BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U 902 M) for Authority, Among Other Things, to Update its Electric and Gas Revenue Requirement and Base Rates Effective on January 1, 2019.	Application No. 17-10-007 (Filed October 6, 2017)
And Related Matter.	Application No. 17-10-008 (Filed October 6, 2017)

OPENING BRIEF OF SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) AND SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M) IN THE TEST YEAR 2019 GENERAL RATE CASE

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SUMMARY OF RECOMMENDATIONS

Introduction/Summary/Policy

- SoCalGas and SDG&E respectfully request that the Commission approve their proposed, updated revenue requirements of $2.937 billion and $2.203 billion, respectively for test year (TY) 2019 in this General Rate Case (GRC). The Companies believe these funds are needed to run our businesses safely; maintain and enhance system reliability; enable diverse customer service capabilities and efficiencies; focus on reasonable rates and continuous improvement; invest in our workforce; and lead in clean energy solutions.
- The Commission should find that safety is deeply embedded in the culture at SoCalGas and SDG&E.
- In this first-ever risk-informed GRC, the Commission should find that SoCalGas and SDG&E have presented their funding requests informed by their key top safety risks and risk mitigation activities in accordance with Commission adopted requirements.
- The Commission should approve the incremental investments SoCalGas and SDG&E have proposed to mitigate these key top safety-related Risk Assessment Mitigation Phase (RAMP) risks.

Safety

- The CPUC has been focused on ensuring the utilities address safety risks for many years. The Commission's Interim Decision Adopting the Multi-Attribute Approach (Or Utility-Equivalent Features) and Directing Utilities to Take Steps Toward a More Uniform Risk Management Framework, Decision (D.)16-08-018 (Interim S-MAP Decision), adopted a Safety and Enforcement Division (SED) recommendation to "cover the company's organizational structure as it relates to safety" and "safety culture" in their Risk Assessment Mitigation Plan (RAMP) report.
- Safety is deeply embedded in the culture at SoCalGas and SDG&E. It is this profound belief in safety as a driver of decision-making that made integrating RAMP into our GRC a natural outgrowth of the way in which we historically make decisions. SoCalGas and SDG&E are committed to doing the right thing and doing it safety.
- The Utilities have taken multiple, forward-thinking steps to address safety culture and associated safety policies and practices and routinely take a proactive and leading role in the Commission's efforts to address a myriad of safety initiatives and risks.
- Both the SoCalGas and SDG&E executive leadership teams and Boards have skills and processes in place to monitor, evaluate, and oversee process and occupational safety.
- In sum, the Companies' multipronged approach to safety, whether at the Board level or the front line, enshrines safety into the utility culture and drives its collective decision-making.

RAMP and Risk Management Testimony Presentation

- The Companies' RAMP-related information in the TY 2019 GRC was presented in accordance with Commission-adopted requirements.
- The Commission should examine the Companies' risk-informed GRC showing in light of its risk-informed GRC framework, and disregard intervenor proposals that are inconsistent with risk-informed funding decisions.

- RAMP-related information should be used to inform funding decisions in this proceeding, as supported by ORA, and as required by the Commission.
- Parties' proposals that RAMP-related costs should be subject to additional conditions (including one-way balancing, cost caps, or both) should be rejected because such recommendations are unnecessary and incompatible with the Commission's risk-informed framework.

Fueling Our Future

- The FOF program comes under the umbrella of continuous improvement activities, which is embedded in the SoCalGas and SDG&E cultures. The costs associated with employees who participate in continuous improvement projects should not be regarded as one-time costs. The savings in TY 2019 should be adopted without any base year adjustment.

Gas Distribution

- SoCalGas and SDG&E's O&M and capital forecasts reflect a detailed and thorough examination of the Gas Distribution area and represent a reasonable level of funding for the activities and capital projects planned during this forecast period.
- ORA's recommended O&M and capital funding levels, primarily based on use of a last recorded year (LRY) methodology, should be rejected as it is premised on a misunderstanding of the Commission's prior decisions, falls short in thoroughly analyzing all the risk information, and, in some areas, did not provide enough supporting data and rationale for its selected forecasting methodology.
- SoCalGas and SDG&E do not oppose ORA's recommendation to adopt actual recorded 2017 capital expenditures for many capital categories. Other O&M and capital funding proposals from ORA, TURN, CFC and the Sierra Club/UCS are flawed and should be rejected.
- CUE's recommendations for more funding for certain expense and capital areas of Gas Distribution are only addressed in rebuttal and not addressed in this brief since CUE does not contend that SoCalGas and SDG&E's requested funding levels are not needed.

Gas System Integrity

- ORA's reliance on a 2016 adjusted-recorded forecasting methodology for SoCalGas does not provide adequate funding to support the activities needed to mitigate SoCalGas' key safety risks and, therefore, SoCalGas' forecasts should be approved without revision.
- ORA recommended reductions to SDG&E's funding request without evaluating how such cuts would negatively impact specific RAMP efforts. Accordingly, ORA's proposed funding should be rejected and SDG&E's forecasts should be adopted.
- Although OSA emphasized the importance of implementing American Petroleum Institute's Recommended Practice 1173 (API RP 1173), its suggestion that the Commission impose additional requirements and conditions upon the Companies' implementation of this voluntary standard is unwarranted. The Companies have demonstrated a strong commitment to implementation of this pipeline safety management system, for which GRC funding has been requested. ORA's recommended reductions would also impact funding for API RP 1173's implementation.

Gas Transmission Operation

- Key objectives of the SoCalGas and SDG&E Gas Transmission organizations are to operate safely, achieve compliance with applicable legal and regulatory requirements, and provide customers with reliable natural gas service at reasonable cost.
- SoCalGas and SDG&E request approval of TY 2019 forecasts for O&M costs associated with operating and maintaining the SoCalGas and SDG&E natural gas transmission systems. No party disputed these forecasts and they should be adopted as reasonable.

Gas Transmission (Capital)

- SoCalGas and SDG&E request the Commission to adopt forecasts for capital expenditures in 2017, 2018, and 2019 in furtherance of promoting the safety and reliability of delivering natural gas on its transmission system. Approval of the forecasts in this testimony will further SoCalGas' and SDG&E's objectives of providing safe and reliable delivery of natural gas to customers at a reasonable cost.
- No party opposed SoCalGas' forecast for the capital cost categories of New Construction Pipeline, Pipeline Replacement, Cathodic Protection, and Measurement & Regulation Stations. Therefore, SoCalGas requests that the Commission adopt these forecasts as reasonable.
- The Commission should authorize recovery of costs expended by SoCalGas in conceiving, proposing, and following the Commission's orders to commence in a CEQA review in furtherance of the North-South Project (also known as the Southern Gas System Reliability Project). The project was proposed by SoCalGas in order to fulfill its obligation to maintain reliability of its natural gas system, and the majority of costs incurred were at the explicit direction of the Commission. TURN/SCGC's and ORA's arguments against authorizing recovery of these costs seek to re-litigate the issues underlying the North-South Application, which is not at issue in this proceeding. SoCalGas acted reasonably and prudently in incurring the costs and following the orders of the Commission, and thus cost recovery should be authorized.

Gas Major Projects

- The Major Projects and Construction organization manages major projects associated with pipeline installation, replacement, and modernization, including valves, regulating and metering stations and appurtenances, and other similar projects associated with compressor stations, storage fields, and natural gas fueling stations.
- No party opposed SoCalGas' TY 2019 forecast of non-shared O&M expenses. SoCalGas requests the Commission authorize the forecast for non-shared O&M costs.
- SoCalGas requests approval of the forecast of capital expenditures relating to major gas projects to support the SoCalGas system for 2017, 2018, and 2019. These forecasts are comprised of the following capital projects: DOCC, Methane Monitors & Fiberoptic Projects, and Pipeline Infrastructure Monitoring System (PIMS).
- The DOCC will provide enhanced visibility into SoCalGas' and SDG&E's distribution system resulting in more efficient management of the system operations and improved ability to identify and respond to pressure abnormalities efficiently. Thus, SoCalGas requests the Commission adopt its recommendation for the construction of the DOCC to

strengthen the ability to prevent and manage risk identified in RAMP Chapter SCG-10 through the real-time monitoring and oversight of its gas distribution pipeline system.

Gas Engineering

- SoCalGas requests approval of its TY 2019 forecast O&M and 2017 – 2019 capital forecast.
- Only ORA submitted testimony in response to SoCalGas' non-shared services costs for Gas Engineering and ORA did not oppose SoCalGas' forecasted amount for TY 2019. Therefore, SoCalGas requests that the Commission adopt SoCalGas' Gas Engineering O&M forecast as reasonable.
- SoCalGas agreed to ORA's recommended forecast and forecast method used for the last two years (2016 and 2017) to forecast years 2018 and 2019. Since some Morongo-related expenses are included in year 2016, SoCalGas agreed that its forecast for capital budget workpapers 0617 should be adjusted to exclude these costs if the Morongo Memorandum Account and the Morongo Balancing Account are authorized and created to capture future expenses for the Morongo ROW resolution.
- SDG&E accepts ORA's recommendation that the Commission adopt SDG&E's 2017 adjusted-recorded capital expenditure for Land Rights, Auxiliary Equipment, and Capital Tools as well as ORA's recommendation to provide zero funding in 2017 for Supervision and Engineering Overheads as stipulated in Exhibit 66.

Underground Storage

- SoCalGas' Underground Storage testimony and workpapers describe SoCalGas' forecasted activities from 2017-2019 that support SoCalGas' operation of its four underground storage fields.
- ORA and OSA were the only parties to submit testimony relating to Underground Storage. ORA does not oppose SoCalGas' SIMP capital forecast amounts for 2018 and 2019, but recommends adoption of adjusted-recorded costs for 2017.
- ORA's proposals to establish a one-way balancing account for the Routine Aboveground (AGS) and Underground Storage (UGS) cost category and to modify SIMPBA for capital expenditures from a two-way balancing to a one-way balancing are not necessary or reasonable.
- SoCalGas agrees with OSA that Underground Gas Storage would benefit from an SMS approach, and is committed to a voluntary implementation of API RP 1173.

Aliso Canyon Turbine Replacement

- In compliance with D.13-11-023, SoCalGas presented direct testimony in this GRC establishing the reasonableness of $275.5 million in capital expenditures to complete the Aliso Canyon Turbine Replacement Project; demonstrating the present and future public convenience and necessity require construction of the Project at the increased cost; and requesting authorization from the Commission to recover in rates the $74.6 million in costs that exceed the previously-authorized cost of $200.9 million for the Project.
- SoCalGas presented compelling evidence of the reasonableness of incurred costs. No party opposes SoCalGas' justification of the reasonableness of the costs or recommends any adjustments to SoCalGas' forecast for the Project. SoCalGas requests authorization

to recover the costs that exceed the previously-authorized cost and asks for authorization to continue to maintain the existing Aliso Canyon Memorandum Account (ACMA) to record additional capital-related costs in excess of $275.5 million, which may be presented for review in a subsequent GRC.

- ORA recommends that after the ACTR project is completed and put in service, a full audit of SoCalGas expenditures be performed by the Commission or an assigned entity to determine the reasonableness of all the charges, or even perform another reasonableness review in the next GRC. SoCalGas opposes ORA's recommendation for a second reasonableness review, as it is unnecessary and inefficient.

Gas Control and System Operations/Planning

- SoCalGas' Gas Control and System Operations/Planning testimony and workpapers describe SoCalGas' forecasted activities for 2017-19.
- Applicants forecast a level of O&M costs in the test year necessary to support system utility operations and emergency response, and SoCalGas requests the Commission to adopt SoCalGas' proposed TY 2019 forecast for Gas Control and System Operations/Planning O&M costs.

Pipeline Integrity for Transmission and Distribution

- Pipeline Integrity is responsible for managing two major, federally mandated pipeline programs to reduce the risk of pipeline failure, the Transmission Integrity Management Program (TIMP) and the Distribution Integrity Management Program (DIMP). All of the TIMP and DIMP programs and activities are RAMP costs. TIMP and DIMP are two-way balanced programs.
- The Commission should adopt the SoCalGas and SDG&E forecasts of the Pipeline Integrity O&M expenses and planned capital expenditures as reasonable, as the forecasts appropriately balance compliance obligations for pipeline safety, risk reduction effectiveness, as well as the impact on ratepayer costs.
- CFC's reduction to SoCalGas' DIMP capital expenses is not justified, as the early vintage pipeline replacement programs proactively prioritize high-risk vintages, such as plastic pipe (*e.g.*, Aldyl-A) and unprotected steel, to reduce integrity risks that could result in the release of gas or pipeline failures.
- IS' wholesale reduction to SoCalGas' total revenue requirement, which would affect Pipeline Integrity's capital expenditures, is unsupported. SoCalGas has adequately demonstrated the priority and need for TIMP and DIMP's mandatory safety programs.

Pipeline Safety Enhancement Plan (PSEP)

- SoCalGas should be authorized to proceed with the pressure test, replacement, and valve projects proposed in order to continue implementation of the Commission-mandated Pipeline Safety Enhancement Plan and advance the Commission's and Legislature' pipeline safety objectives.
- The record establishes that the forecasts proposed by SoCalGas for the projects are reasonable and therefore should be authorized. Contrary to TURN/SCGC's and IS's proposals, risk assessment, or contingency, factors should be included in estimates of the type at issue, are the norm in the professional cost estimating industry, and account for

costs that are expected to be incurred. ORA's models for proposing forecasts are seriously flawed, as evidenced by SoCalGas' augmentation of its models, and therefore should be rejected.

- PSEP projects previously have been subject to regulatory accounting treatment in the form of a two-way balancing account; the Commission should continue this treatment for the PSEP projects proposed in this proceeding and authorize associated PSEP costs to be recorded to the newly created Pipeline Safety Enhancement Plan Balancing Account.
- Because unforeseen circumstances may arise which are out of SoCalGas' control but require acceleration or delay of a project for operational, reliability, or safety enhancement reasons, SoCalGas should be granted authority to substitute a proposed project with another project, provided project substitution does not cause SoCalGas to exceed the aggregate amount authorized for PSEP in this proceeding. When project substitution is necessitated, SoCalGas will file a Tier One advice letter to notify the Commission of the identity of the projects and other germane details.
- The Commission should clarify State policy regarding transmission pipelines that have documentation of a pressure test that pre-dates the adoption of the federal pressure testing regulations in 1970, i.e., whether "Phase 2B" should be included within the scope of PSEP.

Gas Procurement

- SoCalGas' Gas Procurement's (Gas Acquisition) request is described in Gas Acquisition's requested funding and forecasted activities for 2017-2019.
- ORA was the only party to contest Gas Acquisition's request. ORA recommended an adjustment related to the two vacancies in the department.

Electric and Fuel Procurement (SDG&E Only)

- SDG&E is requesting the Commission adopt SDG&E's E&FP TY 2019 forecast for E&FP to fulfill its responsibility for planning, procuring, managing, and administering the energy supply resources needed for SDG&E to deliver clean, safe, and reliable electricity to its approximate 3.6 million customers.
- ORA was the only party to submit testimony in response to SDG&E E&FP's request. ORA did not oppose SDG&E's TY2019 expense forecast. In addition, ORA did not take issue with SDG&E's business justifications for the capital technology upgrades.
- Based on the foregoing, SDG&E requests that the Commission adopt its proposed O&M expenses.

Advanced Metering Infrastructure (AMI) (SoCalGas Only)

- The Advanced Meter Operations organization (AMO) is responsible for deploying, operating, monitoring and maintaining SoCalGas' AMI technology.
- Except as otherwise set forth later in this brief, no Intervenors have contested SoCalGas' requests for the forecasted items identified the AMI testimony and workpapers.
- SoCalGas agrees with ORAs recommendation adopting the 2017 recorded expenditure and the resulting total disallowance in SoCalGas forecasted capital-related curb meter installation costs in 2018.

Electric Generation (SDG&E Only)

- SDG&E requests that the Commission adopt its TY 2019 forecast for Electric Generation.
- In anticipation of the possibility, pursuant to D.06-09-021, that Calpine will exercise its option to "Put" the Otay Mesa Energy Center plant to SDG&E in 2019, SDG&E requests that the Commission approve SDG&E's proposed Otay Mesa Acquisition Balancing Account (OMABA) to track the revenue requirement that SDG&E will need to own and operate the plant.

Electric Distribution (SDG&E Only)

Capital Projects (General)

- SDG&E's testimony demonstrates the need for the forecasted capital projects through individual descriptions and analysis of each project's business justification, need and support related to the safety and reliability for its customers, employees and communities. This presentation included a significant amount of new information regarding projects and programs that are proposed to address SDG&E's key safety risks, as presented in its RAMP Report. Approximately 22% of the requested Electric Distribution capital funding is related to Safety & Risk Management.
- ORA recommended high-level adjustments to each budget category based on various forecasting methods and generally ignored individual project details and the risk mitigation basis for RAMP-related projects. ORA also recommends adoption of reduced 2017 recorded capital expenditures, rather than the 2017 forecast. SDG&E demonstrated in rebuttal why ORA's recommendations are not appropriate.
- The Commission's Safety and Enforcement Division (SED) observed that "the risks identified in the RAMP Report offer a complete description of risk scenarios and proposed mitigation measures and provides a reasonable basis for understanding the intent of the mitigations and how they might be able to reduce the impact or frequency of [RAMP risk-related] incidents." Thus, while RAMP-related information in SDG&E's Electric Distribution Capital testimony presentation does not provide sole justification for RAMP projects, it does provide more information to parties and the Commission than in any prior GRC, about the key safety risks that each RAMP project is meant to address.

Distributed Energy Resources (DER) Policy and Capital Projects

- SDG&E has proposed a package of investments designed not only to support the utility's ability to provide safe and reliable service in a changing operational environment resulting from rapid growth in customer adoption of innovative distributed energy technologies, but also to promote increased deployment of such resources.

Operations and Maintenance (O&M)

- SDG&E has provided a substantial amount of detail supporting its Electric Distribution O&M forecasts in testimony, workpapers, and data requests, including a new and significant amount of information regarding projects and programs that are proposed to address SDG&E's key safety risks, as presented in its RAMP Report. The Commission should adopt SDG&E's forecasted expenses as reasonable.

- ORA’s and other parties’ recommendations that rely almost exclusively on historical averages neglect to consider the individual merits of important new and necessary programs. The funding levels of previous programs should not solely dictate the approval of new proposed risk reduction programs, particularly where O&M is tied to newly approved RAMP capital projects. SDG&E recommends that the Commission disregard recommendations based solely on those methods.

Supplemental Year-Round Wildfire Risk Mitigation

- Because of the extreme weather events and the necessary efforts to mitigate fire hazard within its service territory, SDG&E’s requested funding for year-round lease of the helitanker should be approved. No party contested SDG&E’s helitanker request.

Asset Management (O&M)

- SDG&E’s newly formed Asset Management group is developing a strategic asset management capability for SDG&E, in accordance with the world-class standard of ISO 55000. ISO 55000 compliance was recommended in a report by the Safety and Enforcement Division (SED) in March 2015.
- SDG&E continues its commitment to evolving its Asset Management organization in furtherance of its safety goals consistent with SED guidance and the Commission’s Risk Framework Decision, with its planned requirements to implement the S-MAP, RAMP, and annual accountability reporting as part of the GRC process – rebutting ORA’s and OSA’s claims.

Customer Services - Field and Meter Reading

- SoCalGas and SDG&E have justified approval of their reasonable forecasts. Intervenor proposed reductions do not provide sound rationale or justification in their alternate forecasting methodologies.
- SoCalGas has addressed CUE’s claim of inadequate staffing, and more importantly, demonstrated that SoCalGas’ soft close policy does not pose a safety concern for customers. SDG&E has provided reasonable explanations to oppose SDCAN’s recommendation to increase the Service Guarantee credit amount.

Customer Services - Office Operations

- In all cases, SDG&E and SoCalGas used a BY methodology to forecast estimated 2017-2019 expenses. This approach was used because base year 2016 represented the most recently available adjusted recorded expenditures, transactions and activity levels, customer service policies, practices and procedures.
- SoCalGas and SDG&E have justified approval of their reasonable forecasts. Intervenor proposed reductions do not provide sound rationale for their contentions.

Customer Services - Information (SoCalGas Only)

- SoCalGas provides customers with information and services through multiple channels to enhance the ability of SoCalGas’ customers to understand and manage their energy usage. Customer Services - Information requires additional funding to increase communications and support for mandated priorities, as well as to offer programs and services related to such priorities.

- SoCalGas has justified approval of its reasonable forecasts. Intervenor proposed changes do not provide sound rationale for their contentions.

Customer Services - Information and Technologies (SDG&E Only)

- SDG&E serves as a trusted energy advisor to all segments of customers and requires additional funding to offer relevant information about their energy consumption, pricing plans, programs and tools to manage and control their use through residential customer services, business services, marketing and communications, research and analytics, customer programs, and customer pricing, among other services.
- SDG&E has justified approval of its reasonable forecasts. Intervenor proposed changes do not provide sound rationale for their contentions.

Customer Services - Technologies, Policies, and Solutions (SoCalGas Only)

- SoCalGas has demonstrated that a robust utility Research, Development and Demonstration (RD&D) program is beneficial to ratepayers as well as to the citizens of California. Full funding is critical to RD&D program and environmental policy goals achievement of success.
- Policy and Environmental Solutions (P&ES) educates state, local and regional governments and agencies on the needs of customers and the environmental benefits and cost-effectiveness of natural gas and renewable gas (RG) to meet those needs, as well as potential impacts to customers, which allows these stakeholders to make informed decisions.
- SoCalGas has justified approval of its reasonable forecasts. Intervenor objections do not provide sound rationale for their contentions.
- The Commission should adopt the TY 2019 request for all Customer Service programs, activities and costs as proposed.

Supply Management & Logistics and Supplier Diversity

- The Commission should approve SoCalGas' and SDG&E's reasonable forecasts for the Supply Management & Logistics department, including the forecasts for the Companies to continue their important supplier diversity efforts.

Fleet Services (and SoCalGas Facility Operations)

- SoCalGas and SDG&E's Fleet Services and SoCalGas Facility Operations, testimony and workpapers support the level of O&M and capital costs necessary to plan, manage and operate a fleet that is both service-ready and in compliance with applicable laws and regulations governing alternative-fuel vehicles, and also to maintain and improve facilities in support of public and employee safety.
- ORA's and TURN's proposed reductions do not account for the business and operational realities facing SoCalGas and SDG&E Fleet Services and SoCalGas Facility Operations and should be rejected.

- SoCalGas has demonstrated that Sierra Club/UCS' proposals regarding procurement of electric vehicles for SoCalGas' fleet and recommendations against SoCalGas' proposed NGV refueling stations are without merit and should be rejected.

Real Estate, Land Services, and (SDG&E) Facilities

- SDG&E's forecasts for O&M and capital expenditures for Real Estate, Land and Facilities and SoCalGas' forecasts for O&M expenditures for Real Estate are reasonably supported by the specific cost drivers, activities and projects detailed in Applicants' testimonies and workpapers.
- ORA and TURN's proposed reductions are based on unfounded reductions in forecasted costs for emergent, as-yet specified projects in blanket budgets and a misunderstanding of the pressing need for certain substantial, specified capital projects. ORA's and TURN's proposed forecasts would inadequately fund real estate, facilities, capital construction and land services administration and should be rejected.

Environmental Services

- SoCalGas and SDG&E have justified approval of reasonable ongoing O&M expense forecasts for Environmental Services. ORA's arbitrary reduction to the SoCalGas New Environmental Regulatory Balancing Account (NERBA) LDAR Impact Program for TY2019 is unsupported and should be rejected.

Information Technology

- The Commission should adopt SoCalGas' and SDG&E's reasonable forecasts of IT costs, which reflect the Companies' best efforts to stay abreast of the rapid pace of change in the technology industry.

Cybersecurity

- The Commission should adopt SoCalGas' and SDG&E's reasonable forecasts of costs to manage increasing cybersecurity risk, which is one of the Companies' top safety risks identified in the RAMP Report.

Corporate Center – General Administration

- The Commission should approve the reasonable forecast for allocations of General Administration costs from Sempra Energy's Corporate Center to SoCalGas and SDG&E.

Insurance

- The Companies' proposed insurance expenses are reasonable and should be approved.
- In light of the new challenges in forecasting insurance premiums and the cost volatility, especially after the 2017 California wildfires, SoCalGas and SDG&E propose the adoption of a two-way Liability Insurance Premium Balancing Account (LIPBA) to help address these concerns.

Compensation and Benefits/Post-Retirement Benefits

- SoCalGas and SDG&E's request for Compensation and Benefits/Post-Retirement Benefits cost recovery is reasonable, consistent with past CPUC decisions, will benefit customers, and should be approved.
- SoCalGas' and SDG&E's compensation and benefits programs are critical to attracting, motivating and retaining a skilled, high-performing workforce. The compensation and benefits programs provided to SoCalGas and SDG&E employees, retirees and their dependents reflect the impacts of the marketplace, collective bargaining and government regulation. Benefits include health and welfare programs and retirement plans, as well as pension and Post-Retirement Benefits Other than Pensions (PBOP).
- Compensation programs are designed to focus employees on key priorities, such as safety and customer service.
- SoCalGas and SDG&E are proposing a change in their pension funding methodology in order to mitigate a funding shortfall and avoid generational equity issues where future ratepayers would be asked to fund costs that benefited earlier generations. SoCalGas' and SDG&E's proposed pension funding methodology is consistent with the Commission's historical practice of providing for ratepayer funding of pension plan costs based on California utilities' cash contributions to their pension plans. ORA does not take issue with SoCalGas' and SDG&E's pension and PBOP funding forecast or the proposed change in pension funding methodology.
- A comprehensive study of the Companies' compensation and benefit programs, by Willis Towers Watson found the Companies' total compensation to be "at market," as defined by Commission standards. No party refuted the results of SoCalGas' and SDG&E's total compensation study.
- Intervenors' proposals fail to account for the Commission's longstanding practice of providing funding for reasonable, at-market total compensation, including pension and PBOP benefits that are offered as part of a reasonable total compensation program.

Human Resources Department, Safety, Workers' Compensation, & Long-Term Disability

- SoCalGas and SDG&E's forecasted O&M costs for Human Resources Department, Safety, Workers' Compensation & Long-Term Disability are reasonably supported by the specific cost drivers and activities contained in their case-in-chief and will enable Applicants to attract and retain the most qualified, competent, and safe workforce on behalf of their customers. Furthermore, the test year forecasts for the cost centers for the CEO, COO and Chief Administrative Officer functions accurately reflect the positions and activities being recorded in those cost centers.

A&G – Accounting and Finance/Legal/Regulatory Affairs/External Affairs

- The Commission should adopt the reasonable forecasts of Administrative and General (A&G) costs for SoCalGas' and SDG&E's Accounting and Finance, Legal, Regulatory Affairs, and External Affairs divisions.
- In light of the mismatch between third-party related claims and the amount of available insurance at any given time, SDG&E requests that the Commission approve its proposed Third-Party Claims Balancing Account (TPCBA) to compare the revenue requirement

approved in this GRC for third-party related claims payments and recoveries with actual net expenses booked.

<u>Shared Services & Shared Assets Billing, Segmentation & Capital Reassignments</u>

- The Commission should approve SoCalGas' and SDG&E's proposed shared services and shared assets billing and segmentation and capital reassignment policies and methodologies, which no party opposed.

<u>Rate Base</u>

- Most of SoCalGas and SDG&E's rate base recommendations are uncontested. The Companies' use of their authorized rate of return as a reasonable proxy for the allowance for funds used during construction (AFUDC) is consistent with how the Companies have calculated AFUDC in prior GRC proceedings. TURN offers no basis for grounding its AFUDC recommendations off the Companies' actual rates of return, and the Companies' reduced 2018 authorized rates largely mirror TURN's proposal.
- SDG&E's use of a five-year historical average to forecast electric and gas customer advances for construction (CAC), and SDG&E's treatment of fuel in storage as a component of rate base, are both consistent with Commission precedent.
- SDG&E's inclusion of two plants within Plant Held for Future (PHFU) use fall within the five-year period that the Commission has established for including plants in PHFU for electric distribution property.

<u>Depreciation</u>

- ORA did not object to SoCalGas' recommendations.
- TURN does not provide any statistical analysis supporting its proposal to keep both Companies' depreciation rates at the 2016 GRC levels or why such an outcome is reasonable. TURN's reliance upon the Commission's determination in Southern California Edison Company's (SCE) 2015 GRC regarding the need for SCE to provide sufficient explanation to support its depreciation expert's judgment has limited impact here where the Companies' depreciation experts either provided adequate analysis or did not rely upon judgment in reaching their proposals. Where SoCalGas chose a lower ranked life/curve, it was generally because SoCalGas' depreciation expert believed that the current average service life for that account should remain the same and chose a curve that best fit that recommendation. SDGE&E overwhelmingly chose the top ranked statistical choice for its electric distribution accounts.
- Although SDG&E accepted several ORA recommendations, SDG&E's remaining proposed net salvage increases are below the recent actual net salvage rates for those account and should be adopted. With regards to the Desert Star Energy Center, ORA provides no support for its position that the Commission should penalize SDG&E by purposefully applying an incorrect retirement date for Desert Star that would prevent SDG&E from recovering the original cost of that investment.

<u>Taxes</u>

- ORA does not challenge SoCalGas and SDG&E's forecast for income taxes, property taxes, or franchise fees. The Companies' updated payroll tax forecasts are consistent with how the Companies have calculated payroll taxes in previous GRCs and largely mirror ORA's recommendations.

- The Companies support their alternative proposal to continue the Tax Memorandum Accounts (TMA). The Companies further request that the Commission reaffirm TMA is not intended to track differences between forecasted and incurred tax expenses that are caused by events unrelated to tax changes.
- The Commission should apply the average rate assumption method (ARAM) to return unprotected excess accumulated deferred income taxes (ADIT). This is consistent with how excess unprotected ADIT was treated in prior GRCs, provides consistency in the treatment of plant-based ADIT, and reduces the chance of unfairness between current and future ratepayers. The intervenors' proposals should be reject as TURN's proposal inconsistently treats unprotected excess ADIT and benefits current ratepayers at the expense of future ones, and. FEA's proposal would result in immediately increased costs to ratepayers.
- Although the Companies believe that the Tax Cuts and Jobs Act (TCJA) most logically excludes new removal costs from the Companies' ARAM calculation, the Companies agree to abide by SCE's private letter ruling from the IRS on this issue and track any differences in their TMAs.

<u>Working Cash</u>

- Applicants' working cash requests consistently follow the requirements of CPUC Standard Practice U-16 (SP U-16) and reasonably compensate investors for providing funds committed to operating expenses in advance of receiving the offsetting customer revenues. ORA, TURN, and FEA's proposed selective deviations from SP U-16 and 2016 recorded data to reduce the TY 2019 working cash requirement should be rejected.

<u>Customer Forecasts</u>

- No party has contested SoCalGas' gas customer forecast and, therefore, SoCalGas' forecast should be adopted.
- Unlike TURN who provided no factual support for its proposals regarding SDG&E's gas customer forecast, SDG&E provided evidence using 2017 gas meter data to confirm the reasonableness of its methodology and gas customer forecast.
- The Commission should adopt SDG&E's electric customer forecast without revision and reject TURN's request on the basis that TURN has not demonstrated evidence that SDG&E's methodology for its electric customer forecast is unreliable, nor that by selectively favoring the use of Moody's as the only source of forecasted housing starts, this will result in a more accurate forecast.

<u>Cost Escalation</u>

- No party disputed the cost escalation factors used to reflect the effect of external inflation in SoCalGas and SDG&E's labor O&M, non-labor O&M, and capital-related costs, nor the updated cost escalations. The escalations are reasonable forecasts that should be adopted by the Commission for use in determining the Companies' TY 2019 revenue requirement and annual PTY adjustments.

Miscellaneous Revenues

- Miscellaneous Revenues are comprised of fees and revenues collected by SoCalGas and SDG&E from non-rate sources for the provision of specific products or services. Miscellaneous revenues are incorporated into rates as a reduction to base margin revenue requirements charged to customers for utility service, thereby lowering rates. In forecasting for Test Year 2019 miscellaneous revenues, SoCalGas and SDG&E performed an item by item analysis of miscellaneous revenue accounts, including a review of prior-year recorded results as well as the factors that could impact future results. The Commission should adopt SoCalGas and SDG&E's reasonable forecasts of miscellaneous revenues.

Regulatory Accounts

- Parties have only disputed the following five of SoCalGas' regulatory account proposals: the continuation of the Storage Integrity Management Program Balancing Account (SIMPBA) and the creation of four new accounts (Pipeline Safety Enhancement Plan Balancing Account (PSEPBA), Morongo Rights-of-Way Memorandum Account (MROWMA), the Morongo Rights-of-Way Balancing Account (MROWBA), and Liability Insurance Premium Balancing Account (LIPBA)). SoCalGas has thoroughly supported why its proposed ratemaking treatment is appropriate and reasonable for current and proposed regulatory accounts (e.g., two-way versus one-way balancing to protect both shareholders and ratepayers, uncertainty and unpredictability in nature of work and costs); thus, intervenors' positions should be rejected. SoCalGas' uncontested proposals should be approved, which are listed in Appendix A.
- Parties have only disputed the following four of SDG&E's regulatory account proposals: the modification of the one-way Tree Trimming Balancing Account (TTBA) to two-way balancing treatment and the creation of three new balancing accounts (LIPBA, Otay Mesa Acquisition Balancing Account (OMABA), and Third-Party Claims Balancing Account (TPCBA)). SDG&E has provided robust support for why its proposed ratemaking treatment is appropriate and reasonable for current and proposed regulatory accounts (e.g., climate-related trends increasing wildfire risk, timing considerations for regulatory approval, unpredictable number of claims and amounts); thus, intervenors' positions should be rejected. SDG&E's uncontested proposals should be approved, which are listed in Appendix A.
- The Commission should approve the Companies' uncontested proposal to establish sub-accounts in the existing Tax Memorandum Accounts (TMA) to address the 2018 impacts resulting from the Tax Cuts and Jobs Act (TCJA) and should opine on the two options put forth by the Companies with regard to the disposition of the sub-accounts.

Summary of Earnings/Results of Operations Model

- The Companies' RO model has been accepted by all parties without challenge or indication that any redesign is necessary to more accurately calculate a revenue requirement.
- The Companies request that the Commission adopt their requested revenue requirements for TY 2019 as proposed. If ORA and TURN's proposals with respect to the Oncor

acquisition are instead adopted, this would have a negligible impact on the total authorized revenue requirements.

Post-Test Year Ratemaking

- The Companies' Post-Test Year proposals account for their major cost drivers, which allows them to provide safe and reliable service to their customers, comply with regulations, and manage their operations as prudent financial stewards.
- The Companies' request for a four-year GRC term, which was supported by ORA, should be adopted because it would reduce the administrative burden on all parties and allow the Companies to more effectively operate their businesses while implementing new risk mitigation and accountability structures, processes and reporting requirements.
- The intervenors' recommended attrition mechanisms generally fail to provide a numerical basis that reflects a representative index of cost escalation, an appropriate estimation of capital additions, an associated impact on rate base, and a calculation that results in increases for each revenue requirement component. This is the methodology utilized in the Companies' proposed Post-Test Year ratemaking mechanism and therefore should be adopted.
- The Commission should approve the Companies' proposal to continue the existing Z-factor mechanism, unchanged for this 2019-2022 GRC term.

Presentation of Rates

- While affordability is a serious concern that SoCalGas and SDG&E share with parties, it is not the standard by which the Commission approves a total revenue requirement as "just and reasonable" in a general rate case.
- If the Commission considers affordability in this proceeding, as opposed to the statewide Rulemaking 18-07-006 dedicated to such complex issues, it is important to look at more than just rates, and instead focus on customer bills. SoCalGas and SDG&E's customer bills will continue to be among the lowest in the nation even if the proposed revenue requirements are approved in their entirety.

Results of Examination (ORA Audit)

- SDG&E and SoCalGas' proposed method of segmenting and reassigning of common costs is consistent with FERC guidelines, were not contested by any party to this proceeding and should therefore be adopted.
- Applicants' proposed proxies for AFUDC rates (i.e., authorized rates of return) closely approximate actual-historical AFUDC rates computed under the FERC's AFUDC formula, and should therefore be adopted. In contrast, ORA's proposed AFUDC rates show no meaningful or reasonable comparison to actual-historical AFUDC rates and amount to nothing more than an unsupported cost-cutting measure.

Mobilehome Park Utility Upgrade Program

- SoCalGas and SDG&E demonstrated that it prudently organized and administered the MHP Pilot Program, undertook efforts to minimize costs, and, as a result, the costs incurred are reasonable. No party opposed the reasonableness of the costs incurred by SoCalGas and SDG&E in executing the MHP Pilot Program. SoCalGas and SDG&E

requests the Commission approve as reasonable the costs incurred through 2016 in executing the MHP Pilot Program.

Accessibility Issues

- The Center for Accessible Technology (CforAT), SoCalGas and SDG&E submitted joint testimony (Accessibility Request). The Accessibility Request is of specific scope, centered on the interests of persons with disabilities. No party has opposed the Accessibility Request. Adoption of the Accessibility Request by the Commission is appropriate because the request is reasonable, consistent with law and in the public interest.

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U 902 M) for Authority, Among Other Things, to Update its Electric and Gas Revenue Requirement and Base Rates Effective on January 1, 2019.	Application No. 17-10-007 (Filed October 6, 2017)
And Related Matter.	Application No. 17-10-008 (Filed October 6, 2017)

OPENING BRIEF OF SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) AND SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M) IN THE TEST YEAR 2019 GENERAL RATE CASE

1. Introduction/Summary of Recommendations

San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas) (collectively, Applicants or Companies) herein file their Opening Brief (Brief) in the above captioned, consolidated General Rate Case (GRC) proceedings. The Summary of Recommendations is provided after the Table of Contents and Table of Authorities herein.

2. Procedural Background

Applicants filed their respective Test Year (TY) 2019 Applications (A.)17-10-007 and A.17-10-008 on October 6, 2017.[1] These Applications were consolidated on November 8, 2017 by a ruling issued by Administrative Law Judge (ALJ) Lirag. ALJ Lirag also granted Applicants' Motion for Protective Order on December 13, 2017. A prehearing conference was held on January 10, 2018 and on January 29, 2018, Commissioner Randolph issued the Assigned Commissioner's Scoping Memorandum and Ruling (Scoping Ruling),[2] which set forth the procedural schedule and the issues to be considered in this case. On June 7, 2018, ALJ Lirag

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[1] Applicants served revised direct testimonies in December 2017. Pursuant to SDG&E's Motion for Leave to Submit Supplemental Testimony, SDG&E served supplemental testimony on May 7, 2018 regarding Supplemental Year-Round Wildfire Risk Mitigation.

[2] Applicants served supplemental testimony on February 8, 2018 as required by the Scoping Ruling's sub-issue f on the impact of rates on disconnections for nonpayment pursuant to Senate Bill (SB) 598. On April 30, 2018, an Amended Scoping Ruling was issued to remove the sub-issue as to whether changes are needed to the reconnection process for gas customers and to add a sub-issue as to whether or not the utilities have sufficient resources to implement their reconnection process.

issued a ruling granting Applicants' Motion to Establish General Rate Case Memorandum Accounts (GRCMAs), which provide a necessary safeguard in the event that a final decision in these proceedings is not rendered by January 1, 2019.

On April 6, 2013, Applicants served supplemental tax testimony to reflect the impact of the Tax Cuts and Jobs Act (TCJA), which was signed into federal law on December 22, 2017. The Office of Ratepayer Advocates (ORA)[3] served its testimony on April 13, 2018, intervenors served their testimony on May 14, 2018, and rebuttal testimony was served on June 18.

Per ALJ Lirag's April 20, 2018 and May 3, 2018 rulings, the Commission held a number of public participation hearings and information sessions throughout the service territories of the two Companies from May 29, 2018 through June 28, 2018.

The Commission held approximately five weeks of evidentiary hearings beginning on July 9, 2018 through August 8, 2018 and on August 28, 2018.

Pursuant to the Rate Case Plan[4] and the adopted procedural schedule, Applicants served Update Testimony on August 24, 2018 reflecting the most recent available cost escalation rates and for any changes arising from governmental actions, such as tax or postage rate changes. SoCalGas and SDG&E also included changes that SoCalGas and SDG&E agreed to during the course of discovery, in rebuttal testimony, or at hearings. With these changes, the Update revenue requirement for SoCalGas is $2,936,606,000. The Update revenue requirement for SDG&E is $2,202,534,000 on a combined basis and $1,763,508,000 and $439,025,000 for electric and gas departments, respectively.[5]

Two rulings have been issued over the course of the proceeding to clarify the scope of this GRC. First, on March 8, 2018, Assigned Commissioner Randolph issued a ruling denying Environmental Defense Fund's (EDF) request to include Lost and Unaccounted for Gas (LUAF) in the scope of this proceeding, indicating LUAF issues should be raised in Rulemaking (R.) 15-01-007 and Applicants' Triennial Cost Allocation Proceedings (TCAP) as applicable. Second, on September 17, 2018, ALJ Lirag granted Applicants' motion for clarification that certain issues raised by EDF and Southern California Generation Coalition (SCGC) are outside the

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[3] The Office of Ratepayer Advocates was renamed the Public Advocates Office of the Public Utilities Commission pursuant to SB 854, which was signed by the Governor on June 27, 2018 (Chapter 51, Statutes of 2018). For purposes of this brief, the name ORA will be used.

[4] Decision (D.) 89-01-040, as modified by D.93-07-030, D.07-07-004, and D.14-12-025.

[5] Ex. 514 SCG/SDG&E Hom at 25.

scope of this proceeding. The ruling instructed that EDF's requests regarding improvements to the backbone transmission and storage services are outside the scope and should instead be raised in Applicants' TCAP (A.18-07-024). Additionally, the ruling clarified the ruling made in evidentiary hearings on July 10, 2018 by specifying that funding requests for proposals by EDF and SCGC relating to core balancing to actual demand, as well as the proposal for automation, should be raised and addressed in the core balancing proceeding (A.17-10-002).[6] Accordingly, affected portions of EDF and SCGC's testimonies have been ignored by Applicants in this Opening Brief pursuant to the ALJ's instructions.

3. Evidentiary Standards and Burden of Proof

Pursuant to Section 454(a) of the California Public Utilities Code, rates may only be changed upon a finding by the Commission that the new rate is justified. SoCalGas and SDG&E agree that they have the ultimate burden of proof and must justify the reasonableness of their positions in this ratemaking proceeding. The evidentiary standard that applies to ratemaking proceedings is one of a preponderance of the evidence. The Commission affirmed in the S-MAP D.14-12-025 that this standard specifically applies to a GRC.[7]

As conclusively demonstrated by the record in this proceeding and as discussed *infra*, SoCalGas' and SDG&E's showings are well supported. The Companies have exceeded their burden and have demonstrated the reasonableness of their requests through prepared direct, revised, rebuttal, and updated testimony, extensive workpapers, and other exhibits of over 70 of the Companies' expert witnesses, and hearing testimony of over 40 of these witnesses. The Companies also responded to over 10,500 data request questions from multiple parties throughout this proceeding.[8]

Because this is the first-ever risk-informed GRC proceeding, incorporating the first-ever RAMP Report, SoCalGas' and SDG&E's TY 2019 presentations have provided unprecedented detail regarding the Companies' risk mitigation activities related to their funding requests, including detail regarding the Companies' activities promoting their strong safety culture,

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[6] Tr. V11:579-580 (Lirag).
[7] D.14-12-025 at 20-21 (The Commission affirmed, "[i]t is clear . . . that the standard of proof that a utility has to meet in a GRC is one of preponderance of the evidence.").
[8] Ex. 254 SCG/SDG&E/Manzuk at 6.

throughout the witness testimony chapters.[9] The Companies' RAMP-related information in this proceeding was presented in accordance with Commission-adopted requirements and is "to be reviewed in the TY2019 GRC applications,"[10] as discussed in Section 6, *infra.* RAMP-related information should be used to inform funding decisions in this proceeding, as supported by ORA,[11] and as required by the Commission.

4. Test Year Forecasting Methods

4.1 General Forecasting

SoCalGas and SDG&E prepared forecast estimates for O&M expense in TY 2019 and capital spend for the years 2017, 2018 and 2019, with expected in-service dates such that the costs of capital (depreciation, tax, return) can be estimated from the resultant additions to ratebase. The last available year of recorded financial data is referred to as the "base year." In this GRC the base year is 2016. The Companies evaluated their historical financial data and made adjustments as necessary. Examples of these adjustments include excluding costs not relevant to the GRC (*e.g.*, those under the jurisdiction of the Federal Energy Regulatory Commission), transferring data to different cost centers, or excluding one-time expenditures. The Companies then presented its forecasts in 2016 adjusted-recorded dollars in accordance with the Commission's Rate Case Plan.

The Companies use an internally-developed forecasting application called the General Ratecase Integrated Database (GRID), which performs these functions:

- Permits the review and adjustment of historical costs;
- Allows for selection of an underlying base forecast methodology (3, 4 or 5-year average, 3, 4 or 5-year simple linear trend, use of the 'base year' 2016 values, or a 'zero-base' method by which the estimates of future costs are discretely entered with no underlying forecast), using adjusted historical costs;
- Allows for adjustment of forecasted costs for new or changed activities, and entry of descriptive data including RAMP attributes;
- Produces workpapers as portable-document-files (PDFs);
- Produces 'testimony tables' as Word tables to be placed in testimony; and

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[9] *See* Ex. 3 SCG/SDG&E/Day/York, *passim* (providing a detailed overview of the Companies' risk-informed presentations). ORA recognized that the Companies have "presented more detail on specific funding requests and [have] associated each funding request with one or more risks detailed in the RAMP...." Ex. 398 ORA/Stannik at 10 (internal citations omitted). The RAMP Report alone was over 900 pages of written descriptions and analysis. *See* Ex. 4 SCG/SDG&E/Day/Flores/York at 8.

[10] D.18-04-016 at 12.

[11] Ex. 398 ORA/Stannik at 2 and 15.

- Exports data for [Results of Operations] RO model purposes.

The various underlying base forecast methodologies are applied depending on the facts and circumstances of the various projects and programs. Zero-based methods can include:

- An arithmetic method such as unit cost multiplied by expected volume;
- Referencing a RFP response, an invoice, or other reference document;
- Use of Subject Matter Expert judgment;
- Reference to a like-kind project or activity performed elsewhere; and
- Reference to a similar project or work done in the past and updated for current conditions.

Behind these forecasting methods are often other tools used in the routine project estimating process not specifically designed for GRC forecasting, such as the SDG&E applications Distribution Planning Support System (DPSS) and Budgeting, Scheduling and Estimating (BSE). These are both enterprise applications utilizing underlying network applications such as Microsoft SQL Server, IDMS, Oracle or other database management platforms requiring enterprise-quality data systems and infrastructure. These same forecasting practices have been utilized to support SoCalGas and SDG&E's last several GRC requests.

Historical Data

Witnesses develop GRC forecasts for expenditures they believe are necessary to provide safe and reliable gas and electric service to our customers. As mentioned above, witnesses forecasted the TY 2019 for O&M and years 2017 through 2019 for capital. To develop forecasts for the instant proceeding, witnesses may use historical data available at the time (i.e., through the 2016 base year) to inform their GRC request. In the various workpapers accompanying both O&M and capital forecasts, witnesses show which forecast methodology was chosen and often provide additional description of why the chosen methodology was felt to be most appropriate to the circumstance.

2017 Data

The data for the Base-Year-Plus-1 (in this case 2017, also called '2017 actuals') became available during the course of these proceedings after the filing of the Application. This data was made available to the parties. In some instances, parties recommended adoption of those 2017 values in place of the Company's 2017 forecasts. SoCalGas and SDG&E witnesses discussed whether adoption of 2017 values make sense in each particular instance, in their respective rebuttal testimonies.

4.2 Aliso Canyon Incident Expenditure Requirements

In D.16-06-054 the Commission resolved SoCalGas and SDG&E's 2016 General Rate Case and directed SoCalGas to "provide testimony demonstrating that all of the additional costs that stemmed from the Aliso Canyon leak have not been included in its forecast of costs for its Test Year 2019 general rate case application"[12] and required SoCalGas "to provide a separate itemization of all of the costs related to the gas leak at the SS-25 well at Aliso Canyon and to provide testimony on whether the costs attributable to the Aliso Canyon leak have affected SoCalGas' funding request for its underground gas storage facilities."[13] In compliance, (1) SoCalGas submitted testimony demonstrating that the Aliso Canyon Storage Facility natural gas leak incident (hereafter, the "Aliso Incident") costs have not been included in the forecasted costs of the 2019 GRC;[14] (2) SoCalGas provided an itemized showing of the Aliso Incident costs removed by the SoCalGas and SDG&E witnesses in the 2019 GRC;[15] and (3) SoCalGas submitted testimony addressing whether costs attributable to the Aliso Incident affected SoCalGas' 2019 GRC underground gas storage facility funding requests.[16] No party to the 2019 GRC alleges that SoCalGas and SDG&E have not complied with these Aliso Incident-related requirements. As such, the Commission should find that SoCalGas and SDG&E have complied with D.16-06-054's Aliso Incident requirements.

5. Policy Overview

5.1 General

SoCalGas and SDG&E provided overarching policy testimony by Mr. Bret Lane and Ms. Caroline Winn to generally describe how the proposals and requests included in SoCalGas' and SDG&E's TY 2019 GRC Application reflect a strong commitment to delivering safe, clean, and reliable natural gas service to customers at reasonable rates. Various witnesses discussed in further detail throughout their testimonies how the following SoCalGas and SDG&E business priorities are reflected in their respective forecasts and activities for their organizations:

- run our business safely;
- maintain and enhance system reliability;
- enable diverse customer service capabilities and efficiencies;

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[12] D.16-06-054 at 332 (Ordering Paragraph 12).
[13] *Id*. at 324 (Conclusion of Law 75).
[14] *See* Ex. 280 SCG/Steinberg and Ex. 281 SCG/Steinberg.
[15] *Id.*
[16] *See* Ex. 273 SCG/Navin at 6-7.

- focus on reasonable rates and continuous improvement;
- invest in our workforce; and
- lead in clean energy solutions.

When questioned about these priorities during hearings, Mr. Lane emphasized that "the element of safety is the foundation of . . . what we focus on."[17] For example, as explained in Mr. Lane's direct testimony, SoCalGas' GRC proposals "focus on enhancing system integrity through mandatory programs such as the Pipeline Safety Enhancement Plan (PSEP), Transmission, Distribution, and Storage Integrity Management Programs (TIMP, DIMP, and SIMP), as well as other activities to improve our system."[18] Mr. Lane further notes that approximately 55% of SoCalGas' incremental revenue requirement in this 2019 GRC is directly related to safety measures, as part of the Commission's new comprehensive risk-informed RAMP approach.[19] While Mr. Lane indicates that elements included in RAMP are what the Companies have been doing for years, he elaborates that the Companies "very much support what the Commission is trying to do with RAMP of . . . evolving it into . . . an even higher state of us understanding risk and how do we more effectively mitigated those risks."[20]

In her testimony, Ms. Winn stated that "At SDG&E, safety isn't a goal – it is part of the Company's DNA."[21] She explained that "Nothing is more important than keeping our employees, contractors and the public safe [and] [w]e are making strategic investments in culture, technology, system upgrades and community partnerships to enhance the safety of our customers and the communities we serve."[22] Ms. Winn noted that SDG&E's "focus on safety is not new" but that "[d]espite our strong safety record and the comprehensive safety activities that SDG&E already implements, constant vigilance, preparedness, and incremental investment to mitigate our top safety-related RAMP risks are needed to maintain and enhance our safety record."[23] In this regard, approximately 45% of SDG&E's incremental revenue requirement in this 2019 GRC is directly related to RAMP and includes efforts to mitigate wildfire risk and

[17] Tr. V10:431:17-19 (Lane).
[18] Ex. 1 SCG/Lane at 1.
[19] *Id.* at 1-2.
[20] Tr. V10:433:15-20 (Lane).
[21] Ex. 2 SDG&E/Winn at 1.
[22] *Id.*
[23] *Id.* at 4.

medium-pressure pipeline failure risk, as well as cross-cutting risks to address Employee, Contractor, Customer and Public Safety.[24]

While the Commission's purpose in this proceeding is to decide what is ultimately just and reasonable in authorizing revenue requirements, Mr. Lane describes how the Companies look at "the balance of investments needed to our infrastructure, into our system, and of what is needed from our side as far as prudently managing the system from a safety perspective, but also being mindful of the rate impact it can have on our customers."[25] Similarly, Ms. Winn explains how "SDG&E is continuously looking for ways in which to serve our customers more efficiently" and "will continue to focus on delivering safe and reliable service to our customers at reasonable rates."[26] Please see Section 47 for a discussion of how the Companies' proposed gas and electric rates and residential customer bills resulting from the TY 2019 GRC proposals would favorably compare with other large electric and gas utilities across the nation.

Section 5.2 below describes the Companies' strong safety culture and how they integrated great detail about this information throughout the RAMP and TY 2019 GRC showings. Section 6 below discusses how the Companies were the first utilities to present their risk-informed TY 2019 GRC showing, supported by testimony that transparently demonstrates how the Companies' key safety risks have been prioritized under the Commission's new GRC framework.

5.2 Safety

The CPUC has been focused on ensuring the utilities address safety risks for many years. The Commission's Interim Decision Adopting the Multi-Attribute Approach (Or Utility-Equivalent Features) and Directing Utilities to Take Steps Toward a More Uniform Risk Management Framework, Decision (D.)16-08-018 (Interim S-MAP Decision), adopted a Safety and Enforcement Division (SED) recommendation to "cover the company's organizational structure as it relates to safety" and "safety culture" in their RAMP Report.[27] The Companies included this information in their RAMP Report. Importantly, the Companies' integrated their RAMP Report into the 2019 GRC, and showed in great detail through their 2019 GRC

[24] *Id.* at 8.
[25] Tr. V10:440:11-17 (Lane).
[26] Ex. 2 SDG&E/Winn at 9.
[27] D.16-08-018 at 141.

Applications and supporting testimony "how each organization contributes to driving safety culture" at SoCalGas and SDG&E.[28]

5.2.1 Our Strong Safety Culture

Safety is deeply embedded in the culture at SoCalGas and SDG&E. It is this profound belief in safety as a driver of decision-making that made integrating RAMP into our GRC a natural outgrowth of the way in which we historically make decisions. SoCalGas and SDG&E are committed to doing the right thing and doing it safely. Our goal is that each employee arrives home safely after a day's work and that our customers trust our commitment to their family's safety. In addition, we are committed to being a prudent and safe operator in the communities we serve. Many witnesses in this case testified about safety culture, generally in Section II of the direct testimonies, whether from the perspective of our most senior executives, field operations, customer services, or human resources. For example, Bret Lane, SoCalGas' President and Chief Operating Officer, explained SoCalGas' commitment to and strong safety culture as follows:

> Our tradition of providing safe and reliable service spans throughout 150 years of our company's history and is summarized in our *Commitment to Safety* statement, which is endorsed by our entire senior management team:
>
> *Southern California Gas Company's longstanding commitment to safety focuses on three primary areas – employee safety, customer safety and public safety. This safety focus is embedded in what we do and is the foundation for who we are – from initial employee training, to the installation, operation and maintenance of our utility infrastructure, and to our commitment to provide safe and reliable service to our customers.*[29]

Mr. Lane's sentiment is shared by Caroline Winn, SDG&E's Chief Operating Officer, who explained that "[o]ur safety focus isn't something that is left to our front-line employees to champion. At SDG&E, it starts at the top. The first agenda item at every utility board meeting, senior management meeting and weekly operating council meeting is a safety discussion led by one of our operating officers."[30]

In addition, the witnesses for Human Resources, Safety, Workers' Compensation and Long-Term Disability echoed these sentiments. Tashonda Taylor, on behalf of SDG&E,

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[28] Ex. 3 SCG/SDG&E/Day/Flores/York at 30.
[29] Ex. 1 SCG/Lane at 6.
[30] Ex. 2 SDG&E/Winn at 5.

explained that SDG&E embraces a "safety-first culture [that] focuses on our employees, customers, and the public, and is embedded in every aspect of our work."[31] SDG&E's safety culture efforts include developing a trained workforce, safely operating and maintaining our electric and gas infrastructure, and providing safe and reliable gas and electric service. Mary Gevorkian, on behalf SoCalGas, explained that SoCalGas' "safety culture starts from our senior leadership with the Executive Safety Council (ESC), which is chaired by the Chief Operating Officer. The council sets goals and direction, provides resources and reviews results. Direct feedback from the frontline employees and supervisors is provided to the Council through regular dialogue sessions and through the field and office safety committed across the Company."[32] Both Companies emphasize and enshrine safety into their culture through employee programs like Behavior Based Safety Programs (intended to reduce at-risk behaviors), a Close Call/Near Miss Program (to reduce the potential for serious incidents), Safety Committees (creating forums for employee engagement on safety issues), and the myriad of safety training and safe driving programs.

Knowing that "what gets measured gets improved," both Companies conduct a bi-annual safety culture assessment through the National Safety Council Barometer Safety Culture Survey and an Employee Engagement Survey.[33] The Safety Barometer Survey assesses the overall health of the safety climate and identifies areas of opportunity to eliminate injuries and improve focus and commitment to safety. In its most recent survey, NSC ranked SDG&E in the 85th percentile, which is considered 'high performing' amongst the 580 companies that participated in the survey.[34] SoCalGas was ranked in the 90th percentile.[35]

The Companies have taken multiple, forward-thinking steps to address safety culture and associated safety policies and practices and routinely take a proactive and leading role in the Commission's efforts to address safety initiatives and risks. For these reasons, the Companies welcome a partnership with organizations such as the Office of Safety Advocate (OSA). Like OSA in its newly established role, the Companies place safety as a top priority.[36] In this regard,

[31] Ex. 362 SDG&E/Taylor at 6.
[32] Ex. 255 SCG/Gevorkian at 8-9.
[33] Ex. 362 SDG&E/Taylor direct at 8. Ex. 255 SCG/Gevorkian at 9.
[34] Ex. 362 SDG&E/Taylor at 8.
[35] Ex. 255 SCG/Gevorkian at 9.
[36] Ex. 1 SCG/Lane at 5-9. Ex. 2 SDG&E/Winn at 1-2.

we hope to continue to work closely with OSA in identifying potential opportunities to further our safety management policies and practices. In fact, on June 14 and 15, 2018, the Companies hosted representatives from OSA for a comprehensive deep dive into their various safety programs and initiatives, including details about the Companies' Emergency Operations Center (EOC), Transmission, Distribution, and Storage Integrity Management Programs (TIMP, DIMP, and SIMP), Pipeline Safety Enhancement Plan (PSEP), Quality Management and Continuous Improvement, Leak Detection initiatives, and the Incident Evaluation Process, among others. Together we can establish safety priorities balanced against the Commission's reliability and affordability goals.[37]

5.2.2 Process/Operational Safety

SoCalGas and SDG&E have an unwavering commitment to protecting employees, contractors and the public. In its testimony, OSA raised concerns, suggesting the Companies were too focused on 'people' safety rather than operational safety. Operational safety, also referred to herein as process safety, is deeply embedded in our operations and driven from the top. As stated in the direct testimony of Mr. Lane, "System integrity is an integral part of reducing safety risks. Thus, our proposals focus on enhancing system integrity through mandatory programs. . . ."[38] This commitment is echoed in the revised direct testimony of Ms. Winn.[39]

People safety reverberates in multiple areas, particularly public and process safety. Although OSA did not give credit in its testimony to SoCalGas and SDG&E for their efforts in this area, both Companies have policies and use metrics to measure operational/process safety (*e.g.*, damage prevention, PSEP, TIMP, DIMP, wires down, wildfire (Fire Risk Mitigation Program) and vegetation-related activities, to name a few). In recommending the Companies "increase their focus on process safety,"[40] OSA appeared not to recognize that process safety risks are being addressed by SoCalGas and SDG&E every day and that SoCalGas and SDG&E are committed to the critical safety principles of continuous improvement and the cycle of "Plan-

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[37] Ex. 90 SCG/SDG&E/Buczkowski/Geier at 2-3.
[38] Ex. 1 SCG/Lane at 1.
[39] Ex. 2 SDG&E/Winn at 1.
[40] Ex. 442 OSA/Contreras at 2-2.

Do-Check-Act."[41] These commitments are expressed by Ms. Winn and Mr. Lane, as well as other witnesses, in their GRC testimony.

In his testimony, Mr. Lane addresses process/operational safety: "In line with SoCalGas' deep-seated culture of employee/contractor, customer/public, and system safety, our GRC proposals will allow us to continue to invest to enhance safety and thereby mitigate risks that could impact our employees, customers, and/or system."[42] Additionally, in her direct testimony, Ms. Diana Day, the Companies' Vice President of Enterprise Risk and Compliance, explains: "My risk management organization generally facilitates the identification, analysis, evaluation, and prioritization of risks, with an emphasis on safety, to ultimately inform the investment decision-making process, and works to integrate risk management with asset and investment management through the creation of governance structures, competencies, and tools."[43]

For SoCalGas and SDG&E, process/operational safety is considered to be a blend of engineering, operational, and management expertise focused on preventing everything from near misses to catastrophic events. Similar to the Companies' focus on addressing risk, the emphasis on process/operational safety is not new. Even the more recent process safety management system (SMS), such as the tenets from the American Petroleum Institute Recommended Practice 1173 (API 1173 or API RP 1173) covering leadership, commitment and stakeholder engagement, are a focus of SoCalGas and SDG&E. That said, the Companies see the value in continuous improvement and are now seeking to more formally implement a safety framework that incorporates existing and new safety measures through a pipeline SMS and its related tenets (*i.e.*, API 1173) in the context of this GRC for their Gas operations. In addition, and as discussed in rebuttal testimony, SDG&E's Electric operations is committed to implementing an SMS including International Organization for Standardization (ISO) 55000 and its tenets. Likewise, SoCalGas' Underground Storage operations is implementing API 1171 and are committed to implementing an SMS.[44] SoCalGas and SDG&E are respectively seeking funding for the implementation of API 1173 and ISO 55000 in this proceeding. This evidences SoCalGas' and SDG&E's continued commitment to the implementation of a formal process safety framework

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41 American Petroleum Institute Recommended Practice 1173.
42 Ex. 1 SCG/Lane at 1.
43 Ex. 3 SCG/SDG&E/Day/Flores/York at 2.
44 Ex. 90 SCG/SDG&E/Buczkowski/Geier at 5.

and that their actions align with OSA's process safety interests emanating from both API 1173 and SMS proposals.

Finally, SoCalGas and SDG&E support OSA's recommendation to establish and focus on leading indicators of process safety; however, like other aspects of OSA's testimony, OSA may have lacked an appreciation of the extent of SoCalGas' and SDG&E's commitment to process safety, our use of metrics, and the connection of each to the existing safety-driven regulatory processes and compliance requirements.[45] By focusing on developing regulatory compliance metrics to demonstrate the effectiveness of their safety risk mitigations, the Companies are, in part, addressing OSA's metrics recommendation. However, mere compliance is not the goal at the Companies. SoCalGas and SDG&E leadership have consistently made safety their highest priority for many reason, not just to achieve "regulatory compliance." Measuring the Companies' heightened safety goals is already in play. Some examples of leading operational metrics used to gauge safety at the Companies, include (i) near miss statistics; (ii) average number of field rides per employee; (iii) number of stop-the-job events; (iv) response time (minutes) to gas leaks; (v) total miles of transmission pipe inspected by in-line inspection; (vi) average response time for emergency, branch, and circuit outages (minutes); (vii) transmission and distribution overhead wires down; (viii) transformers at seismic guidelines; and (ix) inspections (such as vegetation) and the Corrective Maintenance Program (CMP).[46] As noted by Ms. Day, "Over the next few years, the ERM[47] department is committed to developing metrics that can be used to measure the effectiveness of our risk management efforts. This may include performance metrics to measure particular risks, methods of evaluating the effectiveness of risk mitigants, or overarching metrics, such as a risk reduction per dollar spent."[48] The Companies are also working with the CPUC's SED and interested parties on metrics-related efforts in the context of the S-MAP, A.15-05-002 (consolidated).

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[45] *Id at 9.*
[46] Ex. 90 SCG/SDG&E/Buczkowski/Geier at 10 and n.37. Some examples of important lagging operational metrics used to gauge safety at the Companies, include (i) number of damages due to mismarks; (ii) damages on medium pressure lines per 1,000 Underground Service Alert (USA) tickets; (iii) number of fire ignitions; (iv) number of dig-ins; (v) number of curtailments due to unplanned pipeline and equipment outages; and (vi) aviation incident rate.
[47] Enterprise Risk Management (ERM).
[48] Ex. 3 SCG/SDG&E/Day/Flores/York at 26.

5.2.3 The Expanded Role and Capabilities of SoCalGas and SDG&E's Leadership and Boards of Directors in Assessing and Monitoring Process Safety

Both the SoCalGas and SDG&E executive leadership teams and Boards have skills and processes in place to monitor, evaluate, and oversee process and occupational safety.[49] In addition to having practices in place to ensure the Boards of each utility effectively review safety for each company, both Boards include senior officers with extensive operational and safety experience specific to a natural gas or electric utility. At the Board level, both Companies discuss safety-related issues at every meeting. The following are just a handful of topics discussed at the Companies' Board meetings: Grassroots Safety Culture; Fire Preparedness, Response and Meteorology; Environmental and Safety Compliance Management Program Certification Update; Risk Assessment Mitigation Phase Update; Cybersecurity and Crisis Communications Update; and Century Park Facility Safety Enhancements.[50]

In addition, both Companies' executive leadership oversee safety on a daily basis and report concerns to the respective Boards. The SoCalGas Executive Safety Council and SDG&E Executive Safety Council, chaired by their respective COOs, and composed of key HR, Safety, and Operations executives, actively seeks employee engagement and feedback on safety issues and performance from front-line employees and supervision. Additionally, the SoCalGas and SDG&E executive teams are made aware of safety and compliance issues through the Pipeline Safety Oversight Committee. The Pipeline Safety Oversight Committee is structured to review issues, identify solutions and resolution, and track follow up.[51] The SDG&E Executive Team also monitors and tracks safety and compliance issues through the Corrective Maintenance Program and the associated Quality Assurance/Quality Control Program.[52]

Finally, while all officers of each Company are **responsible** for safety, there is one officer at each Company who is **accountable** for safety. In both cases, this person is the Chief Operating Officer, who is designated as the Chief Safety Office and is also the Chair of the respective Safety Committees.[53]

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[49] Ex. 90 SCG/SDG&E/Buczkowski/Geier at 11.
[50] *Id.*
[51] *Id.*, (citing SoCalGas Company Operation Standard 183.09).
[52] *Id.* (citing to SDG&E Electric Standard Practice No. 612 (Rev.)).
[53] Ex. 90 SCG/SDG&E/Buczkowski and Geier at 11.

In sum, the Companies multipronged approach to safety, whether at the Board level or the front line, enshrines safety into our culture and drives our collective decision-making.

6. Risk-Informed GRC Overview

SoCalGas and SDG&E's Risk Management direct testimony volume comprised the Risk Management Policy testimony of Diana Day, the ERM Organization testimony of Gregory Flores, and the RAMP-to-GRC Integration testimony of Jamie York,[54] each of which is discussed in turn in Sections 6.1, 6.2, and 6.3, below. The Risk Management Policy testimony of Diana Day discusses how the Companies' TY 2019 showing "present[s] the very first risk-informed GRC application, supported by testimony that transparently demonstrates how the Companies' key safety risks have been prioritized under the California Public Utilities Commission's (CPUC or Commission) new GRC framework."[55] The ERM Organization testimony of Gregory Flores sponsors the Operations and Maintenance (O&M) expenses for SoCalGas and SDG&E to support the trajectory described in Ms. Day's testimony related to the ERM function.[56] And the RAMP to GRC Integration testimony of Jamie York "describes the process used to integrate the RAMP process into these GRC applications."[57]

6.1 Risk Management Policy

Ms. Day's direct testimony summarizes SoCalGas and SDG&E's risk-informed GRC presentation, providing context within which SoCalGas and SDG&E's funding requests should be viewed, and explaining how SoCalGas and SDG&E have incorporated risk management into the TY 2019 GRC applications and supporting testimony. Ms. Day's testimony also provides a roadmap of the RAMP risks included in this GRC and where (*i.e.*, in which SoCalGas and/or SDG&E testimony chapters) these risks are represented, and identifies each TY 2019 GRC witness who sponsors mitigation activities associated with the Companies' RAMP risks (as previously set forth in their RAMP Report[58]) including details on RAMP-related risks and costs, in Appendix A of her testimony.

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[54] Exs. 3 and 4 SCG/SDG&E/Day/Flores/York; Ex. 5 SCG/Flores; Ex. 6 SDG&E/Flores.
[55] Ex. 3 SCG/SDG&E/Day at ii.
[56] Ex. 3 SCG/SDG&E/Flores at 1.
[57] Ex. 3 SCG/SDG&E/Day/Flores/York at ii.
[58] I.16-10-015/I.16-10-016 (cons.), Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company (November 30, 2016) (referred to herein as the "RAMP Report").

Ms. Day describes how the Companies have incorporated their GRC cost requests for risk mitigation activities into the Commission's new risk-informed GRC framework, established through the Risk Framework Decision.[59] The Commission adopted the Risk Framework Decision in December 2014, to incorporate a risk-informed decision-making framework into the Rate Case Plan (RCP) for the GRCs of California's investor-owned utilities (IOUs).[60] The Commission intended this framework to incorporate risk, value transparency, and place safety of the public, employees, and contractors, as a top priority.[61] The Commission has stated that the new risk framework is intended to "result in additional transparency and participation on how the safety risks for energy utilities are prioritized … and provide accountability for how these safety risks are managed, mitigated and minimized."[62]

The Risk Framework Decision included the addition of two new Commission proceedings – S-MAP and RAMP – which provide a framework for risk models and tools as well as risk assessments and mitigation plans for SoCalGas and SDG&E's key safety risks, and feed into the GRC applications.[63] Specifically, the Risk Framework Decision requires each IOU to take the following additional steps and include additional, risk-related information, as part of the GRC process:

(1) initiate utility-specific S-MAP applications and participate in a statewide S-MAP proceeding, intended to "allow the Commission and parties to examine, understand, and comment on the models that the energy utilities plan to use to prioritize risks and to mitigate risks;"[64]

(2) subsequently, initiate a request that an order instituting investigation be opened and submit a RAMP report for each upcoming GRC, describing how the IOU plans to assess, mitigate, and minimize certain key risks; and

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[59] Ex. 3 SCG/SDG&E/Day at 4 (citing D.14-12-025, Decision Incorporating a Risk-based Decision-making Framework into the Rate Case Plan and Modifying Appendix A of Decision 07-07-004 (December 9, 2014) (referred to herein as the "Risk Framework Decision")).

[60] California IOUs consist of SoCalGas, SDG&E, Pacific Gas and Electric Company (PG&E), and Southern California Edison Company (SCE).

[61] Risk Framework Decision at 35.

[62] *Id.* at 3; *see also id.* at 10. Note that SoCalGas' and SDG&E's GRC applications address risks and request funding for risk mitigation activities beyond their top safety risks (for example, reliability projects and safety risks that did not meet the minimum threshold to be included in RAMP).

[63] *Id.* at 2-3.

[64] *Id.* at 21.

(3) incorporate the RAMP submission, as clarified or modified in the RAMP proceeding, into the IOU's GRC filing.

Going forward, the Commission will also require the Companies to file two reports annually, the Risk Mitigation Accountability Report and the Risk Spending Accountability Report,[65] which will require the Companies to implement additional internal tracking processes and tools to measure the effectiveness of their mitigation plans.

SDG&E and SoCalGas' TY 2019 GRC testimony presentation is the first to fully incorporate these additional processes into their GRC showing. To integrate this process, for the past several years, the Companies have been participating in Commission proceedings and developing internal processes to incorporate the S-MAP, RAMP, and accountability reporting requirements into their operations, and GRC presentations. This work is still ongoing, as described below.

Since SoCalGas and SDG&E submitted their GRC testimony, a Motion for Approval of Settlement Agreement (Motion),[66] was jointly filed by Settling Parties[67] on May 2, 2018, in Phase 2 of the S-MAP. The settlement agreement "reflects the Settling Parties' collective view on how key issues in Phase 2 of this proceeding should be resolved."[68] As explained in the Motion, "[t]he issue at the core of Phase 2 was whether the Joint Intervenor [TURN, EPUC, and Indicated Shippers] Approach or a utility proposed alternative should be adopted as the uniform approach for all large utilities to be used in future RAMP and GRC filings."[69]

The settlement, if adopted, sets forth "minimum required elements to be used by the large utilities for risk and mitigation analysis in the RAMP and GRC."[70] These minimum requirements include, among other things, a process for selecting risks for the RAMP, principles for performing risk assessment and risk ranking in preparation for the RAMP, a methodology for mitigation analysis for risks in RAMP including the calculation of risk-spend efficiency, and

65 *See id.* at 44.
66 A.15-05-002/-003/-004/-005 (cons.), Joint Motion for Approval of Settlement Agreement Plus Request for Receipt into the Record of Previously Served Documents and for Expedited Comment Period (Filed May 2, 2018) (Motion).
67 The Settling Parties include the following entities: PG&E, SCE, SoCalGas, SDG&E, ORA, The Utility Reform Network (TURN), the Energy Producers and Users Coalition (EPUC), and Indicated Shippers (IS).
68 Motion at 1.
69 *Id.* at 4.
70 *Id.* at 10.

global items such as ensuring transparency, using data when practical and appropriate, and using Subject Matter Expert (SME) judgment if data is not available.[71]

In addition to describing how the Companies' incorporated risk management into the TY 2019 GRC applications and supporting testimony, Ms. Day also testifies that the Companies have met their prior commitments as set forth in her testimony submitted in the TY 2016 GRC by building a risk culture, focusing on continuous improvement of their risk processes, continued integration of risk, asset, and investment management, and serving internally in an advisory support capacity.[72] Third-party risk maturity and integration of risk, asset and investment management assessment reports for SoCalGas and SDG&E are attached to Ms. Day's testimony as Appendices C and D, respectively. Beyond the commitments expressed in the TY 2016 GRC, Ms. Day testifies that the Companies' "[e]fforts over the next GRC cycles will focus on continuing to develop repeatable, consistent, and transparent processes"[73] and demonstrates this through an updated strategic trajectory providing the Companies' risk-related vision. This vision outlines various initiatives associated with risk, asset, and investment management.[74] Lastly, Ms. Day describes that risk management informs the Companies' safety culture including that "[s]afety is a core value of the Companies."[75]

6.2 Enterprise Risk Management

Gregory Flores' testimony sponsors the ERM Organization O&M expenses for SoCalGas and SDG&E, to support the trajectory described in Ms. Day's testimony related to the ERM function.[76] Mr. Flores' testimony supports the TY 2019 forecasts for O&M shared costs associated with the ERM Organization of both SoCalGas and SDG&E, with no non-shared O&M expenses or capital costs, as summarized in Table 6.2.A:

TABLE 6.2.A - Test Year 2019 Summary of Total Costs			
Description	**2016 Adjusted-Recorded (000s)**	**TY 2019 Estimated (000s)**	**Change (000s)**
SDG&E ERM & Compliance	4,281	6,743	2,462
SoCalGas ERM	292	292	0
Total Shared Services	**4,573**	**7,035**	**2,462**

71 Ex. 4 SCG/SDG&E/Day/Flores/York at 11.
72 Ex. 3 SCG/SDG&E/Day at 19-24.
73 *Id.* at 24.
74 *Id.* at 24-28.
75 *Id.* at 28.
76 Ex. 3 SCG/SDG&E/Flores at 1.

Mr. Flores' testimony describes SoCalGas and SDG&E's commitment to continued development of our ERM program that facilitates the integration of risk into the review of enterprise risks, with an emphasis on safety, the identification and prioritization of effective mitigation measures and, ultimately, the investment decision-making process.[77] Our integration and practice of risk management continues to evolve to address a variety of changing demands related to operational, compliance, industry and Commission regulations, and increasing expectations related to risk-informed decision-making.

6.3 RAMP-To-GRC Integration

The RAMP to GRC Integration testimony of Jamie York describes the process used to integrate the RAMP process into the TY 2019 GRC applications.[78] The CPUC established the RAMP in the Risk Framework Decision as "an initial phase of each utility's GRC process"[79] and ordered that future GRC applications include "changes resulting from the RAMP process."[80] Ms. York's testimony provides a summary of those changes. Ms. York describes the integration process as complicated, iterative, and required changes to the Companies' well-established internal GRC process.

The RAMP is a subset of the Companies' GRC showing, in that it is limited to reporting on safety-related activities that correspond to one or more of the Company's key safety risks, with risk impacts scoring four (major) or more in the Safety, Health and Environment category, as described in the RAMP Report's "Overview and Approach" Chapter.[81]

SoCalGas and SDG&E were the first utilities to submit a RAMP Report and, thus, integrate the RAMP into the GRC. The Companies' RAMP Report comprised over 900 pages of written descriptions and analysis of the Companies' key risks, and their baseline and proposed risk mitigation activities.[82] The RAMP Report was subject to review and scrutiny by the Commission's SED, who "reviewed the RAMP Report for compliance," and several parties "were given the opportunity to file comments."[83]

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[77] *Id.* at 1-8.
[78] Ex. 3 SCG/SDG&E/York at ii.
[79] Risk Framework Decision at 31.
[80] *Id.* at 42-43.
[81] RAMP Report at Overview and Approach Chapter (RAMP – A), A-4.
[82] Ex. 4 SCG/SDG&E/Day/Flores/York at 8 (citing the RAMP Report).
[83] D.18-04-016 at 1.

Because this was the Commission's first-ever RAMP proceeding, and first-ever RAMP Report, the information provided in the Report offered unprecedented detail and analysis of the Companies' risk mitigation activities. The decision closing the Companies' RAMP proceedings noted the Commission's SED observation that "the risks identified in the RAMP Report offer a complete description of risk scenarios and proposed mitigation measures and provides a reasonable basis for understanding the intent of the mitigations and how they might be able to reduce the impact or frequency of the [RAMP risk-related] incidents."[84] The decision further noted that "[t]he risk rankings and proposed mitigations provide more data, information, and analysis regarding SDG&E's and SoCalGas' methodologies in assessing risks and how to mitigate those risks."[85]

Translating the safety-risk mitigation activities identified in the RAMP Report into the GRC in a manner that reflects this risk-based view, while at the same time including the requests that meet the traditional non-risk-based operating needs, was a challenging task. Ms. York testifies regarding the steps the Companies took to incorporate the RAMP mitigation activities into the GRC applications, as follows:

1. The Companies first identified the population of activities from the RAMP Report that should be further reviewed for inclusion in the GRC.
2. Then, the RAMP risk mitigation activities described in the RAMP Report were assigned to GRC subject matter areas.
3. Risk mitigation activities were then evaluated to determine specific requests in the GRC.
4. Specific RAMP requests were then incorporated into the witnesses' GRC forecasts.

Ms. York's testimony describes each of the above steps in detail and provides an example of how RAMP was integrated into the GRC testimony forecasts.[86] Ms. York also describes challenges experienced in the RAMP-to-GRC Integration Process.[87]

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[84] *Id.* at 8.
[85] *Id.* at 9.
[86] Ex. 3 SCG/SDG&E/York at 2-10.
[87] *Id.* at 10-11.

6.4 Other Parties' RAMP and Risk Management Testimony

Direct testimony regarding SoCalGas' and SDG&E's Risk Management presentation was submitted by ORA, TURN, CUE, UCAN, and IS. [88] Intervenors generally commented and provided recommendations as to whether the RAMP information put forth in the Companies' GRC showing should or should not be utilized for evaluating the Companies' requests in this proceeding, based largely on the assertion that the RAMP process and related information is not fully mature. However, as Ms. Day, Mr. Flores and Ms. York explained in their rebuttal testimony, the Commission has found that the "[p]roposed spending for safety mitigation activities and the efficiency of risk mitigation funding are to be reviewed in the Test Year 2019 GRC applications[.]"[89] The Companies' based their risk-informed presentation in this case on D.16-08-018 and the Risk Framework Decision, which modified the Rate Case Plan to incorporate a risk-based decision-making framework including establishing the RAMP process and required the Companies to integrate "RAMP results into [their] GRC filing[s],"[90] beginning with their TY 2019 showing.[91] The Commission has found that SED has "reviewed the RAMP Report for compliance,"[92] the Companies have "incorporated RAMP results into their respective Test Year 2019 GRC applications,"[93] "the requirements set forth [in] D.14-12-025 and D.16-08-018 have been satisfied,"[94] and "this [RAMP] process is now complete."[95] Thus, the Companies' RAMP-related information in this proceeding was presented in accordance with Commission-adopted requirements and is "to be reviewed in the TY2019 GRC applications."[96] RAMP-related information should be used to inform funding decisions in this proceeding, as supported by ORA,[97] and as required by the Commission. Intervenors' testimony proposing cuts to the Companies' funding without sufficient consideration of safety risk and specific mitigations

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88 Ex. 398 ORA/Stannik; Ex. 490 TURN/Borden; Ex. 370 CUE/Marcus; Ex. 511 UCAN/Charles; Ex. 436 IS/Gorman.
89 Ex. 4 SCG/SDG&E/Day/Flores/York at 2 (quoting D.18-04-016 at 2, 14).
90 *Id.* (quoting D.14-12-025 at 42).
91 *Id.* at 2-3 (citing D.16-08-018 at 154).
92 D.18-04-016 at 1.
93 *Id.*
94 *Id.* at 14.
95 *Id.* at 1 and Conclusion of Law (COL) 2.
96 *Id.* at 12.
97 Ex. 398 ORA/Stannik at 2 and 15.

affected by such cuts should be given less evidentiary weight for disregarding the Commission's new risk-informed framework.

IS and TURN argued that RAMP-related costs should be subject to additional conditions including one-way balancing, cost caps, or both. Ms. Day, Mr. Flores, and Ms. York testified that such recommendations are unnecessary and incompatible with the Commission's risk-informed framework, because the "Commission actively chose to adopt new reporting requirements to achieve utility accountability, rather than other options such as regulatory accounts and cost caps as proposed by TURN and IS in this proceeding."[98] Additionally, "[f]lexibility is required as the Companies may need to shift resources to pressing or emerging risks."[99]

ORA also submitted testimony opining on the proposed ERM Organization funding request. While ORA did not oppose the Companies' O&M funding request for the ERM Organization, it "recommends that this funding be provided via a 1-way balancing account since Commission requirements may change and exact funding purposes have not been defined."[100] The Companies disagree with this recommendation. As Ms. Day, Mr. Flores, and Ms. York explained, "[b]ecause risks and risk mitigations are dynamic, setting the precise scope of the Companies' efforts years in advance may be challenging and unreasonable."[101] Further, creating a new regulatory account for the marginal amount of the ERM Organization funding requested in this TY 2019 GRC would segregate one relatively small category of costs and would create an administrative burden. Based on the foregoing, ORA's recommendation to one-way balance the ERM Organization costs should be rejected.

The Companies' risk-informed GRC presentation, in accordance with the Commission's new risk decision-making framework, should be fully accounted for by intervenors and the Commission in making funding decisions in this proceeding. The Commission should examine the Companies' risk-informed GRC showing in light of its risk-informed GRC framework, and disregard intervenor proposals that are inconsistent with risk-informed funding decisions.

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[98] Ex. 4 SCG/SDG&E/Day/Flores/York at 12.
[99] *Id*.
[100] Ex. 398 ORA/Stannik at 8.
[101] Ex. 4 SCG/SDG&E/Day/Flores/York at 18.

7. Fueling Our Future

7.1 Introduction

SoCalGas and SDG&E discuss the Fueling Our Future (FOF) initiative in Exhibits 222[102] and 223.[103] FOF is an enterprise-wide initiative that commenced in 2016 designed to provide an opportunity to examine how we approach, organize and execute work. Built on the premise that within a successful company, opportunities exist to improve performance by better leveraging people, processes and technology, FOF focuses on innovating and modernizing processes to meet the future needs of our business and build a better business through reinvestments. Savings generated from FOF are passed through to ratepayers in the form of revenue requirement reductions. Ratepayers also benefit from continued operating excellence that delivers clean, safe and reliable energy to better the lives of our customers and communities now and in the future.

During an 18-week period in 2016, ongoing, continuous improvement efforts were supplemented by a third-party consulting firm, EHS Partners (EHS), who provided incremental resources and a framework to help identify, evaluate, and prioritize initiatives. EHS, whose engagement ended in 2016, was funded by Sempra Energy. The culmination of these efforts was a transparent, detailed list of over 450 approved ideas to be implemented over twelve quarters between late 2016 and third quarter 2019. Despite the portfolio of initiatives being dynamic, such that actual timing and/or savings outlooks may change over time, the TY 2019 GRC reflects a total commitment of $68.99 million, composed of $42.76 million for SoCalGas and $26.23 million for SDG&E. Notably, without the FOF planning phase in 2016, these TY 2019 GRC savings would not materialize.

Both ORA and TURN are in agreement that the Commission should accept SoCalGas' and SDG&E's TY 2019 FOF savings.[104] However, while applauding the companies' efforts and

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[102] *See* Ex. 222 SCG/SDG&E/Snyder/Clark (adopted by Baron/Widjaja).
[103] *See* Ex. 223 SCG/SDG&E/Baron/Widjaja.
[104] Ex. 399 ORA/Burns at 1, 5-7; Ex. 504 TURN/Dowdell at 6. In the course of its review, ORA examined a couple of examples (one from each company) of the backup documentation supporting the Companies' cost savings and found that backup to be "problematic." Ex. 399 ORA/Burns at 3-4. As explained in Ex. 223 SCG/SDG&E/Baron/Widjaja at 3, fn. 5, in discovery, SoCalGas and SDG&E provided ORA with a list of each approved FOF initiative and idea to be implemented, a short idea description, the cost to implement, ongoing costs and benefits, estimated net savings, and expected completion date. SoCalGas and SDG&E believe they provided an appropriate level of support, but, as noted in the discussion section below, SoCalGas and SDG&E are committed to the savings amounts identified in the direct testimony, whether or not the savings ultimately are actually realized.

recommending that the TY 2019 savings be accepted, TURN argues that company staff costs over the 18-week planning phase in BY 2016 should be quantified and removed from the test year because they should be considered "one-time costs . . . that will not be repeated as part of the ordinary course of business going forward."[105] As explained in more detail below, SoCalGas and SDG&E disagree with TURN's assertion because our employees are engaged in continuous improvement efforts on an ongoing basis.

7.2 Continuous Improvement at SoCalGas and SDG&E

As explained in Exhibit 222, to appreciate the significance of FOF to SoCalGas' and SDG&E's operations, it is first necessary to understand how continuous improvement at the Companies sets the stage for FOF's successful introduction. To us, continuous improvement is far more than a collection of operational policies and procedures. It is a growth mindset that has employees seeking new ways of doing business to increase the efficiency of core operations and customer service. There are three pillars to continuous improvement efforts at SoCalGas and SDG&E: culture, analytics, and process.

A culture of continuous improvement enables employees to look at problems from new perspectives. Without a cultural commitment to continuous improvement, valuable analyses may be unrealized and processes unchanged. SoCalGas and SDG&E build a culture of continuous improvement by seeding the organization with employees trained in Lean Six Sigma methods, a data-driven approach to improve business processes using statistical analysis. Lean Six Sigma casts an eye towards analysis that produces quantifiably-justifiable business decisions and provides a framework for positively affecting business processes by mitigating variability and streamlining complexities between workstreams, while increasing speed and improving agility. Every year, the Companies train employees from across the organization in the Lean Six Sigma data-driven approach (typically, SoCalGas trains 80 to 100 employees per year and SDG&E trains 60 to 80 employees per year). Employees are encouraged to apply lessons learned with their teams and in their work, whether in the field, office, customer contact center, or elsewhere.

FOF was born out of the same commitment to continuous improvement – linking a culture focused on continuous improvement and analytics to produce wide-ranging process

[105] Ex. 504 TURN/Dowdell at 6.

improvements. FOF is an attempt to take the formula that has been successful in business units, such as the customer contact center, and extend the approach across the Companies as a whole. SoCalGas and SDG&E have committed to TY 2019 cost savings of a combined $68.99 million FOF savings. These savings reduce the GRC TY 2019 revenue requirement and will help fund incremental strategic and base projects that modernize our infrastructure, with an emphasis on enhancing safety and reliability.

7.3 Response to TURN

As summarized above, TURN argues that the Commission should:

1. Accept the $68.99 million in estimated FOF initiative savings as a reduction of revenue requirement to be passed through to ratepayers;
2. Applaud Sempra's on-going efforts to find more effective, cost-efficient ways to deliver retail gas and electricity, and other energy services . . .; and
3. Adjust 2016 base year revenues downward by the amount of the FOF Project Phase costs identified, as these one-time costs represent significant base year work by SDG&E and SCG staff that will not be repeated as part of the ordinary course of business going forward.[106]

As explained in Exhibit 223, SoCalGas and SDG&E strongly disagree with TURN's suggestion that the Commission should "Adjust 2016 base year revenues downward by the amount of the FOF Project Phase costs identified" on the grounds that these are "one-time costs [that] represent significant base year work by SDG&E and SCG staff that will not be repeated as part of the ordinary course of business going forward."

As a threshold matter, the Companies did not separately track the 18-week project phase costs during BY 2016. More importantly, the employees who supported FOF were exempt employees who continued to support their current roles and responsibilities at least in part during the 18 weeks of FOF Project Phase. Work that was not completed by FOF team members was not deferred but, instead, redistributed to other employees within the organization.[107]

[106] *Id.*
[107] Ex. 223 SCG/SDG&E/Baron/Widjaja at 5.

In addition, the project phase was necessary for FOF idea generation and the eventual approval of selective ideas for implementation. Without the project ideation and idea assessment phase, the $68.99 million of cost savings would not have been possible.[108]

Finally, the FOF program comes under the umbrella of continuous improvement activities, which, as described above, is embedded in the SoCalGas and SDG&E cultures. The costs associated with employees who participate in continuous improvement projects should not be regarded as one-time costs. Whether supporting FOF activities or other continuous improvement initiatives, this is the job of SoCalGas and SDG&E staff on an ongoing basis. If there were any incremental costs associated with the FOF effort, those were the costs associated with the engagement of the third-party consultant (EHS), but, as SoCalGas and SDG&E explained in their direct testimony, none of EHS' costs were allocated to SoCalGas or SDG&E.[109]

FOF savings returned to ratepayers would not even be possible if not for the FOF planning activities that led to these savings. To claim that employee resources called upon during the planning phase of FOF should be considered as out of the ordinary course of company business, ignores the continuous improvement commitment and culture embedded at both SoCalGas and SDG&E, which continues on an ongoing basis. We request that the Commission adopt the $68.99 million savings in TY 2019, without any base year adjustment.

8. Gas Distribution (SoCalGas and SDG&E)

SoCalGas and SDG&E's Gas Distribution testimonies and workpapers, supported by witness Gina Orozco-Mejia, describe and justify SoCalGas and SDG&E's forecasted Gas Distribution O&M and capital expenditures.[110] They provide a detailed and thorough examination of the Gas Distribution area, including operations, facilities, the major cost drivers, and the challenges facing Gas Distribution from system expansion, increased regulatory and environmental requirements, aging infrastructure, maintaining a skilled workforce, and economic conditions. SoCalGas and SDG&E's Gas Distribution is responsible for operating, maintaining, and constructing new gas facilities to provide safe, clean, and reliable delivery of natural gas to

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[108] *Id*.
[109] Ex. 222 SCG/SDG&E/Snyder/Clark/Baron/Widjaja at 3.
[110] *See* Exs. 07-10A SCG/Orozco-Mejia and Exs. 11-14 SDG&E/Orozco-Mejia.

its customers at a reasonable cost consistent with operational laws, codes, and standards established by local, state, and federal authorities.

Intervenors' summary positions are compared to SoCalGas and SDG&E's in the tables below:

Summary of SoCalGas O&M Request and Intervenor Proposals

TOTAL NON-SHARED + SHARED SERVICES O&M[111] - Constant 2016 ($000)		
	Test Year 2019	**Variance**[112]
SoCalGas	148,154	
ORA	118,209[113]	(29,945)
CFC	147,654[114]	(500)
TURN	133,245[115]	(14,909)
CUE	161,313[116]	13,159

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111 For the purpose of these comparison tables, for areas that were not discussed by the parties (e.g., TURN, CUE, CFC), it is assumed that the parties accepted SoCalGas' forecasts.

112 Intervenor's forecast – Utility's forecast = Variance.

113 In Ex. 406 ORA/Phan at 2 in Table 11-1, the total O&M is shown as $118.312 million. However, SoCalGas has provided in Ex. 10 SCG/Orozco-Mejia at Appendix A corrected calculations for O&M.

114 In its testimony, CFC makes a specific recommendation for Cathodic Protection (O&M) only. CFC also recommends that Gas Distribution's TY 2019 revenue requirement be reduced by $27.9 million to reflect CFC's estimate for unaccounted for gas. Ex. 484 CFC/Roberts at 11. This out-of-scope proposal is addressed in Section 8.5 below.

115 In its testimony, TURN makes specific recommendations for Main Maintenance and Service Maintenance categories only.

116 In its testimony, CUE makes specific recommendations for Locate & Mark, Leak Survey, Main Maintenance, Service Maintenance, and Tools, Fittings and Materials categories only.

Summary of SoCalGas Capital Request and Intervenor Proposals

TOTAL CAPITAL [117] - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SoCalGas	278,473[118]	324,801	347,842	951,116	--
ORA[119]	279,210	285,885	298,056	863,151	(87,965)
CUE[120]	278,473	324,801	368,357	971,631	20,515

Summary of SDG&E O&M Request and Intervenor Proposals

TOTAL O&M - Constant 2016 ($000)		
	Test Year 2019	**Variance**
SDG&E	29,533	
ORA	28,366[121]	(1,167)
CUE	32,312	2,779

Summary of SDG&E Capital Request and Intervenor Proposals

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	50,666[122]	91,606	110,993	253,265	--
ORA	75,756	88,647	88,246	252,649	(616)
CUE	50,666[123]	91,606[124]	132,560	274,832	21,567
Sierra Club / UCS	Not Specified				

[117] For the purpose of these comparison tables, for areas that were not discussed by CUE, it is assumed that it accepted SoCalGas' forecasts.

[118] ORA recommends adopting SoCalGas' actual recorded 2017 capital expenditures for all capital categories for the 2017 forecast, which SoCalGas does not oppose, with the exception of Capital Tools and Meter Guards discussed further below in Section 8.3.1.4. *See* Ex. 10 SCG/Orozco-Mejia at 128:2-8.

[119] In Ex. 406 ORA/Phan at 4 in Table 11-2, the total Capital for 2018 and 2019 are shown as $274.586 million and $298.167 million respectively. However, SoCalGas has provided in Ex. 10 SCG/Orozco-Mejia at Appendix A corrected calculations for Capital categories.

[120] In its testimony, CUE makes specific recommendations for Supply Line Replacements, Service Line Replacements, and Regulator Stations categories only. In Ex. 370 CUE/Marcus at 16:1, the total base forecast used for CUE's calculation was incorrect, for a corrected value please refer to Ex. 10 SCG/Orozco-Mejia at Appendix A, A-3 to A-4.

[121] This is a corrected value. Refer to Ex. 14 SDG&E/Orozco-Mejia at Appendix A for the derivation of this value.

[122] SDG&E does not oppose ORA's recommendation to use 2017 adjusted-recorded expenditures for 2017 Gas Distribution Capital. *See* Ex. 14 SDG&E/Orozco-Mejia at 32:15-17.

[123] CUE did not discuss SDG&E's total forecast values for base year 2016, 2017, and 2018. It is assumed that CUE accepted the SDG&E forecast figures for those years.

[124] *Id*.

8.1 Risk-Informed Funding Requests (SoCalGas and SDG&E)

In developing SoCalGas and SDG&E's requests, priority was given to key safety risks identified in the Companies' RAMP Report to assess which risk mitigation activities Gas Distribution currently performs and what incremental efforts are needed to further mitigate these risks. All the work categories sponsored by Ms. Orozco-Mejia are activities Gas Distribution currently performs. SoCalGas and SDG&E assumed that many of the incremental RAMP-related mitigation activities were already accounted for in the base (*i.e.*, RAMP Embedded Base Costs) when using a five-year linear trend as the base forecast methodology. This was done to prevent double counting of upward pressures.[125]

As further detailed in Section II.A of Ms. Orozco-Mejia's direct testimonies, SoCalGas and SDG&E's RAMP risks represented and supported as part of these testimonies include:[126]

- Mitigating the risk of Catastrophic Damage Involving Third-Party Dig-Ins includes training and Locate and Mark activities as RAMP base expenses for both utilities. For SoCalGas, the incremental RAMP expenses support Standardizing Locate and Mark tools used by locators by replacing aging tools. For SDG&E O&M, the incremental RAMP expenses support Operator Qualification certification, staff support for federal and state regulation translation, and additional standby personnel for surveillance of excavations near high-pressure gas lines.
- Mitigating the risk of Employee, Contractor, Customer and Public Safety includes employee training, personal protective equipment (PPE) and safety equipment, and above-ground and below-ground gas facility and pipeline inspections as RAMP base expenses for both utilities. In addition to these base expenses, for SoCalGas, the incremental RAMP expenses support O&M and capital for a confined space air monitoring system for field personnel and capital to upgrade Nomex coveralls and fresh air equipment.
- Mitigating the risk of Catastrophic Damage Involving Medium-Pressure (MP) Pipeline Failure includes managing risks through compliance with applicable federal (49 CFR 192) and state (General Order 112-F) regulations as RAMP base expenses for both utilities. SDG&E will expand and add new mitigations from RAMP incremental expenses for increasing the replacement of early vintage plastic pipe, removal of Dresser Mechanical couplings and Oil Drip piping facilities. In addition, RAMP incremental expenses for the removal of damaged buried piping in vaults; removal of closed valves between high- and medium-pressure systems; removal/replacement of early vintage steel pipe and pre-1933 threaded steel main; and provide funding for a cathodic protection (CP) reliability program to assess the "health" of SDG&E's CP system.
- For SoCalGas only, mitigating the risk of Catastrophic Damage Involving High-Pressure (HP) Pipeline Failure includes maintenance, qualifications of pipeline personnel, requirements for corrosion control through CP, and operations as RAMP base expenses.

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[125] Ex. 10 SCG/Orozco-Mejia at 11:17-20; Ex. 14 SDG&E/Orozco-Mejia at 4:7-9.

[126] *See* Ex. 7 SCG/Orozco-Mejia at 14-25 (Table GOM-07); Ex. 11 SDG&E/Orozco-Mejia at 12-25.

- For SDG&E only, mitigating the risk of Workforce Planning (the risk of loss of employees with deep knowledge, understanding, and experience in operation due to retirement or turnover) through training and knowledge transfer programs and compliance and inspection programs as RAMP base expenses. Beyond these base expenses, RAMP incremental expenses will support the establishment of the "Supervisor University," a dedicated training group and curriculum for the development of field supervisors.

8.2 Common Issues (SoCalGas and SDG&E)

8.2.1 Five-Year Linear Trend Versus ORA's Forecasting Methodologies

A fundamental difference driving ORA's proposed reductions for Gas Distribution is a disagreement with SoCalGas and SDG&E's use of a five-year (2012-2016) linear trend. ORA's general position is that a "Last Recorded Year" (LRY) methodology is required or binding for a historical trend scenario spanning three or more years.[127] The Companies respectfully disagree.

ORA's position requiring the LRY methodology is based on two CPUC decisions: PG&E's 1990 GRC (D.89-12-057) and SCE's 2015 GRC (D.15-11-021).[128] However, these decisions are not controlling. First, in PG&E's 1990 GRC, both parties involved recommended the use of LRY and averaging methodologies.[129] As a result, the Commission stated, "[f]rom these descriptions of the parties' methodologies, we may discern general agreement on certain principles for developing a base estimate of 1990 expenses."[130] The Commission then outlined principles where a LRY would be more appropriate than use of an average and vice versa. Notably, the Commission did not mandate the use of LRY where historical data shows a trend spanning three or more years. Second, in SCE's 2015 GRC, SCE recommended using the LRY, while ORA recommended use of averaging.[131] Further, both parties cited to PG&E's 1990 GRC for guidance "to distinguish between averaging and LRY."[132] These cases are distinguishable from the instant GRC where the Companies propose a linear trend. In developing the principles ORA now relies on, the Commission did not evaluate whether a linear trend would be

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[127] *See* Ex. 406 ORA/Phan at 6-7.
[128] Ex. 406 ORA/Phan at 6-7 (quoting D.15-11-021 and D.89-12-057).
[129] D.89-12-057 at 14 ("Generally, PG&E relied upon 1987 recorded expenses for its base estimate. However, for those accounts which may be influenced by outside forces, . . . PG&E used a four-year average. . . . DRA generally derived the base 1990 estimate using either 1987 recorded expenses, or an average of two, three or four years[.]").
[130] *Id.* at 15.
[131] D.15-11-021 at 210.
[132] *Id.*

appropriate, nor was it asked to do so.[133] Thus, the principles developed in PG&E's 1990 GRC are not binding on this case. Further, the Commission has previously stated that "[b]asic forecasting principles are also subject to interpretation and application on a case-by-case basis" and "forecasting principles articulated in other decisions are important guidelines for the Commission, but are not dogma to be rigidly imposed."[134] ORA's argument that a LRY methodology must be applied should therefore be disregarded.

SoCalGas and SDG&E maintain the position that the use of a five-year linear trend is justified where it was used, as it best represents the historical data and the funding requirement to support increased growth, regulatory change, and the mitigation of risks that have been fully justified in testimony. SoCalGas and SDG&E will refrain from reiterating here the detailed justifications for use of the five-year linear trend found in the rebuttal testimony.[135] However, the Companies will highlight a few essential reasons why SoCalGas and SDG&E's proposed forecasts should be adopted over ORA's recommendations.

ORA's application of the LRY methodology overlooks certain historical data and facts, growth drivers, and RAMP mitigation activities. Typically, ORA recommended the LRY methodology by averaging the last two years of recorded data (2016-2017) for many of the O&M and capital areas in Gas Distribution.[136] In other instances, ORA used the LRY methodology as what is effectively a base year method by taking only the 2016 recorded year (particularly for SDG&E).[137] In only one instance, ORA employed a five-year average instead of a linear trend.[138] ORA's method of using the last two years' or base year's data is inconsistent with what ORA's analyst advocated in her TY 2016 GRC testimony that "data from as many years as possible should be used for a more reliable forecast."[139]

ORA's approach also does not recognize that costs to complete impacted Gas Distribution activities are continuing to grow. For SoCalGas, ORA's opposition to the use of a five-year linear trend results in reductions to eight out of eleven non-shared services O&M

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[133] *See* D.89-12-057 at 14-15.
[134] D.12-11-051 at 15; *see also* Ex. 10 SCG/Orozco-Mejia at 15-16.
[135] Ex. 10 SCG/Orozco-Mejia at 9-10; Ex. 14 SDG&E/Orozco-Mejia at 15-21, 25-28.
[136] Ex. 10 SCG/Orozco-Mejia at 5-6. For SoCalGas' Capital Cathodic Protection, ORA recommended a three-year average (2015-2017) instead of SoCalGas' five-year linear trend.
[137] Ex. 14 SDG&E/Orozco-Mejia at 15:2-4, 18:21-23, 25:19-22.
[138] *See, e.g.*, Ex. 406 ORA/Phan at 36-37.
[139] *See* Ex. 10 SCG/Orozco-Mejia at 15 (quoting A.14-11-003/-004 (cons.), Ex. 350 ORA/Phan at 8).

workgroups for TY 2019: Locate and Mark, Leak Survey, Measurement and Regulation, Cathodic Protection, Main Maintenance, Service Maintenance, Tools, Fittings & Materials, and Operations and Management workgroups.[140] ORA proposes reductions to four out of fifteen capital workgroups for SoCalGas Gas Distribution: Service Replacements, Main & Service Abandonments, Cathodic Protection Capital, and Capital Tools.[141] This results in a total O&M reduction of $11.628 million and a capital reduction of $3.749 million for SoCalGas. For SDG&E, ORA's opposition to the use of a five-year linear trend results in reductions to three out of twelve O&M workgroups for TY 2019: Locate and Mark, Main Maintenance, and Measurement and Regulation workgroups; which translates to a total reduction in O&M of $1.013 million. (There was no five-year linear trend dispute in SDG&E capital.)

Where SoCalGas and SDG&E used the trend methodology, the data and supporting facts clearly demonstrate that the work and/or unit costs have trended upwards and that the trend will continue to do so throughout the GRC period. As further detailed in Ms. Orozco-Mejia's rebuttal testimony,[142] the five-year linear trend appropriately incorporates these considerations, while ORA's LRY methodology does not. In addition, incremental work above historical spending, performed to maintain the safe and reliable operation of the distribution system and related work processes, were identified and considered by SoCalGas and SDG&E. These new or more extensive work elements were then subjected to an analytical calculation to determine the amount of incremental funding needed. The overall result is a forecast, developed using historical data, and activity drivers with the addition of these incremental expenses.

The Locate and Mark workgroup is one example where the five-year linear trend for the base forecast was fully justified by both SoCalGas and SDG&E, and yet ORA recommended a LRY methodology that would result in unsupported reductions. Locate and Mark is a process mandated by 49 C.F.R. § 192[143] and California's "One-Call" Statute, which requires the owner of underground facilities to identify substructures at locations of planned excavations. The activities completed under this workgroup are preventative in nature and are required to avert

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140 ORA does not take issue with and accepts the SoCalGas TY O&M forecast for Asset Management and Regional Public Affairs.

141 ORA does not take issue with and accepts the SoCalGas Capital forecast for New Business, Pressure Betterment, Supply Line Replacement, Main Replacement, Other Distribution Capital Projects, and Measurement and Regulation Devices.

142 Ex. 10 SCG/Orozco-Mejia at 9-10; Ex. 14 SDG&E/Orozco-Mejia at 15-16, 19-21, and 25-27.

143 *See* Cal. Gov't Code §§ 4216, *et seq*.

damages caused by third-party excavators working near gas underground substructures. The work primarily comprises locating and marking SoCalGas and SDG&E's underground pipelines, conducting job observations, and performing depth checks.[144] These activities directly address the mitigating measures identified in the RAMP Report.[145] For SoCalGas and SDG&E, the costs associated with mitigation actions in support of RAMP risks are embedded in the Locate and Mark base forecast.[146] SoCalGas and SDG&E did not add an incremental increase for these activities on top of the base trend forecasts so as to prevent double counting.[147]

By the same token, ORA's use of the LRY method, unadjusted to reflect this incremental level of activity, would not sufficiently account for these RAMP activities. Although ORA acknowledges an upward trend in this work category,[148] its LRY methodology does not recognize the need to fund the anticipated growth in work and associated expenses in TY 2019. As economic conditions continue to improve, construction activities are expected to continue to increase near pipelines. It is also anticipated that with the implementation of California's Dig Safe Act of 2016 (SB 661) and the establishment of a new Board with the power to enforce the law and issue fines will increase the number of locate and mark tickets submitted to the regional notifications centers.

Moreover, the number of hours of stand-by time (job observations) have increased over the years[149] as well as an upward trend in the number of USA tickets worked.[150] Growth in

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[144] Ex. 7 SCG/Orozco-Mejia at 32; Ex. 11 SDG&E/Orozco-Mejia at 36-37.

[145] I.16-10-015/-016 (cons.), Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company, November 30, 2016 (regarding Chapter SCG-1 Catastrophic Damage Involving Third-Party Dig-ins and Chapter SDG&E-2 Catastrophic Damage Involving Third-Party Dig-ins).

[146] Ex. 10 SCG/Orozco-Mejia at 21. For SoCalGas, ORA did not dispute costs for incremental activities reflecting USA ticket price increases associated with membership fees or vacuum keyhole technology to excavate to find hard-to-locate underground pipelines. *See id.* at 25. For SDG&E, the Locate and Mark O&M base forecast is a five-year linear trend; the Locate and Mark RAMP embedded capital component in BC 501 is a five-year average forecast. *See* Ex. 11 SDG&E/Orozco-Mejia at 38:17-19; Ex. 13 SDG&E/Orozco-Mejia at 27-30.

[147] Ex. 10 SCG/Orozco-Mejia at 17.

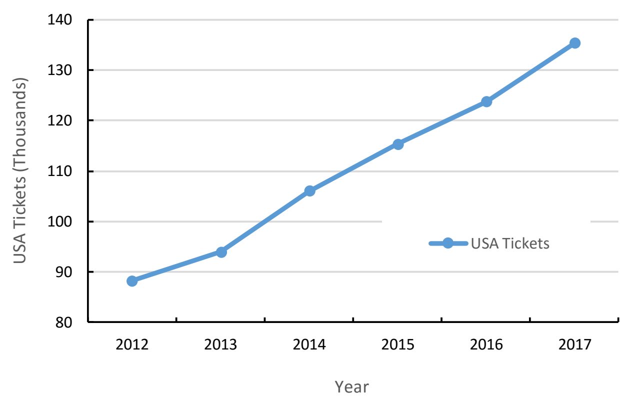
[148] Ex. 406 ORA/Phan at 11.

[149] Ex. 10 SCG/Orozco-Mejia at 23 (Table GOM-07).

[150] Ex. 10 SCG/Orozco-Mejia at Appendix B, CUE-SCG-DR-03, Question 183 (For SoCalGas, the decrease in 2016 in the number of USA tickets is a result of a change in data tracking methodology related to the consolidation of overlapping notification areas at the end of 2015. This change directly reduced the number of tickets received in those areas. However, the 2017 number reflects the anticipated upward pressure after this data tracking change.).

Locate and Mark is substantiated by the historical USA Ticket Notification trend. For example, SDG&E's USA ticket notifications are shown in the figure below (including year 2017 data):[151]

Figure 8.2.1.A
SDG&E USA Ticket Notifications



In addition, based on the requirements of General Order (GO) 112-F, SoCalGas and SDG&E expect an increase in locating and marking known abandoned lines, which will increase the time spent locating each ticket and creating additional work for supporting activities. These activities support the increasing growth that SoCalGas and SDG&E are experiencing with locate and mark work due to GO 112-F, SB 661, and construction activities.

Finally, as the Companies pointed out in rebuttal testimony, ORA did not discuss how specific RAMP mitigations would be affected by its recommended reductions. ORA's cross-examination of Ms. Orozco-Mejia during hearings did not shed further light on this methodology dispute.[152] Furthermore, SoCalGas and SDG&E clarified during hearings that the ORA analyst Ms. Dao Phan's forecasts did not account for the embedded growth that was within the linear

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[151] Ex. 14 SDG&E/Orozco-Mejia at 16 (Figure GOM-01). For brevity, only SDG&E's graphical representation of ticket notification growth is shown here. SoCalGas' graphical representation is shown in Ex. 10 SCG/Orozco-Mejia at 24 (Figure GOM-02).
[152] Tr. V10:481:17-483:7 (Orozco-Mejia).

trend for RAMP-related activities.[153] Although a separate ORA analyst's report discussed RAMP at a general level,[154] there was no mention of it by Ms. Phan for her report on this witness area.[155] In fact, RAMP was not mentioned once in Ms. Phan's testimony.

Thus, ORA's LRY forecast methodology is premised on a misunderstanding of the Commission's prior decisions, falls short in thoroughly analyzing all the risk information, and, in some areas, did not provide enough supporting data and rationale for its selected forecasting methodology. As such, the Commission should not adopt ORA's position on LRY methodology.

8.2.2 Higher Funding Recommendations/Undisputed Items

CUE recommended higher funding in Gas Distribution's cost categories and certain items, such as FOF cost savings, were undisputed by any party. For SoCalGas, CUE recommended increases for O&M Locate and Mark, Leak Survey, Main Maintenance, Service Maintenance, and Tools, Fittings, and Materials; for capital, increases were recommended for Supply Line Replacement, Service Replacement, and Regulator Stations.[156] CUE did not dispute the other O&M or capital workgroups.[157] For SDG&E, CUE recommended increases for O&M in Leak Survey, Locate and Mark, and Main Maintenance;[158] for capital, increases were recommended for Replacement – Mains and Services, Cathodic Protection, and Regulator

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[153] Tr. V10:484:8-13 (Orozco-Mejia) ("[W]hen ORA makes its recommendation for a two-year average instead of our linear trend, it dismisses the [e]mbedded costs that are within that linear trend, which some of those costs are associated with mitigating RAMP risks.").

[154] *See generally* Ex. 398 ORA/Stannik/Li. Although Ms. Orozco-Mejia indicated at the time of hearings that she did not recall reading this general analysis of RAMP entitled, "Risk Management Policy; Enterprise Risk Management Organization; RAMP/GRC Integration' Pipeline Integrity, SoCalGas PSEP," there would be no expectation that she would – as Ms. Phan, the ORA analyst for Gas Distribution, never cross-referenced it. Ms. Diana Day and Ms. Jamie York were the appropriate SoCalGas/SDG&E witnesses that addressed this more general RAMP analysis, which was not specific to Gas Distribution. *See* Ex. 10 SCG/Orozco-Mejia at 3 n.11 referring to those witnesses and n.12 cross-referencing this general ORA analysis in Ms. Orozco-Mejia's rebuttal testimony. Ms. Orozco-Mejia confirmed that her testimonies were prepared by her or under her direction, working with a team of people, which further explains why she would not have a specific recollection of ORA testimony that is not within the scope of her witness area. *See* Tr. V10:479-482 (Orozco-Mejia).

[155] Tr. V10:482:2-8 (Orozco-Mejia) (". . . . there wasn't a reference to RAMP within Ms. Da[o]'s report.").

[156] CUE recommends a higher total expense of $161.038 million or $13.159 million above SoCalGas' TY 2019 forecast for O&M expenses. Ex. 370 CUE/Marcus at 23-25, 26-27, 29-31, 33-34.

[157] CUE forecasts a significantly higher value of $20.515 million above SoCalGas' capital expense for TY 2019. CUE accepts SoCalGas' forecast capital expense for 2017 and 2018. Ex. 370 CUE/Marcus at 15-20.

[158] CUE's O&M recommendations would result in an overall increase of $2.779 million. Ex. 370 CUE/Marcus at 86-93.

Station Improvements.[159] CUE did not dispute the other SDG&E O&M or capital workgroups. Since CUE does not contend that SoCalGas and SDG&E's requested funding levels are not needed, but argues instead that more funding is needed, details on CUE's recommendations will not be discussed further in this brief. Those details can be found in the rebuttal testimony.[160] SoCalGas and SDG&E's forecasts endeavored to strike an appropriate balance between Gas Distribution's pipeline safety, risk mitigation effectiveness, and impact on ratepayer costs within the 2019 GRC cycle. Therefore, the Commission should adopt SDG&E's and SoCalGas forecasts as reasonable.

Parties did not dispute SoCalGas and SDG&E's FOF cost savings. The FOF initiative began in 2016 to examine operations across the Companies and identifying opportunities for efficiency improvements. Through this process, ideas were generated, reviewed, analyzed, and targeted for implementation from 2017 through TY 2019. For both Companies, these costs saving activities were accepted by other parties for TY 2019. The associated work categories for SoCalGas include: Leak Survey, Measurement and Regulation, Cathodic Protection, Main Maintenance, Service Maintenance, Field Support, Asset Management, and Regional Public Affairs for O&M. The associated O&M work categories for SDG&E include Main Maintenance, Measurement and Regulation and Operations Management and Training. These cost savings are further discussed within the direct testimony for both SoCalGas and SDG&E,[161] respectively, and will not be discussed further within this brief since these cost savings were not disputed.

ORA recommends adopting SoCalGas' actual recorded 2017 capital expenditures for all capital categories for the 2017 forecast, which SoCalGas does not oppose, with the exception of

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[159] CUE proposes increases to three capital expense categories for TY 2019. These are Replacement – Mains and Services (BC 508), Cathodic Protection (BC 509), and Regulator Station Improvements (BC 510) resulting in an overall increase of $21.567 million. Ex. 370 CUE/Marcus at 44-51, 55-58.

[160] SoCalGas' detailed arguments can be found at Ex. 10 SCG/Orozco-Mejia for: Locate and Mark at 25 to 26; Leak Survey at 33 to 35; Main Maintenance at 57 to 58; Service Maintenance at 68 to 70; Tools and Fittings at 78; Supply Line Replacements at 97 to 98; Service Replacements at 102; Regulator Stations at 114; Field Capital Support at 140.

SDG&E's detailed arguments can be found at Ex. 14 SDG&E/Orozco-Mejia for: Leak Survey at 11 to 12; Locate and Mark at 17 to 18; Main Maintenance at 21 to 22; Replacement - Mains and Services at 34 to 35; Cathodic Protection at 37 to 38; Regulator Station Improvements at 42 to 45.

[161] Ex. 7 SCG/Orozco-Mejia at 39:28-40:10, 44:1-11, 48:6-16, 54:12-25, 61:8-17, 67:24-68:16, 75:28-76:24, 86:1-8; Ex. 11 SDG&E/Orozco-Mejia at 40:25-28, 52:7-15, 66:26-67:2.

Capital Tools and Meter Guards discussed further below in Section 8.3.1.34.[162] ORA recommends adopting SDG&E's actual recorded 2017 for all O&M and capital categories for the 2017 forecast, which SDG&E does not oppose.

Additionally, parties did not oppose SoCalGas' shared services O&M forecast of $0.275 million.[163] Parties did not take issue with SoCalGas' full request of capital expenditures for Pressure Betterment, Supply Line Replacements, Main Replacements, and Measurement and Regulation Devices. ORA does not take issue with the SoCalGas' proposed cost components for New Business Construction for 2018 and 2019.[164] SoCalGas does not oppose ORA's application of 2017 recorded new business trench reimbursements and new business forfeitures, resulting in a lower 2017 recorded costs for new business construction. ORA did not dispute the forecast for New Business Trench Reimbursements for 2017-2019 and costs for incremental activities for Advanced Metering Infrastructure in 2019. Parties did not take issue with and ORA accepts SDG&E's full request of capital expenditures for 2018 and TY 2019 for Other Services, Leak Survey, Service Maintenance, Tools Fittings & Materials, Electric Support, Cathodic Protection, Asset Management, and Operations Management and Training workgroups.

8.3 SoCalGas Issues

8.3.1 SoCalGas Non-Shared O&M Expenses

In total, SoCalGas requests the Commission adopt its TY 2019 forecast of $147.879 million for Gas Distribution O&M expenses. ORA recommends the Commission adopt $117.934 million for Gas Distribution non-shared services O&M expenses for TY 2019, a reduction in SoCalGas' request of $29.945 million. ORA proposes reductions to nine workgroups for TY 2019 as shown in Table 8.3.1.A below. CFC proposes a reduction to Cathodic Protection, resulting in an overall decrease of $0.500 million. CFC did not provide forecasts for other O&M workgroups. CFC also recommends that Gas Distribution's TY 2019 revenue requirement be reduced by $27.9 million to reflect CFC's estimate for unaccounted for gas.[165] This out-of-scope proposal is addressed in Section 8.5 below. TURN proposes

[162] *See* Ex. 10 SCG/Orozco-Mejia at 128:2-8 and 134:10-14.
[163] *Id.* at 86. SDG&E did not have a Shared Services O&M forecast. *See generally* Ex. 11 SDG&E/Orozco-Mejia.
[164] Ex. 406 ORA/Phan at 48:19-20.
[165] Ex. 484 CFC/Roberts at 11.

reductions to Main Maintenance and Service Maintenance, resulting in an overall decrease of $14.909 million. TURN did not provide forecasts for other O&M workgroups.

SoCalGas' revised direct testimony fully supports TY 2019 non-shared services Gas Distribution O&M expenditures of $147.879 million. SoCalGas developed this forecast based on a review of 2012 to 2016 historical spending, and in consideration of new or incremental changes in activities that will impact future revenue requirements. SoCalGas's forecasts also include costs to mitigate RAMP risks discussed in Section 8.1 above and in further detail in Ms. Orozco-Mejia's testimony.[166]

Table 8.3.1.A
SoCalGas Test Year 2019 Non-Shared O&M Forecast Summary and Variance from Intervenor Proposals

	Position of Party					Difference Between Party and SCG			
	SCG	**ORA**	**CFC**	**TURN**	**CUE**	**(ORA-SCG)**	**(CFC-SCG)**	**(TURN-SCG)**	**(CUE-SCG)**
Field O&M – Locate and Mark	16,050	14,284	16,050	16,050	17,525	(1,766)	-	-	1,475
Field O&M – Leak Survey	10,711	8,874	10,711	10,711	11,310	(1,837)	-	-	599
Field O&M – Measurement and Regulation	14,888	13,150	14,888	14,888	14,888	(1,738)	-	-	-
Field O&M – Cathodic Protection	18,322	14,300	17,822	18,322	18,322	(4,022)	(500)	-	-
Field O&M – Main Maintenance	20,772	10,139	20,772	11,470	31,677	(10,633)	-	(9,302)	10,905
Field O&M – Service Maintenance	16,997	11,390	16,997	11,390	17,167	(5,607)	-	(5,607)	170
Field O&M – Field Support	21,069	19,718	21,069	21,069	21,069	(1,351)	-	-	-
Field O&M – Tools, Fittings and Materials	10,307	9,275	10,307	10,307	10,317	(1,032)	-	-	10
Field O&M - Subtotal	**129,116**	**101,130**	**128,616**	**114,207**	**142,275**	**(27,986)**	**(500)**	**(14,909)**	**13,159**
Asset Management	6,965	6,965	6,965	6,965	6,965	-	-	-	-
Operations and Management	7,378	5,419	7,378	7,378	7,378	(1,959)	-	-	-
Regional Public Affairs	4,420	4,420	4,420	4,420	4,420	-	-	-	-
Total Non-Shared Services O&M	**147,879**	**117,934**	**147,379**	**132,970**	**161,038**	**(29,945)**	**(500)**	**(14,909)**	**13,159**

As discussed in the Common Issues Section of this brief, ORA disputed SoCalGas' use of a five-year linear trend for eight out of the eleven non-shared services O&M workgroups for TY 2019: Locate and Mark, Leak Survey, Measurement and Regulation, Cathodic Protection, Main Maintenance, Service Maintenance, Tools, Fittings & Materials, and Operations and Management workgroups. SoCalGas primarily used a five-year linear trend for its base forecasts. Ms. Orozco-Mejia's rebuttal testimony outlined in detail the supporting evidence as to why SoCalGas' use of a five-year linear trend was appropriate for these workgroups, including graphical displays of the historical data to show how it follows the upward trend line over the five-year period.

166 Ex. 7 SCG/Orozco-Mejia at 14 (Table GOM-07).

SoCalGas will not reiterate all of those detailed facts here, but offers a few key examples demonstrating the reasonable use of a five-year linear trend.

8.3.1.1 Disputed Five-Year Linear Trend for Base Forecasts

In addition to the Locate and Mark workgroup discussed in the Common Issues Section of this brief, ORA disputes seven more cost categories (Leak Survey, Measurement and Regulation, Cathodic Protection, Main Maintenance, Service Maintenance, Tools Fittings & Materials, and Operations and Management) where SoCalGas used a five-year linear trend for its base forecast. The linear trend was used because these activities' costs are historically showing an upward trend to perform work to maintain system safety and compliance with federal and state pipeline safety regulations and to reduce the risk of asset failure and enhance public safety. For example, in the Service Maintenance workgroup, the trend of years 2012-2016 demonstrates that the expenditures in this work activity have increase steadily in an upward direction, contrary to ORA's proposed reduction.[167]

Moreover, SoCalGas anticipates upward pressures based on factors such as increasing costs due to aging infrastructure, increasing regulatory/legislative pressures, and increasing municipality work and general construction.[168] For example, for the Leak Survey workgroup, SoCalGas expects leak survey activities and costs to increase as a result of system growth and expansion, more frequent surveys, new pipe installation, changes in work practices, and increases in leak survey footage. ORA's recommended base forecast using the LRY methodology suggests growth will stagnate below 2017 recorded levels. As explained in Ms. Orozco Mejia's rebuttal testimony, this stagnation is not supported by the historical information or the drivers of this activity.[169] SoCalGas' distribution main and service mileage has increased by 1,269 miles between 2012 and 2016, requiring more leak survey activities. Furthermore, new meter set installations are continuing to grow, as a result of continued economic strength. The increase in the number of new business meter sets reflect the need to add new mains and services to the pipe system, which in turn require an increase in the miles of leak survey needed to maintain system safety and compliance.[170] ORA's LRY methodology does not adequately

[167] Ex. 10 SCG/Orozco-Mejia at 59-61 (Table GOM-11).
[168] *See, e.g.*, *id.* at 37-40, 41-42, 52, 62-67.
[169] *Id.* at 29-30.
[170] *Id.* at 30.

account for these considerations that would help reduce the risk of asset failure and enhance public safety.

Another example is Main Maintenance, where ORA's forecast is $11.387 million less than the 2017 recorded expense; and the second lowest annual recorded data in the six-year history (2012-2017).[171] ORA's recommended level of funding would significantly undercut and insufficiently fund the work for this safety and compliance activity.

In addition to ORA's recommended decreases for five-year linear trends, CFC recommended a lower funding in Gas Distribution's Cathodic Protection by $0.500 million. CFC utilizes the Department of Transportation's Annual Report for Gas Distribution System (*i.e.*, PHMSA 7100.1 report) to calculate cathodic protection spend per mile of main and the total hazardous and non-hazardous leaks per mile of main throughout the historical years (2012-2016).[172] While creating these calculations, CFC acquired overall data for the Gas Distribution system and not specific data pertaining to cathodic protection. SoCalGas recreated CFC's calculation and discovered the calculations that CFC provides are inaccurate and do not accurately represent this workgroup.[173] Furthermore, cathodic protection is a federally mandated safety activity that consists primarily of compliance inspection, associated evaluations, and planned and unplanned maintenance for SoCalGas' distribution system.

8.3.1.2 Disputed Five-Year Average for Base Forecast

8.3.1.2.1 Field Support

The Field Support area is for a variety of support services within Gas Distribution O&M activities. The primary components are field supervision, clerical support, dispatch operations, training, safety meetings, materials support, and removal of abandoned mains.[174] Generally, these costs support the safety and reliability of SoCalGas' system by providing field support, supervision, and required employee training and qualification.[175] In addition to these costs, Field Support includes RAMP Embedded Base Costs to prevent double counting of upward pressures.[176] ORA proposes a LRY two-year average forecast resulting in a $1.351 million

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171 *Id.* at 48:3-6.
172 Ex. 484 CFC/Roberts at 8.
173 Ex. 10 SCG/Orozco-Mejia at 45:19-24.
174 Ex. 7 SCG/Orozco-Mejia at 63:6-12.
66 *Id.* at 65:8-10.
67 Ex. 10 SCG/Orozco-Mejia at 73:12.

reduction to $19.718 million,[177] while accepting all incremental costs. ORA opposes SoCalGas' five-year (2012-2016) average base forecast and proposes the LRY method utilizing a two-year (2016-2017) average. ORA's justifies its methodology by relying on a three-year (2014-2016) downward trend.[178] However, ORA does not recognize the need to fund the anticipated growth in work and associated expenses in this area for TY 2019. As testified by Ms. Orozco-Mejia in her rebuttal testimony, "Field support activities are driven by the amount of field work to be completed, the need for contractor support, the complexity of jobs, the number of employees, training, incremental operations, compliance, and safety requirements that impact the Gas Distribution workforce."[179] The years of 2012-2016 represent a longer time period than ORA's recommendation, which is a more accurate representation of the expenditures in this workgroup. Moreover, ORA's two-year average approach does not comport with ORA's position in the TY 2016 GRC proceeding that "data from as many years as possible should be used for a more reliable forecast."[180]

8.3.1.3 Disputed Incremental Costs

For some O&M workgroups, SoCalGas added incremental costs to the base forecast to reflect other upward pressures above historical spending. These workgroups and ORA's disputes of those incremental costs are discussed below.

8.3.1.3.1 Leak Survey

In addition to the base forecast, ORA disputes any incremental funding to cover the increased bi-annual leak survey activity for all high-pressure lines, even for surveys of the DOT-defined high-pressure transmission lines every six months required by GO 112-F starting on January 1, 2017.[181] ORA claims that SoCalGas' request is unsubstantiated and inadequately supported by detailed historical data,[182] but a detailed breakdown of the costs between medium- and high-pressure leak surveys is not necessary to make reasonable cost assumptions for this incremental funding. For the 690 miles of pipe at issue during hearings, SoCalGas is now required by GO 112-F to survey this DOT-defined pipe every six months, instead of annually,

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[68] Please *see* Ex. 10 SCG/Orozco-Mejia at Appendix A for a detailed explanation of this corrected value.
[69] Ex. 406 ORA/Phan at 35:8.
[70] Ex. 10 SCG/Orozco-Mejia at 72:9-12.
[71] A.14-11-003/-004 (cons.), Ex. 350 ORA/Phan at 8:9-10.
[181] *See* Ex. 406 ORA/Phan at 13-16. ORA did not dispute costs for incremental activities reflecting Survey – Early Vintage Plastic pipe. *Id.* at 16.
[182] *See* Ex. 406 ORA/Phan at 15:16-17 and 16:1-2.

and as reiterated during hearings.[183] Therefore, the leak survey associated with this pipe will double starting in 2017 and will continue every year. Because SoCalGas performed those surveys annually in the past, it made reasonable assumptions about the cost by doubling the survey (now twice a year) for the same number of miles of DOT-defined pipe.[184] Thus, the impacted incremental DOT-defined pipe mileage in 2017 and 2018 for SoCalGas' forecast is 690 miles each year.[185] In addition, given that the leak survey activity is a mitigation measure supporting the RAMP risk Catastrophic Damage Involving HP Pipeline Failure, SoCalGas will apply the bi-annual leak survey requirement to all its high-pressure lines by the TY 2019, not just the DOT-defined pipe. For these non-DOT-defined high-pressure lines, SoCalGas made similar cost assumptions.[186] Accordingly, the total number of incremental miles surveyed will increase to approximately 3,700 miles by the TY 2019 for all high-pressure pipe.[187] ORA's recommendation of zero funding is unreasonable for this mandated compliance activity under GO 112-F. ORA also does not substantiate its disallowance for the funding to expand the scope of this bi-annual survey beyond DOT-defined high-pressure lines as a RAMP enhanced mitigation measure.

8.3.1.3.2 Main Maintenance – Leak Repairs

The impact from the work to address incremental main leaks found is $6 million over the base forecast in TY 2019, which is what is being requested in this GRC. ORA claims that the incremental costs for leak repairs requested are excessive, given the historical pattern of leak repairs, and suggests that SoCalGas' request should be rejected because the 2016 GRC already funded repairs for an existing non-hazardous leak inventory ("backlog").[188] It appears that ORA misunderstands SoCalGas' testimony and forecast, as the additional information provided in Ms. Orozco-Mejia's revised direct testimony was intended to give a complete picture of costs to

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183 Tr. V10:497:24-28 and 498:1-9 (Orozco-Mejia).

184 Tr. V10:498:1-9 (Orozco-Mejia). *See also* Ex. 10 SCG/Orozco-Mejia at 32 ("The specific cost for this activity was calculated by taking the average amount of pipe a technician surveys in a day and the labor cost for the technician, as provided in the Leak Survey Workpaper.").

185 Ex. 10 SCG/Orozco-Mejia at 31:25 to 32:1. As noted in Ex. 10 SCG/Orozco-Mejia at 32 n.105, SoCalGas provided a correction to ORA that DOT-defined transmission pipe is approximately 714 miles.

186 *See* Ex. 10 SCG/Orozco-Mejia at 32.

187 *Id.* at 32:18-20. As noted in Ex. 10 SCG/Orozco-Mejia at 32 n.105, SoCalGas provided a correction to ORA that there are approximately 3,280 miles of high-pressure distribution lines. With the 714 miles of DOT-defined transmission lines, the total miles of high-pressure mains maintained by Gas Operations Distribution is approximately 3,994 miles.

188 Ex. 406 ORA/Phan at 25-26.

repair main leaks, even if appropriately funded via several different mechanisms (TY 2019 GRC, TY 2016 GRC, and SB 1371 Rulemaking (R.15-01-008)) without any double recovery. Because leak repair activities can be associated with multiple objectives[189] and overlapping time periods for when leaks are discovered and when funded for repair,[190] Ms. Orozco-Mejia's testimony clarified the precise scope of what costs are being requested for funding approval in this TY 2019 GRC that do not overlap with funding approved elsewhere:

> The test year for this case is 2019. So the test year 2019 does not include those pre-2017 or leaks that were found up until the end of 2016. That would be part of the last GRC. So though we are showing them here to show how we arrived in the 2019, that – the leaks that we are showing in 2019 -- the incremental leaks in 2019 are associated with an incremental leak survey and, therefore, the incremental leaks that we anticipate finding.[191]

In the quote above, the new leak survey activities driving those incremental leaks to be funded in this TY 2019 GRC request are the Bi-Annual High-Pressure Leak Survey and the Enhanced Leak Survey – Early Vintage Plastic Pipe. The current forecast for those incremental leak repairs starting in TY 2019 is 2,400 leaks.[192] These TY 2019 repairs are meant to address new leaks found due to the new bi-annual leak survey for high-pressure pipe and the enhanced leak survey for early vintage plastic pipe – the repairs are not associated with an existing inventory, as ORA assumed.[193] Thus, the disputed incremental funding of $6 million "requested for the TY 2019 GRC does not include funding for a leak inventory," as further clarified in SoCalGas' rebuttal testimony.[194] Ms. Orozco-Mejia went on to explain:

> [S]ince SoCalGas was already authorized funding for its non-hazardous leak inventory through the year 2018, in the TY 2016 GRC, SoCalGas is continuing with that leak repair activity through 2018. Starting in 2019, leaks remaining in the non-hazardous leak inventory after the TY 2016 GRC leak repair activity will

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189 Tr. V10:532:17-23 (Orozco-Mejia) ("The costs that are being incurred for activities purely associated with methane reductions would be in SB 1371, versus costs that are associated to operate and maintain our system in a safe, reliable manner to keep the integrity of our system. Those costs are within my GRC presentation.").

190 TY 2016 GRC funding is for the 2016-2018 period; TY 2019 GRC is for the 2019-2022 period; and SB 1371's Tier 3 Advice Letter process is for the 2018-2020 period. As explained in this section, because of the overlap in funding periods, to avoid double recovery, SoCalGas has demarcated that leaks found before the end of 2016 would be funded by the TY 2016 GRC, while leaks found starting in 2017 would begin to be funded by SB 1371's NERBA.

191 Tr. V10:539:26 to 540:9 (Orozco-Mejia).

192 Ex. 7 SCG/Orozco-Mejia at 53.

193 Ex. 406 ORA/Phan at 26:5-6.

194 Ex. 10 SCG/Orozco-Mejia at 52:1-2.

> be funded through SB 1371's [New Environmental Regulatory Balancing Account (NERBA) for]. . . leaks found starting in 2017. . . .[195]

ORA is also inconsistent in applying its own forecast methodology.[196] While ORA took issue with the Bi-Annual High-Pressure Leak Survey as stated above, it did not dispute the Enhanced Leak Survey – Early Vintage Plastic Pipe.[197] In fact, ORA actually recommends that the Aldyl-A (early vintage plastic) pipelines be repaired and replaced as necessary during the 2019 GRC cycle:

> ORA does not dispute SCG's proposal to increase the survey frequency of Aldyl-A pipes by performing annual surveys. However, ORA recommends the Commission require SCG to adhere to its proposed annual survey cycle, and to repair and replace the Aldyl-A pipelines as necessary, during the 2019 GRC cycle.[198]

This directly contradicts ORA's recommendation under Main Maintenance, where ORA recommended zero incremental funding for the incremental leak repairs associated with the Enhanced Leak Survey – Early Vintage Plastic Pipe. Since ORA's recommendation is based on a misunderstanding of SoCalGas' forecast, and is contradictory to its own recommendation for leak survey activities, the Commission should adopt SoCalGas' request for these incremental leak repairs.

8.3.1.3.3 Service Maintenance

For Service Maintenance, added to the base forecast are incremental costs for: MSA Maintenance Activities ($1.523 million); Meter Guards ($1.109 million); Inaccessible Meters ($2.106 million); and FOF cost savings (-$0.075 million) for a total forecast of $16.997 million.

ORA disputes all incremental costs associated with this work category, except the FOF cost savings. TURN supports ORA's reduction proposal but recommends a five-year (2013-2017) average for the base forecast. Within Exhibit 10, SoCalGas portrayed the historical costs with a separation of damage credits to further explain that the costs for this workgroup closely follow a linear trend for years 2012-2016. During hearings, TURN questioned the separation of damage credits and if the methodology used should correlate to Main Maintenance. As stated by

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195 Ex. 10 SCG/Orozco-Mejia at 52:16-53:2. *See id.* at 52:13-18 for further explanation.
196 Ex. 406 ORA/Phan at 27.
197 *Id.* at 16:9-12.
198 *Id.*

Ms. Orozco-Mejia "[this is] a different way of looking at the data. But that's what we did for this case."[199]

MSA Maintenance Activities and Meter Guards – As a result of a focused SoCalGas MSA inspection program applied in 2016, which complies with atmospheric corrosion code requirements with a more thorough review of conditions at the MSA, expenses will increase. Due to these inspections, the amount of work orders generated for maintenance follow-up has increased. SoCalGas has requested funding for the existing inventory of work orders generated by MSA inspections in 2016 and 2017. This incremental increase is targeted to address an emerging inventory of work in 2016 and 2017. ORA recommends zero funding for these activities. Table GOM-17 in Exhibit 10 discussed by Ms. Orozco-Mejia during hearings displays an increasing number of maintenance orders, doubling in 2016 and growing in 2017 and 2018.[200] This evidences the need for funding to maintain the existing and growing inventory of MSA maintenance work orders.

Inaccessible MSAs – Disconnect Services – ORA recommends zero funding for this activity. This incremental activity supports SoCalGas' Customer Service – Field Operations' work to address chronically inaccessible meters for MSA inspections. The MSA inspection program schedules one visit every three calendar years where physical access is necessary for a comprehensive inspection. The work history is not representative of future work for this incremental activity. Historically, SoCalGas Meter Readers performed inspections monthly over the three-year inspection window, which resulted in a lower chronic access issue. Now that Customer Service Meter Readers are no longer performing these monthly inspections, Gas Distribution employees will perform these MSA inspections under conditions where there is an increase in chronically inaccessible MSAs. Disconnecting the service line is the last and final step in the process after multiple attempts of contacting the customer including, phone, letters, and physical visits to gain access to the MSA. SoCalGas Gas Distribution plans to support Customer Service – Field when contact with the customer is not successful, which creates an inaccessible MSA, resulting in disconnecting the service line. Under CPUC-approved SoCalGas

[199] Tr. V10:555:27 to 556:1 (Orozco-Mejia).

[200] As stated in hearings, Ms. Orozco-Mejia confirmed that the Table GOM-17 represented within Exhibit 10 represents the number of maintenance orders submitted and does not represent completed orders. Ex. 10 SCG/Orozco-Mejia at 6 (Table GOM-17).

Tariff Rule 25,[201] SoCalGas has the right to safe access to the gas meter during all reasonable hours as a condition of service. Furthermore, under CPUC-approved SoCalGas Tariff Rule 9,[202] after written notice, SoCalGas has the right to discontinue the service to a customer for non-compliance with any of its tariffs.

8.3.1.3.4 Tools, Fittings, and Materials

ORA did not dispute costs for incremental activities reflecting Calibrated Tools, OMD Cages, MSA Maintenance Activities, and Maintenance, but did dispute Meter Guard Activities discussed below.

Meter Guard Activities – ORA disputes SoCalGas' forecast for meter guard replacement materials by recommending zero funding for this non-labor activity that correlates to the labor activity mentioned in Service Maintenance. As mentioned above in Service Maintenance, a focused MSA inspection program resulted in an increase in the amount of work orders generated for maintenance follow up. SoCalGas plans to ramp up a focused Meter Guard replacement project to address the growing Meter Guard replacement work order inventory from the 2016 and 2017 MSA inspection program. This incremental non-labor cost supports a safety and compliance activity.[203] Funding for meter guard replacement is imperative to safeguard against potentially hazardous environments to the MSA or to the public. Meter guards protect gas distribution assets and support their function, safety, and longevity. Over time, these meter guards may get damaged or deteriorate, requiring repair or replacement.[204] Thus, as with the labor costs for this same activity, ORA's recommendation is not sufficiently supported to provide zero funding for the non-labor costs.

8.3.1.3.5 Operations and Management

ORA disputes all incremental costs for this work category that relate to new positions created to manage corresponding incremental activities. SoCalGas discusses below how its testimony demonstrated the need for these new positions driven by upward pressures.

Project Advisors and Project Manager – In 2017, SoCalGas created a team to manage and reduce the inventory of existing and new non-hazardous leaks. It is expected that this team

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[201] SoCalGas Tariff Rule No. 25, *available at:* http://www.socalgas.com/regulatory/tariffs/tm2/pdf/25.pdf.
[202] SoCalGas Tariff Rule No. 09, *available at:* http://www.socalgas.com/regulatory/tariffs/tm2/pdf/09.pdf.
[203] *See* 49 C.F.R. § 192.353(a).
[204] Ex. 10 SCG/Orozco-Mejia at 77:14-18.

will continue working into the TY 2019 to manage incremental leak mitigation efforts as the amount of leak survey rises as well as the time to repair leaks increases, due to changes in the associated equipment and standards. Given the anticipated increase in this leak repair work associated with increased leak surveys, SoCalGas, as a prudent operator, is increasing personnel to manage it.[205] ORA claims that SoCalGas' existing funding is adequate for the number of employees it requests in 2019.[206] SoCalGas does not agree with this assertion, as these positions are incremental for a new effort and were not included in the BY 2016. ORA's recommendation misunderstands the circumstances regarding SoCalGas' request and assumes that the existing funding will cover these positions in TY 2019. These positions are new and are needed in order to address the existing inventory of non-hazardous leaks as well as the anticipated incremental leaks that will add to this inventory. For the above stated reasons, the Commission should reject ORA's recommendation and adopt SoCalGas' forecast.

Director of Workforce Planning & Resource Management – In 2017, SoCalGas added the Director of Workforce Planning & Resource Management, who is responsible for directing and providing strategy, vision, and leadership for an organization accountable for the planning, scheduling, resource management, engineering, design, and special projects for the entire SoCalGas distribution pipeline infrastructure.[207] ORA asserts that the work is not new and that the funding for this position is already included in SoCalGas' existing funding.[208] Although the activities in Workforce Planning and Resource Management organization are not new, the Director position is new and necessary to provide centralized leadership and direction, as new technology and work process are implemented and as work and regulatory pressures continue to increase.[209]

Continuous Improvement Operations Manager – SoCalGas is continuously looking for ways to improve the efficiency and effectiveness of Gas Distribution processes. The addition of a Continuous Improvement Operations Manager provides the focus to review work processes to determine efficiency, safety and compliance improvement opportunities.[210] In fact, ORA

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[205] Ex. 10 SCG/Orozco-Mejia at 82:9-14. For further details for project advisors and project manager positions, *see id.* at 82:15-21.
[206] Ex. 406 ORA/Phan at 41:11-12.
[207] Ex. 10 SCG/Orozco-Mejia at 83:28 to 84:2. For further details for this position, *see id.* at 84:2-7.
[208] Ex. 406 ORA/Phan at 41:11 to 42:6.
[209] Ex. 10 SCG/Orozco-Mejia at Appendix B, ORA-SCG-053-DAO, Question 3.
[210] *Id.* at 84:24-27. For further details for this position, *see id.* at 84:1-5.

agreed with all the FOF cost benefit reductions proposed by SoCalGas, which results in O&M cost savings of $4.742 million in the TY 2019.[211] This position is necessary to achieve these cost savings.

Resumption of Routine Operations – ORA disputes SoCalGas requested $0.112 million above the base year level to account for resources that were not part of the operations organization in 2016.[212] Some management employees' time in this workgroup provided customer support during the Aliso Canyon incident, which required a reprioritization of company resources. In order to adequately resume routine operations and management activities, SoCalGas requests $0.112 million over the base forecast for TY 2019. These costs were excluded from the GRC filing and were not part of the Base Year 2016 expense.[213] Therefore, as these employees returned to their regular jobs within Gas Distribution, the funding in the Base Year is insufficient to cover future requirements. ORA's recommendation misunderstands the circumstances regarding SoCalGas' request and mistakenly assumes that the existing funding will cover these costs in TY 2019. For the above stated reasons, the Commission should reject ORA's recommendation and adopt SoCalGas' forecast.

8.3.2 SoCalGas Capital Issues

SoCalGas further requests the Commission adopt its forecast for capital expenditures in 2017, 2018, and 2019 of $278.473 million, $324.801 million and $347.842 million, respectively. ORA recommended adopting SoCalGas' actual 2017 recorded capital expenses which were $0.737 million higher than forecasted for 2017, and which SoCalGas does not dispute. ORA, however, recommended reductions to SoCalGas' capital expense of $38.916 million for 2018 and $49.786 million for TY 2019. Ms. Orozco-Mejia addressed ORA's recommended $87.965 million reduction in capital for in rebuttal testimony,[214] showing that ORA's recommendations are often based on an insufficiently supported forecasting methodology, inaccurate assumptions, and an incomplete understanding of SoCalGas' testimony or data presented in data requests.

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211 Ex. 406 ORA/Phan at 16:14-15, 19:2, 21:10-12, 27:15-16, 33:25-26, 36:2-3, 38:10-11, 42-43.

212 Please *see* Ex. 7 SCG/Orozco-Mejia at 75:24-27 and 85:24-29 for SoCalGas' request and Ex. 406 ORA/Phan at 38 and 42:7-43:3 for ORA's acceptance for the Asset Management and Regional Public Affairs, respectively.

213 Ex. 10 SCG/Orozco-Mejia at 85:22-27.

214 Ex. 10 SCG/Orozco-Mejia.

SoCalGas 2017-2019 Capital Forecast Summary and Variance from Intervenor Proposals

Southern California Gas Company
Gas Distribution Capital Forecast Summary
(Thousands of Constant 2016 Dollars)

	Difference Between Party and SCG					
	(ORA - SCG)			(CUE - SCG)		
	2017	*2018*	*2019*	*2017*	*2018*	*2019*
A. New Business	6,710	2,489	2,489	-	-	-
B. Pressure Betterment	1,153	-	-	-	-	-
C. Supply Line Replacement	(2,376)	-	-	-	-	-
D. Main Replacements	2,027	-	-	-	-	-
E. Service Replacements	6,667	-	(3,643)	-	-	779
F. Main & Service Abandonments	56	(1,534)	(2,799)	-	-	-
G. Regulator Stations	(2,209)	(7,105)	(11,905)	-	-	13,800
H. Cathodic Protection	1,944	(575)	(1,189)	-		-
I. Pipeline Relocations- Freeway	(6,435)	(4,092)	(4,092)	-	-	-
J. Pipeline Relocations - Franchise	(4,694)	(1,003)	(1,003)	-	-	-
K. Other Distribution Capital Projects and Meter Guards	2,048	(8,299)	(8,299)	-	-	-
L. Measurement and Regulation Devices	(3,896)	-	-	-	-	-
M. Capital Tools	(4,876)	(3,532)	(2,734)	-	-	-
N. Field Capital Support	4,067	(8,255)	(11,633)	-	-	-
O. Remote Meter Reading	551	(2,032)	-	-	-	-
Total Capital	**737**	**(38,916)**	**(49,786)**	-	-	**20,515**
Difference by Percentage	0.3%	-14%	-17%	-0.3%	-3%	8%
Total Capital (2017-2019)		**(87,965)**			**20,515**	

8.3.2.1 Disputed Five-Year Linear Trends for Base Forecasts

Similar to O&M activities, ORA disputes several capital areas where a five-year linear trend was used, and recommends a LRY methodology. Ms. Orozco-Mejia's rebuttal testimony addresses these disputes and the evidence in more detail. SoCalGas highlights a few key examples for capital expenses in this brief to demonstrate why a five-year linear trend is more appropriate.

Service Replacements – The work represented in this category includes expenditures associated with routine replacement of isolated distribution service pipelines to maintain system reliability and customer safety.[215] Most service replacement projects are driven by leakage and pipe corrosion.[216] SoCalGas forecasts continuing service line replacements at the five-year

[215] Ex. 7 SCG/Orozco-Mejia at 103:20-23.
[216] *Id.* at 104:11-12.

(2012-2016) linear trend. This approach allows SoCalGas to replace its aging infrastructure and address service pipe leaks.

ORA agrees with SoCalGas' 2018 forecast, which used the five-year (2012-2016) linear trend, but disputes the 2019 forecast for this work category.[217] ORA's use of two different methodologies, in the same work category is an example of how ORA has been inconsistent and selective in its forecasts. ORA's recommendation of $30.760 million for 2019, based on a two year average (2016-2017 recorded) forecast, is $3.643 million below SoCalGas' 2019 forecast and significantly below ($4.445 million) SoCalGas' actual recorded amount in 2017.[218] ORA's recommendation forecasts a downward trend for this activity, but provides no support for how a work activity experiencing ongoing upward pressure would reverse this trend by 2019. In fact, the historical data shows an upward trend and directly contradicts ORA's characterization of this activity.[219]

Main and Service Abandonments – This work category includes expenditures associated with the abandonment of distribution pipeline mains and services, without the installation of a replacement pipeline.[220] The activities contained in Main and Service Abandonments are especially necessary to eliminate the risk that may result from a hazardous condition due to the potential for third-party damage, thus mitigating a public safety risk.[221] SoCalGas developed its forecast using a five-year (2012-2016) linear trend because it incorporates the level of expenditures and activity seen during the historical period and anticipates an increase in spending in the upcoming years due to a continued increase in construction activity near pipelines and a favorable economic environment.[222]

ORA acknowledges that "the Main and Service Abandonments recorded expenditures for 2012-2016 clearly show an upward trend," and that "the 2017 spending was higher than the base year amount."[223] However, ORA does not elaborate nor attempt to provide justification for how

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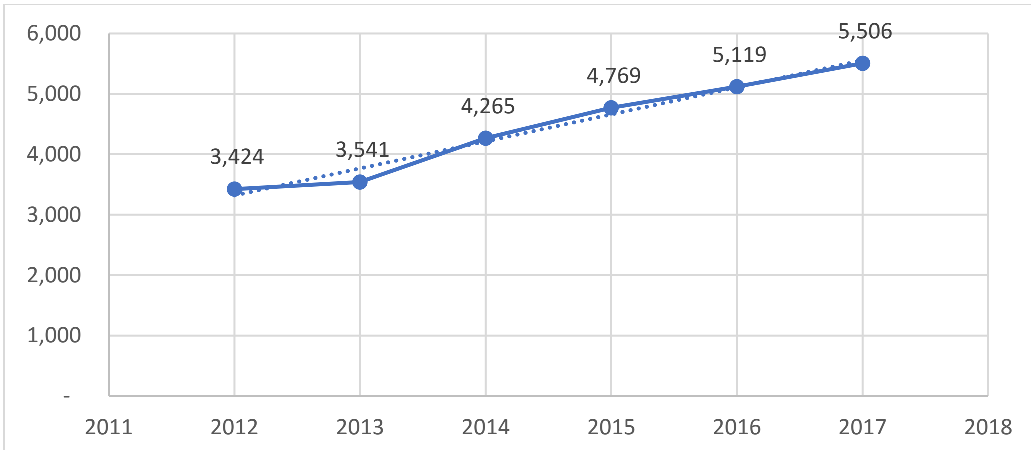
217 Ex. 406 ORA/Phan at 57:1-3.
218 *Id.* at 57:8 (ORA's forecast contained a calculation error. ORA incorrectly calculated the averages for the 2016 and 2017 recorded expenditures, which totaled $30.760 million instead of $31.871 million.).
219 Ex. 10 SCG/Orozco-Mejia at 100 (Figure GOM-19).
220 Ex. 7 SCG/Orozco-Mejia at 106:15-16.
221 *Id.* at 106:25 to 107:2.
222 *See id.* at 107 n.37 & Ex. 10 SCG/Orozco-Mejia at 103 n.363 (citing *US Markets Metro Economies: West*, IHS MARKIT (Spring 2017) (Total Employment for SoCalGas 12-county area growth rate is used as a directional indicator for general economic conditions and potential economic growth).
223 Ex. 406 ORA/Phan at 58:14-19.

the activities in this category will decrease in 2018 and 2019. The number of main and service abandonments continue to increase each year as seen in the figure below and have shown no signs of decreasing as ORA implies.[224]

Figure 8.3.2.1.A
Southern California Gas Company
Number of Main and Service Abandonment Orders



Cathodic Protection – The CP capital work category includes expenditures associated with the new installation and replacement of CP systems and equipment.[225] SoCalGas selected a five-year (2012 through 2016) linear trend plus incremental increase for its forecast, as this allows the Company to capture the increased activity to respond to an aging CP system requiring increased rates of infrastructure renewal.[226] With the exception of 2014, the expenditures in this work activity trended upward. As the system continues to age and deteriorate, the need to replace major CP system components will continue to increase.[227] ORA's recommendation to reduce the SoCalGas forecast by using a three-year average,[228] fails to recognize that the Cathodic Protection capital forecast helps to reduce the risk of asset failure and enhance public safety. Cathodic Protection is a required maintenance activity that cannot be overlooked, as corroded pipe directly increases the risk of leaks and can reduce the useful life and performance of the pipeline.

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[224] Ex. 10 SCG/Orozco-Mejia at 105 (Figure GOM-21).
[225] Ex. 7 SCG/Orozco-Mejia at 112:21-22.
[226] *Id.* at 113:3-4.
[227] *Id.* at 114:6-7.
[228] ORA's 2018 forecast incorrectly adds the expenditures for the base capital work and remote monitoring units. ORA's 2018 forecast, if calculated correctly, should have been $7.859 million, instead of $6.059 million, since it did not oppose SoCalGas' funding request for remote metering units.

New Capital Tools – This area is to purchase of tools and equipment used by Gas Distribution field personnel for the inspection, construction, maintenance and repair of gas pipeline systems.[229] The main drivers of this category include the need to replace existing tools that are damaged, broken, outdated technologically, or have outlived their useful lives and the need to stock crew vehicles with new tools and equipment.[230] In recommending a two-year average of 2016 and 2017 recorded expenses, ORA mistakenly states that there has been a steady downward trend from 2014 to 2016.[231] In actuality, the dollars for 2014-2016 follows a steeper linear trend than what SoCalGas forecasted for routine purchases[232] using 2012-2016 data for a linear trend.[233] SoCalGas anticipated overall capital construction work and associated costs to continue to increase in an upward direction.[234]

8.3.2.2 Disputed Five-Year Average Forecasts for Base Forecasts

For a couple of capital workgroups, ORA recommends a three-year historical average forecast instead of SoCalGas' five-year average. A five-year average captures a longer time period than ORA's recommendation, which is a more accurate representation of the activities in these workgroups and would account for historical fluctuations. In the TY 2012 GRC proceeding, ORA's same analyst Ms. Phan stated that "data from as many years as possible should be used for a more reliable forecast,"[235] and yet Ms. Phan did not take this approach in this case. SoCalGas explains further below why a longer historical look is more appropriate for these workgroups.

Pipeline Relocations – Freeway – Freeway work is driven by governing agencies' requests for SoCalGas to relocate pipe and related facilities that, if maintained in their current location, would interfere with planned construction or reconstruction of freeways.[236] Although ORA considered recent spending over the last three years,[237] its forecast excludes the three years with the highest level of spending and fails to account for all of the typical fluctuations within

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229 Ex. 7 SCG/Orozco-Mejia at 134:30 to 135:1.
230 *Id.* at 135:8-10.
231 Ex. 406 ORA/Phan at 78:24-25.
232 ORA accepts SoCalGas' incremental costs regarding RAMP - confined space air monitoring system for field personnel, and RAMP - upgrade Nomex coveralls and fresh air equipment.
233 Ex. 10 SCG/Orozco-Mejia at 133 (Figure GOM-30).
234 *See* Ex. 7 SCG/Orozco-Mejia at 137:23-25.
235 A.14-11-003/-004 (cons.), Ex. 350 ORA/Phan at 8:9-10.
236 Ex. 7 SCG/Orozco-Mejia at 116:18-21. For further description please refer to *id.* at 116-117.
237 Ex. 406 ORA/Phan at 68.

this workgroup. As transportation agencies continue with improvement and expansion projects, SoCalGas is required to respond by relocating infrastructure in conflict with freeway construction, which is more accurately represented by a longer historical look capturing a higher level of spending.[238]

Pipeline Relocations – Franchise – Franchise work is driven by external requests, as specified under the provisions of SoCalGas' franchise agreements with city and county agencies that require relocating or altering SoCalGas facilities.[239] Although ORA considered recent spending over the last three years,[240] its forecast fails to account for the typical fluctuations seen in this workgroup over the five-year historical period, as Ms. Orozco-Mejia rebuttal testimony states: "Franchise work is driven by the volume and type of construction work required in response to requests from external agencies, such as cities and counties. SoCalGas has little control over the construction schedule of these projects, but it must complete its portion of the work in a timely manner to avoid impacts to the external agency's work."[241]

New Business Forfeitures – As part of the forecast for new business construction expenditures, ORA disagrees with SoCalGas' forecast for New Business Forfeitures.[242] ORA disputes SoCalGas' use of the five-year (2012-2016) average to determine its forecast for New Business Forfeitures and asserts that the LRY for Main & Stub Forfeitures and five-year (2012-2016) average for Service & Meter Set Assembly are more appropriate.[243] ORA misunderstands the long-term new business impacts on forfeitures. The primary driver of Main & Stub forfeitures is Tariff Rule No. 20 - Gas Main Extensions, which states that "[t]he total refundable amount is subject to refund for a period of ten (10) years after the extension is first ready for service."[244] Therefore, forfeitures are impacted by what was happening over a period of 10 years prior to the forecast period, as opposed to ORA's LRY method looking at the last 4 years.[245]

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[238] Ex. 10 SCG/Orozco-Mejia at 121:9-25.
[239] Ex. 7 SCG/Orozco-Mejia at 118:15-17. For further description refer to *id.* at 118:25 to 119:5.
[240] Ex. 406 ORA/Phan at 69:20-23 to 70:1-2.
[241] Ex. 10 SCG/Orozco-Mejia at 124:9-12. For additional support please refer to *id.* at 124:12-19.
[242] Ex. 406 ORA/Phan at 49:19-20.
[243] *Id.* at 49:22 to 50:2.
[244] SoCalGas Tariff Rule No. 20.E.3, *available at* https://www.socalgas.com/regulatory/tariffs/tm2/pdf/20.pdf.
[245] Please *see* Ex. 10 SCG/Orozco-Mejia at 93-96 for further details.

8.3.2.3 Disputed Incremental Costs

Regulator Station Replacement Program – Given the large number of regulator stations that are beyond their average life expectancy, SoCalGas plans to accelerate the rate at which it replaces regulator stations by replacing an incremental eight stations in 2018 and in 2019 in addition to the base forecast.

For 2018 and 2019, ORA recommends using a two-year average based on the 2016 and 2017 recorded expenditures and opposes any funding for the incremental request to accelerate the replacement of regulator stations.[246] ORA recognizes that "SCG proposes the 2016 recorded expenditures as the base amount for its 2017-2019 forecasts. This method is appropriate since recorded expenditures for Regulator Stations indicate an upward trend from 2014 to 2016," yet ORA recommends a lower amount than base year (2016) recorded for 2018 and 2019.[247] ORA's approach is unreasonable because it disputes ongoing work and historical cost trends. ORA's recommendation to reduce SoCalGas forecast, fails to recognize that the Regulator Stations forecast helps to reduce the risk of asset failure and enhance public safety. Failure of a regulator station could result in over-pressurizing or under-pressurizing the gas distribution system, impacting service to customers and/or jeopardizing public safety. These are mechanical devices that will not operate forever and must be replaced prior to failure. At ORA's recommended base year (2016) replacement rate of 13 regulator stations, it would take SoCalGas 62 years to replace these regulator stations. Using SoCalGas' 2019 replacement recommendation of 31 stations per year, it would take approximately 26 years to replace these stations.[248] As ORA noted, there are approximately 809 regulator stations that are above the 35-year average life expectancy, including approximately 324 stations that have been in service for over 50 years.[249] ORA focuses on the declining average age of regulator stations, which is driven by the total number of installations.[250] However, as stated before, the Regulator Station Replacement Program is targeting the stations that are above the 35-year life expectancy.[251]

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[246] Ex. 406 ORA/Phan at 60:18-20.
[247] *Id.* at 60:22-24.
[248] This is the sum of 13 replacements in the base forecast and 18 incremental replacements (13 + 18 = 31).
[249] Ex. 406 ORA/Phan at 63:9-12.
[250] *Id.* at 63:9-64:6.
[251] *See* Ex. 10 SCG/Orozco-Mejia at 109-113.

Meter Guards – ORA accepts the base forecast for Other Distribution Capital Projects, but disputes Meter Guards. Meter guards are routinely installed to protect the meter set assemblies (MSAs) at existing customer locations from vehicular traffic and limit exposure to other potential sources of impact damage, in accordance with GO 112-F and 49 C.F.R. § 192.353(a).[252] Meter guards protect the MSA when activity on the property creates or encourages a potentially hazardous environment to the MSA or to the public.[253] SoCalGas forecasted this work category using a zero-based approach.[254] For the year 2017, SoCalGas used the BY 2016 recorded to forecast the level of expenditure in this capital category.[255] Based on the current inventory of pending meter guard installations, SoCalGas forecasts installing meter guards at approximately 13,000 MSA locations each year in 2018 and 2019.[256]

ORA proposes a reduction to this forecast for 2018 and TY 2019 of $8.299 million for both years. ORA recommends the 2017 recorded expenses for the 2017 forecast and zero funding for the 2018 and TY 2019 forecast for Meter Guards.[257] ORA claims SoCalGas' request for 2018 and 2019 Meter Guard funding is "excessive [sic] inadequately supported."[258] SoCalGas disagrees, as the Company implemented a focused MSA inspection program to comply with atmospheric corrosion code requirements resulting in a more thorough review of conditions at the MSA. This incremental request is to address the volume of capital orders that were generated as a result of MSA inspections from 2016 and 2017. ORA states that "as of January 19, 2018, SCG is still developing this plan" and that "ORA is not confident that 13,000 meter guards, or any meter guards from this plan, will be installed by the end of 2018."[259] However, this concern is misplaced, as SoCalGas stated in the revised direct testimony and a response to an ORA data request, it has been working on the implementation plan, including establishing a project team responsible for supporting this effort starting in 2018.[260] An increase

[252] Ex. 7 SCG/Orozco-Mejia at 124:6-7.
[253] *Id.* at 125:23-24.
[254] *Id.* at 125:5-8.
[255] *Id.* at 125:8-9.
[256] *Id.* at 125:10-12.
[257] Ex. 406 ORA/Phan at 71:11-17.
[258] *Id.* at 74:4-6.
[259] *Id.* at 72:13-16.
[260] Ex. 7 SCG/Orozco-Mejia at 125:9-10; Ex. 10 SCG/Orozco-Mejia at Appendix B, ORA-SCG-065-DAO, Question 8.a.

of work of this magnitude requires a project plan and resource coordination before work can begin, so the activity can be accomplished in an efficient manner.[261]

8.3.2.4 Disputed Capital Costs Due to Calculation Errors

Field Capital Support – This area is for labor and non-labor for a broad range of services to support field capital asset construction, including project planning, local engineering, clerical support, field scheduling and dispatch, field management and supervision, updating of mapping products, and off-production time for support personnel and field crews that install Gas Distribution capital assets.[262] Collectively, the level of support activities can fluctuate with the level of capital construction activity. The forecast therefore used historical costs as a percentage of construction costs. The total capital forecast for Field Capital Support is $61.317, $70.292, $74.618 million for 2017, 2018, and 2019, respectively.

ORA accepts SoCalGas' forecast method, but proposed reductions for 2018 and 2019 by applying SoCalGas' methodology to ORA's proposed expenditures in the related construction categories.[263] The resulting reductions for 2018 and 2019 are $12.543 and $12.633 million, respectively. ORA's proposal contains some calculation errors, such as incorporating the new business trench reimbursements and forfeitures, which are not used to forecast capital construction costs for the purpose of determining Field Capital Support.[264]

8.4 SDG&E Issues

8.4.1 SDG&E Non-Shared O&M Expenses

SDG&E's revised direct testimony fully supports TY 2019 non-shared services Gas Distribution O&M expenditures of $29.533 million. SDG&E developed this forecast based on a review of 2012 to 2016 historical spending, and in consideration of new or incremental changes in activities that will impact future revenue requirements. SDG&E's forecasts also include RAMP costs to mitigate Gas Distribution risks. SDG&E's Gas Distribution O&M is all non-shared. ORA proposes reductions to four workgroups for TY 2019 as shown in the table below.

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[261] For further detail please refer to Ex. 7 SCG/Orozco-Mejia at 123-125.
[262] *Id.* at 138:15-18.
[263] Ex. 406 ORA/Phan at 81:3-5.
[264] Ex. 7 SCG/Orozco-Mejia at 137-139. Please refer to *id.* at Appendix A, pp. A-4 to A-6, for corrections.

SDG&E Test Year 2019 Non-Shared O&M Forecast Summary and Variance from Intervenor Proposals

	Position of Party			Difference Between ORA and SDG&E	Difference Between CUE and SDG&E
	SDG&E	ORA	CUE	(ORA - SDG&E)	(CUE - SDG&E)
Field O&M – Other Services	202	202	202	0	0
Field O&M – Leak Survey	1,841	1,841	2,468	0	627
Field O&M – Locate and Mark	3,589	3,446	3,849	(143)	260
Field O&M – Main Maintenance	3,422	2,965	5,314	(457)	1,892
Field O&M – Service Maintenance	1,867	1,867	1,867	0	0
Field O&M – Tools and Mat'ls	1,010	1,010	1,010	0	0
Field O&M – Electric Support	425	425	425	0	0
Field O&M – Supervision and Training	3,993	3,839	3,993	(154)	0
Field O&M – M & R	4,216	3,803	4,216	(413)	0
Field O&M – Cathodic Protection	2,289	2,289	2,289	0	0
Asset Management	2,169	2,169	2,169	0	0
Operations Management & Training	4,510	4,510	4,510	0	0
Total Non-Shared Services O&M	**29,533**	**28,366**	**32,312**	**(1,167)**	**2,779**

8.4.1.1 Disputed Five-Year Linear Trend for Base Forecasts

In addition to the Locate and Mark workgroup discussed in the Common Issues Section of this brief, ORA disputes two more cost categories (Measurement and Regulation and Main Maintenance) where SDG&E used a five-year linear trend for its base forecast. For a discussion on ORA's opposition to the five-year linear trend methodology please see the Common Issues Section of this brief.

8.4.1.2 Disputed Incremental Costs

8.4.1.2.1 Supervision and Training

ORA proposes a TY 2019 forecast based on 2016 adjusted-recorded expenses of $3.520 million plus only one of the two incremental additions, the RAMP-related cost of $319,000 for Leadership Training, instead of SDG&E's forecast of $3.993 million which includes both Leadership Training and the Supervisor University. ORA disallowed $0.154 million for the incremental addition of three field supervisors required for growth in this workgroup.

ORA argues that the 2016 expense level "already captures additional field supervision."[265] However, the additional field supervision will be needed as activities will not remain at the same baseline level as in the past. With growth in this workgroup, additional supervision will provide the knowledge and skills to enhance worker effectiveness and safety. Additional first-line supervisor support will be needed to address the challenges the Company

[265] Ex. 404 ORA/Campbell at 12:23-25.

faces described in Ms. Orozco-Mejia's direct testimony[266] and in the response to a data request,[267] to respond to operations, maintenance, and construction needs associated with customer growth, mitigation of the risks confronted on the job, addressing compliance with new federal and state (GO 112-F) regulations, and proactive action to enhance employee training, qualification, and work quality.

8.4.2 SDG&E Capital Expenses

ORA recommends adopting the 2017 adjusted-recorded capital expenditure amount for 2017, and proposes reductions to three capital expense categories for 2018 and 2019. These are Replacement of Mains and Services (BC 508), Regulator Station Improvements (BC 510), and Local Engineering (BC 902). The overall expense reduction ORA proposes for these categories combined is $22.747 million. A discussion on these disputed capital expense categories is provided below. ORA accepted SDG&E's forecasts for the remaining capital budget categories.

SDG&E 2017-2019 Capital Forecast Summary and Variance from Intervenor Proposals

San Diego Gas And Electric Company
Gas Distribution Capital Forecast Summary
(Thousands of Constant 2016 Dollars)

	Difference Between Party and SDG&E					
	(ORA - SDG&E)			(CUE - SDG&E)		
	2017	*2018*	*2019*	*2017*	*2018*	*2019*
A. New Business	1,702	0	0	0	0	0
B. System Minor Additions, Relocations	5,144	0	0	0	0	0
C. Meter & Regulator Materials	(4,413)	0	0	0	0	0
D. Pressure Betterment	(895)	0	0	0	0	0
E. Distribution Easements	0	0	0	0	0	0
F. Pipe Relocations - Franchise/FWY	8,676	0	0	0	0	0
G. Tools and Equipment	345	0	0	0	0	0
H. Code Compliance	(709)	0	0	0	0	0
I. Replacement - Mains and Services	10,183	0	(9,286)	0	0	11,308
J. Cathodic Protection	2,255	0	0	0	0	1,844
K. Regulator Station Improvements	649	0	(5,124)	0	0	8,415
L. CNG Station Upgrades	406	0	0	0	0	0
M. Local Engineering	1,747	(2,959)	(8,337)	0	0	0
Total Capital	**25,090**	**(2,959)**	**(22,747)**	**0**	**0**	**21,567**
Difference by Percentage	49.5%	-3.2%	-20.5%	0.0%	0.0%	19.4%
Total Capital (2017-2019)		**(616)**			**21,567**	

Notes:

1/ CUE did not discuss SDG&E's total forecast values for base year 2016, 2017 and 2018.
It is assumed that they accepted the SDG&E forecast figures for those years.

266 *See* Ex. 11 SDG&E/Orozco-Mejia at iv to vii.

267 Ex. 14 SDG&E/Orozco-Mejia at Appendix B, ORA-SDGE-117-MCL, Question 7.a.

8.4.2.1 Replacement of Mains and Services

While ORA does not oppose SDG&E's forecast of $16.940 million for 2018, it recommends that same funding level for TY 2019 resulting in a $9.286 million reduction in SDG&E's TY 2019 forecast. Although ORA concurs with SDG&E's proposed two RAMP incremental additions associated with replacement of early vintage steel pipe and the replacement of pre-1933 threaded steel main,[268] ORA states that "SDG&E has not presented sufficient evidence to support a 55% increase in forecasted 2019 expenditures relative to its 2018 forecast."[269]

ORA's position regarding SDG&E's support of a 55% increase in capital expenditures for 2019 is unwarranted. The actual 2016 expenditures in this work category were $5.618 million, while the 2017 expenditures grew to $16.151 million, an increase of 188%. As demonstrated by the higher than forecasted level of spending in 2017, SDG&E has the commitment to the RAMP risk mitigation projects and the ability to significantly increase the rate at which work is completed.[270]

8.4.2.2 Regulator Station Improvements

ORA's recommendation for TY 2019 results in a $5.124 million reduction in SDG&E's forecast.[271] ORA justifies this recommendation by stating that:

> At least two of the [incremental] projects will commence in year 2018 and the RAMP Risk ID 16/ Medium and High-Pressure Systems project has an estimated time of completion 5 years from start year 2018 with a completion in year 2023. Year 2023 is out of this general rate case cycle. ORA recommends a forecast of $20.5 million for year 2018 and 2019 be adopted.[272]

ORA's reasoning shows a misunderstanding of SDG&E's forecast and the RAMP project time frames. ORA appears to assume that the expenditure for TY 2019 will be reduced since it incorrectly interprets that a portion of the funding shown for TY 2019 will occur beyond the current GRC cycle. ORA's testimony presented a table provided by SDG&E in a data request

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[268] Ex. 404 ORA/Campbell at 29:20-30:1.
[269] *Id.* at 30:3-5.
[270] Ex. 14 SDG&E/Orozco-Mejia at 32:25 to 33:2.
[271] Included in SDG&E's forecast is TY 2019 funding for the incremental additions of Dresser Mechanical Coupling removal ($7,876,000), Oil Drip Piping Removal ($9,275,000), Buried Piping in Vaults Replacement ($7,719,000), and Closed Valves Between Medium and High-Pressure Systems ($0).
[272] Ex. 404 ORA/Campbell at 34:6-10.

response to provide a time frame for the four RAMP incremental addition projects.[273] SDG&E indicated the approximate time in years for each of these projects and annual forecasted funding.

8.4.2.3 Local Engineering

Expenses recorded to this capital expense category are the labor and non-labor funding for a broad range of services to support Gas Distribution field capital asset construction. While both SDG&E and ORA forecasts were developed on a zero-based basis,[274] ORA's recommendation is $2.959 million and $8.337 million below SDG&E's 2018 and 2019 forecasts. ORA developed its Local Engineering forecast for 2018 and 2019 by "[taking] a four-year average of the LE percentages from years 2014-2017; ORA excluded the 2012 and 2013 LE percentages as outliers as they were unusually high compared to the other years."[275] ORA goes on to say, "ORA applied its recommended ratio of 18.62% to its capital expenditure forecasts (net of Regulator Materials and Tools & Equipment), to arrive at its recommended LE forecast of $11.78 million for 2018 and $11.74 million for 2019."[276] SDG&E disagrees with ORA's methodology of excluding the 2012 and 2013 data as "outliers" in the calculation of the ratio of historical LE to total construction costs and using instead the 2014-2017 four-year data.[277] ORA does not appear to support its conclusion that two of the data points are outliers with evidence other than they were 'unusually high,' and presents no arithmetic basis to justify their exclusion.

Additionally, ORA failed to consider the incremental RAMP – Cathodic Protection Reliability initiative, the third cost element that is included in the total Local Engineering forecast.[278] This incremental addition is necessary to improve the safety and reliability of the system and reduce risk as identified in the RAMP Report. This incremental addition provides funding to develop a model to simulate the status of SDG&E's cathodic protection system.

8.5 Other Out of Scope, Policy, or Other Non-Cost Issues Raised by Parties

8.5.1 CFC

For SoCalGas, CFC recommends that Gas Distribution's TY 2019 revenue requirement be reduced by $27.900 million to reflect CFC's estimate for unaccounted for gas.[279] The

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[273] Ex. 14 SDG&E/Orozco-Mejia at Appendix B, ORA-SDG&E-153-MCL, Question 1.
[274] For additional forecast methodology detail, *see* Ex. 11 SDG&E/Orozco-Mejia at 101.
[275] Ex. 404 ORA/Campbell at 36:24 to 37:3.
[276] *Id.* at 37:10-12.
[277] Ex. 14 SDG&E/Orozco-Mejia at 47:23-27.
[278] *Id.* at 48:4-18.
[279] Ex. 484 CFC/Roberts at 11.

Commission already denied EDF's request to include LUAF as a scoping issue in this GRC, stating:

> Issues regarding Lost and Unaccounted for Gas should be raised in [] Rulemaking 15-01-008 and Southern California Gas Company's (and San Diego Gas & Electric Company's) Triennial Cost Allocation Proceedings as applicable.[280]

For this reason, the Commission should reject CFC's proposal to address unaccounted for gas in this case.

8.5.2 TURN

For SDG&E and SoCalGas, TURN states that expenses related to clothing and other gear containing the utilities' name and logo (excluding uniforms, hard hats, etc.) are largely promotional and image-building and should not be paid for by ratepayers. It claims that since the Commission removed these costs in PG&E's recent rate case, they should be removed from SoCalGas and SDG&E's case as well.[281] For SoCalGas Gas Distribution, the total for 2016 was $44.966 thousand and for SDG&E it was $4.008 thousand.[282] As explained in Ms. Orozco-Mejia's rebuttal testimony,[283] these items are given to employees to recognize accomplishments or to promote safety awareness. The logo clothing also allows emergency responders, media, government officials, fellow employees, and customers to readily identify company representatives who can respond to their inquiries and provide important information and updates.

8.5.3 Sierra Club

For SDG&E, the Sierra Club/Union of Concerned Scientists (UCS) indicated that they did not support the need for new Natural Gas Vehicle (NGV) refueling stations in San Diego. They indicated that "A survey conducted in 2012 cannot logically be used to support the need for the new charging stations in 2018 and 2019, given the proliferation of electric vehicle options since 2012 and the decline in availability of natural gas passenger vehicles."[284] Contrary to Sierra/Club/UCS's assertions, the expansion of natural gas vehicles and the need for NGV

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280 A.17-10-007/-008 (cons.), Assigned Commissioner's Ruling on Lost and Unaccounted for Gas Issue (issued March 8, 2018) at 3.

281 Ex. 494 TURN/Marcus at 77-78. Note TURN only gave a 2016 expense and did not specify a specific reduction for any of the forecast years.

282 The requested total expenses by TURN to be removed included clothing expenses across many witness areas. *Id*. at 78.

283 Ex. 10 SCG/Orozco-Mejia at 143; Ex. 14 SDG&E/Orozco-Mejia at 50.

284 Ex. 475 Sierra Club-UCS/O'Dea at 36:12-15.

fueling stations in the future was fully justified in the revised direct testimony of Andrew S. Cheung (adopted by Rosalinda Magana)[285] and the rebuttal testimony of Carmen Herrera regarding SoCalGas NGV refueling stations.[286]

8.6 Conclusion

SoCalGas' Gas Distribution O&M and capital forecasts represent a reasonable level of funding for the activities and capital projects planned during this forecast period. Based on the above discussion, the Commission should adopt SoCalGas' original TY 2019 O&M forecast of $148.154 million and adopt the forecasts of its capital expenditures in 2017, 2018, and 2019 of $279.210, $324.802, and $347.842 million, respectively.

SDG&E's Gas Distribution O&M and capital forecasts represent a reasonable level of funding for the activities and capital projects planned during this forecast period. Based on the above discussion, the Commission should adopt SDG&E's original TY 2019 O&M forecast of $29.533 million and adopt the forecasts of its capital expenditures in 2017, 2018, and 2019 of $50.666 million, $91.606 million, and $110.993 million, respectively.

9. Gas System Integrity for Distribution, Transmission and Storage

SoCalGas and SDG&E's Gas System Integrity testimonies and workpapers, supported by witness Omar Rivera, describe and justify the Companies' forecasted Gas System Integrity O&M expenditures.[287] Gas System Integrity is responsible for a collection of key activities and programs that contribute to the ongoing vitality of gas operations and help achieve our overarching objective to provide safe, clean, and reliable natural gas service at reasonable rates.[288] Gas System Integrity works alongside the Gas Transmission, Gas Distribution, and Storage organizations by creating and issuing policies and standards that establish and validate compliance with applicable laws, regulations, internal policies, and best practices.[289]

The RAMP risks represented and supported as part of these testimonies are Catastrophic Damage Involving Third-Party Dig-Ins, Employee, Contractor, Customer, and Public Safety, Catastrophic Damage Involving High-Pressure Failure, Workforce Planning, Records Management, and Catastrophic Damage Involving Medium-Pressure Pipeline Failure, as further

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[285] *See* Ex. 156 SCG/Cheung/Magana.
[286] *See* Ex. 192 SCG/Herrera.
[287] *See* Exs. 84-86 SCG/Rivera and Exs. 87-89 SDG&E/Rivera.
[288] Ex. 84 SCG/Rivera at 2; Ex. 87 SDG&E/Rivera at 2.
[289] *Id.*

detailed in Section II of Mr. Rivera's direct testimonies.[290] The RAMP risk mitigation efforts are associated with programs and processes concerning public and employee safety, system reliability, regulatory and legislative compliance, and pipeline system integrity.[291] The incremental funding request supports the ongoing management of these risks that could pose significant safety, reliability, and financial consequences to our customers and employees. The anticipated risk reduction benefits that may be achieved by authorizing the funding to implement these incremental activities are summarized in Sections III and IV of Mr. Rivera's direct testimonies.[292]

Intervenors' summary positions are compared to SoCalGas and SDG&E's in the tables below:

Summary of SoCalGas O&M Request and Intervenor Proposals

TOTAL NON-SHARED + SHARED SERVICES O&M Constant 2016 ($000)		
	Test Year 2019	**Variance[293]**
SoCalGas	32,904	
ORA	18,853[294]	(14,051)
CUE	32,904[295]	0
OSA	not specified	n/a

Summary of SDG&E O&M Request and Intervenor Proposals

TOTAL NON-SHARED + SHARED SERVICES O&M Constant 2016 ($000)		
	Test Year 2019	**Variance**
SDG&E	1,558	
ORA	1,180[296]	(378)
CUE	1,833[297]	275

290 *See* Ex. 84 SCG/Rivera at 10-22; Ex. 87 SDG&E/Rivera at 7-11.
291 *See id.*
292 *See* Ex. 84 SCG/Rivera at 24-68; Ex. 87 SDG&E/Rivera at 13-24.
293 Intervenor's forecast – Utility's forecast = Variance.
294 ORA recommendations result in a reduction of 43% of O&M non-shared and shared operations, which are derived by incorporating the 2016 actual expense data into the forecast and accepting SoCalGas' requested incremental increases.
295 Recommendations were made for Gas Operations Staff and Training only; CUE does not take issue with SoCalGas' funding request.
296 ORA recommends $347,000 for Damage Prevention O&M non-shared, rather than the requested $725,000.
297 Recommendations were made for Damage Prevention and Public Awareness only.

9.1 SoCalGas Issues

SoCalGas requests approval of a TY 2019 forecast of $32.904 million for Gas System Integrity O&M.[298] The forecast is composed of $15.598 million for non-shared service activities and $17.306 million for shared service activities. This forecast represents an increase of $19.936 million over 2016 adjusted-recorded costs (BY 2016) and includes $22.753 million in RAMP related costs.[299] While ORA, CUE, and OSA provided testimony on SoCalGas' Gas System Integrity forecast, only ORA disagreed with SoCalGas' funding request. ORA recommended a $14.051 million reduction (43% total reduction) to SoCalGas' funding level request.

9.1.1 Non-Shared Operations and Maintenance

The TY 2019 forecast for non-shared O&M is $15.598 million; an increase of $10.823 million over BY 2016.[300] ORA contested SoCalGas' forecast for non-shared O&M expenses in the following four categories: (1) Gas Operations Staff and Training, (2) Pipeline Safety and Compliance, (3) Damage Prevention Public Awareness, and (4) Gas Contractor Controls.[301] ORA did not contest SoCalGas' request for incremental increases from 2016 to 2019; in fact, ORA recommended that they be allowed.[302] Thus, an unsupported methodology and insufficient consideration of RAMP mitigations are SoCalGas' primary points of contention with ORA's forecast.

SoCalGas applied the five-year average, 2016 adjusted-recorded, and zero-based methods for its TY 2019 forecast as the baseline for the incremental increases in various categories. These methods were applied based on the individual characteristics of each cost category and the anticipated needs associated with each. For example, Damage Prevention Public Awareness will be affected by fluctuations with USA tickets and the unpredictability of potential damage to pipelines and infrastructure, while a significant cost driver for Gas Contractor Controls[303] is the implementation of API RP 1173 and its new framework. SoCalGas performed an analysis of

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[298] Ex. 84 SCG/Rivera at 1.
[299] *Id.* at 7, Table OR-2.
[300] Ex. 84 SCG/Rivera at 24; Ex. 86 SCG/Rivera at 8.
[301] Ex. 407 ORA/Enyinwa at 9.
[302] *Id.* ("ORA understands that new programs and new requirements can result in the increase of costs from 2016 to 2019. Therefore, ORA recommends that for both Non-Shared and Shared operations, SCG's requested incremental increases from 2016 to 2019 be allowed.").
[303] The Gas Contractor Controls group is now known as Pipeline Safety Management System (PSMS) Ex. 86 SCG/Rivera at 16.

each category to determine which forecasting method would be the most appropriate and reasonable to apply.[304]

ORA's proposed methodology does not match its recommended values. ORA's forecast reflects the use of the 2016 adjusted-recorded amount across all of these workgroups. Then ORA proposed to add the incremental increases to the 2016 adjusted-recorded amounts.[305] However, when SoCalGas recreated ORA's methodology[306] in order to validate ORA's forecast, SoCalGas yielded a total of $31.136 million for shared and non-shared services.[307] This equals a difference of $12.275 million from ORA's recommendation.[308] ORA did not submit errata on these forecasts or further explain their methodology subsequent to the submission of SoCalGas' rebuttal testimony noting these apparent miscalculations by ORA.

In addition to ORA's unexplained methodology, ORA did not sufficiently account for SoCalGas' RAMP-related efforts. ORA recommended reductions to some of SoCalGas' risk mitigation efforts without providing an explanation of how these mitigations would be affected.[309] Even ORA's testimony on RAMP/GRC Integration, as presented by Nils Stannik, did not address how Gas System Integrity's RAMP mitigations would be affected by ORA's recommended reductions.[310] As ORA did not adequately support its forecast with a thorough analysis of Gas System Integrity's needs and a reasonable explanation, it should be disregarded.

CUE made one recommendation with regards to SoCalGas' incremental request for Gas Operations Training and Development. However, CUE does not otherwise dispute SoCalGas' forecast for non-shared O&M costs. CUE suggested that the Commission make the proposed training expenditures subject to a one-way balancing account to appease its concern that the requested funds actually be used on the proposed training.[311] CUE's suggestion is unnecessary as the trainings have been designated as RAMP activities, and thus will be subject to RAMP

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304 *See, e.g.*, D.12-11-051 at 13-14 ("Several different methods can be used to calculate test year estimates of expenses, *e.g.*, linear trending, averaging (*e.g.*, five year average [] recorded expenses), last recorded year [], and budget based estimates. … Basic forecasting principles are also subject to interpretation and application on a case-by-case basis.").
305 Ex. 407 ORA/Enyinwa at 9-10.
306 Ex. 86 SCG/Rivera at Appendix A.
307 *Id.* at 9.
308 *Id.*
309 *See* Ex. 86 SCG/Rivera at 2-3 (addressing Ex. 407 ORA/Enyinwa).
310 *See generally* Ex. 398 ORA/Stannik.
311 Ex. 370 CUE/Marcus at 36.

accountability reporting.[312] A one-way balancing account does not allow appropriate flexibility to address the uncertainties of future requirements and the growth for this workgroup.[313] The Commission should therefore approve SoCalGas' request for the Gas Operations Training and Development group.

To appropriately balance between Gas System Integrity's pipeline safety, risk reduction effectiveness, and impact on ratepayer costs, the Commission should adopt SoCalGas' TY 2019 non-shared O&M forecast of $15.598 million.

9.1.2 Shared Operations and Maintenance

The TY 2019 forecast for shared O&M totals $17.306 million; an increase of $9.113 million over BY 2016.[314] ORA contested SoCalGas' forecast for certain shared O&M expenses,[315] proposing a forecast of only $11.393 million (34% reduction).[316] As discussed in section 9.1.1 above, ORA did not adequately explain or support its proposed forecast. Again, ORA did not incorporate any analysis of Gas System Integrity's RAMP mitigation efforts and their effects on SoCalGas' forecast. The Commission should therefore adopt SoCalGas's TY 2019 shared O&M forecast, because SoCalGas provided sufficient support and analysis for each cost category, taking into account historical data and the different cost drivers that affect each category.[317]

SoCalGas requests that its TY 2019 shared O&M forecast of $17.306 million be adopted.

9.2 SDG&E Issues

SDG&E requests approval of a TY 2019 forecast of $1.558 million for Gas System Integrity O&M, which includes $1.352 million in RAMP-related costs.[318] The forecast is composed of $958,000 for non-shared service activities and $600,000 for shared service

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[312] *See* Ex. 86 SCG/Rivera at 3, 12 (addressing Ex. 370 CUE/Marcus).
[313] *Id.* at 11-12.
[314] Ex. 84 SCG/Rivera at 47.
[315] ORA disputed SoCalGas' forecast for the following: (1) Vice President System Integrity and Asset Management, (2) Pipeline Safety and Compliance Manager, (3) Operator Qualification, (4) Shared Public Awareness Activities, (5) Business Process ESS Implementation and ESS Mobile Solutions, (6) Work management and Databases, (7) Contract and Maintenance, (8) Enterprise Geographic Information System, and (9) Records Management and Programs.
[316] Ex. 407 ORA/Enyinwa at 10.
[317] *See* Ex. 84 SCG/Rivera at 47-68; Ex. 86 SCG/Rivera at 27-37.
[318] Ex. 87 SDG&E/Rivera at 6.

activities.[319] This forecast represents an increase of $1.407 million over BY 2016.[320] ORA, CUE, and OSA submitted testimony responding to SDG&E's Gas System Integrity funding request. ORA recommended a reduction to the non-shared O&M forecast, while CUE recommended an increase. No party disputed SDG&E's shared O&M forecast.

9.2.1 Non-Shared Operations and Maintenance

The TY 2019 forecast for non-shared O&M is $958,000; an increase of $807,000 over BY 2016.[321] Only the Damage Prevention cost category, with a forecast of $725,000, has been disputed by the intervenors.

SDG&E's Damage Prevention workgroup covers embedded costs addressing the Catastrophic Damage Involving Third-Party Dig-Ins RAMP risk, which seeks to mitigate threats to pipeline infrastructure and public safety.[322] These risk mitigation actions require funding and resources to correctly mark underground gas infrastructure, respond to USA notification center requests within the required timeframe, provide personnel to perform stand-by duties for third-party excavators in the vicinity of a high-pressure gas pipeline, and meet this mandated requirement. The federally-mandated Public Awareness Program is also covered by the Damage Prevention workgroup.[323] To improve this program, SDG&E plans to conduct an assessment of its current communications and methods, modify content for the appropriate audiences, and increase frequency of the messaging.[324] With these improvements, SDG&E will be prepared to address the anticipated cost increases as a result of the Dig Safe Act of 2016, and better mitigate the Catastrophic Damage Involving Third-Party Dig-Ins RAMP risk.[325] Based on these factors, the forecast for this workgroup was based on a five-year average plus incremental adjustments.[326]

ORA recommended a TY 2019 forecast of $347,000, which was based on the highest recorded expense during the past five years, for a reduction of $378,000. ORA's testimony on Gas System Integrity did not evaluate how the Damage Prevention workgroup addresses RAMP-

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319 *Id.* at 1.
320 *Id.*
321 Ex. 87 SDG&E/Rivera at 13.
322 Ex. 87 SDG&E/Rivera at 8-9, 21; Ex. 88 SDG&E/Rivera at 20-25; *see* Ex. 89 SDG&E/Rivera at 6.
323 Ex. 87 SDG&E/Rivera at 19.
324 *Id.* at 21-22.
325 *See* Ex. 89 SDG&E/Rivera at 6.
326 Ex. 87 SDG&E/Rivera at 21; Ex. 89 SDG&E/Rivera at 5.

related mitigations, nor contemplate how ORA's proposed reduction would negatively impact RAMP efforts, even though ORA agrees that this Public Awareness Program is "important."[327] The new risk-informed GRC process, as established by D.14-12-025,[328] should also inform and be incorporated into intervenors' assessments and forecasts for this GRC, not just the Applicants. Without such information specific to Gas System Integrity's RAMP-related costs, ORA's proposed reduction affecting both RAMP embedded and incremental costs for Damage Prevention is not sufficiently justified from a safety risk perspective.

CUE did not dispute SDG&E's incremental request for the Damage Prevention workgroup; in fact, CUE proposed an increase of $275,000, for a TY 2019 forecast total of $1 million.[329] CUE argued for this increase in order to double the anticipated reduction in the number of dig-ins caused by excavation.[330] However, SDG&E's forecast strikes an appropriate balance between 811 advertising's contributions to pipeline safety, effectiveness in reducing the number of dig-ins, and impact on ratepayer costs.

Accordingly, the Commission should adopt SoCalGas' TY 2019 non-shared O&M forecast of $958,000.

9.2.2 Shared Operations and Maintenance

The TY 2019 forecast for shared O&M totals $600,000; an increase of $600,000 over BY 2016.[331] No party disputed SDG&E's forecast for shared service costs.[332] Thus, SDG&E requests that its TY 2019 forecast of $600,000 for shared service O&M costs be adopted.

9.3 Other Policy or Non-Cost Issues Raised by Parties

OSA provided testimony on SoCalGas' and SDG&E's Gas System Integrity testimonies to discuss the Companies' implementation of API RP 1173.[333] However, OSA did not make any funding recommendations.

The PSMS group is responsible for planning the development and implementation of a company-wide PSMS API RP 1173, consistent with Pipeline and Hazardous Materials Safety Administration's (PHMSA) recommendation: "PHMSA fully supports the implementation of

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327 Ex. 404 ORA/Campbell at 42.
328 *See also* Ex. 03 SCG/SDG&E/Day at 3-4.
329 Ex. 370 CUE/Marcus at 91.
330 *Id.*
331 Ex. 87 SDG&E/Rivera at 23.
332 Ex. 404 ORA/Campbell at 4; *see generally* Ex. 370 CUE/Marcus; Ex. 442 OSA/Contreras.
333 Ex. 442 OSA/Contreras at 2-1 to 3-15.

[API] RP 1173 and plans to promote vigorous conformance to this voluntary standard."[334] The recommended practice is a proactive, system-wide approach to safety management and reducing risks and provides operators with a comprehensive framework to address risk across the entire life cycle of a pipeline. The standard promotes pipeline safety, while implementing guidelines for continuous improvement. SoCalGas strongly agrees that the implementation of API RP 1173 for its pipeline operations is a key step towards enhanced asset and risk management decision-making to ultimately improve safety performance,[335] which is why SoCalGas incorporated a request to fund it in this GRC.

API RP 1173 is not a mandatory practice; however, the Companies have voluntarily begun to implement it[336] and will continue to work with OSA during our safety journey to reach full conformance[337] and continuously improve. OSA clearly outlined its support for implementation of API RP 1173, but suggested that the Commission impose additional requirements and conditions upon the Companies' implementation.[338] The Companies have demonstrated a strong commitment to implementation of this pipeline safety management system[339] and established a project management office and Executive and Director Steering Committees to coordinate and refine how to enhance the safety management system.[340] As none of OSA's suggestions affect the Companies' funding requests, which is the relevant objective of

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[334] Ex. 86 SCG/Rivera at 16 (quoting Hon. Marie Therese Dominguez, Written Statement Before the U.S. H.R. Comm. On Transp. & Infrastructure, Subcomm. on R.R. Pipelines, and Hazardous Materials at 15 (Feb. 25, 2016), *available at* https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/Written_Testimony_Marie_Therese_Dominguez_Administrator_of_PHMSA_2.25.16.pdf).

[335] Ex. 86 SCG/Rivera at 16.

[336] Ex. 84 SCG/Rivera at 23; Ex. 87 SDG&E/Rivera at 12; Ex. 03 SCG/SDG&E/Day at 27; Ex. 250 SCG/SDG&E/Buczkowski/Geier at 5-9.

[337] Ex. 86 SCG/Rivera at 17.

[338] *See* Ex. 442 OSA/Contreras at 3-3 to 3-4 ("OSA supports the *strategic, deliberate, and committed* implementation of API 1173 standards by the Utilities.") (emphasis in original).

[339] Ex. 86 SCG/Rivera at 3:14-19 ("SoCalGas and San Diego Gas & Electric Company (the Companies), all the way to the top levels including their Board of Directors, are deeply committed to this voluntary implementation of API RP 1173, as shown in SoCalGas' specific funding request in this GRC to adequately resource implementation of the Pipeline Safety Management System (PSMS) in accordance with API RP 1173's pipeline safety standard and framework."). *See also* Tr. V16 1293:24-25 (Martinez) for an example of the wide reach of API RP 1173's implementation ("TIMP and every operating unit in the company is part of that effort.").

[340] Ex. 86 SCG/Rivera at 7-8.

this GRC,[341] SoCalGas and SDG&E ask that the Commission adopt their TY 2019 forecasts for Gas System Integrity.

9.4 Conclusion

The Companies' Gas System Integrity forecasts of O&M expenses balance compliance obligations, risk, as well as the cost to deliver natural gas safely and reliably. To enable SoCalGas and SDG&E to accomplish these safety efforts, the Commission should adopt SoCalGas' TY 2019 forecast of $32.904 million for Gas System Integrity O&M expenses ($15.598 million for non-shared service activities and $17.306 million for shared service activities), and SDG&E's TY 2019 forecast of $1.558 million for Gas System Integrity O&M expenses ($958,000 for non-shared service activities and $600,000 for shared service activities).

10. Gas Transmission Operations

Key objectives of the SoCalGas and SDG&E Gas Transmission organizations are to operate safely, achieve compliance with applicable legal and regulatory requirements, and provide customers with reliable natural gas service at reasonable cost.[342] This section includes the O&M costs associated with operating and maintaining the SoCalGas and SDG&E gas transmission systems.

10.1 SoCalGas

SoCalGas requests approval of a TY 2019 forecast of $51.934 million for O&M costs associated with operating and maintaining the SoCalGas natural gas transmission system. The O&M forecast is composed of $50.918 million for non-shared service activities and $1.016 million for shared service activities. This forecast represents an increase of $21.674 million over 2016 adjusted-recorded costs.[343]

GAS TRANSMISSION (In 2016 $)			
	2016 Adjusted-Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
Total Non-Shared Services	29,310	50,918	21,608
Total Shared Services (Incurred)	950	1,016	66
Total O&M	**30,260**	**51,934**	**21,674**

[341] A.17-10-007/-008 (cons.), Assigned Commissioner's Scoping Memorandum and Ruling (issued January 29, 2018) at 4.
[342] Ex. 30 SCG/Bermel/Musich at iii.
[343] Ex. 24 SCG/Musich at 1.

10.1.1 RAMP

Gas Transmission sponsored incremental O&M costs associated with Catastrophic Damage Involving High-Pressure Pipeline (RAMP Chapter SCG-4).[344] The table below summarizes SoCalGas' RAMP O&M requests.

GAS TRANSMISSION (In 2016 $)			
SCG-4 Catastrophic Damage Involving High-Pressure Pipeline Failure	**2016 Embedded Base Costs (000s)**	**TY2019 Estimated Incremental (000s)**	**Total (000s)**
2GT000.000, Pipeline Operation	4,536	0	4,536
2GT002.000, Technical Services	2,387	17,000	19,387
Total	**6,923**	**17,000**	**23,923**

ORA and TURN contested the incremental RAMP costs sponsored in Gas Transmission O&M testimony of $17.000 million in Technical Services for non-shared O&M services, which is comprised of $5.000 million for Right-of-Way (ROW) Maintenance activities and $12.000 million for Class Location Mitigation activities.[345] SoCalGas addresses ORA's and TURN's positions regarding these incremental RAMP costs and requests that the Commission adopt the RAMP risk mitigation activities and the associated costs contained in SoCalGas' testimony.

ORA also offered testimony that it considers the RAMP program insufficiently developed to dictate, or even substantially guide, funding decisions in the GRC.[346] ORA's suggested dismissal of SoCalGas' RAMP cross-referencing is unjustified as SoCalGas has explained in detailed testimony.[347] SoCalGas' RAMP showing in the GRC is based on the requirements adopted by the Commission in decisions and the modification of the Rate Case Plan to include a new risk-based decision-making framework, including the RAMP. SoCalGas is requesting the Commission to adopt and faithfully initiate use of the RAMP-related showing in this proceeding to inform and guide the outcome of its funding decisions.[348]

[344] *Id.* at 6.
[345] Ex. 407 ORA/Enyinwa at 14; Ex. 490 TURN/Borden at 41-42.
[346] Ex. 407 ORA/Enyinwa at 14.
[347] Ex. 26 SCG/Musich at 6-7.
[348] *Id.* at 7.

10.1.2 Non-Shared O&M Services

The following table summarizes SoCalGas' total non-shared O&M forecasts for the listed cost categories.[349]

GAS TRANSMISSION (In 2016 $)			
Categories of Management	**2016 Adjusted-Recorded (000s)**	**TY2019 Estimated (000s)**	**Change (000s)**
A. Gas Transmission Pipelines	17,692	14,463	-3,229
B. Compressor Stations	9,732	9,988	256
C. Technical Services	1,886	26,467	24,581
Total Non-Shared Services	**29,310**	**50,918**	**21,608**

ORA and TURN submitted testimony addressing SoCalGas Gas Transmission O&M expenses. Specifically, ORA and TURN made cost-specific recommendations for the Technical Services cost group of non-shared services.[350] SoCalGas requested a forecast in Technical Services of $26.467 million for TY 2019. This is a $24.581 million increase from the base year and includes incremental costs of: (1) $5.000 million in ROW Maintenance activities (2) $12.000 million in Class Location Mitigation activities, and (3) $7.162 million for Southern Gas System Reliability Project Abandonment Recovery (also referred to as the North-South Project).[351]

TOTAL NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SoCalGas	**29,310**	**50,918**	**21,608**
ORA	**29,310**	**26,681**	**-2,629**
TURN	**29,310**	**26,832**	**-2,478**

10.1.2.1 Technical Services – ROW Maintenance

ORA recommends disallowance of the $5.000 million request for incremental RAMP costs in the ROW Maintenance cost category based on its assertion that O&M expenses are normal day to day activities for operating a natural gas transmission system in compliance with regulations and in a safe manner.[352] ORA considers these routine pipeline O&M activities that are already funded in rates and historical, recorded data and that the cost drivers presented are

[349] Ex. 24 SCG/Musich at 9.
[350] Ex. 26 SCG/Musich at 2.
[351] Ex. 24 SCG/Musich at 17; Ex. 26 SCG/Musich at 1.
[352] Ex. 26 SCG/Musich at 4.

not unique.[353] TURN similarly asserts that the need for incremental funding beyond historical averages for ROW Maintenance has not been demonstrated.[354]

SoCalGas disagrees with ORA's and TURN's position because even though ROW Maintenance activities can be described as "routine," there are several non-routine cost drivers that impact these costs. Examples of these non-routine cost drivers are: (1) removal of previously abandoned pipelines (2) span repainting after wildfires, and (3) repair of pipe exposures and road washouts after significant rainfall.[355]

A single project to remove a previously abandoned pipeline itself could potentially consume much of the annual ROW Maintenance budget, which was approximately $1.5 million in the last two GRC cycles.[356] Additionally, access roads must be maintained to provide ready access in the event of third party pipeline damage, wildfire damage, and for the safety of employees and the public.[357] Recent examples of such cost drivers were the 2017 and 2018 California wildfires across the Ventura and Santa Barbara Counties and subsequent heavy rainstorms, which impacted nearly 100 pipeline spans and resulted in multiple road washouts.[358]

While it is generally true that ROW Maintenance activities can be considered a "routine" aspect of operating a gas system, SoCalGas has substantiated that there are non-routine cost drivers that impact these "routine" activities by providing concrete, recent examples of these cost drivers that are not apparent in historical, recorded costs. Accordingly, SoCalGas requests the Commission adopt its request for incremental costs of $5.000 million in ROW Maintenance activities to support prevention and mitigation of the safety risks identified in RAMP Chapter SCG-4.

10.1.2.2 Technical Services – Class Location Mitigation

ORA and TURN recommend disallowance of the $12.000 million request for incremental RAMP costs in the Class Location Mitigation activities based on the grounds discussed above for ROW Maintenance.[359]

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353 *Id.*
354 *Id.* at 3.
355 *Id.* at 4.
356 *Id.* at 5.
357 *Id.*
358 *Id.*
359 *Id.* at 3.

SoCalGas disagrees within this disallowance. When there is development near a gas pipeline that changes its class location, SoCalGas must verify the proper class location.[360] If the existing Maximum Allowable Operating Pressure (MAOP) for the pipeline exceeds the limits for the new class location, the pipeline must be replaced or hydrotested.[361] If remediation of the pipeline does not occur within two years, the MAOP must be reduced, which may lead to reliability and operational issues.[362] There are now two pipelines with multiple segments that are operating at a lowered MAOP because of class location changes.[363] SoCalGas has forecast $12.000 million per year beginning in TY 2019 for hydrotesting of pipelines because of class location changes, which includes hydrotesting these two pipelines.[364]

Even though Class Location Mitigation activities can be considered part of "routine" operations for a gas transmission system, SoCalGas has demonstrated that there are non-routine cost drivers that impact these "routine" activities by providing examples of cost drivers that are not apparent in historical, recorded costs. Accordingly, SoCalGas recommends that the Commission adopt its request for incremental costs of $12.000 million in Class Location Mitigation activities to support prevention and mitigation of the safety risks identified in RAMP Chapter SCG-4.

10.1.2.3 Technical Services – Southern Gas System Reliability Project Abandonment Recovery

SoCalGas seeks recovery for costs reasonably incurred in conceiving and pursuing the North-South Project proposed to address a recognized reliability risk. SoCalGas proposes cost recovery be spread across three-years (2019-2021) with one-third of the total incurred expenses, $7.162 million, to be implemented annually. The costs are requested as an O&M expense, however, the justifications for incurring the costs and the recovery requested are addressed in Section 11 - Gas Transmission.

10.1.2.4 Undisputed Non-Shared O&M Services

SoCalGas requested $14.463 million for the Gas Transmission Pipeline cost category and $9.988 million for the Compressor Stations cost category for non-shared services in TY 2019.

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360 *Id.* at 5.
361 *Id.*
362 *Id.* at 6.
363 *Id.*
364 *Id.*

No party disputed these requests. Therefore, SoCalGas requests the Commission adopt these requests as reasonable.

10.1.3 Shared Services O&M[365]

SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SOCALGAS	**950**	**1,016**	**66**
ORA	**950**	**1,016**	**66**
TURN	**950**	**1,016**	**66**

No party disputed SoCalGas' forecast for its Shared Services Cost Centers. SoCalGas recommends the Commission adopt SoCalGas' forecast as reasonable.

10.2 SDG&E

SDG&E requests approval of a TY 2019 forecast of $5.110 million for O&M costs associated with operating and maintaining the gas transmission system.[366] The O&M forecast is comprised of $5.110 million for non-shared service activities and represents an increase of $0.740 million over 2016 adjusted-recorded costs. SDG&E Gas Transmission does not have and is not sponsoring any shared services O&M expenses.

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**4,370**	**5,110**	**740**
ORA	**4,370**	**5,110**	**740**

ORA submitted testimony relating to this item and did not dispute SDG&E's TY 2019 expense forecast for non-shared O&M expenses.[367] SDG&E recommends the Commission adopt SDG&E's TY 2019 forecast as requested.

11. Gas Transmission

This section addresses the capital expenditures to support SoCalGas' and SDG&E's gas transmission operations.

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[365] Ex. 24 SCG/Musich at 19.
[366] Ex. 27 SDG&E/Musich at 1.
[367] Ex. 404 ORA/Campbell at 5, 46-49.

11.1 SoCalGas

SoCalGas requests the Commission to adopt its forecast for capital expenditures in 2017, 2018, and 2019 of $135.413, $181.837, and $178.776 million, respectively, in furtherance of promoting the safety and reliability of delivering natural gas on its transmission system.[368] Approval of the forecasts in this testimony will further SoCalGas' objective of providing safe and reliable delivery of natural gas to customers at a reasonable cost.[369]

ORA, TURN, SCGC, and IS offered testimony relating to certain capital cost categories for gas transmission as discussed in detail below.[370]

GAS TRANSMISSION (In 2016 $)[371]				
Categories of Management	**2016 Adjusted-Recorded**	**Estimated 2017 (000s)**	**Estimated 2018 (000s)**	**Estimated 2019 (000s)**
A. NEW PIPELINE	4,984	8,543	7,383	7,383
B. PIPELINE REPLACEMENT	16,563	30,194	26,358	10,499
C. PIPELINE RELOCATIONS	4,218	11,596	10,476	5,922
D. COMPRESSOR STATIONS	20,099	50,432	103,351	116,626
E. CATHODIC PROTECTION	3,637	5,000	6,235	6,658
F. MEASUREMENT & REGULATION	18,946	18,938	18,938	18,938
G. AUXILIARY EQUIPMENT	3,321	10,710	9,096	12,750
TOTAL	**71,768**	**135,413**	**181,837**	**178,776**

11.1.1 RAMP

Gas Transmission sponsored incremental capital costs associated with Catastrophic Damage Involving High-Pressure Pipeline (RAMP Chapter SCG-4), Physical Security of Critical Gas Infrastructure (RAMP Chapter SCG-6), and Climate Change Adaption (RAMP Chapter SCG-9). The table below summarizes SoCalGas' RAMP capital cost requests associated with gas transmission activities.[372]

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368 Ex. 30 SCG/Bermel/Musich at 2.
369 *Id.* at 8.
370 Ex. 407 ORA/Enyinwa; Ex. 436 IS/Gorman; Ex. 506 TURN-SCGC/Yap.
371 Ex. 30 SCG/Bermel/Musich at 9.
372 *Id.* at 4.

GAS TRANSMISSION (In 2016 $)			
RAMP Risk Chapter	**2017 Estimated RAMP Total (000s)**	**2018 Estimated RAMP Total (000s)**	**2019 Estimated RAMP Total (000s)**
SCG-4 Catastrophic Damage Involving High-Pressure Pipeline Failure	5,862	10,755	3,109
SCG-6 Physical Security of Critical Gas Infrastructure	2,477	4,800	8,000
SCG-9 Climate Change Adaptation	396	396	400
Total Capital	**8,735**	**15,951**	**11,509**

SoCalGas identified incremental capital expenses in pipeline relocation activities associated with the class location changes as described in RAMP Chapter SCG-4. ORA offered testimony recommending a reduction in SoCalGas' Pipeline Relocation forecast, which is addressed herein.

SoCalGas also identified incremental capital costs relating to physical security infrastructure investments for critical gas system infrastructure as described in RAMP Chapter SCG-6 and incremental capital costs associated with the installation of stress gauges to address climate change as described in RAMP Chapter SCG-9. These two costs categories are reflected in SoCalGas' forecast for the Auxiliary Equipment & Project cost category. ORA offered testimony recommending a reduction in the Auxiliary Equipment & Project forecast, which is addressed below.

No party contested the incremental RAMP capital costs sponsored in the Gas Transmission testimony relating to forecasted Cathodic Protection capital expense activities described in RAMP Chapter SCG-4. Accordingly, SoCalGas requests that the Commission adopt the RAMP risk mitigation activities for Cathodic Protection as reasonable.

11.1.2 Pipeline Relocation

ORA offered testimony relating to the Pipeline Relocation cost category. ORA did not contest the need for Pipeline Relocation projects but did recommend a $6.373 million reduction in the 2017 forecast.[373]

[373] Ex. 407 ORA/Enyinwa at 6.

Budget Category	ORA Recommended			SCG Proposed			Variance
	2017	2018	2019	2017	2018	2019	
Pipeline Relocation ($000)	$5,223	$10,476	$5,922	$11,596	$10,476	$5,922	($6,373)

To the extent ORA's recommendation relies on the use of realized capital expenses for 2017, SoCalGas disagrees with the reduction because the costs forecasted for 2017 will still be realized in 2018 or 2019.[374] Costs in this category are incurred for modifying and relocating pipelines to accommodate planned private property development, municipal public works, street improvement projects, and contract and franchise requirements.[375] Many of the projects in this budget category have experienced delays due to third-party activities and permitting issues.[376] Even though these projects were delayed, the costs projected for 2017 are still expected to be realized but at a time later than previously anticipated.[377] The underlying need to incur such costs has not diminished, instead the time at which they will be realized has been delayed. Therefore, SoCalGas requests that the Commission approve the 2017 forecast presented to cumulatively cover the cost of the projects that have been delayed but that are expected to go into service in 2018 and 2019.

11.1.3 Compressor Stations

ORA and IS offered testimony for the Compressor Stations capital expense category.[378] ORA recommends a reduced forecast in this category of $45.374 million, which includes a $25.453 million reduction for the 2017 forecast based on costs realized in 2017.[379] ORA also compares SoCalGas' request in this GRC with a similar request in the previous TY 2016 GRC.[380]

374 Ex. 32 SCG/Bermel/Musich at 10.
375 Ex. 31 SCG/Bermel/Musich at 52; Ex. 32 SCG/Bermel/Musich at 10.
376 Ex. 32 SCG/Bermel/Musich at 10.
377 *Id.*
378 Ex. 407 ORA/Enyinwa; Ex. 436 IS/Gorman.
379 Ex. 407 ORA/Enyinwa at 21.
380 *Id.* (citing A.14-11-003/-004 (cons.), Hearing Ex. 25 (Stanford Direct) at 66).

Budget Category	ORA Recommended			SCG Proposed			Variance
	2017	2018	2019	2017	2018	2019	
Compressor Station ($000)	$24,979	$92,888	$107,168	$50,432	$103,351	$116,626	($45,374)

This GRC is significantly different than the previous cycle due to the design refinement of the Blythe Compressor Modernization project, which was a large part of the budget code forecast for the TY 2016 GRC.[381] The 2017 forecast for this budget category was not realized primarily because of scope and schedule refinement as well as detailed engineering and permitting activities associated with this large compressor station project.[382] Delays and deferrals of this type are not uncommon in managing large construction projects.[383] SoCalGas has increased momentum on executing the Blythe Compressor Modernization project and expects to realize the 2017 forecast costs in 2018 through completion of the project, which is currently projected to be Q3 of 2020.[384]

IS contends that SoCalGas' revenue increase for the TY 2019 should be reduced and that SoCalGas should identify future needed non-routine projects in the post-test year period, estimate their costs, show the cost/benefit of the projects, and demonstrate that including the projects in the post-test year period is reasonable.[385] IS state that such projects should identify a clear description of risk mitigation and safety improvements that the project will address.[386] IS did not dispute the need for the Blythe Compressor Modernization project.

In response to IS position, SoCalGas provided additional detail of these types of projects currently anticipated to be executed during the post-test years of 2020, 2021, and 2022 to provide further transparency for large gas transmission capital projects that are in progress, specifically, the Blythe Compressor Modernization project, Ventura Compressor Modernization project, and Honor Rancho Compressor Modernization project.[387] Notably, the RAMP safety element is not

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[381] Ex. 32 SCG/Bermel/Musich at 11.
[382] *Id.*
[383] *Id.*
[384] *Id.* at 14.
[385] Ex. 436 IS/Gorman at 25.
[386] *Id.*
[387] Ex. 32 SCG/Bermel/Musich at 12-14.

applicable to the Blythe Compressor Modernization project, which is tied to SoCalGas' ability to provide reliable natural gas service to customers on the Southern System.[388]

11.1.4 Auxiliary Equipment & Project

ORA did not support SoCalGas' capital forecast in the Auxiliary Equipment & Project budget category that included a forecasted capital budget for activities relating to a RAMP safety element.[389] ORA recommends a five-year average of recorded expenditures for this budget category and reducing the 2017 forecast based on realized costs in 2017. This recommendation reduces SoCalGas' requested overall forecast by $15.490 million.[390]

Budget Category	ORA Recommended			SCG Proposed			Variance
	2017	2018	2019	2017	2018	2019	
Auxiliary Equipment ($000)	$5,744	$5,661	$5,661	$10,710	$9,096	$12,750	($15,490)

SoCalGas requests incremental capital budget in this category to support the safety element associated with RAMP Chapter SCG-6 (Physical Security and Operational Resiliency).[391] SoCalGas did not provide specific project details because of the sensitive nature of security infrastructure projects designed to protect critical gas facilities.[392] Such activities generally include the installation of physical security systems including access control and detection capabilities.[393] These capital investments seek to reduce the risk of damage to critical gas facilities and increase SoCalGas' ability to serve customers when impacted by a gas leak, fire, explosion, and/or outage caused by intentional acts such as theft, robbery, burglary, vandalism, terrorism, and trespassing.[394]

SoCalGas recommends the Commission adopt a zero-based forecast methodology for this cost category because there is no regular historical average for reference.[395] Detailed cost estimates were obtained from third-party firms and provided by personnel experienced in

388 *Id.* at 12.
389 Ex. 407 ORA/Enyinwa at 23.
390 Ex. 32 SCG/Bermel/Musich at 16.
391 *Id.*
392 *Id.*
393 *Id.* at 16.
394 *Id.*
395 Ex. 30 SCG/Bermel/Musich at 29.

estimating projects with similar scope, equipment, and construction environments.[396] A zero-based estimate is a more accurate indicator of future costs for this blanket budget category based on current and expected projects of this nature.[397]

11.1.5 Cost Recovery for the North-South Project

SoCalGas seeks recovery of costs reasonably incurred to propose a solution to an identified energy reliability need and to enhance the reliability of its natural gas system. The costs requested for the North-South Project,[398] discussed further below, are as follows:

Table 11.A
Summary of Parties' O&M (Expense) Proposal
for North-South Project Cost Recovery

Base Year 2016	Test Year 2019	Change
0	$ 7,162	$ 7,162

SoCalGas requests that cost recovery for the expenses incurred in pursuing this system reliability enhancement project be spread evenly across three-years (2019-2021).

11.1.5.1 SoCalGas' Position

SoCalGas seeks recovery of funds reasonably expended by it in pursuing its obligations to maintain a reliable gas system and following the orders of the Commission. On December 20, 2013 SoCalGas and SDG&E filed a joint application, A.13-12-013 (North-South Application), for authority to recover in rates the revenue requirement associated with the North-South Project as well as approval of related cost allocation and rate design proposals.[399] The North-South Project, also referred to as the Southern Gas System Reliability Project, proposed to construct a new natural gas pipeline between the town of Adelanto and SDG&E's Moreno Compressor Station and to reconfigure SoCalGas' Adelanto Compressor Station.[400] SoCalGas and SDG&E proposed the project in order to address a risk prudently identified by them: the reliability of the Southern System is dependent almost entirely on supplies flowing through the Blythe interconnection with Kinder Morgan interstate natural gas pipeline.[401]

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396 *Id.*
397 *Id.*
398 *Id.* at 32.
399 *Id.* at 30.
400 *Id.*
401 *Id.*

At the time the North-South Project was proposed, electric generation demand on the Southern System was increasing while customer deliveries were decreasing.[402] Disruption or diminution in supplies flowing through the Blythe receipt point can cause the curtailment of customers.[403]

As reasonable managers, SoCalGas and SDG&E explored various options to alleviate the risk of a shortage of supplies available to the Southern System and ultimately selected the North-South Project as the most prudent option.[404] The new pipeline proposed as part of the North-South Project would have made gas from SoCalGas' northern receipt points and storage facilities in Honor Rancho available to the Southern System.[405] Multiple delivery sources into the Southern System would have provided operational flexibility and enhanced reliability.[406]

Consistent with Commission precedent,[407] SoCalGas and SDG&E deemed it prudent to present its cost allocation and rate design proposals associated with rate recovery for the North-South Project to the Commission in the North-South Application.[408] On May 5, 2014, the Assigned Commissioner issued a scoping ruling which determined that the Commission would act as the lead agency for an environmental review of the proposed project pursuant to the California Environmental Quality Act (CEQA) and ordered SoCalGas and SDG&E to file and serve a Proponent's Environmental Assessment (PEA) within 30 days.[409]

SoCalGas and SDG&E complied with the Commission's directive to pursue a CEQA review.[410] Before that review was completed, on July 14, 2016, the Commission issued a decision, D.16-07-015, rejecting the North-South Project.[411] Although the Commission agreed

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402 As the Commission acknowledged in D.16-07-015, "increased electric generation demand on the Southern System due to the unanticipated shutdown of the SONGS nuclear power plant" drove "increased costs in Sep. 2011 – Aug. 2013." D.16-07-015 at 11.
403 Ex. 30 SCG/Bermel/Musich at 30.
404 *Id.*
405 *Id.*
406 *Id.*
407 The Commission stated in D.89-02-071, "The Commission has the statutory responsibility to approve the addition of new pipeline capacity to serve the California utility market . . .as part of its responsibility to ensure that adequate utility service is provided at just and reasonable rates; that the service and facilities of the utilities are sufficient and reasonable, and to determine the level of service to be provided to all classes of customers." D.89-02-071 at Conclusions of Law (COL) 1.
408 Ex. 30 SCG/Bermel/Musich at 30.
409 *Id.* at 30-31; A.13-12-013, Assigned Commissioner's Scoping Memo and Ruling (May 5, 2014) at 11.
410 Ex. 30 SCG/Bermel/Musich at 31.
411 *Id.*

"that there is a need to enhance the reliability of natural gas supplies to the Southern System,"[412] the Commission determined that "the alternative physical solutions proposed by TransCanada, Transwestern and EPNG all provide redundant pipeline capacity at a significantly lower cost than the North-South pipeline."[413] The "alternative physical solutions" to which the Commission refers are proposals by TransCanada Corporation, Transwestern Pipeline Company, LLC, and El Paso Natural Gas Company, L.L.C. to build interstate and intrastate pipelines owned by them and regulated by the Federal Energy Regulatory Commission (FERC).[414] SoCalGas and SDG&E's access to these proposed pipelines would be by way of contracts to be negotiated between the parties.[415]

The costs incurred by SoCalGas and SDG&E in conceiving and pursuing the North-South Project to address an identified system reliability need and undertaking activities in furtherance of the Commission-ordered CEQA review are reasonable.[416] The Commission has recognized that "a shortage of natural gas and/or electricity, whether real or contrived, can be devastating to the people, businesses, and the economy of the State of California. Even a shortage in just a couple of months could cause billions of dollars of additional costs, which would not be incurred if there were a balance in the supply and demand."[417] Thus, it has ordered that "the utilities must continue to study and report on the adequacy of their entire system, including local transmission, and act to ensure that it remains reliable."[418] The Commission has gone even further to state that it "expect[s] the utilities to expand their local transmission systems based on system planning analyses (using the one-in-ten year criterion), instead of relying solely on open seasons."[419] Repeatedly the Commission has emphasized that "the utilities' primary obligation [is] to ensure infrastructure adequacy."[420]

In order to comply with its obligations to maintain and enhance system reliability pursuant to these Commission decisions, and SoCalGas' statutory mandate to follow

[412] D.16-07-015 at 15.
[413] *Id.*
[414] Ex. 30 SCG/Bermel/ at 31.
[415] SoCalGas is not aware that any of the proposed pipelines cited by the Commission are in the process of being constructed. *Id.* at 31 n.16.
[416] *Id.* at 31; Ex. 25 SCG/Musich.
[417] Ex. 30 SCG/Bermel/Musich at 31 (quoting Order Instituting Rulemaking in R.04-01-025 at 4-5).
[418] D.06-09-039 at 61.
[419] *Id.* at 64.
[420] *Id.* at 72.

Commission orders,[421] SoCalGas reasonably pursued the actions resulting in the costs for which SoCalGas now seeks rate recovery. Based thereon, SoCalGas' request should be granted.

11.1.5.2 ORA's Position

ORA recommends SoCalGas should not be authorized to recover any costs expended by it in pursuing the North-South Project or following the orders of the Commission. ORA contends that the Commission correctly determined in D.16-07-015 that (a) ratepayers should not fund the North-South Project; (b) almost all the premises behind the project were spurious; (c) SoCalGas failed to demonstrate the need for the project; (d) alternate physical solutions could provide the same redundant pipeline capacity at a significantly lower cost; and (e) there was never a need for the project.[422]

ORA's arguments focus on re-litigating the underlying issue, *i.e.*, the merits of the North-South Project itself. That issue has been determined and does not bear on cost recovery of the funds expended by SoCalGas in pursuing the North-South Project and following the orders of the Commission. ORA's position ignores the two main reasons SoCalGas seeks recovery of these costs: the costs were incurred (a) in order to comply with the Commission's directives to "study and report on the adequacy of their entire system, including local transmission, and act to ensure that it remains reliable,"[423] and (b) to comply with the Commission's orders to conduct a CEQA review and prepare a PEA. Moreover, the premise behind the North-South Project can hardly be called "spurious" since the Commission explicitly found in the decision that SoCalGas (and SDG&E) demonstrated there is a need for enhanced reliability in the Southern System[424] – the precise problem the North-South Project was designed to address. Moreover, the Commission did not preclude the cost recovery sought herein – Applicants are not seeking to recover in rates "the cost of constructing a new natural gas pipeline between the town of Adelanto and the Moreno Pressure Limiting Station and rebuilding the Adelanto Compressor Station."[425],[426]

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421 Pub. Util. Code § 702 states, "Every public utility shall obey and comply with every order, decision, direction, or rule made or prescribed by the commission in the matters specified in this part, or any other matter in any way relating to or affecting its business as a public utility, and shall do everything necessary or proper to secure compliance therewith by all of its officers, agents, and employees."
422 Ex. 407 ORA/Enyinwa at 16-17.
423 D.06-09-039 at 61.
424 D.16-07-015 at COL 1.
425 *Id.* at 1.
426 As Applicants' witness Michael Bermel stated, the North-South "[A]pplication was to recover in rates the costs associated with constructing a pipeline system, the North South System. It was not completed."

Finally, it is noteworthy that none of "the alternate physical solutions proposed by Trans-Canada, Transwestern and EPNG,"[427] which ORA cites to, are in development.[428]

11.1.5.3 SCGC/TURN's Position

Southern California Generation Coalition (SCGC)/TURN jointly also recommend that SoCalGas not recover the costs expended in pursuing the North-South Project and following the Commission's orders for a number of reasons: SoCalGas has failed to demonstrate the reasonableness of the costs incurred because the "components of [the] figure" Applicants are seeking haven't been identified;[429] the North-South Project fails to meet any of the standards stated in previous Commission decisions regarding whether preconstruction costs of abandoned projects should be included in rates;[430] and SoCalGas' proposal for allowing recovery of the North-South Project costs would violate GRC principles.[431]

The reasonableness of costs has been demonstrated. SoCalGas (and SDG&E) were ordered to follow the Commission's orders, and to do so in a short time frame.[432] While it was foreseeable that many costs would be incurred as part of the North-South Project, it was not anticipated that the costs would be accelerated to the extent they were by the Commission's May 5, 2014 ruling.[433] SoCalGas (and SDG&E) filed an application for authority to recover in customer rates the revenue requirement associated with the contemplated project and associated rate design.[434] While it was contemplated that compliance with CEQA (or the federal National

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Tr. V11:705:12-15 (Bermel). *See also* Tr. V11:709:28-710:5 (Musich): "We're not seeking recovery of the North South Revenue Requirement. Here we're seeking the recovery of the expenses that were incurred in following the Commission's orders. We're not seeking the costs to construct the project."

427 Ex. 407 ORA/Enyinwa at 17.

428 Ex. 32 SCG/Bermel/Musich at 9.

429 Ex. 506 TURN-SCGC/Yap at 2-3.

430 *Id.* at 3-9.

431 *Id*. at 9-10.

432 Unexpectedly, the PEA was ordered by the Commission to be filed within 30 days of issuance of the May 5, 2014 Scoping Memo and Ruling. Tr. V11:714:22-24 (Bermel); A.13-12-013, Assigned Commissioner's Scoping Memo and Ruling (May 5, 2014) at 11, 14.

433 Ex. 32 SCG/Bermel/Musich at 5; Tr. V11:712:1-17 (Bermel): "We proposed this project, and we proposed it on a timeline and an expense profile – a spend profile so that we wouldn't be incurring major expenses until we had a decision from the Commission. That included going to CEQA full blown. So we were going to work this project through until we got a decision. It would be slow and deliberate. Take our time assembling some technical facts. When we got the decision from the Commission, we'd go through and do some of the things that the Commission moved forward by two years. So that was the change that was the direction of the Commission to fundamentally change our schedule and our send out day on this project.")

434 Ex. 32 SCG/Bermel/Musich at 5-6.

Environmental Policy Act (NEPA)) would be necessitated at some point, it was contemplated that it would take place as part of the permitting process for the pipeline and compressor station, as is customary.[435] In other words, it was anticipated that these costs would be incurred *after* the Commission issued a ruling on the North-South Application.[436]

However, at the pre-hearing conference in the proceeding, the ALJ and ORA raised the issue of whether SoCalGas and SDG&E should have to file a PEA and complete an environmental review as part of considering the application.[437] In response, Applicants were clear that they did not yet have a fully formed project description that would be suitable for meaningful CEQA evaluation and that, if the Commission determined a CEQA review was necessary in order to render a decision on the North-South Application, that the requirement for a PEA be delayed.[438] Both ORA and SCGC submitted briefs arguing that a review under CEQA was required.[439]

Subsequently, the assigned ALJ adopted the recommendations of ORA and SCGC and ordered a review pursuant to CEQA and preparation of a PEA.[440] The effect of this ruling was that development activities and related spending for the North-South Project were driven not by SoCalGas (and SDG&E), but rather by efforts to comply with the Commission's directives.[441] This continued until the proposed decision denying the project was issued in April 2016 – even before the Environmental Impact Report (EIR) was finalized and the CEQA review was complete.[442]

The following table shows the breakdown of costs incurred in developing the North-South project:

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[435] *Id.* at 6.
[436] Tr. V11:721:11-19 (Musich).
[437] Ex. 32 SCG/Bermel/Musich at 6.
[438] *Id.*
[439] *Id.*
[440] *Id.*
[441] *Id.*
[442] *Id*. at 6-7; Tr. V11:668 (Musich).

Table 11.B
Costs Incurred for Development of North-South Project by Category

Major Activity	Costs ($millions)
Environmental/Permitting	$ 6.7
Engineering, Survey & Geotechnical	$ 7.2
Legal Services / Public Relations	$ 1.1
Subtotal Non-Labor	$ 14.9
Company Labor	$ 2.4
Total Direct Costs	$ 17.3
Indirects	$ 4.2
Total Project Costs	$ 21. 5

The following table shows the breakdown of costs incurred before and after the Commission's May 5, 2014 ruling:

Table 11.C
North-South Project Costs Incurred Before and After
Assigned Commissioner's May 2014 Scoping Memorandum and Ruling

	Through May 5, 2014	After May 5, 2014
Company Labor and Expense	$172,736	$2,235,356
Preliminary Scoping & Project Dev., Eng., Design & Ministerial Permitting	$236,038	$6,311,882
Environmental Planning & Permitting	$625	$7,058,245
Public Outreach and Agency Notifications	$0	$738,345
Land and ROW Acquisition	$0	$506,362
Indirects	$199,454	$4,032,995
Directs Total	$409,399	$16,850,189
Directs + Indirects Total	$608,853	$20,883,184

The cost to develop and file the Application and supporting information was approximately $600,000.[443] While Applicants contemplated that CEQA and/or NEPA

[443] Ex. 32 SCG/Bermel/Musich at 7-8.

compliance costs would be incurred in the future, the majority of such compliance activities were planned to begin *after* the Commission issued a decision authorizing the Application.[444] In the alternative, if the Application was denied, then the compliance activities would not be undertaken.[445]

After the Commission ordered a CEQA review in response to comments by ORA and SCGC, determined it would serve as lead agency for the review, and appointed the Commission's Energy Division to administer the review, Energy Division's CEQA review drove costs.[446] Energy Division's CEQA review necessitated the following activities, which resulted in incurring the costs presented for recovery herein: engineering activities that were preliminary in nature had to proceed to the detailed planning stage in order to conduct the CEQA review (sooner than these activities had been planned to occur); environmental work was accelerated and had to be expanded to wider corridors with multiple assessments of alternatives because the proposed pipeline route alignment had to be finalized before commencing CEQA; land services and project outreach activities were accelerated by 1 to 2 years; and CEQA Lead Agency costs totaling $2 million (about $1.5 million for CPUC consultants and $.5 million for other agencies) were accelerated.[447]

Over $20 million was spent as a result of the CEQA review commencing before the project was developed to the stage required for such a review.[448] SoCalGas could not have anticipated at the time the previous rate case application was prepared that such costs would be required to be undertaken at such a premature point in the project's lifecycle.[449] Equity favors granting SoCalGas recovery of these costs that were incurred. The costs were incurred in order to comply with the directives of the Commission and its Energy Division, and in response to recommendations by both ORA and SCGC on behalf of SoCalGas' customers.[450] SoCalGas (and the other IOUs) are obligated to follow the orders of the Commission.[451]

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444 *Id.* at 8; Tr. V11:720:15-18 (Bermel).
445 Ex. 32 SCG/Bermel/Musich at 8.
446 *Id.*
447 *Id.*
448 *Id.*
449 *Id.*
450 *Id.*
451 Pub. Util. Code § 702.

Finally, approving recovery of these costs does not violate GRC principles. To support their position, SCGC/TURN's witness cites to a decision that was ordered two years *after* the decision on the North-South Application and pertains to the establishment of a memorandum account.[452] That decision is inapposite and does not stand for the proposition that GRC principles are violated by allowing rate recovery in this instance. Moreover, the record is clear that the funds expended in furtherance of the North-South Project were *not* part of the prior GRC.[453]

Based on the fact that the costs incurred are just and reasonable and were incurred by SoCalGas in furtherance of complying with the directives of the Commission in response to recommendations by ORA and SCGC on behalf of SoCalGas' customers, the Commission should approve SoCalGas' request for cost recovery of $7,162,000 for each year in 2019-2021.

11.1.6 Undisputed Capital Expenses

No party opposed SoCalGas' forecast for the capital cost categories of New Construction Pipeline, Pipeline Replacement, Cathodic Protection, and Measurement & Regulation Stations. Therefore, SoCalGas requests that the Commission adopt these forecasts as reasonable.

11.2 SDG&E

SDG&E requests the Commission to adopt its forecast for capital expenditures in 2017, 2018, and 2019 for $10.492, $10.192, and $10.042 million, respectively, to further SDG&E's objective of providing safe and reliable delivery of natural gas to customers at a reasonable cost.[454]

TOTAL CAPITAL - Constant 2016 ($000)

	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	**$10,492**	**$10,192**	**$10,042**	**$30,726**	
ORA	**$6,202**	**$8,765**	**$4,808**	**$19,775**	**($10,951)**

ORA offered testimony recommending a reduction in the forecasts for the New Construction Pipeline, Pipeline Replacement, and Compressor Stations cost categories.[455]

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452 Ex. 506 TURN-SCGC/Yap at 9-10.
453 Tr. V11:693:20-694:1 (Bermel), 694:22-27 (Bermel), 695:17-19 (Bermel), 709:28-710:5 (Musich), 717:28-718:1 (Musich).
454 Ex. 35 SDG&E/Bermel/Musich at 1.
455 Ex. 405 ORA/Weaver at 1-2.

11.2.1 New Construction Pipeline

ORA recommends $1.667 million, $3.901 million, and $0.094 million for 2017, 2018 and 2019, compared to SDG&E's request of $3.901 million, $3.901 million and $3.901 million for 2017, 2018 and 2019.[456] ORA's reductions are based a methodology that decouples labor and non-labor forecasts.[457] Specifically, ORA adopts a hybrid approach that uses 2017 recorded data to forecast labor, but to forecast 2017 non-labor, uses a 2012-2014 historical three-year average that discards the more recent years 2015 and 2016.[458] ORA does not oppose SDG&E's base-year method to forecast 2018 costs but then recommends using a three-year average method to forecast 2019 costs.[459]

SDG&E believes ORA's methodology does not appropriately consider the pattern of an increasing volume of work in this category.[460] SDG&E disagrees with ORA' methodology because it decouples labor and non-labor costs, selectively chooses specific date ranges and removes historical, recorded large capital projects.[461] Such an approach does not accurately reflect the correlation between labor and non-labor costs because capital projects have labor and non-labor components, employs a selection process that reduces SDG&E's forecasts, and does not account for the periodic occurrence of large capital projects in this category.[462]

SDG&E recommends a base year forecast method to account for work that could be reasonably anticipated but not yet fully identified. New Construction Pipeline is a "routine" budget category that consists of a collection of many like-kind projects that are often forecasted based on historic spending patterns such as averages, trends or the most recent year.[463] Fully identifying and planning the construction of all the new construction pipelines that may occur during the GRC period is neither practical nor efficient.[464]

In addition, there are two large projects that were recently scoped but not identified in the original workpapers for this budget category.[465] These projects have a combined forecast of

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[456] *Id.* at 4-5.
[457] Ex. 35 SDG&E/Bermel/Musich at 3.
[458] *Id.*
[459] *Id.* at 3-4.
[460] *Id.* at 3.
[461] *Id.* at 3-4.
[462] *Id.*
[463] *Id.*
[464] *Id.* at 4.
[465] *Id.*

roughly $1.75 million in capital costs and are expected to be completed in 2019.[466] In a similar instance, for the TY 2016 GRC, SDG&E's actual costs exceeded its forecast in two of three forecast years, 2015 and 2016.[467] SDG&E believes this increasing volume of work is more reflective of the work performed historically and that should be anticipated in this category.[468] Thus, SDG&E requests that the Commission approve its forecast amounts for 2017 and 2019.

11.2.2 Pipeline Replacement

ORA does not oppose SDG&E's request for labor associated with pipeline replacements.[469] For non-labor, ORA used SDG&E's recorded data for 2017 and recommends a five-year average based on the years of 2012-2016 for costs in 2018 and 2019 after removing costs associated with a single project.[470]

SDG&E disagrees with ORA's recommendations of non-labor forecasts for 2017, 2018 and 2019. Non-labor costs that were realized in 2017 were lower than expected due to construction and permitting delays on several projects in this category.[471] For 2018 and 2019 non-labor costs, two more projects have been identified that are going into construction and anticipated to be placed in service in 2019 with an estimated cost of $1 million each.[472] These newly identified projects along with current work-in progress data demonstrate that SDG&E's proposed forecast for this budget category accurately reflects the volume of work forecasted.[473] Therefore, ORA's forecast methodology that selectively removes projects that SDG&E has physically completed does not capture historical projects and anticipated volume of future projects in this category.

Because it is difficult to anticipate when and where pipelines will need to be replaced due to third-party damage or by weather-related events, SoCalGas believes a five-year average methodology is more appropriate for this budget category.[474]

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466 *Id.*
467 *Id.* at 4-5.
468 *Id.* at 5.
469 Ex. 405 ORA/Weaver at 7.
470 *Id.*
471 Ex. 35 SDG&E/Bermel/Musich at 5.
472 *Id.*
473 *Id.* at 5-6.
474 *Id.* at 6.

11.2.3 Compressor Stations

ORA recommends using recorded costs for 2017 while maintaining SDG&E's 2018 and 2019 labor forecast.[475] For non-labor, ORA recommends using SDG&E's five-year average of 2012-2016 recorded costs after removing one-time costs associated with security enhancements and a security guard shelter building.[476]

SDG&E requests that the Commission adopt SDG&E's five-year average of $4.4 million in 2017, $4.1 million in 2018, and $3.9 million in 2019. While SDG&E recognizes that while capital improvements may appear as a one-time cost for Moreno Compressor Station, there is another physical security project at a different compressor station which also requires capital improvements.[477] To support transparency, SDG&E has also provided a detailed forecast for the Moreno Compressor Modernization project which is underway and expected to be in-service in the post-test years.[478]

12. Gas Major Projects

SoCalGas' ability to meet its obligation to provide natural gas service in accordance with its tariff provisions and customer expectations is highly dependent on the reliable and safe operation of its natural gas system. The Major Projects and Construction organization manages major projects associated with pipeline installation, replacement, and modernization, including valves, regulating and metering stations and appurtenances, and other similar projects associated with compressor stations, storage fields, and natural gas fueling stations.[479]

12.1 RAMP

One capital project sponsored in the Gas Major Projects testimony is categorized as a RAMP project under RAMP Chapter SCG-10 (Catastrophic Damage Involving Medium-Pressure Pipeline Failure).[480] SoCalGas proposes a Distribution Operations and Control Center (DOCC) to strengthen the ability to prevent and manage risk under this category by providing continuous monitoring and oversight of its gas distribution pipeline system.[481] Both capital and O&M forecasts associated with the DOCC are addressed herein.

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[475] Ex. 405 ORA/Weaver at 9.
[476] *Id.*
[477] Ex. 35 SDG&E/Bermel/Musich at 7.
[478] *Id.*
[479] Ex. 50 SCG/Bermel at 1.
[480] *Id.* at 1-2, 7-8.
[481] *Id.*

Only TURN opposes the proposed DOCC and recommends disallowance of the forecasted test year expenditures of $26 million in 2019 as discussed below.[482]

Summary of RAMP O&M[483]

GAS MAJOR PROJECTS (In 2016 $)			
RAMP Risk Chapter	**2016 Embedded Base Costs (000s)**	**TY2019 Estimated Incremental (000s)**	**Total (000s)**
SCG-10 Catastrophic Damage Involving Medium-Pressure Pipeline Failure	0	1,398	1,398
Total O&M	**0**	**1,398**	**1,398**

Summary of RAMP Capital[484]

GAS MAJOR PROJECTS (In 2016 $)			
RAMP Risk Chapter	**2017 Estimated RAMP Total (000s)**	**2018 Estimated RAMP Total (000s)**	**2019 Estimated RAMP Total (000s)**
SCG-10 Catastrophic Damage Involving Medium-Pressure Pipeline Failure	400	3,156	25,901
Total Capital	**400**	**3,156**	**25,901**

12.2 Non-Shared O&M Costs

SoCalGas requests approval of a TY 2019 forecast of $3.971 million in O&M costs to support major projects on the SoCalGas system.[485] This represents a $2.713 million increase over 2016 adjusted-recorded expenses for this category.

GAS MAJOR PROJECTS (In 2016 $)			
Categories of Management	**2016 Adjusted-Recorded (000s)**	**TY 2019 Estimated (000s)**	**Change (000s)**
MAJOR PROJECTS	1,258	3,971	2,713
Total Non-Shared Services	**1,258**	**3,971**	**2,713**

482 Ex. 490 TURN/Borden at 1.
483 Ex. 50 SCG/Bermel at 2.
484 *Id.*
485 *Id.* at 9.

No party opposed SoCalGas' TY 2019 forecast of non-shared O&M expenses for the $3.971 million. SoCalGas requests the Commission authorize the forecast for non-shared O&M costs.

12.3 Capital Expenditures

SoCalGas requests approval of the forecast of $1.200, $8.969, and $37.714 million for capital expenditures relating to major gas projects to support the SoCalGas system for 2017, 2018, and 2019.[486] These forecasts are comprised of the following capital projects: DOCC, Methane Monitors & Fiberoptic Projects, and Pipeline Infrastructure Monitoring System (PIMS).[487] ORA and TURN offered testimony relating to this cost category that is addressed below.[488]

TOTAL CAPITAL - Constant 2016 ($000)

	2017	2018	2019	Total	Variance
SOCALGAS	1,200	8,969	37,714	47,883	--
ORA	143	8,969	37,714	46,826	-1,057
TURN	1,200	8,969	11,813	21,982	-25,901

12.3.1 ORA

ORA does not oppose SoCalGas' 2018 and 2019 proposed capital expenditures for this cost category.[489] For 2017, ORA recommends the Commission adopt SoCalGas' 2017 recorded capital expenditures instead of SoCalGas' forecast.[490] SoCalGas does not oppose ORA's recommendation for 2017 capital expenditures.[491]

12.3.2 TURN

TURN opposes the proposed DOCC and recommends disallowance of the forecasted test year expenditures of $26 million in 2019.[492] TURN does not oppose the proposed capital expenditures for the DOCC in 2017 and 2018, which were previously approved by the Commission.[493] TURN recommends setting additional requirements for SoCalGas to propose

486 *Id*. at 19.
487 *Id*.
488 Ex. 408 ORA/Lasko; Ex. 490 TURN/Borden.
489 Ex. 408 ORA/Lasko at 2.
490 *Id*.
491 Ex. 53 SCG/Bermel at 6.
492 Ex. 490 TURN/Borden at 1.
493 *Id*. at 49.

the DOCC in a future rate case.[494] TURN's position is based on several issues including disputing whether the DOCC will improve safety and the amount of risk on the distribution system.[495]

SoCalGas believes the DOCC will improve safety and reliability in SoCalGas' and SDG&E's distribution systems and improve SoCalGas and SDG&E's operational flexibility during situational response.[496] The DOCC will provide enhanced visibility into SoCalGas' and SDG&E's distribution system resulting in more efficient management of the system operations and improved ability to efficiently identify and respond to pressure abnormalities.[497] The DOCC will provide real-time monitoring of the distribution system, including nearly 1,800 points of high-pressure and over 4,000 miles of high-pressure pipeline.[498] It will also control 200 of the most critical distribution regulator stations with a long-term vision to control all 2200 regulator stations, allowing SoCalGas to isolate runs that can impact the distribution system.[499] Thus, SoCalGas requests the Commission adopt its recommendation for the construction of the DOCC to strengthen the ability to prevent and manage risk identified in RAMP Chapter SCG-10 through the real-time monitoring and oversight of its gas distribution pipeline system.

13. Gas Engineering

The Gas Engineering testimony and workpapers, supported by witness Deanna Haines, describes and justifies SoCalGas' and SDG&E's forecasted activities and programs from 2017-2019 including a compendium of key activities and programs that support Gas Transmission, Gas Distribution, Storage, and Customer Services.[500] Gas Engineering supports these activities and programs by creating and issuing policies and standards that facilitate compliance with applicable laws, regulations and internal policies; testing for gas and material quality to ensure they meet specifications, implementing programs for regulatory requirements and contractual obligations; providing and issuing engineering designs; and making capital investments that support the safety and reliability of the transmission system.[501] SoCalGas and SDG&E take a

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494 *Id.* at 48-49.
495 *Id*. at 43-45.
496 Ex. 53 SCG/Bermel at 7-11.
497 *Id*.
498 *Id*. at 7-8.
499 *Id*. at 11.
500 Exs. 60 to 66, SCG/Haines and SDG&E/Haines.
501 Ex. 60, SCG/Haines at iii; Ex. 64, SDG&E/Haines at ii.

shared-service approach to many natural gas pipeline operator responsibilities, especially in Gas Engineering. The shared-service approach benefits both Companies and their ratepayers by enabling the Companies to pool their collective knowledge, experience, engineering expertise and intellectual property.[502]

13.1 SoCalGas

SoCalGas requests approval of its TY 2019 O&M and capital forecasts. For Gas Engineering O&M, SoCalGas requests a total of $26.554 million.[503] Because of the mature nature of the activities, most of the forecasts rely upon a five-year (2012 through 2016) average or linear trend methodology.[504] This forecast represents an increase of $9.331 million over BY2016.[505] In total, SoCalGas requests the Commission adopt a TY 2019 forecast of $26,554,000 for Gas Engineering O&M expenses, which is composed of $12,226,000 for non-shared service activities and $14,328,000 for shared service activities.[506]

TOTAL O&M (In 2016 $)[507]			
	2016 Adjusted-Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
Total Non-Shared Services	7,786	12,226	4,440
Total Shared Services (Incurred)	9,437	14,328	4,891
Total O&M	**17,223**	**26,554**	**9,331**

SoCalGas is also requesting approval of a 2017-2019 Gas Engineering capital forecast in the amount of $38.778 million.[508] The forecast is composed of a 2017 forecast of $11.316 million, 2018 forecast of $13.361 million, and 2019 forecast of $14.101million for Gas

[502] Ex. 60 SCG/Haines at 6.
[503] Ex. 60, SCG/Haines at iii-v and 1; Ex. 63 SCG/Haines at 1; Ex. 63 SCG/Haines at 15 and Ex. 63B SCG/Haines (errata) log correcting total forecast of $26,629,000 to $26,554,000 and correcting non-shared services forecast from $14,403,000 to $14,328,000.
[504] Ex. 60, SCG/Haines at 6.
[505] *Id*. at 1, Table DRH-1. In light of the errata correction discussed in fn. 4, the increase changed from $9,406,000 to $9,331,000.
[506] *Id*.
[507] *Id*. at iii, as modified by errata log, Ex. 63B modifying $14,403 to $14,328. This change also results in the Change for shared services from $4,966 to $4,891 and $9,406 to $9,331.
[508] Ex. 63 SCG/Haines at 13-15. SoCalGas stipulated to revised capital forecasts in the Land and Rights of Way Budget category and to the Capital Tools & Laboratory Equipment Budget category. These stipulated capital forecasts were not provided, in error, on the Total Capital tables in Ex. 63 SCG/Haines at 1 and 13.

Engineering capital projects.[509] The table below summarizes SoCalGas' capital request for each of the capital cost categories.

TOTAL CAPITAL - In 2016 $

	2017 (000s)	2018 (000s)	2019 (000s)
SoCalGas	11,316	$13,361	$14,101
ORA	$10,911	$11,809	$12,220

13.1.1 RAMP

Gas Engineering sponsored incremental costs associated with Records Management (RAMP Chapter SCG-8) and Climate Change Adaptation (RAMP Chapter SCG-9) and capital investments related to Catastrophic Damage Involving High-Pressure Pipeline Failure (RAMP Chapter SCG-4).[510] The table below summarizes SoCalGas' RAMP O&M and Capital requests.

Southern California Gas Company
Summary of O&M RAMP Overlay

GAS ENGINEERING (In 2016 $)			
RAMP Risk Chapter	**2016 Embedded Base Costs (000s)**	**TY 2019 Estimated Incremental (000s)**	**Total (000s)**
SCG-8 Records Management	5,442	522	5,964
SCG-9 Climate Change Adaptation	230	1,290	1,520
Total O&M	**5,672**	**1,812**	**7,484**

Southern California Gas Company
Summary of Capital RAMP Overlay

GAS ENGINEERING (In 2016 $)			
RAMP Risk Chapter	**2017 Estimated RAMP Total (000s)**	**2018 Estimated RAMP Total (000s)**	**2019 Estimated RAMP Total (000s)**
SCG-4 Catastrophic Damage Involving High-Pressure Pipeline Failure	2,245	2,245	2,245
Total Capital	**2,245**	**2,245**	**2,245**

[509] Ex. 63 SCG/Haines at 13-14.
[510] Ex. 60, SCG/Haines at 6-7, 9-11.

No party contested the incremental RAMP costs sponsored in the Gas Engineering testimony. Accordingly, SoCalGas requests that the Commission adopt the RAMP risk mitigation activities and the associated costs contained in SoCalGas' Gas Engineering testimony.

13.1.2 SoCalGas – Non-Shared Operations and Maintenance

Only ORA and TURN submitted testimony on Gas Engineering's Non-Shared O&M request. Of the two, only ORA made specific dollar recommendations relating to each of Gas Engineering's individual cost categories. The table below summarizes SoCalGas' O&M forecast and compares it against ORA's recommendations.

Gas Engineering – O&M	**2019 (In 2016 $)**	
	SoCalGas (000s)	**ORA (000s)**
Non-Shared Services		
Gas Engineering	8,600	8,600
Land and Right of Way	3,626	2,772
Total Non-Shared Services	12,226	11,372
Shared Services		
Gas Engineering	808	808
Measurement, Regulation, and Control	6,648	6,648
Engineering Design	4,376	4,225
Engineering Analysis Center[511]	2,058	2,058
Gas Operations Research and Materials	438	438
Total Shared Services	14,403	14,177
Total O&M	**$26,554**	**$25,549**
Difference - ORA		**($1,080)**

TURN addressed a single issue: SoCalGas' request for a memorandum account and balancing account relating to the Morongo Rights-of-Way.[512] Where applicable, SoCalGas addresses the issues that were raised by ORA and TURN, in the sections below.

[511] This figure represents SoCalGas' concession to ORA to remove $75,000 from its previous request of $2,133,000. *See* Ex. 63 SCG/Haines at 13.

[512] Ex. 503, TURN/Finkelstein at 12-21.

13.1.2.1 Land Services and Right of Way

ORA recommended $2.772 million for the O&M associated with Land Services and Right-of-Way activities.[513] This recommendation is $854,000 less than SoCalGas' TY 2019 Land Services and Right-of-Way request.[514] ORA argued that the reduction is appropriate because SoCalGas' 2017 recorded costs were $398,000 less than SoCalGas 2017 forecast, which, in turn, required an adjustment to the 2018 and 2019 forecast.[515] In place of SoCalGas' methodology, ORA proposed that a Year-On-Year (YOY) growth of 9.6% be applied to 2018 and 2019 forecasted costs.[516]

SoCalGas opposes ORA's approach and recommendation of reducing the Land Services and Right-of-Way TY 2019 request to $2.772 million compared to the forecast presented by SoCalGas of $3.626 million because using 2017 recorded cost is not a reasonable forecast methodology for year 2019.[517] SoCalGas' Land and Right-of-Way department needs resources to appropriately execute renewals of right-of-way and ongoing land services preliminary estimates.[518] The 2017 recorded costs are not sufficient to accommodate historical activities, such as increased governmental fees and staffing needed to implement the FOF initiatives proposed to enhance the Land Services and Right-of-Way records.[519]

Further, ORA's recommendation to apply a 9.6% YOY rate to 2018 and 2019 forecasts ignores other drivers to the Land Services and Right-of-Way costs that SoCalGas considered when selecting the five-year trend methodology.[520] First, 2017 is an attrition year for expenditures that were approved in the previous GRC (TY 2016) and funds for attrition years have already been approved for that year.[521] SoCalGas uses forecast methodologies to match the cost of running the business for 2019 – the test year – and therefore, it is not appropriate to use 2017 recorded costs as the basis for forecasting costs for TY 2019.[522] Second, many O&M expenses, both labor and non-labor, are driven by governmental fees that are anticipated to

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513 Ex. 408, ORA/Lasko at 3.
514 *Id.*
515 *Id.* at 15.
516 *Id.*
517 Ex. 63, SCG/Haines at 6-8.
518 Ex. 60, SCG/Haines at 16.
519 Ex. 63, SCG/Haines at 6-7.
520 *Id.* at 7.
521 *Id.*
522 *Id.*

increase as evidenced in the Bureau of Land Management's schedule.[523] Finally, there is an additional O&M expenditure – the implementation and deployment of the Land Services and Right-of-Way central database which is a FOF initiative.[524] This will require additional resources.[525] The Land Services and Right-of-Way department has experienced an upward trend and the highest percent increase in SoCalGas' original forecast was between 2016 and 2017 with an increase of 28.4%, which reflect the adjustments for the initial forecast to operate the department and to forecast TY year 2019.[526] As demonstrated above, SoCalGas' five-year trend methodology most reasonably captures the Land Services and Right of Way O&M expenses that SoCalGas anticipates incurring in TY 2019.[527] Therefore, SoCalGas requests that the Commission adopt SoCalGas' methodology and forecast for Land Services and Right of Way O&M.

13.1.3 Morongo Rights-of-Way Renewal

SoCalGas requested the establishment of: (1) a memorandum account (MROWMA)to record pre-construction costs associated with the possible relocation of transmission pipeline around the Morongo Reservation, which would facilitate SoCalGas' efforts to study, design, and make informed decisions regarding potential relocation or renewal options; and (2) a separate and distinct Morongo Right-of-Way Balancing Account (MROWBA), to potentially record costs associated with renewal of expiring rights-of-way for pipelines that cross Morongo lands. Both accounts would track any costs incurred beginning January 1 of TY 2019.[528]

ORA and TURN submitted testimony in response to SoCalGas' request relating to the Morongo Rights-of-Way Renewal. SoCalGas addresses each party's position, below.

13.1.3.1 ORA

ORA opposed, in part, SoCalGas' request and instead, recommends that only a memorandum account be established to track the cost for the renewal of the rights-of-way (renewal payment), subject to reasonableness review, and opposes SoCalGas' request to establish a balancing account.[529] ORA did not present any specific factual or policy testimony

[523] *Id*.
[524] *Id*.
[525] *Id*.
[526] *Id*.
[527] *Id*.
[528] Ex. 60, SCG/Haines at 4; Tr. V12:923:2-23 & 924:3-8 (Haines).
[529] Ex. 408, ORA/Lasko at 18.

supporting its recommendation. Therefore, SoCalGas reiterates its requests to establish the MROWMA and MROWBA for the reasons set forth in testimony.

13.1.3.2 TURN

TURN opposes SoCalGas' establishment of a MROWMA and MROWBA.[530] TURN argues that SoCalGas could and should have forecasted the costs associated with the renewal of the expiring ROW agreements in its TY 2019 GRC.[531]

First, TURN does not dispute that this current GRC is the appropriate venue through which SoCalGas can and should seek authority to track costs incurred relating to the Morongo Rights-of-Way to provide reliable natural gas service to customers.[532] The stand-alone application filed by SoCalGas (A.16-12-011) was ultimately denied on the basis that relief should have been sought in a GRC.[533] Second, with respect to attempting to prepare a reasonable cost forecast versus requesting regulatory accounts to record specific costs that are difficult to forecast, the Commission must weigh the record establishing that there were unique factors involving ongoing negotiations with the Morongo tribe that made it impractical and unwise to prepare a cost forecast.[534]

At the time of the GRC filing, and throughout the course of the proceeding, negotiations were active, and the possibility of renewal, and the terms under which renewal (including price) could be mutually agreed upon, were not known.[535] SoCalGas acted prudently to request authority to record a cost that was expected to be incurred in the upcoming GRC cycle, but which was infeasible and imprudent to forecast while negotiations were ongoing.[536] Under those circumstances, it was reasonable for SoCalGas to propose a balancing account to record renewal costs, and a memorandum account to record relocation pre-construction costs. TURN's argument places SoCalGas and ratepayers in an untenable position. If SoCalGas forecasted these costs in an active proceeding, as TURN claims SoCalGas should have done, SoCalGas would materially de-position its customers in negotiations.[537] Considering SoCalGas sought to reach an

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530 Ex. 503, TURN/Finkelstein at 14-21.
531 *Id.*
532 *Id.*
533 *See* D.18-04-012, p. 19 (Conclusion of Law 7).
534 Ex. 60, SCG/Haines at 16-19; Ex. 63, SCG/Haines at 2-3; Tr V12:914:3-9 & 16-22 (Haines).
535 *Id.*
536 *Id.*
537 *Id.*

optimal result for the benefit of customers , TURN's request does not further the public's interest in receiving reliable service at a just and reasonable cost.[538] In addition, TURN's position should be rejected because it would preclude SoCalGas from recovering operational costs reasonably incurred by SoCalGas for the benefit of customers.[539]

In terms of TURN's testimony opposing SoCalGas' Morongo-related proposals, SoCalGas notes several flaws. First, TURN's argument that D.18-04-012 somehow precludes the Commission from granting SoCalGas' requested relief in this GRC[540] is not supported by the Commission's decision. Ordering Paragraph 2 was clear on this point, "This decision makes no predispositions or findings regarding Southern California Gas Company's request for authority to establish a Morongo Rights-of-Way Memorandum Account in Application 17-10-008, which is its Test Year 2019 general rate case application."

Second, TURN claims that the forecast for Gas Engineering's Land Services and Right-of-Way O&M group includes Morongo-related costs because SoCalGas used a linear forecast method.[541] SoCalGas did not forecast Morongo-related costs; however, SoCalGas acknowledges that that there are some historical costs related to Morongo.[542] Nevertheless, any historical costs that may have been captured through the O&M forecasting methodology are *de minimis,* and do not reflect the magnitude of costs that can be incurred to renew the Morongo Rights-of-Way.[543]

TURN also suggests that the Company's Gas Transmission and Major Projects groups includes a capital forecast for pipeline relocations that include pre-construction expenses for Morongo Rights-of-Way renewal activities.[544] Similar to the historical O&M costs identified above, SoCalGas identified historical costs and an expense in the amount of $353,286 that may relate to Morongo.[545] Like the O&M costs, the amounts captured in the forecasting methodology and the expense of approximately $350,000 do not reflect the amounts SoCalGas expected to need for resolution of the Morongo ROW going forward, and a forecast based on these costs alone will significantly understate anticipated needs.[546]

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538 Tr. V12:914:16-22 (Haines).
539 Ex. 503, TURN/Finkelstein at 14.
540 Ex. 503, TURN/Finkelstein at 15-16.
541 Ex. 503, TURN/Finkelstein at 16-17.
542 Ex. 63, SCG/Haines at 9-10.
543 *Id.*; *see also,* Ex. 60, SCG/Haines at 18:16-22 & 27-30.
544 Ex. 503, TURN/Finkelstein at 18-20.
545 Ex. 63, SCG/Haines at 10.
546 *Id*.

TURN further argues that SoCalGas can record the pre-construction costs through: (a) the "preliminary survey and investigations" balance sheet item included in the working cash calculation (citing SCG-38-2R (Chan)); and through the (b) Construction Work In Progress (CWIP) – *i.e.*, that the amounts recorded in CWIP, if reasonable, are added to rate base.[547] SoCalGas disagrees because the costs were too speculative at the time the forecast was prepared and continued to be uncertain and could not reasonably have been forecasted to be included in this GRC for recovery through working cash and rate base.[548] Past and current negotiation efforts demonstrate that the potential cost of renewal of the rights-of-way was uncertain.[549] For this reason, SoCalGas' proposal for the balancing and memorandum accounts to record costs associated with spending as of January 1, 2019 is appropriate and reasonable.

Third, TURN argues that there is no precedent for SoCalGas' request. SoCalGas disagrees because the Commission has approved other regulatory accounts, including two-way balancing accounts such as the NERBA, where the expectation and nature of costs is reasonable but the full range and level of costs are unforeseeable or uncertain.[550]

Based on the foregoing, SoCalGas requests that the Commission reject TURN's recommendation and authorize the MROWMA and MROWBA.

13.1.4 Uncontested Items – Non-Shared Services O&M

SoCalGas sought $8.6 million for the Gas Engineering cost category.[551] This category includes the cost categories for (i) Engineering Analysis Center & Measurement, Regulation, and Control, and (ii) Civil, Structural, and Hazard Mitigation Engineering.[552] Only ORA submitted testimony in response to SoCalGas' non-shared services costs for Gas Engineering and ORA did not oppose SoCalGas' forecasted amount of $8.6 million for TY 2019.[553] Therefore, SoCalGas requests that the Commission adopt SoCalGas' Gas Engineering O&M forecast in the amount of $8.6 million as reasonable.

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547 Ex. 503, TURN/Finkelstein at 20-21.
548 Ex. 63, SCG/Haines at 10-11.
549 Ex. 60, SCG/Haines at 18; Ex. 63 at 2-3.
550 Ex. 63, SCG/Haines at 11; Tr V12:912:14-22 (Haines).
551 Ex. 60, SCG/Haines at 12-13.
552 *Id.*
553 Ex. 408, ORA/Lasko at 14.

13.1.5 Shared – O&M

SoCalGas and SDG&E take a shared-service approach to many natural gas pipeline operator responsibilities, especially in Gas Engineering.[554] The shared-service approach benefits both Companies and their ratepayers by enabling the Companies to pool their collective knowledge, experience, engineering expertise and intellectual property.[555] The table below provides a summary of Gas Engineering's Shared Services O&M request and reflects a concession made with ORA.[556]

Southern California Gas Company
Shared O&M Summary of Costs

GAS ENGINEERING (In 2016 $)			
Incurred Costs (100% Level)			
Categories of Management	**2016 Adjusted-Recorded (000s)**	**TY 2019 Estimated (000s)**	**Change (000s)**
A. DIRECTOR OF GAS ENGINEERING	387	808	421
B. MEASUREMENT, REGULATION & CONTROL	4,930	6,648	1,718
C. ENGINEERING DESIGN	2,128	4,376	2,248
D. ENGINEERING ANALYSIS CENTER	1,501	2,058	557
E. GAS OPERATIONS RESEARCH & MATERIALS	491	438	-53
Total Shared Services (Incurred)	**9,437**	**14,328**	**4,891**

ORA was the only party to submit testimony addressing Gas Engineering's individual Shared Services O&M request. SoCalGas responds to ORA's recommendation, below.

13.1.5.1 Engineering Design: High Pressure and Distribution Engineering Network Design (HPDEND)

Within the Engineering Design cost category, there is a workpaper category called HPDEND (Workpaper 2200-2377).[557] SoCalGas requested $1.290 million for HPDEND O&M.[558] ORA recommended a forecast of $1.142 million, which is $148,000 less than

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554 Ex. 60, SCG/Haines at 6.
555 *Id.*
556 This figure represents SoCalGas' concession to ORA to remove $75,000 from its previous request of $2,133,000. *See* Ex. 63 SCG/Haines at 13.
557 Ex. 60, SCG/Haines at 33-34.
558 Ex. 60, SCG/Haines at 22-23 & 33-34; Ex. 61, SCG/Haines at 87.

SoCalGas' forecast.[559] In making this recommendation, ORA did not oppose SoCalGas' incremental adjustment of $640,000 in 2019 for the Gas Engineering's High Pressure and Distribution Engineering Network Design (HPDEND) but ORA disagreed with the Test Year O&M forecast for the Gas Engineering's design group responsible for design and policy related to high pressure distribution engineering and network design (HPDEND).[560] ORA recommended using actual adjusted-recorded 2017 expenses of $502,000 as the base forecast for 2019.[561]

SoCalGas opposes ORA's recommendation because it did not reflect the increased trending cost associated with the HPDEND.[562] A key cost driver for HPDEND is support for an increasing number of Renewable Gas (RG) projects that require an assessment of system capability to receive RG sources.[563] Examples of the increasing number of RG projects include biogas from landfills, wastewater treatment facilities and dairy farm operations (SB 1383).[564] As the RG projects increase, the need HPDEND support for those projects will necessarily increase.[565] Therefore, SoCalGas requests that the Commission reject ORA's recommendation and adopt SoCalGas' TY 2019 request.

13.1.5.2 Engineering Analysis Center (EAC)

ORA recommended an adjustment of $75,000 for the EAC.[566] SoCalGas agreed with ORA's recommended adjustment and has incorporated that adjustment in the Gas Engineering section of the brief.[567]

13.1.5.3 Uncontested Items

ORA did not contest the following cost categories in SoCalGas' Gas Engineering request.[568]

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559 Ex. 408, ORA/Lasko at 23.
560 *Id.*
561 *Id.*
562 Ex. 63, SCG/Haines at 12.
563 *Id.*
564 *Id.; see, also,* Ex. 60, SCG/Haines at 33-34.
565 Ex. 63, SCG/Haines at 12.
566 Ex. 408, ORA/Lasko at 23.
567 Ex. 63, SCG/Haines at 13 and Appendix B, Data Request ORA-SCG-154-YNL attached to Ex. 63.
568 Ex. 408, ORA/Lasko at 14, 21-22

GAS ENGINEERING – UNCONTESTED COST CATEGORIES (In 2016 $)	2019 (000s)
DIRECTOR OF GAS ENGINEERING	808
MEASUREMENT, REGULATION & CONTROL	6,648
ENGINEERING DESIGN – ENGINEERING DESIGN MANAGER, DESIGN DRAFTING AND PROCESS DESIGN, PIPELINE ENGINEERING, MECHANICAL DESIGN, ELECTRICAL ENGINEERING	3,086
GAS OPERATIONS RESEARCH & MATERIALS	438

13.1.6 Gas Engineering - Capital

SoCalGas requests approval of a 2017-2019 capital forecast in the amount of $38.778 million.[569] The forecast is composed of a 2017 forecast of $11.316 million, 2018 forecast of $13.361 million and 2019 forecast of $14.101million for Gas Engineering Capital projects.[570] The table below summarizes SoCalGas' capital request for each of the capital cost categories.

GAS ENGINEERING – CAPITAL (In 2016 $)[571]			
Categories of Management	**Estimated 2017 (000s)**	**Estimated 2018 (000s)**	**Estimated 2019 (000s)**
Land and Rights of Way & Gas Transmission (GT) Buildings and Improvements[572]	3,892	5,468	5,468
Capital Tools & Laboratory Equipment[573]	2,515	2,245	2,245
Supervision & Engineering Pool	4,909	5,648	6,388
Total	**11,316**	**13,361**	**14,101**

569 SoCalGas conceded to revised capital forecasts in the Land and Rights of Way Budget category and to the Capital Tools & Laboratory Equipment Budget category as described in Ex. 63 SCG/Haines at 13-15.
570 Ex. 63 SCG/Haines at 13-14.
571 *Id.* at 13-15. Modifications to the values are reflected in the narrative of Ms. Haines revised rebuttal testimony, although the summary table was inadvertently not updated. The first value is found on page 13 line 19 in the Land and ROW for 2017 ($3.892). The second value for 2017 is the Capital Tools and Lab Equipment found on page 14 at line 13 ($2.515). The third value for 2017 is the Supervision and Engineering Overheads ($4.909) and is from the original forecast in Ex. 60 SCG/Haines at 37 but is also referenced in Ex. 63 SCG/Haines at 15 lines 3-5. The total of these three values for 2017 capital forecast is $11.316 MM.
572 Ex. 63 SCG/Haines at 14. In Ms Haines' revised rebuttal, Ex. 63, SoCalGas stipulates to a reduction in capital forecast for the 2018 and 2019 Land and Right of Way budget category as contingent upon the Commission authorizing the MROWMA and MROWBA. Should the Commission authorize these accounts, the forecast for Land and Right of Way budget category for 2018 and 2019 will be reduced to $4,591 for each year.
573 Ex. 63 SCG/Haines at 14.

13.1.6.1 Land and Rights of Way (Budget Code 617) & Gas Transmission Buildings and Improvements (Budget Code 633)

SoCalGas requested a 2017 forecast in the amount of $5.468 million; a 2018 forecast in the amount of $5.468 million; and a 2019 forecast in the amount of $5.468 million.[574] ORA recommended a forecast of $3.892 million, $4.680 million, and $4.680 million for Land and Rights of Way for years 2017, 2018, and 2019, respectively, which is $1.576 million, $788,000, and $788,000 less than SoCalGas; forecast for years 2017, 2018, and 2019, respectively.[575] ORA did not oppose SoCalGas' 2017 adjusted-recorded capital expenditures for Land and Right of Way.[576]

SoCalGas agreed to ORA's recommended forecast and forecast method used for the last two years (2016 and 2017) to forecast years 2018 and 2019.[577] Since some Morongo-related expenses are included in year 2016, SoCalGas agreed that its forecast for capital budget workpapers 0617 should be adjusted to exclude these costs if the Morongo Memorandum Account and the Morongo Balancing Account are authorized and created to capture future expenses for the Morongo ROW resolution.[578]

13.1.6.2 Capital Tools and Lab Equipment (Budget Codes 736, 730 & 714)

SoCalGas forecasted capital expenditures of $2.245 million for 2017; 2018 and 2019[579]. ORA recommended $2.515 million, $2.245 million, and $2.245 million for Capital Tools and Lab Equipment for years 2017, 2018, and 2019, respectively, which is $270,000 more than SoCalGas' 2017 forecast.[580] SoCalGas agrees with ORA's recommendation because it anticipates and addresses SoCalGas tools and lab equipment need and cost drivers.[581]

13.1.6.3 Supervision and Engineering Overheads (Budget Code 908)

For Supervision & Engineering Overheads capital, SoCalGas requested a 2017 forecast of $4.909 million; a 2018 forecast of $5.648 million; and a 2019 forecast of $6.388 million for a

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574 Ex. 60, SCG/Haines at 38.
575 Ex. 408, ORA/Lasko at 27-28.
576 *Id.*
577 Ex. 63, SCG/Haines at 13-14.
578 *Id.*
579 Ex. 60, SCG/Haines at 37.
580 Ex. 408, ORA/Lasko at 29.
581 Ex. 60, SCG/Haines at 39-40; Ex. 63, SCG/Haines at 14.

total forecast of $16.945 million.[582] ORA recommended a downward adjustment in the amount of $4.504 million, $4.884 million, and $5.295 million for 2017, 2018, and 2019, respectively, which is $405,000, $764,000, and $1,093,000 less than SoCalGas' request for 2017, 2018, and 2019, respectively.[583] ORA disagreed with SoCalGas' five-year linear method for capital forecast for Supervision and Engineering overheads.[584] In its place, ORA proposed a year-on-year (YOY) growth of 8.43% between 2017-2019, which is the average of growth in 2016 and 2017.[585]

SoCalGas opposed ORA's recommendation and approach because ORA only used two years of historical data to average a growth rate and did not consider the variability with a historical increasing trend from year 2012 to 2017.[586] Also, ORA's recommendation did not take into account the fact that Supervision and Engineering overheads to continue to increase as they are impacted by the capital projects in other areas such as Major Projects, Storage, and Gas Transmission.[587] Therefore, SoCalGas' five-year linear trend and forecast more accurately and appropriately represents the Supervision and Engineering Overheads capital forecast. ORA's use of a YOY growth rate of 8.43 % should be rejected.

13.1.6.4 Uncontested Items

GAS ENGINEERING – CAPITAL (In 2016 $)			
Categories of Management	**Estimated 2017 (000s)**	**Estimated 2018 (000s)**	**Estimated 2019 (000s)**
Capital Tools & Laboratory Equipment	2,515	2,245	2,245

Based on the foregoing arguments and subject to SoCalGas' agreement with certain ORA's recommendations, SoCalGas requests the Commission adopt the total capital forecast of $38.778 million for Gas Engineering's Capital projects.[588]

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582 Ex. 60, SCG/Haines at 37.
583 Ex. 408, ORA/Lasko at 29-31
584 *Id.*
585 *Id.*
586 Ex. 63, SCG/Haines at 15.
587 *Id.; see, e.g.,* Ex. 30, SCG/Bermel & Musich, Ex. 50, SCG/Bermel, Ex. 273, SCG/Navin.
588 Ex. 63 SCG/Haines at 13-15. Modifications to the values are reflected in the narrative of Ms. Haines revised rebuttal testimony, although the summary table was inadvertently not updated. The first value is found on page 13 line 19 in the Land and ROW for 2017 ($3.892). The second value for 2017 is the Capital Tools and Lab Equipment found on page 14 at line 13 ($2.515). The third value for 2017 is the Supervision and Engineering Overheads ($4.909) and is from the original forecast in Ex. 60 SCG/Haines

13.2 SDG&E

13.2.1 RAMP

Gas Engineering's operations at SDG&E are coordinated through Gas Engineering at SoCalGas, where risk mitigation strategies are formed. Please refer to the relevant sections of this Opening Brief for a discussion on the specific risk mitigations proposed in this GRC, such as those addressing Records Management (RAMP Chapter SCG-8), Climate Change Related to Catastrophic Damage Involving High-Pressure Pipeline Failure (RAMP Chapter SCG-4).

13.2.2 SDG&E – Capital (Uncontested Items)

ORA was the only party that submitted testimony in response to SDG&E's Gas Engineering testimony.[589] ORA made certain recommendations concerning SDG&E's capital request for (1) Land Rights; (2) Auxiliary Equipment; (3) Capital Tools; and (4) Supervision and Engineering Overheads.[590]

SDG&E accepts ORA's recommendation that the Commission adopt SDG&E's 2017 adjusted-recorded capital expenditure amount of $889,000 for Land Rights, Auxiliary Equipment, and Capital Tools as well as ORA's recommendation to provide zero funding in 2017 for Supervision and Engineering Overheads as stipulated in Exhibit 66.[591] The following table provides a summary of the adjustments based on ORA's recommendation.

TOTAL CAPITAL - (In 2016 $000s)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	**$268**	**$268**	**$268**	**$804**	
ORA	**$889**	**$268**	**$268**	**$1,425**	**$621**

Based on the foregoing, SDG&E requests that the Commission adopt the total Capital forecast in the amount of $1.425 million.

14. Underground Storage

SoCalGas' Underground Storage testimony and workpapers, supported by witness Neil Navin, describes and justifies SoCalGas' forecasted activities from 2017-2019 including activities that support SoCalGas' operation of its four underground storage fields;[592] that promote

at 37 but is also referenced in Ex. 63 SCG/Haines at 15 lines 3-5. The total of these three values for 2017 capital forecast is $11.316 MM.

[589] *See generally,* Ex. 408, ORA/Lasko.

[590] Ex. 408, ORA/Lasko at 32-35.

[591] Ex. 66, SDG&E/Haines at 2-3.

[592] The storage fields are: Aliso Canyon, La Goleta, Honor Rancho, and Playa del Rey.

the safety, integrity, design, operations, maintenance, and gas injection/withdrawal activities, along with environmental and regulatory compliance functions, within the four storage fields; and that relate to the capital investments necessary to provide storage services for SoCalGas customers.[593] The critical goals for storage are safety, integrity, gas availability, and reliability, which are achieved in compliance with governmental regulations.[594]

14.1 Underground Storage – Non-Shared Operations and Maintenance

SoCalGas operates four underground storage fields – Aliso Canyon, Honor Rancho, La Goleta, and Playa del Rey – as an essential part of its integrated transmission pipeline and distribution system. This interconnected system consists of high-pressure pipelines, compressor stations, and underground storage fields, designed to receive natural gas from interstate pipelines and local production sources. The integrated system enables deliveries of natural gas to customers or into storage field reservoirs, depending on system demands. SoCalGas uses its storage assets to efficiently meet gas balancing requirements. To satisfy these needs, the individual storage facilities act as "gas suppliers" or "consumers," depending upon the withdrawal or injection requirements as managed by Gas Control.[595] Fluctuating demands may require storage operations to perform gas injection or withdrawal functions at any hour of the day, 365 days per year.[596] Storage fields are continually staffed with operating crews and on-call personnel to support these critical 24/7 operations.[597]

SoCalGas forecasts TY 2019 underground storage costs of $59.640 million.[598] ORA and OSA were the only parties to submit testimony relating to Underground Storage. The following table provides a summary and description of the TY2019 forecast, and ORA and OSA's position.

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SOCALGAS	$43,853	$59,640	$13,787
ORA	$43,853	$59,640	$13,787
OSA	No recommendation	No recommendation	No recommendation

593 Exs. 273-276 SCG/Navin.
594 Exs. 273-276 SCG/Navin.
595 Ex. 273 SCG/Navin at 18.
596 *Id.* at 18-19.
597 *Id.* at 19.
598 *Id.* at 18.

Even though ORA did not suggest any adjustments to SoCalGas' non-shared O&M forecast, ORA proposed the establishment of a one-way balancing account for the Routine Aboveground (AGS) and Underground Storage (UGS) cost category of $38.699 million for TY 2019.[599] As discussed in Mr. Navin's Rebuttal Testimony, ORA's request to establish a one-way balancing account is not necessary or reasonable.[600]

SoCalGas disagrees that a one-way balancing account is needed, because the components of incremental activities forecasted in AGS and UGS O&M were developed to address new regulations and legislation that had firm effective dates or were already in effect, are forecast in a measurable way, are not anticipated to result in a wide range of variability or change, are reasonable, and should not be subjected to a balancing account treatment.[601] Additionally, AGS and UGS Routine O&M activities and its associated costs are incorporated into the Commission's new RAMP process,[602] and as a part of the Commission's new risk-informed GRC framework, will be subjected to two annual reports, the Risk Mitigation Accountability Report and the Risk Spending Accountability Report, which provides for an additional layer of ratepayer protection.

14.1.1 OSA

OSA does not recommend any adjustment to Underground Storage's costs for TY 2019 as presented in this GRC.[603] However, OSA asserts in its testimony that Underground Gas Storage would benefit from a Safety Management System approach,[604] and states that "[t]he Utilities should develop a safety management system (SMS) framework to address [] gas storage assets/operations, and present its proposal in the next GRC. The framework/s should leverage the API 1173 framework's emphasis on safety culture."[605]

SoCalGas agrees with OSA that Underground Gas Storage would benefit from an SMS approach, and is committed to a voluntary implementation of API RP 1173. SoCalGas also agrees with OSA that "[t]he Utilities must develop a long-term multi-year plan based on what

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599 Ex. 409 ORA/Lee at 7-8.
600 Ex. 276 SCG/Navin at 4-10.
601 *Id.* at 5.
602 Ex. 274 SCG/Navin at 18-22.
603 Ex. 442 OSA/Contreras at 2-20 to 2-25.
604 *Id.* at 2-20.
605 *Id.* at 2-4, 2-25.

will be prioritized and how to get there,"[606] and SoCalGas highlights several new and emerging regulations Underground Storage is prioritizing which shares elements of API RP 1173 in Mr. Navin's Rebuttal Testimony.[607]

14.1.2 Uncontested Items

ORA does not recommend any adjustment to SoCalGas' Underground Storage Non-Shared O&M TY 2019 forecast for Storage Risk Management (Non-Refundable) expenses of $2.031 million for TY 2019.[608]

14.2 Storage Integrity Management Program – O&M

ORA did not recommend any adjustment to SoCalGas' forecasted TY 2019 expenses of $18.910 million for Refundable Storage Integrity Management Program (RSIMP).[609] However, ORA recommended the Commission modify the Storage Integrity Management Program Balancing Account (SIMPBA) from a two-way balancing account to a one-way balancing account "to better protect the ratepayers."[610] As discussed in Mr. Navin's Rebuttal Testimony, SoCalGas agrees with ORA's recommendation to keep the TY 2019 forecast of $18.910 million for the SIMP O&M and requests that the Commission adopt this forecast.[611] However, regarding the balancing account treatment, SoCalGas disagrees with ORA's proposal and rationale for a one-way balancing account.

First, SIMP work is variable, not discrete, and regulations relating to SIMP work are dynamic and changing in this context. Two-way balancing account treatment of SIMP would allow for excess funds to be returned to ratepayers and would also allow for cost recovery if activities should exceed forecast due to the unpredictability of inspections and remediation subject to certain reasonableness reviews.

Second, proposed regulations impose new requirements for SIMP related work such as additional well inspection logging and data analysis, improved data management systems, and broader requirements for training and emergency response plan measures which includes costs or requirements that are variable.[612]

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[606] *Id.* at 3-4.
[607] Ex. 276 SCG/Navin at 15-16.
[608] Ex. 409 ORA/Lee at 9.
[609] *Id.* at 11.
[610] *Id.*
[611] Ex. 276 SCG/Navin at 10-15.
[612] Ex. 273 SCG/Navin at 25-26.

Third, ratepayers are equally protected, under a two-way balancing account as under a one-way balancing account while two-way balancing still allows SoCalGas to recover reasonably incurred costs to maintain safety and system integrity and provides SoCalGas the flexibility to address unforeseen integrity work and to present costs incurred to perform that work for the Commission to review for reasonableness, which promotes the shared goal of safe system operation.[613]

Notably, in D.16-06-054, the Commission approved a two-way balancing account for SIMP and found the two-way balancing account reasonable, stating "the costs of inspecting and remediating potential problems at the underground storage facilities may vary. In order to remediate potential problems at other wells, more monies than what the parties agreed to may be necessary. Accordingly, the provision in the Attachment 5 settlement agreement to institute a two-way balancing account procedure for the SIMP expenditures is reasonable."[614]

Additionally, the SIMP is designed similarly to the already existing TIMP and DIMP and should be treated similarly. From a system-wide perspective, the safety objectives, project uncertainties, and unpredictable nature of inspection and repair work for SIMP are similar to DIMP and TIMP. ORA does not dispute continuing the two-way balancing account treatment for TIMP and DIMP and should similarly accept two-way balancing account for SIMP.

14.3 Underground Gas Storage – Shared Operations and Maintenance

SoCalGas forecasts $434,000 in TY 2019 for this cost category which represents the Senior Vice President's activities. These activities extend beyond Underground Storage since the Senior Vice President is also responsible for the Transmission, Capacity Planning, Gas Control & System Planning and Emergency Services. These expenses include technical and financial support, as well as policy issuance to successfully staff the operation and further the goals of the company.[615] ORA does not oppose SoCalGas' forecast. SoCalGas requests that the Commission adopt SoCalGas' forecast as reasonable. The following table provides a summary of SoCalGas and ORA's position.

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[613] Ex. 276 SCG/Navin at 13-14.
[614] D.16-06-054 at Ordering Paragraph (OP) 8.
[615] Ex. 273 SCG/Navin at 29-30.

SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SOCALGAS	$454	$434	($20)
ORA	$454	$434	($20)

14.4 Underground Gas Storage – Capital

SoCalGas proposed a capital forecast in the amount of $208.535 million in 2017, $180.646 million in 2018 and $172.606 million in 2019.[616] ORA was the only party that submitted testimony in response to SoCalGas Underground Storage capital request and in its report, ORA recommended adoption of SoCalGas' 2017 adjusted-recorded capital expenditures and did not recommend any adjustment to 2018 and 2019 forecasted expenditures for each of the Storage Capital Areas: Compressors, Wells, Pipelines, Purification, Auxiliary Equipment, SIMP, and Compressors - ACTR. The following table provides a summary of SoCalGas and ORA's positions.

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SOCALGAS	$208,535	$180,646	$172,606	$561,787	
ORA	$180,249	$180,646	$172,606	$533,501	($28,286)

SoCalGas agrees that its 2018 and 2019 forecast should be adopted. However, as stated in Mr. Navin's Rebuttal Testimony, SoCalGas disagrees with ORA's recommendation to adopt 2017 recorded capital expenditures because (1) ORA fails to provide a basis as to why 2017 recorded costs are more appropriate; (2) ORA fails to consider that the total amount of project work has not changed and that the delays in 2017 will not change the overall funding needed to complete the work; and (3) ORA did not contest SoCalGas' capital forecast methodology for 2018 and 2019.

ORA's recommendation to adopt 2017 recorded capital expenditures rather than 2017 forecast, casts a narrow year-to-year cost view of activities that were forecast over the span of three years, and ignores the broader spectrum of various projects' total costs and activities that were reasonably forecasted. SoCalGas developed project level cost forecast details for 2017-

[616] *Id.* at 1.

2019 in workpapers,[617] and provided additional detail via responses to ORA discovery, and those details were not disputed.

ORA disregards the multi-year forecast cost drivers detailed in Mr. Navin's direct testimony and workpapers.[618] Because the overall three-year forecast (2017, 2018, 2019) was established with each year being dependent on and building off the others, the 2017 forecast should not be adjusted. A variety of operational impacts such as delays, re-prioritization and project constraints has created a variance between 2017 forecast and recorded costs, however, SoCalGas expects this work to be completed in 2019 and believes the overall total cost forecast of these capital projects remain reasonable and should be adopted in its entirety.

14.4.1 Storage Wells Recovery Mechanism Subcategory- Capital

ORA does not recommend adjustment to SoCalGas' cost forecast for 2018 and 2019, but recommends a one-way balancing account for SoCalGas' capital expenses subcategory "Storage Wells" during this GRC period. ORA does not provide any rationale for this recommendation beyond stating "[f]rom 2017 to 2018, SCG only planned to replace four wells total, or an average of 2 wells a year. SCG's plan to replace seven storage wells in 2019 is over four times its current pace,"[619] implying that SoCalGas' forecast is overstated.

SoCalGas disagrees with ORA's recommendation because ORA's observation of the well replacement activity increase in 2019 fails to acknowledge the relative inverse correlation of this forecast with other well activities such as well plug and abandonments, tubing upsizing, and well workovers as presented in Mr. Navin's direct testimony and rebuttal.[620]

SoCalGas' storage wells forecast considers a comprehensive outlook of the activities required to correspond to well integrity assessment activities, well performance history, coupled with system reliability and deliverability needs. SoCalGas' wells forecast also considers the potential of phasing in higher-deliverability replacement wells and eliminating higher cost wells over time to reduce long term operating costs (reducing need for mitigation such as gravel packs) and a redesign of wells for tubing flow only to create a dual barrier of safety. Well capital projects have been reasonably forecasted to account for various operational drivers and

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[617] Ex. 275 SCG/Navin.
[618] Ex. 273 SCG/Navin at 30-57; Ex.275 SCG/Navin.
[619] Ex. 409 ORA/Lee at 18.
[620] Ex. 273 SCG/Navin at 35-42; Ex. 276 SCG/Navin.

interdependencies of activity and should not be subjected to a one-way balancing account treatment.

Furthermore, storage wells capital activities and associated costs are incorporated into Exhibit SCG-10-R in accordance with the Commission's new RAMP process. As a part of the Commission's new risk-informed GRC framework,[621] GRC cost requests for risk mitigation activities will be subjected to two annual reports, the Risk Mitigation Accountability Report and the Risk Spending Accountability Report, which provides for an additional level of ratepayer protection.[622]

14.4.2 SIMP - Capital

ORA does not oppose SoCalGas' SIMP capital forecast in the amount of $71.370 million in 2018, and $53.382 million in 2019 but recommends adoption of adjusted-recorded costs for 2017 (which is addressed in Section 14.4, above). ORA also recommends that the Commission modify SIMPBA for capital expenditures from a two-way balancing to a one-way balancing to "better protect ratepayers."[623]

SoCalGas disagrees with ORA's recommendation and recommends that SIMP related costs *continue* to be recovered through a two-way balancing account due to the unpredictable and potentially variable nature of inspection and remediation costs.[624] SIMP capital work is variable, not discrete, and regulations are dynamic and changing for: proactive plugging and abandonment of wells, inspection/return to operation, data management, pilot emerging monitoring integrity and safety technologies, and for cathodic protection. A two-way balancing account is the most appropriate way to address these costs, for the reasons explained above in Section 14.2 and ordered by the Commission in D.16-06-054.

In addition, there are also external market resource uncertainties. SIMP inspection and return to operation of gas storage wells is dependent on the availability of equipment and personnel, which are the same types of resources used throughout the oil and gas industry. The ability to timely secure these assets is dependent on energy demand and rig availability nationwide, and financial outlays to secure rigs and oil/gas field services can vary greatly over time due to domestic and foreign developments related to energy.

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621 D.14-12-025.
622 Ex. 276 SCG/Navin at 21-22.
623 Ex. 409 ORA/Lee at 25.
624 Ex. 276 SCG/Navin at 22-25.

15. Aliso Canyon Turbine Replacement

In D.13-11-023, the Commission authorized SoCalGas to recover its total capital costs for the Aliso Canyon Turbine Replacement Project (ACTR or Project) up to $200.9 million.[625] The Commission authorized a process for SoCalGas to seek recover of any reasonably incurred costs that exceed the authorized amount of $200.9 million.[626] Specifically,

1. The Commission directed SoCalGas to record in a memorandum account any costs exceeding $200.9 million so that SoCalGas can track those costs for potential future recovery in rates.[627]
2. If the Project costs exceed $200.9 million, the Commission directed a reasonableness review of the costs of the Project and consideration of increasing the authorized reasonable cost of the Project in SoCalGas' next GRC following project completion.[628]

In compliance with D.13-11-023, SoCalGas presented direct testimony in this GRC establishing the reasonableness of $275.5 million in capital expenditures to complete the Project; demonstrating the present and future public convenience and necessity require construction of the Project at the increased cost; and requesting authorization from the Commission to recover in rates the $74.6 million in costs that exceed the previously-authorized cost of $200.9 million for the Project.[629]

The Project was placed into service on May 17, 2018, several months after this Application was filed.[630] Although the final Project cost exceeds the amount presented in SoCalGas' direct testimony,[631] SoCalGas did not seek an update to the revenue requirement presented in this GRC.[632]

ORA is the only party who submitted testimony concerning the Project.[633] <u>ORA does not oppose SoCalGas' justification of the reasonableness of the costs and does not recommend any</u>

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625 D.13-11-023 at OP 9.
626 D.13-11-023 at 33 and OP 9.
627 *Id.*
628 *Id.* at 33 and OP 12.
629 Ex. 277, SCG/Buczkowski at 1; Ex. 278, SCG/Buczkowski.
630 Ex. 279, SCG/Buczkowski at 2.
631 *Id.*
632 *Id* at 2-3. SoCalGas reserves the right to seek recovery of these additional costs in a subsequent GRC.
633 *See* Ex. 409, ORA/Lee.

adjustments to SoCalGas' forecast for the Project.[634] ORA recommends that after the Project is completed and put in service, a full audit of SoCalGas expenditures be performed by the Commission or an assigned entity to determine the reasonableness of all the charges, or even perform another reasonableness review in the next GRC.[635]

SoCalGas opposes ORA's recommendation for a second reasonableness review, as it is unnecessary and inefficient. SoCalGas' position is consistent with D.13-11-023, which states, "If actual Aliso Canyon Turbine Replacement Project (Project) costs exceed $200.9 million, a reasonableness review of all Project costs must be conducted in Southern California Gas Company's (SoCalGas's) general rate case following completion of the Project."[636] Since SoCalGas demonstrated the reasonableness of the $275.5 million in Project costs with substantial evidence in this GRC,[637] and no party presented evidence to rebut this showing or otherwise challenged the reasonableness of incurred costs for the Project, SoCalGas requests the Commission determine that the Project costs presented in this GRC are reasonable, and deny ORA's request to either put off its determination or repeat the entire reasonableness review process all over again in the next GRC.

Given that SoCalGas presented compelling evidence of the reasonableness of incurred costs and no party opposes SoCalGas' presentation of the Project costs, SoCalGas requests authorization to recover the $74.6 million in costs that exceed the previously-authorized cost of $200.9 million for the Project.[638] SoCalGas also requests a finding that the $74.6 million above the authorized $200.9 million cost cap were reasonably-incurred and can be recovered in rates.[639] SoCalGas further asks for authorization to continue to maintain the existing Aliso Canyon Memorandum Account (ACMA) to record additional capital-related costs in excess of $275.5 million, which may be presented for review in a subsequent GRC.[640]

16. Gas Control and System Operations/Planning (SoCalGas)

SoCalGas' Gas Control and System Operations/Planning testimony and workpapers, supported by witness Devin Zornizer, describe and justify SoCalGas' forecasted activities for

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[634] *Id.* at 3 and 25.
[635] *Id* at 29.
[636] D.13-11-023 at OP 12.
[637] Exs. 277-278, SCG/Buczkowski.
[638] Ex. 279, SCG/Buczkowski at 3.
[639] *Id.*
[640] *Id.*

2017-19.[641] Applicants forecast a level of O&M costs in the test year necessary to support system utility operations and emergency response.

- SoCalGas requests the Commission to adopt a TY 2019 forecast of $8,958,000 for Gas Control and System Operations/Planning O&M costs; which consists of $2,972,000 for non-shared service activities and $5,986,000 for shared service activities.

Mr. Zornizer's Rebuttal Testimony responded to issues raised by ORA[642] and TURN[643] regarding forecasted requests contained in Mr. Zornizer's Direct Testimony and workpapers.[644]

ORA disputes SoCalGas' TY 2019 forecast for Emergency Services and recommends the funding request to be lowered to $1.145 million.[645] TURN contests the need for and costs associated with the Distribution Operations Control Center (DOCC).[646] While Mr. Zornizer sponsored the business justification for the DOCC, the costs for the DOCC are sponsored by Mr. Michael Bermel's Gas Major Projects testimony. SoCalGas addresses TURN's cost recommendation for the DOCC in Section 12, above.

The table below summarizes SoCalGas' and ORA's position:

Table 16.A.

TOTAL O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SOCALGAS/SDG&E	**6,027**	**8,958**	**2,931**
ORA	**6,027**	**7,287**	**1,260**

In addition, Mr. Zornizer's Rebuttal Testimony responded to issues raised by SCGC and EDF, which were not a part of Mr. Zornizer's GRC request, not raised in his Direct Testimony or workpaper, and which SoCalGas maintains are outside the scope of this proceeding.[647] Those

[641] *See generally* Exs. 17-19 SCG/Zornizer.
[642] Ex. 406 ORA/Phan at 87, 92, 94.
[643] Ex. 490 TURN/Borden at 44.
[644] Exs. 17-18 SCG/Zornizer.
[645] Ex. 406 ORA/Phan at 87. In the errata dated August 2018, ORA deleted its recommendation to normalize the capital costs associated with the revenue requirement recorded in the Operational Flow Cost Memorandum Account (OFCMA) over 2018 and 2019. Ex. 406A ORA/Phan. Based on ORA's deletion, SoCalGas believes that ORA does not oppose SoCalGas' ability to recover the entire amount of recorded in the OFCMA.
[646] The costs for the DOCC are sponsored in the Gas Major Projects testimony and capital workpapers of Michael A. Bermel, Exs. 50 and 52 SCG/Bermel, and the rebuttal to TURN's cost approach is contained in Ex. 53 SCG/Bermel at 7-11.
[647] Ex. 19 SCG/Zornizer at 12-17, 19-20.

issues were ruled outside the scope and are not addressed in this brief. TURN recommends the Distribution Operations Control Center (DOCC) project be disallowed[648] and EDF's proposal to shift requested dollars to risk mitigation strategy.[649]

16.1 Non-Shared Services O&M

16.1.1. Contested Item – Emergency Services and RAMP

SoCalGas is requesting TY 2019 forecast of $2,816,000, which is an increase of $2,176,000 from BY 2016 adjusted- recorded costs. The incremental request is for 14 additional positions: One Director, three Emergency Services Managers, six Emergency Services Advisors, and four Emergency Services Responses Technologists, and non-labor costs associated with company-wide, full-scale emergency preparedness functional activities. This need is based on large service territory and compliance requirements of state and federal rules on emergency response and procedures. ORA, relying on historical spending, recommends the funding request to be lowered to $1.145 million,[650] which is $1.670 million less than SoCalGas' request. ORA's arguments, however, do not reflect: (1) costs that are driven by safety mitigation activities in RAMP, (2) the need for additional first responder training and enhanced emergency response associated with significant prolonged and recurring Southern California wildfires and related natural disasters, and (3) SoCalGas' requirements associated with corrective actions and recommendations from agency audits.

16.1.1.1 The SoCalGas Emergency Services TY 2019 Request Mitigates RAMP Safety Risks and ORA's Recommendation Undermines that RAMP Funding

SoCalGas' Emergency Services department's costs are all tied to the safety risk and risk mitigation activities from RAMP Report Chapter SCG-2, Employee, Contractor, Customer, and Public Safety. SoCalGas Emergency Services develop and drive emergency preparedness and response programs for the safety of SoCalGas employees, first responders and the public. The estimated incremental requests include costs for the following mitigations: (1) the development and implementation of full-scale and functional emergency preparedness/response exercise training in compliance with regulatory requirements to maintain an Incident Command System

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[648] Ex. 490 TURN/Borden at 44.
[649] Id. at 21.
[650] Ex. 406 ORA/Phan at 87-89.

(ICS) structure; (2) enhancing SoCalGas response/recovery programs for employees and operations; and (3) expanding SoCalGas public awareness program with first responders.

SoCalGas supported its request for the Emergency Services department,[651] with the understanding that additional layers of Commission oversight and ratepayers' protection are in place as the Emergency Services' RAMP cost activities will be subject to two annual reports—the Risk Mitigation Accountability Report and the Risk Spending Accountability Report.[652]

16.1.1.2 SoCalGas Needs Additional First Responder Training and Enhanced Emergency Response Pursuant to GO 112-F and Due to Extreme Weather

SoCalGas' Emergency Services department is on call twenty-four hours a day, seven days a week, three hundred and sixty-five days of the year. Compliance requirements of GO 112-F and extreme weather have increased emergency response needs. In 2016, SoCalGas Emergency Services group only had one director and five employees, but in 2017, SoCalGas restructured the department into four key groups to meet the increased demands: (1) Core Emergency Operations Center Operations; (2) Emergency Preparedness & Response Advancement Program; (3) Regulatory Compliance, Communications, Stakeholder Outreach, and Training Program; and (4) Enterprise Planning, Technology Advancement & Training Program Development Program.[653]

SoCalGas has the responsibility to train its employees on the company's emergency procedures as well as establishing liaison with first responders in accordance with Title 49 CFR Part 192, section 192.615 and GO 112-F section 143.6. SoCalGas is required to establish and maintain liaison with appropriate fire, police, and other public officials and to ensure that SoCalGas employees are knowledgeable of emergency procedures and are trained.[654] Although SoCalGas is already in compliance with existing requirements to meet and train with first responders, the incremental positions are needed to support an enhanced first-responder outreach program as further described below, greater communications during emergency response, maintain adequate response plans, and implement emergency procedures and trainings and outreach.

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[651] Ex. 17 SCG/Zornizer at 15-16; Ex. 18 SCG/Zornizer at 11-21.
[652] Ex. 19 SCG/Zornizer at 6.
[653] Ex. 19 SCG/Zornizer at 8-9.
[654] 49 CFR Part 192, § 192.615(c).

Moreover, over the past several years, the prevalence of extreme weather has increased emergency response needs—*e.g.*, wild fires—and recent studies state that California will experience much greater extreme weather seasons.[655] SoCalGas Emergency Services department plays a critical role in executing and managing the incident command structure during disaster relief efforts.

16.1.1.3 SoCalGas Emergency Services Proposes These FTEs to Implement Corrective Actions and Recommendations Made by Governmental Agencies

SoCalGas' increased funding request for Emergency Services is due to incremental responsibilities associated with the recommendations by SED of CPUC and the California Division of Occupational Safety and Health department. In 2016, SED conducted GO-112 Inspection and identified process improvements needed to SoCalGas' first responder outreach program and emergency exercises program.[656] SED also recommended SoCalGas enhance the frequency it performs emergency preparedness and response exercises and regularly coordinate with first responders and appropriate public official on these trainings.[657] California Division of Occupational Safety and Health department cited SoCalGas for failure to ensure that the Incident Commander (IC) was trained to the first responders operations level, and to certify that the IC knew how to implement the employer's Incident System[658]; in response, in late 2017, SoCalGas launched a program requiring SoCalGas responders to take certain courses and obtain their certification. The incremental FTEs will allow SoCalGas to monitor and administer these trainings. Moreover, the incremental positions will support the roll-out of the new WebEOC application (SoCalGas' Incident Tracking and Management System) to over 2,000 employees, which will be in place in the beginning of 2019.[659]

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655 Ex. 19 SCG/Zornizer at 8, FN 28, citing Colgan, David, *Study Forecasts a Severe Climate Future for California* (April 23, 2018) UCLA Newsroom, *available at* http://newsroom.ucla.edu/releases/california-extreme-climate-future-ucla-study ("[California] will experience a much greater number of extremely wet and extremely dry weather seasons—especially wet—by the end of the century.").

656 Lee, Dennis, SED Closure Letter for the General Order (G.O.) 112 Inspection of Southern California Gas Company's Emergency Management Program (Aug. 15, 2017).

657 *Id.*

658 Occupational Safety and Health, Inspection 1111741.015, Violation Item #4, Citation 02001. Standard 5192(Q)(6)(E), United States Department of Labor (Issued June 10, 2016), *available at* https://www.osha.gov/pls/imis/establishment.inspection_detail?id=1111741.015.

659 Ex. 19 SCG/Zornizer at 10.

16.1.2. Uncontested Item – Storage Products Manager

The Storage Products Manager group manages the sale of storage products and California Energy Hub (CEH) services through sales campaigns, open seasons, and bi-lateral negotiations to meet customer needs and to maximize reliability and value for SoCalGas and SDG&E and their ratepayers. This group also procures and sells spot purchases and baseload gas supply to support System Reliability. SoCalGas is requesting TY 2019 forecast of $156,000, which is an increase of $10,000, and the parties do not dispute this request.

16.2 Shared Services O&M

The parties do not dispute SoCalGas' TY 2019 forecast of $5,986,000 for (1) Energy Markets & Capacity Products; (2) Gas Scheduling[660]; (3) Gas Transmission Planning; and (4) Gas Control and SCADA Operations. Energy Market & Capacity Products shared services schedules gas transportation and storage services on the SDG&E and SoCalGas transportation and storage system; and, provides capacity services for gas marketers that serve both SoCalGas and SDG&E customers, large nonresidential customers who choose to act as their own supplier, and core aggregators. Energy Markets & Capacity Products also manages business relationships with upstream pipelines that serve the SoCalGas and SDG&E systems. Gas Scheduling is a 24/7 operation that manages the day-to-day system and operations for nominations, allocations and scheduled gas transportation for non-core customers and implements the Operational Flow Order (OFO) rules. Gas Transmission Planning assesses the transmission system's ability to meet standards, obligations, demand, and accesses new sources of gas supply. It also works closely with departments tasked with maintaining the safety and integrity of the gas transmission system and assesses the impact on operation and customer service resulting from these maintenance activities. The Gas Control units are responsible for 24/7 staffing for control room monitoring and the remote control of pipeline and compression facilities on the transmission system. The Supervisory Control and Data Acquisition (SCADA) Operations department manages the planning, operation, and maintenance of the SCADA system.

16.2.1 Operational Flow Cost Memorandum Account (OFCMA)

SoCalGas' $1.696 million in capital expenditures currently recorded in the OFCMA in connection with the OFO/EFO implementation have been reasonably incurred. These costs

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[660] Although parties do not dispute the forecast amount, they raise issues with certain automated functions within the ENVOY® system. This is covered more in detail below.

directly supported the achievement of SoCalGas' objective of replacing circa-1998 winter balancing rules, which in turn has enhanced operational stability.

Table 16.B.
OFO/EFO Cost Summary

Capital Cost through 2017		
Internal Labor	$	560,251
Consultants	$	944,575
Other Direct Costs	$	1,756
Indirect Costs	$	135,791
AFUDC	$	53,512
Grand Total	**$**	**1,695,885**

SoCalGas and SDG&E requested authorization to replace their winter balancing rules with OFO and EFO procedures; SoCalGas and SDG&E proposed to have a low OFO be triggered when they forecasted exhaustion of the 340 million cubic feet per day of storage withdrawal allocated to balancing.[661] They also proposed that they be authorized to invoke EFOs when they forecast or actually experience a supply and/or capacity shortage that threatens deliveries to end-use customers.[662] The Commission authorized the proposed changes but ordered a memorandum account to track the costs.[663] Major system enhancements were required in the ENVOY® and Specialized Contract Billing System (SCBS) applications to execute the OFO/EFO Implementation. The enhancements included (1) creation of new screens to view, process, and archive the Low OFO Calculations; (2) modifications to the Gas Scheduling processes to replace the Winter balancing rules with the new Low OFO rules; (3) creation of new alerts and notices specific to the Low OFO; and (4) Updates to the ENVOY® and SCBS interface to accommodate the transfer of Low OFO declaration, stage, and tolerance to the billing system.[664] To execute these enhancements, SoCalGas' Information Technology department (IT) formed and utilized a team structure led by management personnel who are experienced and knowledgeable in the IT enhancements.

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[661] *See* D.15-06-004 at 3.
[662] *Id.*
[663] *Id.* at 40-44.
[664] *Id.*

16.3 Support for Other Witnesses

SoCalGas' Gas Control and System Operations/Planning testimony and workpapers, supported by witness Devin Zornizer, also provide policy support for the following witness areas: (1) Mr. Michael Bermel – Gas Major Projects; (2) Mr. Christopher Olmsted – Information Technology; and (3) Ms. Carmen Herrera – Fleet Services and Facility Operations.

16.3.1 Contested Items – DOCC and EDF's Miscellaneous Proposals

SoCalGas and SDG&E intend to establish Distribution Operations Control Center (DOCC)[665] that is similar and integrated into the existing Gas Control Center, which monitors and controls pipeline and compression facilities on the transmission system. DOCC will be the single point of coordination to operate the gas distribution system and will enhance SoCalGas' ability to operate, monitor, and acknowledge events, support emergency response, provide reliable service to customers, and improve the health of the distribution system. While the system will not be fully completed until 2022, select assets will be placed in service in 2018/9 and require maintenance and operating resources in and/or prior to TY 2019.

TURN takes issue with a centralized DOCC because it states that SoCalGas did not "justify the large capital cost of the DOCC project" nor compared it to "other alternatives."[666] In addition, TURN recommends that SoCalGas hire a third party to investigate how PG&E's DOCC has reduced risk and enhanced safety.[667]

SoCalGas' safety-first culture focuses on public, customer, and employee safety, and this safety culture efforts include developing a trained workforce, operating and maintaining the gas infrastructure, and providing safe and reliable gas service. The proposed DOCC meets these objectives via a centralized control room where operator qualified trained controllers are prepared to quickly identify and respond to abnormal operating conditions (AOC). Contrary to TURN's statement that distribution pipeline pressure is highly variable and therefore monitoring of the pressure will not be useful, SoCalGas operates many distribution pipelines with pressures well above 60 psig, which can have operating patterns similar to transmission pipelines. DOCC is needed to monitor the pressure on these types of distribution pipelines.

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[665] Sponsored by Witness Michael Bermel – Gas Major Projects, Ex. 50 SCG/Bermel.
[666] Ex. 490 TURN/Borden at 44.
[667] *Id.*

DOCC's purpose is to monitor, operate, and control with an emphasis on proactive operation and control. Moreover, the benefit of DOCC is to enhance the identification of and reaction to outages and blowing gas events, and the potential to reduce the timing associated with these events. Operator qualified controllers operating in a 24-hour control room enhance safety as the DOCC would provide more robust real-time monitoring and response via call-outs to operations personnel. Further, having flow meters and pressure monitoring in the control room are intended for detecting anomalies and abnormal operating conditions on the system.

SoCalGas opposes TURN's recommendation to hire a third party to investigate how PG&E's DOCC reduced risk and enhanced safety; SoCalGas has already conducted a study that establishes a plan for the development and implementation of a Gas Distribution Control Center.

16.3.1.1 EDF's Proposal of "Workable Plan" Around Gas Electric Coordination

EDF recommends that SoCalGas create a "workable plan" to address both the operational and market risks associated with gas and electric coordination.[668] Such a proposal is unnecessary as SoCalGas' RAMP is predicated on a risk framework that incorporate risk, value transparency, and place safety of the public, employees, and contractors as a top priority. Moreover, operational risk is mitigated by operating the transmission system in a real-time control room environment. Further, SoCalGas and SDG&E work with grid operators, primarily CAISO and LADWP, on a regular basis at the operational level to keep each apprised of expected usage, and scheduled and emergency outages that impact the reliability of the respective gas and electric operating system.[669] SoCalGas and SDG&E have developed Low OFO and EFO procedures and revised its curtailment rules in part to better address the requirements of the electric grid operators.[670]

16.1.3. Uncontested Items − WebEOC, Emergency Field Communication Services, ENVOY® Enhancements, Emergency Command Vehicle Centers, and Physical Relocation of Gas Control Facility

Mr. Christopher Olmsted – Information Technology (IT) Ex. 300 SCG/Olmsted

- Web Emergency Operation Center (WebEOC) needs to be replaced to support CPUC GO 112-F. Currently SoCalGas uses a system called WebEOC, which was implemented more than eight years ago, and the system has not kept pace with current information

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668 Ex. 367 EDF/Lander at 4.
669 Ex. 19 SCG/Zornizer at 12-13.
670 *Id.* at 13-14.

technology advancements, preventing WebEOC from being able to be integrated with other mission critical systems that SoCalGas uses. A new system is needed to be compatible with current technologies and to allow the ease of access to multiple systems through a single portal, providing real-time information and reduced workloads.

- Emergency Field Communication Systems are communication trailers that support company employees and first responders. Currently, IT has eight emergency communication trailers that have older technology and no longer meet the needs of emergency field operations communication and coordination. These communication trailers will require a complete redesign and/or replacement to support the emergency events in the field.
- In D.16-06-039, the Commission approved SoCalGas' request to seek recovery of costs related to High OFO information system enhancements.[671] System enhancements were implemented in ENVOY® and in the Specialized Contract Billing System (SCBS). Costs in 2017 will relate to the completion of the enhancements and modifications.
- SoCalGas was permitted to implement Low OFO and EFO procedures and establish OFCMA to track costs associated with the implementation.[672] The execution required system enhancements in the SCBS, including modifications to the SCBS billing logic, and in ENVOY®, including modification of affected reports, monitoring pages, and noticing pages.
- ENVOY® Generation MA (Microservice Architecture) − SoCalGas proposes to replace the existing ENVOY® system, which is difficult and costly to modify and adjust in a new regulatory environment. Modularizing the architecture of ENVOY® will make it more configurable and further enhance and optimize the mobile capabilities on multiple platforms.
- ENVOY® Next Generation − The SoCalGas ENVOY® Next Generation Project entails a fully revamped interface and navigational menus, expanded to provide customers with up-to-date information, additional data querying functions and reporting, additional accessibility (neutral web browser use and mobile platforms), customizable account functions, and stronger web security.

<u>Ms. Carmen Herrera – Fleet Services and Facility Operations Ex. 188 SCG/Herrera</u>

- SoCalGas is requesting three (3) Emergency Command Vehicle centers that will provide field company employees and first responders a place to have meetings as well as allow them access to communication tools and mapping and printing capabilities. Currently, SoCalGas does not have any Emergency Command Vehicle Center. The ability to manage and communicate on-site is essential to supporting the company's emergency response in the field.
- SoCalGas requests funding for planning, permitting, construction, and relocation of a new Gas Control Center.[673] The existing building facility can no longer be renovated to

[671] *See* D.16-06-039 at Ordering Paragraph (OP) 12.
[672] *See* D.15-06-004 at OP 6-13.
[673] ORA does not contest the justification for this project but disagrees with the estimated date for the facility relocation. *See* Ex. 414 ORA/Waterworth at 24-25. The estimated date for the relocation and facility relocation costs are discussed in the Fleet Services rebuttal testimony of Carmen Herrera. *See* Ex. 192 SCG/Herrera.

meet workforce space requirements. The facility houses the Gas Control and SCADA departments which are mission-critical and are responsible for the remote monitoring, control, and real-time operation of SoCalGas and SDG&E's combined gas-transmission system, including associated pipelines, line compressor stations, and underground storage facilities.

17. Pipeline Integrity for Transmission and Distribution

SoCalGas and SDG&E's Pipeline Integrity for Transmission and Distribution testimonies and workpapers, supported by witness Maria Martinez, describe and justify SoCalGas and SDG&E's forecasted Pipeline Integrity O&M and capital expenditures.[674] Pipeline Integrity is responsible for managing two major, federally mandated pipeline programs to reduce the risk of pipeline failure, the Transmission Integrity Management Program (TIMP) and the Distribution Integrity Management Program (DIMP).[675] TIMP and DIMP are two-way balanced programs.[676]

The RAMP risks represented and supported as part of these testimonies are Catastrophic Damage Involving High-Pressure Failure, Catastrophic Damage Involving Medium-Pressure Pipeline Failure, and Records Management, as further detailed in Section II of Ms. Martinez's direct testimonies. All of the TIMP and DIMP programs and activities sponsored by Ms. Martinez are RAMP costs, as TIMP and DIMP are performed pursuant to relatively new federal code requirements that go above and beyond routine maintenance activities by monitoring and remediating risk on the pipeline system with the goal of reducing overall risk. The TIMP manages this risk reduction through the execution of assessments and remediation of transmission pipelines with a primary focus in populated areas (High Consequence Areas (HCAs) on a reoccurring set schedule. The DIMP manages this risk reduction by implementing targeted activities, programs, or projects that provide an extra layer of monitoring, assessment, or proactive remediation on distribution pipelines, such as the wholesale early vintage pipeline replacement programs.[677]

Intervenors' summary positions are compared to SoCalGas and SDG&E's in the tables below:

674 *See* Exs. 111-14 SCG/Martinez and Exs. 115-18A SDG&E/Martinez.
675 Ex. 111 SCG/Martinez at iii-iv, 2-4, 21-28 and Ex. 115 SDG&E/Martinez at 2-3, 9-21.
676 Ex. 111 SCG/Martinez at 14, 20 and Ex. 115 SDG&E/Martinez at 10, 16.
677 Ex. 111 SCG/Martinez at 10-11 and Ex. 115 SDG&E/Martinez at 7-11.

Summary of SoCalGas O&M Request and Intervenor Proposals

TOTAL NON-SHARED + SHARED SERVICES O&M (TIMP and DIMP) - Constant 2016 ($000)		
	Test Year 2019	**Variance**[678]
SoCalGas	86,000	
ORA	86,000	0
TURN	85,996	(4)[679]
CUE	89,743	3,743
CFC	86,000	0
OSA	not specified	n/a
IS	not specified	n/a

Summary of SoCalGas Capital Request and Intervenor Proposals

TOTAL CAPITAL (TIMP and DIMP) - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SoCalGas	125,184[680]	125,184	215,000	465,368	
ORA	193,425	125,184	215,000	533,609	68,241
TURN	193,425	125,184	215,000	533,609	68,241
CUE	193,425	125,184	532,72	851,333	385,965
CFC	193,425	125,184	145,000	463,609	(1,759)
OSA	not specified				n/a
IS	not specified				n/a

Summary of SDG&E O&M Request and Intervenor Proposals

TOTAL NON-SHARED + SHARED SERVICES O&M (TIMP and DIMP) - Constant 2016 ($000)		
	Test Year 2019	**Variance**
SDG&E	11,000	
ORA	11,000	0
TURN	11,000	0
CUE	11,762	762
CFC	11,000	0
OSA	not specified	n/a
IS	not specified	n/a

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678 Intervenor's forecast – Utility's forecast = Variance.

679 TURN recommends a minor O&M adjustment for removal clothing and gear other than uniforms for $4,359.06 (in whole 2016 dollars). Ex. 494 TURN/Marcus at 77-78.

680 SoCalGas does not oppose ORA's recommendation to use 2017 adjusted recorded expenditures for 2017 capital. Ex. 114 SCG/Martinez at 2, 11.

Summary of SDG&E Capital Request and Intervenor Proposals

TOTAL CAPITAL (TIMP and DIMP) - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	24,216[681]	24,216	49,000	97,432	
ORA	36,808	24,216	49,000	110,024	12,592
TURN	36,808	24,216	49,000	110,024	12,592
CUE	36,808	24,216	190,534	251,558	154,126
CFC	36,808	24,216	49,000	110,024	12,592
OSA	not specified				n/a
IS	not specified				n/a

17.1 Common Issues (SoCalGas and SDG&E)

With regard to O&M expenses, as shown in the tables above, no party recommended reductions to SoCalGas or SDG&E's funding level requests (TURN almost exactly matches SoCalGas' forecast). No party appears to have disputed SoCalGas' forecast for shared service costs. CUE recommends higher levels of non-shared services O&M funding for both Companies ($3.743 million above SoCalGas' forecast and $0.762 million above SDG&E's forecast) based on its recommendations to accelerate the Vintage Integrity Plastic Plan (VIPP) for both Companies, and the Bare Steel Replacement Plan (BSRP) and Distribution Riser Inspection Program (DRIP) that are specific to SoCalGas.[682] As indicated in Ms. Martinez's rebuttal testimony, because SoCalGas and SDG&E's forecasts endeavored to strike an appropriate balance between DIMP's pipeline safety, risk reduction effectiveness, and impact on ratepayer costs, the Commission should adopt the Companies' forecasts as reasonable.[683] SoCalGas requests approval of a TY 2019 forecast of $86 million for Pipeline Integrity O&M, which is composed of $82.710 million for non-shared service activities and $3.290 million for shared service activities. This forecast represents an increase of $10.342 million over 2016 adjusted-

[681] SDG&E does not oppose ORA's recommendation to use 2017 adjusted recorded expenditures for 2017 capital. Ex. 118 SDG&E/Martinez at 2, 4.
[682] Ex. 370 CUE/Marcus at 28, 36, 92; Ex. 375 CUE/Kick at 5.
[683] Ex. 114 SCG/Martinez at 7; Ex. 118 SDG&E/Martinez at 4.

recorded costs (BY 2016).[684] SDG&E requests a TY 2019 forecast for non-shared O&M of $11.0 million, an increase of $3.256 million over BY 2016.[685]

SoCalGas and SDG&E are also requesting capital expenditures for TIMP and DIMP. To support these areas, SoCalGas originally proposed expenditures of $125.184 million in 2017, $125.184 million in 2018, and $215 million in 2019. SDG&E originally proposed expenditures of $24.216 million in 2017, $24.216 million in 2018, and $49 million in 2019. As with O&M expenses, CUE again forecasts significantly higher values for capital expenses ($385.965 million above SoCalGas' total forecast and $154.126 million above SDG&E's total forecast) based on its recommendation to accelerate the VIPP, BSRP, and DRIP programs. As with O&M, SoCalGas and SDG&E consider their capital forecasts to more appropriately consider impact on ratepayers' costs than CUE's higher values. All of the parties recommend adopting SoCalGas and SDG&E's actual 2017 recorded capital expenses ($68.241 million higher than SoCalGas' forecast and $12.593 million higher than SDG&E's forecast), and which SoCalGas and SDG&E do not dispute.[686] All of the parties also recommend adopting SoCalGas and SDG&E's forecasted 2018 capital expenses. ORA and TURN recommend adopting SoCalGas and SDG&E's forecasted 2019 capital expenses, while CFC disputes DIMP capital expense for SoCalGas only. As CFC's recommended $1.759 million under SoCalGas' total forecast is the only disputed cost in Ms. Martinez's witness area that would result in a lower value, this is discussed in further detail in Section 17.2.1 below.

17.2 SoCalGas Issues

17.2.1 Disputed Capital

CFC argues to reduce funding by $1.759 million for DIMP capital expenses, but this appears to be based on fundamental misunderstandings of the proactive DIMP early vintage pipeline replacement programs (*i.e.*, VIPP or BSRP) sponsored in Ms. Martinez' testimony versus routine repair or replacement work sponsored in the Gas Distribution testimony of Gina Orozco-Mejia. The basis for CFC's proposal presumes the goal of the DIMP early vintage

684 Ex. 111 SCG/Martinez at 13, Table MTM-7.
685 Ex. 115 SDG&E/Martinez at 9, Table MTM-6.
686 Ex. 114 SCG/Martinez at 2; Ex. 118 SDG&E/Martinez at 2.

replacement programs is a targeted leak rate[687] rather than the wholesale replacement of early vintage plastic and steel. SoCalGas' objective is the wholesale replacement of early vintage plastic and steel pipe within the 25- to 30-year time frame described in Ms. Martinez's testimony.[688] These programs proactively prioritize high-risk vintages, such as plastic pipe with brittle-like cracking characteristics (*e.g.*, Aldyl-A) and unprotected steel in order to reduce integrity risks, such as the release of gas or pipeline failures. The early vintage replacement programs (VIPP for plastic and BSRP for bare steel) are important safety and risk mitigation activities pursuant to federally mandated programs that need an adequate level of funding, as generally recognized by other parties such as ORA and TURN who did not take issue with SoCalGas' forecasts and increased the level for 2017 to account for actual expenditures.[689] Indeed, as discussed above, CUE requests to significantly accelerate the pace of such replacement programs. [690]

Limiting DIMP capital funding would hinder the VIPP and BSRP programs from successfully achieving the co-benefit of these programs that CFC seeks: eliminating leaks from those classes of pipe when replaced. As these programs ramp-up in the coming years, the programs' risk prioritization replacement strategy explained in Ms. Martinez's rebuttal testimony will optimize scheduling by considering such criteria as vintage pipeline quantity, pipeline age, installation conditions, available resources and other constraints, and performance, which includes evaluation of completed and pending leak repairs.[691] Accordingly, this strategy already accounts for ways to be cost-effective in executing these high-risk vintage pipeline replacement programs over the GRC cycle and makes adjustments as appropriate based on continuous improvement and better performance information.

CFC's basis for its proposed reduction to DIMP capital expenditures also misunderstands SoCalGas' request for the added advisors by Gas Distribution in Ms. Orozco-Mejia's testimony.[692] The advisors will not have any role in "determin[ing] the optimal pace of asset

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687 As explained in Ms. Martinez' rebuttal testimony, these programs have not established, nor should be driven by, a target leak rate for determining levels of replacement of mains and services. Ex. 114 SCG/Martinez at 12 (citing CFC-SEU-Data Request-018, Questions 1, 3-4, as attached in Appendix A).
688 Ex. 111 SCG/Martinez at 24-26.
689 *See* Ex. 398 ORA/Stannik at 2; Ex. 114 SCG/Martinez at 11.
690 Ex 370 CUE/Marcus at 3-4 and 4-5.
691 Ex. 114 SCG/Martinez at 12-13.
692 Ex. 07 SCG/Orozco-Mejia at 79; Ex. 484 CFC/Roberts at 11.

replacement,"[693] as incorrectly assumed by CFC, and so there is no basis to delay increasing DIMP's capital expenditures to await the advisors' work on leak analysis and performance metrics. As explained in Ms. Martinez's rebuttal testimony, those advisors are focused on Gas Distribution's main leak inventory reduction effort, which is part of routine repair work that is an entirely different effort than the separate DIMP wholesale replacement programs under the VIPP or BSRP.[694] CFC did not question or dispute SoCalGas' characterizations of these misunderstandings during hearings or in subsequent data requests.

17.3 Other Policy or Non-Cost Issues Raised by Parties

17.3.1 CUE

In regard to the DRIP, CUE raises concerns with contract inspectors' ability to detect abnormal conditions given they may be unfamiliar with the SoCalGas facilities.[695] Ms. Martinez noted in rebuttal testimony that CUE's concerns regarding its contractors are unwarranted, as many of the contractors have worked on SoCalGas' facilities for many years, and SoCalGas selects contractors that are qualified on the necessary operator qualifications elements and are required to participate in hands-on training to verify their understanding of the inspections policies and procedures.[696]

Moreover, the DRIP inspections completed as part of DIMP are in addition to the routine maintenance inspection requirements. The routine MSA inspections are completed at least once every 3 years which provide sufficient monitoring during the implementation of the DRIP.[697]

17.3.2 OSA

The rupture that occurred on Line 235-2, demonstrates according to OSA, "that it is necessary to go beyond meeting the minimum standards and implement best management practices to achieve safe and effective pipeline operation."[698] As Ms. Martinez testified in rebuttal testimony, SoCalGas' "TIMP is a continual assessment process that takes such lessons learned from pipeline incidents into account. . . . [T]he purpose of TIMP is to continually identify threats on transmission pipelines, determine the risk posed by these threats, schedule

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693 Ex. 484 CFC/Roberts at 7.
694 Ex. 114 SCG/Martinez at 8.
695 Ex. 375 CUE/Kick at 3.
696 Ex. 114 SCG/Martinez at 7.
697 *Id*.
698 Ex. 442 OSA/Au at 4-8.

assessments to address threats, collect information about the condition of the pipeline, and take actions to minimize applicable threats and integrity concerns to reduce the risk of a pipeline failure."[699] Accordingly, SoCalGas already indicated agreement with OSA that TIMP should be expanded beyond HCAs, which is already reflected in Ms. Martinez's direct testimony demonstrating that SoCalGas has proactively over the years gone above and beyond compliance requirements by extending TIMP into less populated areas:

> Of the 2,300 miles of transmission pipeline that can be in-line inspected (ILI), 60% (1,380) of those miles are located in less populated areas while 80% of the HCAs are able to be in-line inspected. This proactive approach to enhancing safety above and beyond compliance requirements is accomplished through adequate funding and a two-way balancing account. TIMP is an existing program with proposed costs in this GRC, including the expansion into non-HCAs, that would address the Risk Assessment Mitigation Phase (RAMP) risk of Catastrophic Damage Involving High-Pressure Gas Pipeline Incident.[700]

As the October 2017 incident on Line 235-2 occurred after SoCalGas' GRC Application and testimony was submitted, and the root cause analysis (RCA) was ongoing during the course of this proceeding, SoCalGas did not include as part of this TIMP funding request any amounts for the mitigations that will need to take place related to the incident.[701] Rapid-response mitigation actions as a result of the RCA, which was just completed in April 2018, should not be litigated in a three- to four-year forecast application process like the GRC, which is not suited for this purpose:

> The RAMP filings feed into the utilities' GRC filings in a *three-year cycle*. This can work well for ordinary procedures and procurement and as a forward-looking approach to mitigating risk. *However, some risks may be discovered that will require action on a much shorter time horizon*. . . . The utilities must respond to shorter-term needs through processes other than the RAMP and GRC.[702]

The Commission has thus signaled that short-term mitigation following ongoing investigations of safety incidents, and even the funding for such mitigation, should not be considered within the scope of a general rate case. On a longer time horizon, SoCalGas does agree to look to adapt the final recommendations and improvements resulting from the RCA into the TIMP over the next rate case cycle.[703]

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[699] Ex. 114 SCG/Martinez at 8.
[700] *Id.* at 9.
[701] Tr. V16:1286:20-28 (Martinez).
[702] D.16-08-018 at 145 (emphasis in original).
[703] Tr. V16:1295:7-9 (Martinez).

17.3.3 IS

While Indicated Shippers (IS) did not specify any recommendation regarding Pipeline Integrity's forecasts, nor submit testimony on this witness area, IS recommended on a broad basis to reduce the total SoCalGas revenue requirement by $125 million for TY 2019. [704] This reduction in revenue requirement is due to proposed reduction to both PSEP capital expenditure and other capital expenditures excluding PSEP. IS' justification for this blanket reduction is by alleging that SoCalGas' capital expenditures "are not based on transparent and verifiable specific capital programs justified by safety, and risk mitigation."[705] IS recommended keeping total SoCalGas capital expenditures for 2019 to the 2018 forecasted levels, which would decrease capital expenditures by $287 million. [706] This $287 million reduction is separated into 3 buckets: Non-RAMP, PSEP, and RAMP (excluding PSEP) and in the amounts of $120 million, $81 million, and $86 million respectively. TIMP and DIMP would be part of the bucket RAMP (excluding PSEP) but were not addressed specifically in IS' testimony other than stating SoCalGas' cost-of-service increase is largely RAMP-related projects, of which TIMP and DIMP are included. Based on IS' general criticism of SoCalGas' RAMP-to-GRC showing, it appears that IS' basis for its reductions that would affect TIMP and DIMP capital is that SoCalGas "did not provide details that specifically prioritized each proposed capital project or incremental O&M program based on safety-related or risk mitigation metrics."[707] Please see Section 6 of this brief regarding SoCalGas' broader arguments against IS' RAMP-related testimony, which effectively seeks to re-litigate the S-MAP Decisions' requirements for this GRC cycle. As noted earlier in this section, Section II of Ms. Martinez's direct testimony, with references to other portions of her testimony and workpapers, provided the RAMP showing for TIMP and DIMP in this GRC pursuant to the S-MAP Decisions' requirements that currently apply.

Moreover, during IS' cross examination,[708] Ms. Martinez described that TIMP was designed to meet the requirements of 49 Code of Federal Regulations, Section 192 Subpart O and is being carried out efficiently and from a prudent operator standpoint. SoCalGas has

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[704] Ex. 436 IS/Gorman at 2, Table MPG-1.
[705] *See id.* at 3.
[706] *Id.* at 17, Table MPG-3.
[707] *Id.* at 7.
[708] Tr. V16:1298-1303 (Martinez).

performed a relative risk assessment of its pipelines.[709] Ms. Martinez further indicated that TIMP is driven by the requirement that lines must be inspected at a maximum of seven years and the costs for this is based on historical average costs and applied to the set of lines to be completed in 2019.[710]

Accordingly, IS' basis for reduction to capital expenditures for transparency and verifiability reasons is unsupported. TIMP and DIMP are mandatory safety programs; thus, it is patently evident that their purpose is justified in mitigating safety risk, and there is no doubt that there is a "priority or need for the project[s] in the 2019 GRC," contrary to IS' assertions that this detail is missing from SoCalGas' testimony.[711] Therefore, TIMP and DIMP's activities should be adequately funded as requested by SoCalGas. IS has not offered any evidence to substantiate why less funding for capital expenditures would be appropriate for these compliance activities.

17.4 Conclusion

The SoCalGas and SDG&E forecasts of the Pipeline Integrity O&M expenses and planned capital expenditures balance compliance obligations, risk, as well as the cost to deliver natural gas safely and reliably. In order to enable SoCalGas and SDG&E to continue to safely and reliably deliver natural gas to customers, comply with applicable rules and regulations, and expand their safety efforts, the Commission should adopt SoCalGas' TY 2019 forecast of $86 million for O&M expenses ($82.710 million for non-shared service activities and $3.290 million for shared service activities) and adopt the capital expenditures of $193.425 million in 2017 (actuals), $125.184 million in 2018, and $215 million in 2019. The Commission should adopt SDG&E's TY 2019 forecast of $11 million for O&M expenses ($11.0 million for non-shared service activities and $0.0 million for shared service activities) and adopt capital expenditures of $36.808 million in 2017 (actuals), $24.216 million in 2018, and $49 million in 2019.

18. Pipeline Safety Enhancement Plan (PSEP)

18.1 Introduction and Summary of SoCalGas' Request

SoCalGas requests the Commission to adopt its forecasts of $249,467,456 for O&M and $649,326,239 for Capital in order to execute the eleven pressure test projects, eleven replacement projects, and 284 valve bundle projects in furtherance of continuing to implement the

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[709] *Id.* at 1309:12-16.
[710] *Id.* at 1310-1317.
[711] *See* Ex. 436 IS/Gorman at 7.

Commission-mandated and approved Pipeline Safety Enhancement Plan (PSEP). All of the requested funds are linked to mitigating a top safety risk that has been identified in the RAMP Report, namely SCG-4 Catastrophic Damage Involving High-Pressure Pipeline Failure.[712] The following represent the O&M and Capital requests by year.[713]

Table 18.A
O&M Requests by Year ($000)

2019	2020	2021	Total O&M[714]
$83,156	$83,156	$83,156	$249,468

Table 18.B
Capital Expenditure Forecasts Requests by Year ($000)

2015	2016	2017	2018	2019	2020	2021	Total Capital
$1,693	$6,462	$7,575	$18,328	$126,950	$177,944	$310,374	$649,326

As explained in the written and hearing testimony of, and workpapers[715] supported by, witnesses Richard D. Phillips and Sharim Chaudhury, these forecasts are based on the specific, scoped projects anticipated to be executed during 2019-2021; actual costs may differ, and thus SoCalGas requests these costs continue to be recorded to a two-way balancing account – the to-be created Pipeline Safety Enhancement Plan Balancing Account (PSEPBA).[716] Moreover, SoCalGas requests authority to substitute projects currently anticipated to be executed during 2019-2021 in the event there is an unavoidable delay in commencing construction of one of the projects or when it is prudent to accelerate the execution of a PSEP project for operational, reliability, or safety enhancement reasons. Finally, SoCalGas requests the Commission clarify whether, by ordering "that all natural gas transmission pipelines in service in California must be brought into compliance with modern standards for safety,"[717] and further ordering SoCalGas

[712] Ex. 231 SCG/Phillips at 17.
[713] Assumes three-year period of 2019-2021. Fourth year (2022) costs discussed *infra* at Section 18.10.
[714] As stated in Ex.231 SCG/Phillips at 21, because 2019 will be a transition year as PSEP is incorporated into the GRC process, forecasted costs for 2019 do not reflect the level of forecasted spend in the post-test years. Therefore, the PSEP TY 2019 O&M forecast has been normalized to reflect the forecasted total level of expenditures over 2019-2021.
[715] Detailed workpapers are provided for each project proposed to be executed in 2019-2021. *See* Ex. 233-R SCG/Phillips.
[716] *See* Ex. SCG/Yu at 15-17 for further discussion on this balancing account.
[717] D.11-06-017 at 18.

and other California pipeline operators to file a plan to "comply with the requirement that all in-service natural gas transmission pipelines in California has been pressure tested in accord with 49 CFR 192.619, excluding subsection 49 CFR 192.619 (c),"[718] the Commission intended SoCalGas to validate that all in-service natural gas transmission pipelines have been tested to the "modern" pressure test standard set forth in 49 CFR 192 Subpart J (Subpart J).

18.2 Summary of Forecast Variances

Intervenors opposing SoCalGas' forecasts for PSEP (ORA, SCGC and TURN (jointly, SCGC/TURN), and IS) do not oppose the projects SoCalGas proposes to execute during 2019-2021, nor the proposed scope of work for each. Rather, they dispute the amount forecasted by SoCalGas for the execution of the projects. The tables below show a summary of the Capital and O&M forecast differences between the parties after evidentiary hearings:

Table 18.C
Summary of Differences – O&M[719] (Thousands)

	Total O&M	Variance
SoCalGas	$249,468	N/A
CUE[720]	$249,468	$0
ORA	$162,704	($86,764)
SCGC/TURN	$200,210	($49,258)
IS	$202,054	($47,414)

Table 18.D
Summary of Differences – Capital (Thousands)

	Total Capital	Variance
SoCalGas	$649,326	N/A
CUE	$649,326	$0
ORA	$645,502	($3,824)
SCGC/TURN	$522,567	($126,759)
IS	$444,300	($205,026)

The bases for variances are discussed below in the context of the intervenors' positions.

718 *Id.* at OP 4.
719 Ex. 235 SCG/Phillips and Chaudhury at 1.
720 CUE submitted testimony supporting SoCalGas' request for PSEP and did not propose any reductions to SoCalGas' forecasts.

18.3 PSEP Background

In response to the rupture and ignition of a 30-inch diameter natural gas transmission pipeline in San Bruno, California in 2010, the Commission issued R.11-02-019, "a forward-looking effort to establish a new model of natural gas pipeline safety regulation applicable to all California pipelines."[721] In a subsequent decision, the Commission found that "natural gas transmission pipelines in service in California must be brought into compliance with modern standards for safety," and ordered all California natural gas transmission pipeline operators "to prepare and file a comprehensive Implementation Plan to replace or pressure test all natural gas transmission pipeline in California that has not been tested or for which reliable records are not available."[722] These plans were to provide for testing or replacing all such pipelines "as soon as practicable."[723] The Commission also required that the plans "address retrofitting pipelines to allow for in-line inspection tools and, where appropriate, automated or remote controlled shut off valves"[724] and include "increased patrols and leak surveys, pressure reductions, prioritization of pressure testing for critical pipelines that must run at or near Maximum Allowable Operating Pressure (MAOP) values which result in hoop stress levels at or above 30% of Specified Minimum Yield Stress (SMYS), and other such measures that will enhance public safety during the implementation period."[725] The requirements of this decision were later codified at California Public Utilities Code sections 957 and 958.

Accordingly, SoCalGas and SDG&E filed an implementation plan which the Commission approved in June 2014. Specifically, the Commission "adopt[ed] the concepts embodied in the Decision Tree" to guide whether specific segments should be pressure tested, replaced, or abandoned; "adopt[ed] the intended scope of work as summarized by the Decision Tree;" and "adopt[ed] the Phase 1 analytical approach for Safety Enhancement… as embodied in the Decision Tree… and related descriptive testimony."[726] The Commission acknowledged the broad scope of SoCalGas and SDG&E's PSEP:

> In addition to the testing or replacing pipeline, Safety Enhancement includes modifications of 541 valves, and the addition of 20 valves, to provide for

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721 R.11-02-019 at 1.
722 *Id.*
723 *Id*. at 19.
724 *Id*. at 21.
725 *Id*. at OP 5.
726 D.14-06-007 at 2, 22, 59.

automated shut-off capability in order to isolate, limit the flow of gas to no more than 30 minutes, and thereby facilitate timely access of "first responders" into the area surrounding a substantial section of ruptured pipe. Safety Enhancement also includes: 1) improvements to communications and data gathering to ascertain pipeline conditions; 2) installing backflow valves to prevent gas from flowing into sections intended to be isolated from other connected lines; 3) expand the coverage of SDG&E and SoCalGas' private radio networks to serve as back-up to other available means of communications with the newly installed valves to improve system reliability; 4) installing remote leak detection equipment; and 5) increasing physical patrols and leak survey activities.[727]

Although PSEP has been underway since 2011, this constitutes PSEP's first request in a general rate case. The Commission initially ordered an after-the-fact review of the costs of implementing PSEP.[728] To enable this review, the Commission ordered SoCalGas and SDG&E to create certain balancing accounts to record Capital and O&M costs and to "file an application with testimony and work papers to demonstrate the reasonableness of the costs incurred which would justify rate recovery."[729] However, subsequently the Commission ordered PSEP to be brought within the GRC regulatory process.[730] Accordingly, SoCalGas and SDG&E filed two reasonableness review applications (in 2014, in which the Commission found SoCalGas and SDG&E's actions and expenses [save one deferral[731]] were reasonable and consistent with the reasonable manager standard; and in 2016, which is pending a decision from the Commission), and one forecast application in 2017, which is pending a decision from the Commission. SoCalGas and SDG&E intend to file another reasonableness review application this year.[732]

18.4 Project Forecasts

18.4.1 SoCalGas' Proposal[733]

Given the parameters defined by the Commission for the program, forecasts for the PSEP projects proposed in this GRC cycle are prepared differently than the forecasts for the bulk of other activities in this proceeding. Individual projects are identified for execution based on a

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[727] *Id*. at 8.
[728] *Id.* at OP 5.
[729] *Id.* at 39, 60.
[730] D.16-08-003 at OP 5.
[731] D.16-12-063, granting A.14-12-016. The decision declined to authorize recovery of costs for PSEP-specific insurance, without prejudice, after determining that SoCalGas and SDG&E did not make a sufficient factual showing in the proceeding to support the reasonableness of costs. *Id.* at 54.
[732] Ex. 231 SCG/Phillips at 5.
[733] Includes post-test year costs. *Id.* at 54-55.

risk-based prioritization methodology,[734] then each project is analyzed according to the applicable decision tree methodology.[735] Preliminary design, engineering, and planning activities[736] are then undertaken,[737] and once the project scope is confirmed, a preliminary estimate for the project is prepared by a dedicated estimating team.[738] Subject matter experts in different functional areas use their professional experience and expertise to provide estimate assumptions.[739] Actual costs as they are incurred in the field are incorporated into the estimates.[740] Subject matter experts identify potential risks as well as their potential for occurrence, resulting in a risk assessment factor, or contingency, that is applied to projects.[741], [742] This method is the most suitable for deriving forecasts for PSEP because it accounts for the fact that each PSEP project is unique in scope, size, and complexity and has its own potential for risks.[743] Details for each project proposed to be addressed in 2019-2021 are presented in workpapers.[744]

As a result of all these efforts, which include site visits to visually perceive the work area and conditions,[745] SoCalGas has derived forecasts for the eleven pressure test projects, eleven replacement projects, and 284 valve bundle projects identified herein.[746] Costs that the Commission has disallowed from recovery have been excluded from the forecasts.[747]

All the while, efforts are made to reduce the costs of executing PSEP. Pipeline records and operational needs are reviewed prior to initiating construction activity in an effort to

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[734] *Id*. at 5.
[735] *Id.* at 7-12.
[736] Such activities are advanced to an approximate 30% design level in order to comply with the Commission's directive in D.14-06-007 that "It is only fair that ratepayers should have the benefit of detailed plans for this Commission to consider before authorizing or preapproving the expenditure of many hundreds of millions of dollars." D.14-06-007 at 23; Ex. 235 SCG/Phillips and Chaudhury at 6.
[737] Tr. V22:2176-2187 (Phillips).
[738] Ex. 231 SCG/Phillips at 23; Ex. 235 SCG/Phillips and Chaudhury at 7.
[739] Ex. 231 SCG/Phillips at 23; Tr. V22:2169-2170 (Phillips).
[740] *Id.*
[741] *Id.* at 27.
[742] Tr. V22:2175-2176 (Phillips).
[743] Ex. 231 SCG/Phillips at 22.
[744] Ex. 233-R SCG/Phillips.
[745] Tr. V22:2167, 2172, 2219 (Phillips).
[746] SoCalGas' request is inclusive of certain miscellaneous costs: an allowance for pipeline failures ($6,170,000), implementation continuity costs ($5,599,000), and PMO costs ($41,438,000). Ex. 231 SCG/Phillips at 34-38.
[747] *Id.* at 27.

descope, *i.e.*, avoid the need to pressure test or replace, a pipeline.[748] As of October 2017, this due diligence resulted in reducing the scope of PSEP by approximately 270 miles.[749] Alternatives to pipeline replacement are considered as well in an effort to reduce costs: as appropriate, SoCalGas analyzes whether a smaller pipeline diameter can be utilized and whether direct assessment can be used to validate the strength of a pipeline segment rather than replacement.[750] "Incidental" and "accelerated" mileage is addressed to realize cost and operational efficiencies.[751] The Performance Partner Program or other competitive sourcing methods are used to select contractors and materials.[752] From a management perspective, a Program Management Office (PMO) provides oversight at the organizational level, helps develop policies to promote oversight and accountability, and develops reporting metrics.[753]

Accordingly, SoCalGas requests approval of the revenue requirement associated with the following O&M and Capital expenditures to continue execution of PSEP "as soon as practicable"[754] during 2019-2021:[755]

Table 18.E
Expenditure Forecast for Three-Years (2019-2021) ($000)

	O&M	Capital	Total
Pressure Test Projects	$233,895	$64,443	$299,338
Replacement Projects		$301,250	$301,250
Valve Enhancement Plan		$246,000	$246,000
Miscellaneous Costs	$15,573	$37,634	$53,206
Total	**$249,468**	**$649,326**	**$898,794**

748 *Id*. at 7, 12.
749 *Id*. at 12.
750 *Id*.
751 *Id*. at 13.
752 *Id*. at 15.
753 *Id*. at 36.
754 D.11-06-017 at 19.
755 In the event the Commission grants Applicants' request to add a fourth year to this GRC cycle, SoCalGas proposes adoption of the revenue requirement associated with the costs set forth in Section 18.10 *infra*.

18.4.2 ORA's Proposal

18.4.2.1 Summary

ORA does not oppose the scope of any of the projects proposed in this proceeding. ORA's opposition to SoCalGas' proposal is simply to the forecasted costs estimated by SoCalGas. ORA proposes costs for the projects – with the same scopes of work proposed by SoCalGas – utilizing statistical models (one for pressure test projects and one for replacement projects) that use five years of purported actual cost data associated with pressure test and pipeline replacement projects completed by SoCalGas, SDG&E, and other utilities, namely, PG&E and Southwest Gas Company (Southwest).[756] The result is forecasts – for the same scope of work – that are $90.588[757] million less than that estimated by SoCalGas.[758]

However, ORA's linear regression models are neither reliable nor credible for multiple reasons: (a) they are missing important project factors/explanatory variables; (b) they produce biased forecasts; (c) they are based primarily on PG&E data, but do not recognize or account for differences among utilities; and (d) the database underlying ORA's model for pressure test projects is composed almost entirely of PG&E projects and does not include the necessary and significant capital component of PG&E's pressure test projects.[759]

18.4.2.2 ORA's Models Do Not Include Important Cost Drivers

SoCalGas' witnesses explain:

> A prerequisite of a good regression model is that the model include *all* critical project factors or explanatory variables that can explain the variations in costs across projects. Omitting essential explanatory variables results in bias and inaccuracy in the estimates of the effects of the explanatory variables (estimated coefficients) that are included in the model, the model's forecast, and the prediction intervals of those forecasts. This renders such a model unreliable for forecasting purposes.[760]

ORA's models consider a limited number of cost drivers: project duration, project length, and pipeline diameter.[761] Based on these factors, ORA derives predicted costs for 19 of

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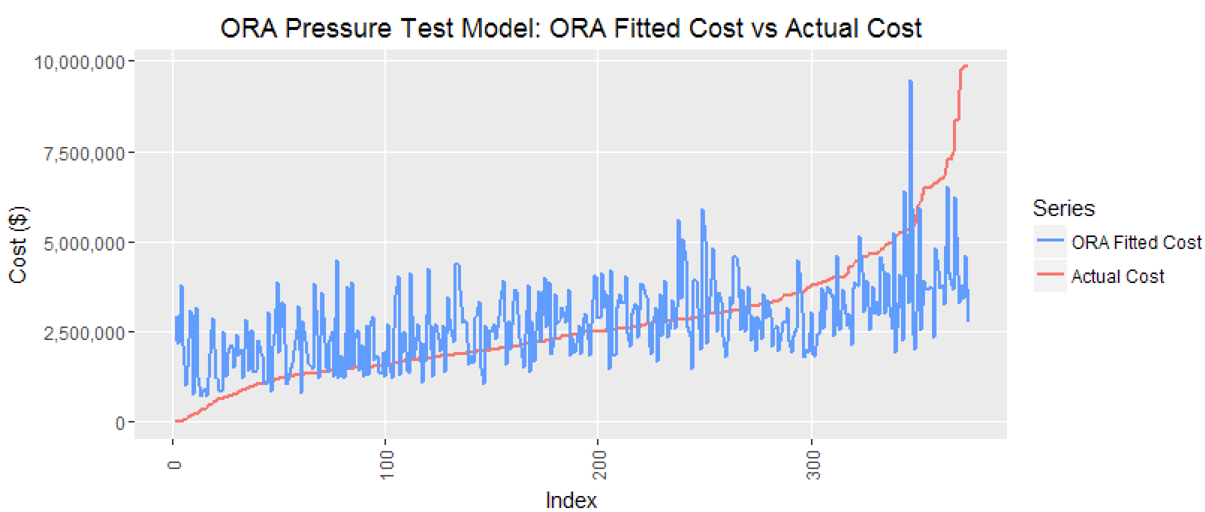
756 Ex. 398 ORA/Stannik and Li at 21-22.
757 Excludes fourth-year projects. Including fourth-year projects, ORA's total recommendation is $100.189 million less than Applicants' request.
758 *Id.* at 21.
759 Ex. 235 SCG/Phillips and Chaudhury at 9.
760 *Id.* at 10, citing Green, W.H. (2008) *Econometric Analysis*, p. 133-34. Upper Saddle River, N.J.: Prentice Hall.
761 Ex. 444 ORA/Stannik and Li at 0120-21.

the 29 projects proposed by SoCalGas herein.[762] However, the models exclude critical explanatory variables that drive project costs. The models are not able to project cost differences due to urban/rural locations, terrain, or differing environmental mitigation requirements.[763] The absence of these essential cost drivers results in biased models that are inappropriate for forecasting PSEP project costs.[764]

18.4.2.3 ORA's Models Fail to Include Essential Cost Drivers, Which Results in Biased Forecasts

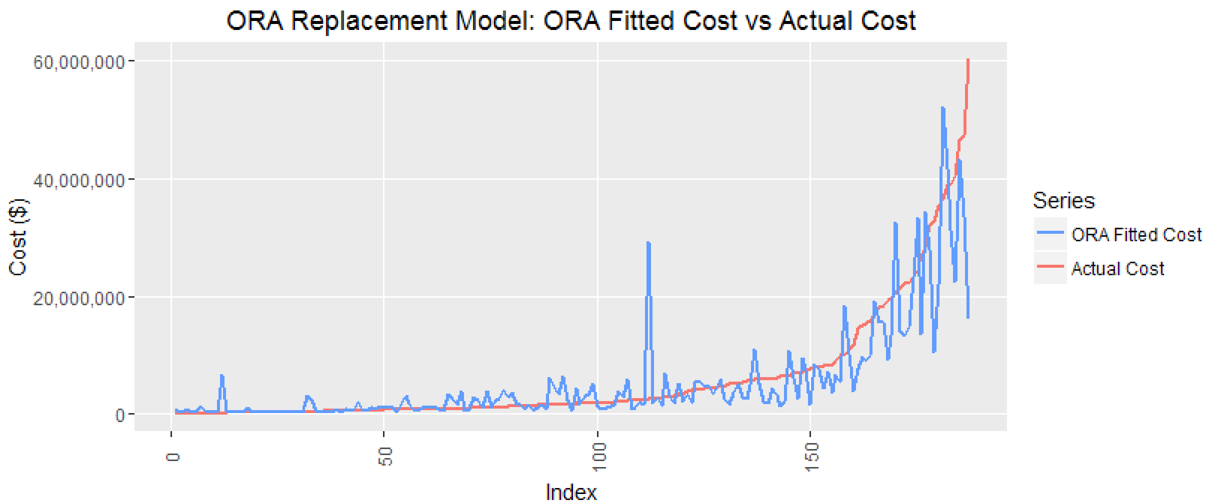
To test ORA's models' suitability for forecasting the costs of replacement and pressure test projects, SoCalGas replicated ORA's forecasting models[765] and compared the results from the models to the actual costs stated in ORA's database. SoCalGas found that both of ORA's models – for pressure test projects and for replacement projects – are biased systematically: lower-cost projects are over-forecasted and higher-cost projects are under-forecasted.[766]

Figure 18.A



[762] Ex. 398 ORA/Stannik and Li at 26.
[763] Ex. 235 SCG/Phillips and Chaudhury at 11.
[764] *Id.* at 11.
[765] The replication was based on ORA's workpapers, data request responses, and database underlying ORA's models. *Id.*
[766] *Id.* at 11-14.

Figure 18.B



As seen in Figures 18.A and 18.B above, the under-forecasting of costs by ORA's models is particularly egregious for the most-costly projects.[767] For the 265 lowest cost pressure test projects, the model over-forecasts by an average of $674,370 per project. (This is largely irrelevant to ORA since, when ORA's 90% threshold exceeds SoCalGas' forecasted amount, ORA recommends the Commission adopt SoCalGas' lower amount.[768] [This inconsistency by ORA in applying the results of its own models underscores the unreliability of the models.]) However, for the remaining 110 pressure test projects, the model under-forecasts by an average of $1,624,620 per project – more than double the average cost variance of the over-forecasts![769]

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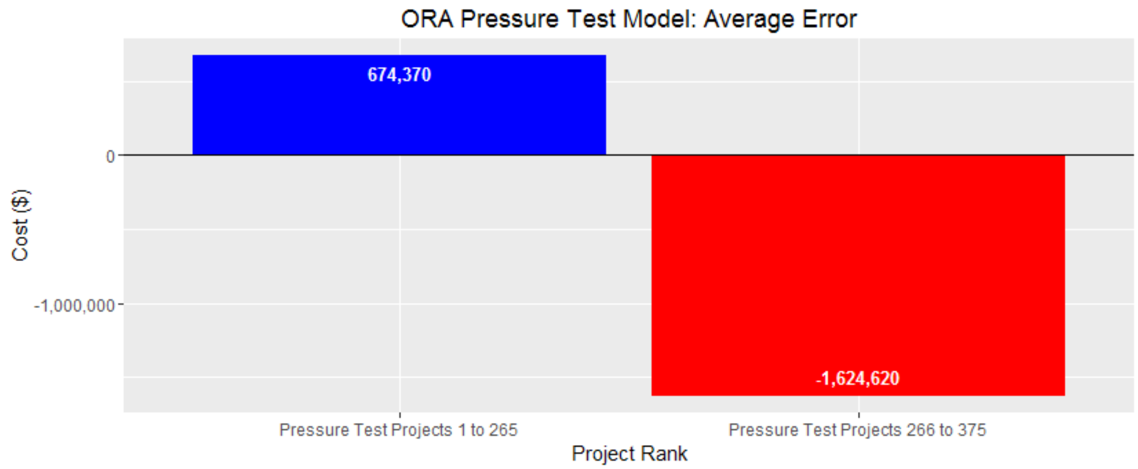
[767] *Id.* at 12.

[768] *Id.* at 19. ORA proposes to apply the results of its models inconsistently: when its model results in cost forecasts that are lower than SoCalGas' forecast, ORA proposes to apply its model; but when its model results in cost forecasts that are higher than SoCalGas' forecast, ORA proposes to ignore the results of its own model. *Id.*

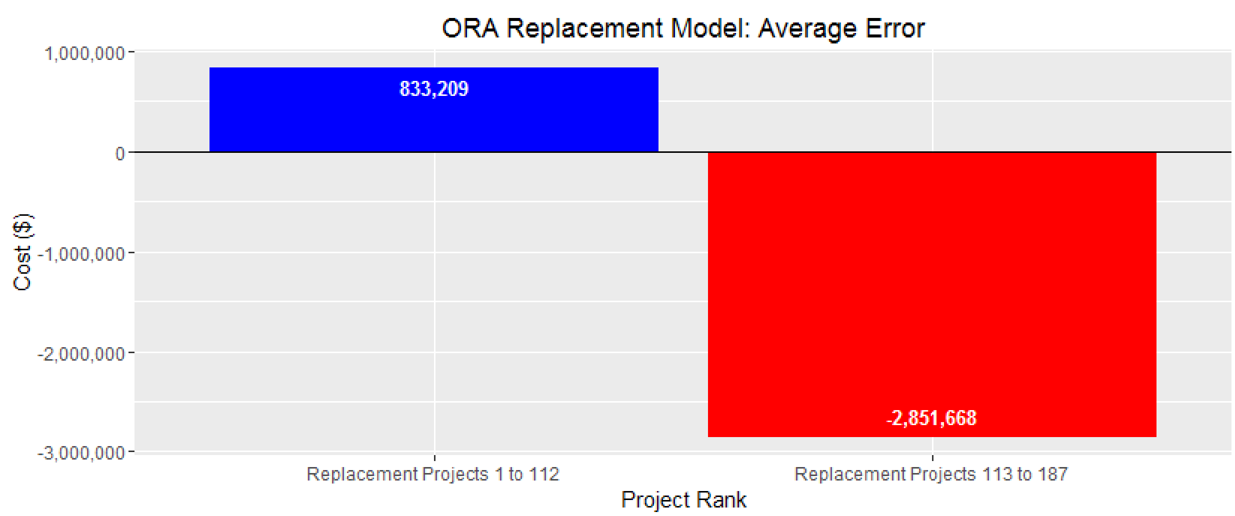
[769] *Id.* at 12-13.

Figure 18.C



Similarly, for replacement projects, ORA's model over-forecasts the 112 lowest-cost replacement projects by an average of $833,209 per project.[770] Again, this is not particularly germane to cost because, when ORA's 90% threshold exceeds the cost forecasted by SoCalGas, ORA recommends the Commission adopt SoCalGas' lower projected cost. But, the 75 highest-cost replacement projects are under-forecasted by ORA's model by an average of $2,851,668 per project![771] The tendency to deviate so significantly from actual costs indicates the models are unreliable.

Figure 18.D



[770] *Id.* at 13-14.
[771] *Id.* at 14.

Importantly, the bias in ORA's models' forecasts is directly translated into the 90% thresholds ORA applies to the forecasts to derive its recommended costs for the pressure test and replacement projects.[772] Although ORA purports its use of a 90% threshold is conservative,[773] its use does not make up for the inherent bias created by the model.

18.4.2.4 ORA's Models Fail to Recognize or Account for Differences Among Utilities, Which Results in Unreliable Forecasts

The overwhelming majority of the historical projects comprising the database underlying ORA's models are those of PG&E, yet neither model accounts for differences between Applicants and PG&E.[774] This is a significant difference that should not be ignored, as evidenced by the improved results yielded by SoCalGas when it enhanced ORA's models to account for it.[775]

SoCalGas augmented ORA's pressure test model with an additional explanatory variable that captures additional project cost due to project length for SoCalGas and SDG&E projects only.[776] The enhanced model, which incorporated this very important and highly statistically significant variable, explained PSEP project costs nearly 50% better than ORA's model.[777] ORA's replacement model was similarly augmented to capture additional SoCalGas and SDG&E project costs related to the duration of the projects. This model yielded similar results, *i.e.*, an indication that the additional variable is important for forecasting PSEP project costs.[778] There are aspects of SoCalGas and SDG&E projects that are in some way different from PG&E projects, and they are significant enough that they must be accounted for.[779] Nevertheless, ORA's models do not do so. It is important to note that, even enhanced, ORA's models forecast

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772 *Id.* ORA calculates 80% prediction intervals centered on its cost forecasts. This means that, if calculated correctly, there is an 80% probability that a project's cost will fall inside the interval and a 10% probability that a project's cost will fall below the interval. Thus, in actuality there is a 90% chance that a project's cost falls at or below the upper limit of this threshold. This is referred to as the "90% threshold" herein.

773 Ex. 398 ORA/Stannik and Li at 23.

774 Ex. 235 SCG/Phillips and Chaudhury at 15.

775 *Id*. at 15-16.

776 *Id*. at 16.

777 *Id*.

778 *Id*. at 16-17.

779 *Id*.

PSEP project costs poorly and are far inferior to SoCalGas' bottoms-up approach to detailed cost estimating which incorporates the relevant and unique cost drivers for each project.[780]

As stated in the prior section, biases in the forecasts produced by ORA's models flow fully into the 90% thresholds and are not diminished by use of the thresholds. Similarly, SoCalGas found that by improving ORA's models with an additional explanatory variable resulted in improvements in the 90% threshold as well.[781] Based on the foregoing, ORA's models, as used and applied by ORA, are not suitable for predicting the costs of the PSEP projects proposed herein.

18.4.2.5 ORA's Pressure Test Database Is Composed Almost Entirely of PG&E Projects Which Do Not Include the Significant Capital Component of PG&E's Pressure Test Projects

The database underlying ORA's pressure test model is composed of 365 PG&E projects (approximately 95% of the database) compared to only 20 of Applicants' projects (approximately 5%).[782] The basic assumption underlying ORA's entire analysis is that another utility's project costs are representative of Applicants' project costs. However, as illustrated by SoCalGas' enhancement of ORA's models,[783] there is strong statistical evidence that this is wrong. Moreover, there is evidence that there are fundamental differences in project scope, geography, and cost components.[784] As a consequence, ORA's pressure test model is wholly unreliable for predicting the costs of pressure tests.

PG&E's PSEP sequences projects different from Applicants' PSEP.[785] Whereas Applicants' initial pressure test projects (which are in ORA's pressure test database) were executed primarily in more populated/dense areas, it is SoCalGas' understanding that PG&E's earliest completed PSEP projects were executed in less populated/dense areas, where generally it is less costly to complete projects.[786] This is validated by comparing the cost-per-mile adopted by the Commission for PG&E in its 2015 Gas Transmission and Storage rate case ($840,000/mile) with the amount proposed by PG&E in its recent 2019 Gas Transmission and

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780 *Id*. at 18-19.
781 *Id*. at 17-19.
782 *Id*. at 19.
783 *Id*. at 15.
784 *Id*. at 19-20.
785 *Id*. at 19.
786 *Id*. at 20.

Storage rate case ($2,500,000/mile).[787] PG&E's request for the PSEP pressure test projects it intends to execute in the near future is *three times* the allowance the Commission approved in its prior rate case.

Further compounding the lack of parity, the PG&E pressure test projects in ORA's database exclude the capital component of each project's costs, but ORA nevertheless proposes to use just the O&M proportion of the project costs in its dataset to establish an effective cap for SoCalGas' pressure test projects, which include *both* O&M and capital costs.[788] ORA's attempt to use PG&E's data to predict the cost of SoCalGas' pressure test projects is thus flawed. Approximately 23% of SoCalGas' proposed pressure test cost estimates are capital.[789] According to PG&E's 2019 Gas Transmission and Storage rate case filing, the capital component of PG&E's pressure tests adds approximately 24% to the cost of PG&E's pressure tests.[790] This is a material component that is missing from ORA's proposed forecasts.

18.4.2.6 ORA's Proposal Does Not Satisfy the Commission's Requirement that PSEP Forecasts Be Based on Detailed Plans, and Thus Should Be Rejected as a Matter of Law.

In addition to the aforementioned factual reasons for rejecting the cost forecasts recommended by ORA based on its statistical models, ORA's methodology should be rejected as a matter of law because it does not comply with the Commission's mandate regarding forecast ratemaking for PSEP. The Commission stated in D.14-06-007, "It is only fair that ratepayers should have the benefit of detailed plans for this Commission to consider before authorizing or preapproving the expenditure of many hundreds of millions of dollars."[791] This decision was rendered following assertions that the Class 5 or Class 4 estimates submitted by Applicants in that proceeding were too rudimentary for ratemaking.[792]

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787 *Id.* at 20 (citing D.16-06-056 COL 21) and Appendix C.
788 *Id.* at 20.
789 *Id.*
790 *Id.* and Appendix D.
791 D.14-06-007 at 23.
792 A.11-11-002, Opening Brief of The Utility Reform Network on Pipeline Safety Enhancement Plan Issues at 76-79. TURN argued that the "Commission should defer adopting a forecast-based revenue requirement until it has the benefit of the more detailed engineering and design." *Id*. at 79. SCGC argued that "Applicants should be required to submit cost estimates in EAD proceedings that are no worse than Class 3 estimates and hopefully much better." A.11-11-002, Southern California Generation Coalition Opening Brief at 30.

ORA's proposed forecasts are derived from no more than three project characteristics: length, diameter, and duration.[793] These are not the "detailed plans" the Commission has stated are necessary for forecast ratemaking for PSEP.[794] "Detailed plans" can be found in SoCalGas' workpapers for the proposed projects.[795] But ORA did not use this information – other than the three aforementioned characteristics – in deriving its forecasts. ORA relied on the three project characteristics only. As such, these rudimentary forecasts do not satisfy the Commission's directive and therefore must be rejected as a matter of law.

18.4.3 SCGC/TURN's Proposal

SCGC/TURN propose that the Commission adopt SoCalGas' forecasts for the projects with two modifications: the "risk assessment," or "contingency factor," should be disallowed from pressure test and replacement projects on the basis that it represents a significant and unreasonable cost to ratepayers;[796] and construction costs for the Line 44-1008 project should be deferred on the basis that SoCalGas may not complete the necessary environmental review process in order to enter construction on this project during this rate case cycle.[797]

SCGC/TURN's first argument ignores the standard custom of the industry to include a risk assessment factor in order to produce a more accurate cost estimate.[798] As explained by Mr. Phillips, a risk assessment factor is a necessary component of an estimate and reflects expected, real costs.[799], [800] AACE International (AACE), the industry association of professionals in the field of estimating, states, "[c]ontingency is a cost element of an estimate to cover the probability of unforeseeable events to occur and that if they occur, they will likely result in additional costs

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793 Ex. 235 SCG/Phillips and Chaudhury at 16.
794 D.14-06-007 at 23.
795 Ex. 233-R SCG/Phillips.
796 Ex. 506 TURN-SCGC/Yap at 20.
797 *Id.* at 43-46.
798 Ex. 235 SCG/Phillips and Chaudhury at 21-26, Appendices A, E, F, G, I; Ex. 236 Technical Article Cost Contingency as the Standard Deviation of the Cost Estimate.
799 Tr. V22:2191-2193 (Phillips).
800 Ex. 235 SCG/Phillips and Chaudhury at 22, 26.

within the defined project scope."[801] Inclusion of contingency is not only expected, but it is integral to the development of accurate cost estimates.[802]

SoCalGas developed the risk assessment factor for each individual project by assembling a cross-functional team of subject matter experts within the PSEP project execution team and risk assessment experts within the PSEP cost estimating team to review risk variables (*e.g.*, assumptions on productivity for contractors, environmental costs, permit conditions, material costs, etc.).[803] These experts then discuss the plausible variances for these cost components.[804] For example, regarding contractor productivity, the team would discuss the probability of the contractor being less productive than planned and the magnitude of a potential reduction in productivity.[805] A similar discussion is had for each project-specific issue. The team uses their individual experiences and knowledge of the specific conditions of each particular project to develop a consensus opinion of potential outcomes.[806] This project-specific process aligns with AACE's recommended practices: "Project specific risks are those that are unique to a particular project's scope, strategies, attributes, and so on. The nature of these risks and extent of their impact are not consistent between projects in a given company."[807] SoCalGas' methods of developing the risk assessment factor is consistent with AACE's recommendation and the standard industry practice.[808]

An estimate that does not include contingency cannot be accurate. Contingency is *expected* to be expended.[809] To illustrate, Mr. Phillips provided an example of a recent occurrence on the Line 36-9-09 North Section 12 project proposed in this proceeding that will drive costs in excess of the base estimate. SoCalGas assumed, when at least 30% engineering was completed, that the pipeline would cross a creek through boring under the creek; however, a

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801 *Id.* at Appendix E, p. 7 (AACE International Transactions RISK.08 2009 Report "Defining Risk and Contingency for Pipeline Projects").

802 Ex. 235 SCG/Phillips and Chaudhury at 21-22. According to AACE, "[i]dentifying risk and determining an appropriate amount of contingency is a challenge that must be addressed to ensure accurate information is available to base critical financial decisions upon." *Id.* at Appendix E, p. 1.

803 *Id*. at 22-23.

804 *Id*.

805 *Id*.; Tr. V22:2175-2176.

806 Ex. 235 SCG/Phillips and Chaudhury at *id.*

807 *Id*. at Appendix E, p. 8.

808 *Id*. at 23-25.

809 *Id*. at 26; Ex. 236 Technical Article Cost Contingency as the Standard Deviation of the Cost Estimate. Tr. V22:2191-2193 (Phillips).

bore sample revealed the presence of oil.[810] In order to avoid extensive oil clean-up costs, it was determined that the pipe would be routed to a different location.[811] The result is that the engineering work completed thus far is largely unusable and will have to be done anew.[812] And, the new route will have to cross a street, which will result in additional costs.[813] These are additional costs that were not contemplated at the time of design and thus have not been accounted for in the base estimate.[814] This is but one example, and Mr. Phillips stated that he had many more similar examples.[815]

Disallowing contingency would be equivalent to disallowing another integral factor in a cost estimate, such as the cost of materials or inspectors.[816] Nevertheless, SCGC/TURN maintain this argument, and go even further to suggest that SoCalGas has already overpredicted the costs of the PSEP projects proposed to be completed during this rate case cycle.[817] However, SCGC/TURN do not, and cannot, support this with evidence. SoCalGas' bottoms-up approach to developing detailed cost estimates with a risk assessment factor derived from the collaboration of various subject matter experts based upon their experience and knowledge of the individual unique characteristics of each project is consistent with industry practices; SoCalGas' forecasts, inclusive of the risk assessment factor, should therefore be approved.

Similarly, SCGC/TURN have no factual basis – only speculation – to support their theory that SoCalGas will not be able to complete the portion of the Line 44-1008 project it proposes during this rate case cycle.[818] This theory, even if it were to bear out, ignores that SoCalGas has considered that any project – not just Line 44-1008 – may be delayed and, as such, has asked the Commission to adopt its project substitution proposal, discussed at Section 18.8, *infra*. SCGC/TURN support this proposal, which renders its position on Line 44-1008 baseless.

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810 Tr. V22:2196-2197 (Phillips).
811 *Id*. at 2197.
812 *Id*.
813 *Id*.
814 Mr. Phillips also explained that the estimators do not want to assume that the bad things will always happen. Tr. V22:2198 (Phillips). Thus, the estimates provided by SoCalGas, even including the risk assessment factor, may not be sufficient to cover reasonable costs that will be incurred in executing a project; thus, two-way balancing account treatment is all the more necessary.
815 *Id*.
816 Ex. 235 SCG/Phillips at 26.
817 Ex. 506 TURN-SCGC/Yap at 32-34.
818 *Id*. at 45.

SoCalGas' mandate from the Commission is to execute PSEP "as soon as practicable;"[819] delaying execution of PSEP on the basis that delays *may* come to fruition is inconsistent with the Commission's explicit orders. SCGC/TURN's proposal to exclude construction costs associated with the Line 44-1008 project therefore should be rejected.

18.4.4 IS Proposal

IS also proposes to disallow the risk assessment component of SoCalGas' PSEP forecasts (pressure test and replacement projects as well as the Valve Enhancement Plan) based on its opinion that SoCalGas can reduce the number of PSEP projects it executes during this rate case cycle if costs (exclusive of the risk assessment component) exceed the allowed forecasts.[820] In other words, IS proposes that SoCalGas slow down the pace of executing PSEP such that less costs are incurred in this rate case cycle. However, this is inconsistent with the Commission's directive that PSEP be executed "as soon as practicable."[821] IS proposal to reduce the scope of PSEP work in this rate case cycle should be rejected by the Commission on the basis that it is inconsistent with the Commission's safety objectives.

And, as stated in Section 18.4, supra, because the risk assessment factor is a necessary component of any estimate prepared in accordance with accepted industry practices, IS request to exclude the contingency factor from pipeline and Valve Enhancement Plan projects should be rejected.

18.5 Pace of Implementation of Valve Enhancement Plan

18.5.1 SoCalGas' Proposal

The Commission directed pipeline operators to address the installation of "automated or remote controlled shut-off valves" in their proposed implementation plans.[822] In response to that, Applicants submitted the Valve Enhancement Plan as part of their PSEP. The Valve Enhancement Plan works in concert with PSEP's pipeline testing and replacement plan to enhance system safety by enhancing existing valve infrastructure to accelerate Applicants'

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[819] D.11-06-017 at 19.
[820] Ex. 436 IS/Gorman at 33, 37.
[821] D.11-06-017 at 19; Pub. Util. Code § 957-958. Section 957 provides that "the commission shall additionally establish action timelines, adopt standards for how to prioritize installation of automatic shutoff or remote controlled sectionalized block valves pursuant to paragraph (1), ensure that remote and automatic shutoff valves are installed as quickly as is reasonably possible." *See also* Ex. 235 SCG/Phillips and Chaudhury at 34.
[822] D.11-06-017 at 21, COL 9, OP 8.

ability to identify, isolate, and contain escaping gas in the event of a pipeline rupture.[823] In order to maximize the cost effectiveness of this investment, Applicants' Valve Enhancement Plan enhances public safety through: (i) installation of Automatic Shutoff Valve (ASV)/Remote Control Valve (RCV) capability at intervals of approximately eight miles or less on pipelines that are twenty inches or greater in diameter; (ii) installation of ASV/RCV capability at intervals of approximately eight miles or less on pipelines twelve inches or greater in diameter that operate at a hoop stress level of 30% or more of SMYS;[824] and (iii) installation of ASV/RCV capability at shorter interval spacing (one-half to one mile) on up to twenty pipeline segments that meet the above criteria and also create a known geologic threat (*e.g.*, earthquake faults, landslide areas, washout areas, and other potential geologic or man-made hazards).[825]

SoCalGas' Valve Enhancement Plan has been underway for years as part of PSEP, and we propose to complete execution of the Commission-approved Valve Enhancement Plan by 2021, which is during this general rate case cycle.[826]

18.5.2 IS' Proposal

IS proposes that SoCalGas implement the Valve Enhancement Plan over six years (*i.e.*, two general rate case cycles).[827] This request, however, appears to be on the mistaken belief that the Valve Enhancement Plan is not an ongoing program and, instead, is commencing anew.[828] In fact, the Valve Enhancement Plan was mandated by the Commission in D.14-06-007,[829] has been well underway (Applicants have sought cost recovery for projects under the Valve Enhancement Plan in A.16-09-005[830]), and, in accordance with its natural life cycle of being implemented "as soon as practicable,"[831] the Valve Enhancement Plan is anticipated to come to an end by 2021.[832] It is contrary to the explicit mandate of the Commission to slow down the implementation of the

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823 Ex. 231 SCG/Phillips at 13-14.
824 Tr. V22:2216-2217 (Phillips).
825 Ex. 231 SCG/Phillips at 14.
826 *Id.*
827 Ex. 436 IS/Gorman at 41.
828 Ex. 235 SCG/Phillips and Chaudhury at 32-34.
829 D.11-06-017 at 21, COL 9, OP 8.
830 A.16-09-005, Application of Southern California Gas Company and San Diego Gas & Electric Company to Recover Costs recorded in the Pipeline Safety and Reliability Memorandum Accounts, the Safety Enhancement Expense Balancing Accounts, and the Safety Enhancement Capital Cost Balancing Accounts at 8-9.
831 D.11-06-017 at 19.
832 Ex. 231 SCG/Phillips at 14.

Valve Enhancement Plan as IS propose, and IS have proposed no reason for doing so other than to defer costs. This, however, is inconsistent with the Commission's expressly stated safety goals.[833] No other intervenors have opposed the pace recommended by SoCalGas for continuing execution of the Valve Enhancement Plan.

18.6 Allowance for Pipeline Failures

SoCalGas forecasted and requested an allowance for pipeline failures over the course of the rate case cycle in the event such costs are necessary. No party has opposed this request, except that ORA has proposed that the allowance not be provided if the Commission orders that PSEP costs should continue to be recorded to a two-way balancing account.[834] SoCalGas is unable to discern any reason for this distinction, and ORA has provided no argument in support of its request.[835] As such, ORA's request should be denied.

18.7 Two-Way Balancing Account Treatment

18.7.1 SoCalGas' Proposal

SoCalGas seeks two-way balancing account treatment,[836] on an aggregate basis, for costs incurred in executing the PSEP projects proposed to be executed during this general rate case cycle. This is consistent with the Commission's decision to order two-way balancing account treatment of costs incurred in executing Phase 1.[837] The Commission implemented balancing account treatment in order "to strike a fair balance between ratepayers and shareholders."[838] While the Commission ordered certain disallowances – activities and items for which Applicants would bear costs rather than ratepayers[839] – the Commission was clear that ratepayers should bear the reasonable costs of implementing PSEP that have not been disallowed:

> *This decision does not propose or adopt any penalty for SDG&E or SoCalGas*. We do however identify certain costs that should be absorbed by shareholders instead of ratepayers. Consistent with long-standing ratemaking principles, ratepayers will generally bear the reasonable costs for a safe and reliable natural gas transmission system.[840]

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833 Ex. 235 SCG/Phillips and Chaudhury at 32-34.
834 Ex. 398 ORA/Stannik and Li at 30.
835 *Id.*
836 The mechanics of the proposed PSEPBA are detailed in Ex. 181 SCG/Yu at 15.
837 D.14-06-007 at OP 4.
838 *Id.* at 19, 22.
839 *Id.* at 32-34, as modified by D.15-12-020.
840 *Id.* at 31 (emphasis added).

As ORA's witness Nils Stannik reasonably recognized on the record in a pending PSEP proceeding:

> As far as what the projects will ultimately cost, no one knows for certain what those will cost, not me, not anyone here. It won't be 100 percent certain until those are done. So I wouldn't want to say I know for sure or I can even be quite sure exactly what those are going to cost when they're completed because no one can.[841]

Indeed, no one can know what the actual costs of the twelve projects will be; therefore, the reasonable way to implement the Commission's intent for ratepayers to "bear the reasonable costs for a safe and reliable natural gas transmission system"[842] is to allow two-way balancing account treatment. In this way, if costs come in higher than estimated, SoCalGas is not penalized.[843] And, if costs come in lower than projected, ratepayers benefit from lower costs.

18.7.2 ORA's Proposal

ORA opposes two-way balancing account treatment on the basis that the time lapse between when the cost estimates are developed and the projects enter construction does not alone warrant such treatment, and that SoCalGas has not demonstrated that PSEP project costs inherently are unpredictable.[844] ORA acknowledges that the project costs are "fairly well-developed" and that the estimates include contingencies in certain categories to account for some level of cost uncertainty.[845]

These arguments, however, do not support requiring the PSEP projects proposed herein to be completed within a fixed budget. As indicated in Section 18.4, supra, contingency is not an addition to a cost estimate; it is a *necessary component* of a cost estimate. This is true no matter how well-developed the cost estimate is, *i.e.*, contingency is applied to all classes of estimates, from Class 5 to Class 1.[846]

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[841] A.17-03-021, Tr. V2:328:26 – 329:5 (Stannik).
[842] D.14-06-007 at 31.
[843] Mr. Phillips explained that costs can and do deviate from a base estimate due to factors outside the control of SoCalGas. Tr. V22:2196-2198. While some of these costs may be captured by the risk assessment factor, there is still a chance that reasonable costs that will be incurred in executing PSEP projects have not been accounted for in the estimate, thus underscoring the need for a two-way balancing account.
[844] Ex. 398 ORA/Stannik and Li at 29.
[845] *Id.*
[846] Ex. 235 SCG/Phillips and Chaudhury at 20-25.

In opposing two-way balancing account treatment because PSEP projects should not be unpredictable inherently (notwithstanding the clear statement to the contrary by ORA's witness[847]), ORA fails to account for the nature of PSEP projects. PSEP is the result of specific Commission and Legislative directives to pressure test or replace in-service transmission lines.[848] SoCalGas has provided specific scopes of work for specific pipeline projects proposed to be completed during this rate case cycle.[849] This is different from the vast majority of work proposed in this proceeding. SoCalGas will not have discretion to manage broad categories of activities within an overall authorized amount. Where, as here, there are detailed and discrete scopes of work for specific projects which *must* be executed, and where the only certainty is that actual costs will deviate from even the most robust estimates, a two-way balancing account is the best way to protect the interests of both ratepayers and SoCalGas.[850] Even more, during the (at minimum) three-year lapse between the preparation of the cost estimates in this Application and the start of construction, external forces are likely to come into play that may impact what was a reasonable cost estimate at the time it was prepared.[851] Construction, contractor, and material costs may change, and new environmental regulations may be enacted.[852] To illustrate: as PSEP transitions into the GRC process, there will be a time lag between the completion of Phase 1A work and commencing construction on the projects included in this Application. During this time, specialized contractor resources, such as welding and coating inspectors, that have completed the appropriate operator qualification process and training on applicable safety requirements can – and will – leave jobs with Applicants to find steadier work during this dip in pipeline construction activity, often venturing outside California.[853] A reduction in the labor pool in all likelihood will drive up costs and impact rates. The alternative – adding new specialized contractor personnel that are not well-versed in Applicants' standards – would not be

[847] A.17-03-021, Tr. V2:328:26 – 329:5 (Stannik).
[848] Ex. 235 SCG/Phillips and Chaudhury at 37.
[849] *Id.*
[850] *Id.*
[851] *Id.*
[852] *Id.* As noted by the witnesses, at the time rebuttal testimony was submitted in this proceeding, steel tariffs had been announced, implemented, and put on hold *multiple* times, for various countries. *Id.* at n.104.
[853] *Id*. at 38-39.

as productive or efficient as new personnel would need to become familiar with company-specific work methods.[854]

Moreover, ORA's proposal for no regulatory accounting treatment whatsoever is contrary to the Commission's prior PSEP decision in that it would act as a penalty against SoCalGas and would not allow for the reasonable costs of implementing PSEP to be paid by ratepayers. Without a two-way balancing account, SoCalGas would have to absorb unanticipated, but reasonably incurred costs – effectively a penalty, which the Commission explicitly stated was not intended.[855] There is no support for ORA's proposal to deviate so significantly from the Commission's prior PSEP decisions.

18.7.3 SCGC/TURN's Proposal

SCGC/TURN also oppose balancing account treatment on the theories that PSEP projects are not fundamentally different from other natural gas utility activities that do not receive balancing accounting treatment, PSEP projects are well-defined, and Phase 1B and 2A projects have fewer uncertainties than Phase 1A projects because they are in more rural locations.

For the reasons stated in Section 18.7.2 supra, SCGC/TURN's proposal is also unsupported. PSEP projects are different from the vast majority of the requests in this general rate case Application. Even a brief review of the requests in this proceeding establishes this fact. Moreover, it is not only untrue that Phase 1B and 2 projects necessarily should cost less than Phase 1A projects; it simply is not relevant whether Phase 1A projects were more expensive than the projects proposed herein because SoCalGas developed cost estimates utilizing a bottoms-up, zero-based approach,[856] not likening similar-ish projects (due to project length, diameter, duration, etc.) based on a handful of shared attributes (as ORA and SCGC/TURN did). SoCalGas derived estimates for each specific project based on its unique collection of individual characteristics; relativity to Phase 1A projects is thus irrelevant. SCGC/TURN's recommendation against continuing two-way balancing account treatment for PSEP should be denied.

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[854] *Id.* at 39.
[855] D.14-06-007 at 31.
[856] Ex. 231 SCG/Phillips at 22.

18.7.4 IS Proposal

IS opposes two-way balancing account treatment on the basis that such an account would remove any economic incentive for SoCalGas to manage PSEP costs. This argument, however, devalues the facts that this regulatory accounting mechanism (a) exists and (b) was already granted to PSEP projects; and moreover ignores that Applicants commenced PSEP under the auspices of reasonableness reviews, wherein intervenors and the Commission scrutinize the reasonableness of costs and decisions made by Applicants in executing PSEP. IS appears to assume that SoCalGas would change their prudent decision-making processes and methods of executing PSEP simply because they are no longer subject to reasonableness reviews. The results of the first reasonableness review for PSEP strongly support granting SoCalGas a two-way balancing account because Applicants are proven reasonable and prudent managers: the Commission reviewed and approved all costs requested in executing PSEP, with the exception of certain specific insurance costs which Applicants may re-present to the Commission in the future for recovery.[857]

18.7.5 CUE's Proposal

CUE supports SoCalGas' request for two-way balancing account treatment for PSEP project costs in recognition of the fact that the costs in question are subject to upward and downward uncertainty.[858] CUE astutely notes that, because ORA's models have predicted costs greater than SoCalGas' forecasts for certain projects, SoCalGas may in fact have *under*-forecasted some of their projects.[859]

CUE also states that if the Commission were to adopt one-way balancing account treatment – although CUE does not advocate this – then it should only do so if the Commission also adopts the higher forecast, whether ORA's or SoCalGas', for each project.[860]

18.8 Authority for Project Substitution

18.8.1 SoCalGas' Proposal

SoCalGas requests authority to substitute one or more PSEP projects with other PSEP projects in the event there is a delay in commencing construction of one of the projects presented

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[857] D.16-12-063 at OP 5.
[858] Ex. 370 CUE/Marcus at 20.
[859] *Id*. at 21.
[860] *Id*. at 7.

herein due to circumstances not within SoCalGas' control (*e.g.*, if there is a delay in obtaining a necessary permit or land rights) or when it is prudent to accelerate the execution of a PSEP project for operational, reliability, or safety enhancement reasons.[861]

When project substitution is necessitated, substitute projects would be selected such that the costs of completing the substituted project(s) would not cause SoCalGas to exceed the aggregate amount authorized for recovery by a decision in this proceeding.[862] Prior to substituting a project, SoCalGas proposes to file a Tier One advice letter to notify the Commission and interested parties of the following: (a) the identity and general scope of the delayed project; (b) the circumstances that led to the change in the execution timing of the substituted project; (c) the project(s) proposed to be executed in lieu of the substituted project; (d) a description of the scope of the substitute project; and (e) an estimate of the cost to complete the project.[863]

This proposal is based on the possibility that circumstances might arise which necessitate advancing another project or delaying a scheduled project during the general rate case cycle. To illustrate, Line 235 experienced a service rupture in October 2017 that necessitated remediation. It is likely that some of this remediation work will address portions of the pipeline that were proposed to be addressed by a project in this proceeding (the Line 235 Section 1 and/or Section 2 pressure tests).[864] In the event some of the scope of work proposed in these projects is addressed outside of PSEP, then SoCalGas would like the authority to address another project so as to maintain the pace of executing PSEP.

18.8.2 ORA's Proposal

ORA supports the concept of project substitution, but proposes that the recommended substitutions be scrutinized through an expedited pre-approval process similar to what the Commission uses in evaluating "some interstate gas capacity contracts"[865] by a working group composed of representatives from Applicants, the Commission's Energy and Safety and Enforcement Divisions, ORA, TURN, and OSA.[866] Alternatively, ORA proposes that project

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[861] Ex. 231 SCG/Phillips at 56.
[862] *Id.*
[863] *Id.*
[864] *Id.*
[865] Ex. 398 ORA/Stannik and Li at 31.
[866] *Id.* at 30-31.

substitution should be permitted in a narrow, well-defined set of circumstances, or if projects are of similar cost and scope (*e.g.*, same type, length, cost, etc.).[867] ORA argues that, unless the Commission modifies SoCalGas' project substitution proposal as it recommends, the Commission should deny the proposal.

While SoCalGas appreciates ORA's acknowledgement that project substitution is both reasonable and necessitated under certain circumstances, ORA's proposals add too much time and complexity to implementing PSEP.[868] Even with an "expedited" approval process, the length of time required for the parties to convene and review the reasonableness of cost estimates will take significant time and interfere with SoCalGas' ability to execute PSEP "as soon as practicable."[869] As such, the Commission should approve SoCalGas' project substitution proposal.

18.8.3 SCGC/TURN's Proposal

SCGC/TURN support SoCalGas' project substitution proposal so long as the Commission is clear that unanticipated conditions necessitating project substitution do not include mere exceedance of forecasts.[870] SoCalGas has been clear that it does not intend to use the project substitution process for this purpose;[871] thus, there appears to be consensus between SoCalGas and SCGC/TURN with respect to SoCalGas' project substitution proposal.

18.9 "Modern Standards" Requirement

18.9.1 SoCalGas' Proposal

SoCalGas seeks clarification as to the Commission's intent in concluding in its primary PSEP decision "that all natural gas transmission pipelines in service in California must be brought into compliance with modern standards for safety. Historic exemptions must come to an end with an orderly and cost-conscious implementation plan."[872] In furtherance of this directive, the Commission ordered SoCalGas and other California pipeline operators to "file and serve a

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[867] *Id.* at 31-32.
[868] Moreover, ORA's proposal is not a new concept. SCGC made a similar proposal in A.11-11-02 for an Expedited Application Docket procedure to review Applicants' PSEP projects, but the Commission rejected this proposal in D.14-06-007. Ex. 235 SCG/Phillips and Chaudhury at 39 (citing D.14-06-007 at 23).
[869] D.11-06-017 at 19.
[870] Ex. 506 TURN-SCGC/Yap at 48.
[871] Ex. 235 SCG/Phillips and Chaudhury at 39-40; Ex. 231 SCG/Phillips at 56.
[872] D.11-06-017 at 18.

proposed Natural Gas Transmission Pipeline Comprehensive Pressure Testing Implementation Plan (Implementation Plan) to comply with the requirement that *all in-service natural gas transmission pipelines in California has been pressure tested in accord with 49 CFR 192.619, excluding subsection 49 CFR 192.619(c)*."[873] SoCalGas understands this language to require gas utilities to propose a plan to validate that all in-service natural gas transmission pipelines in California "have been pressure tested in accord with 49 CFR 192.619, excluding subsection 49 CFR 192.619(c)," *i.e.*, to the "modern standard" set by 49 CFR 192 Subpart J.

SoCalGas included this request in this proceeding pursuant to an agreement with ORA and SCGC/TURN in a pending PSEP proceeding.[874] In prior PSEP proceedings, parties have expressed different interpretations of the language in D.11-06-017 and SoCalGas' obligations with respect to PSEP.[875] SoCalGas requests that the Commission clarify State policy regarding pipelines that have documentation of a pressure test that pre-dates adoption of federal pressure testing requirements (*i.e.*, those categorized as Phase 2B in Applicants' PSEP). Resolution of this issue in this Application will enable SoCalGas prudently to design and plan remaining PSEP projects without delay.

18.9.2 ORA's Proposal

ORA disagrees with SoCalGas' understanding of the Commission's intent that the work that is defined as Phase 2B has been ordered by the Commission to be executed as part of PSEP.[876] In support of its position, ORA cites language from D.15-03-049, which found that Applicants' shareholders are responsible for the cost of testing pipelines installed between 1956 and 1961 for which Applicants do not have a record of a pressure test.[877] However, reliance on this decision is misplaced because it does not address pressure testing pre-1970 pipelines for which there *is* a record of a pressure test, which is the question at issue here.

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[873] D.11-06-017 at OP 4 (emphasis added).

[874] Ex. 235 SCG/Phillips and Chaudhury at 41, n.121 (citing A.16-09-007, Assigned Commissioner's Scoping Memo and Ruling at 4-5). Notwithstanding this agreement, and after the Scoping Memorandum and Ruling in this proceeding specifically included this issue within the scope of this proceeding, SCGC/TURN filed a petition for modification of D.11-06-017 on just this issue. *See* Assigned Commissioner's Scoping Memorandum and Ruling at 4-5.

[875] Ex. 231 SCG/Phillips at 57.

[876] Ex. 398 ORA/Stannik and Li at 32.

[877] *Id.* at 33.

Moreover, ORA's interpretation ignores the plain language of D.11-06-017 which states pipeline operators should be required to pressure test or replace all pipelines not tested in accordance with federal regulations adopted in 1970 (*i.e.*, Subpart J):

> Natural gas transmission pipelines placed in service prior to 1970 were not required to be pressure tested, and were exempted from then-new federal regulations requiring such tests. These regulations allowed operators to operate a segment at the highest actual operating pressure of the segment during the five-year period between July 1, 1965 and June 30, 1970.[878]
>
> Natural gas transmission pipeline operators should be required to replace or pressure test all transmission pipeline *that has not been so tested*.[879]

The intent of the Commission is clear, and ORA's position is not supported.

18.9.3 SCGC/TURN's Proposal

SCGC/TURN also argue that SoCalGas is not required to comply with these explicit directives from the Commission and on that basis argue that the Commission clarify that Phase 2B need not be executed.[880] In making this recommendation, SCGC/TURN selectively quote language in Commission decisions regarding when the costs of testing or replacing post-1955 pipe cannot be recovered in utility rates.[881] Specifically, Catherine Yap states on behalf of SCGC/TURN, "the Applicants' interpretation of D.11-06-017 is clearly contradicted by Ordering Paragraph 3 of the same decision, which states: 'A pressure test record must include all elements required by the *regulations in effect when the test was conducted*. For pressure tests conducted prior to the effective date of General Order 112, one hour is the minimum acceptable duration for a pressure test.'"[882] Witness Yap further states:

> In subsequent decisions the Commission made it abundantly clear that the PSEP does not include pipeline segments for which the Applicants have a record of a pressure test that was required at the time the pipeline was constructed. In D.16-06-007, the Commission ordered that the costs of pressure tests "must be absorbed by the shareholders of SDG&E and SoCalGas in situations where the company has failed to maintain records of strength testing required at the time of installation of the pipeline.[883]

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878 D.11-06-017 at FOF 6.
879 *Id.* at FOF 7 (emphasis added).
880 Ex. 235 SCG/Phillips and Chaudhury at 41.
881 Ex. 506 TURN-SCGC/Yap at 49.
882 *Id.* (emphasis in original).
883 *Id.*

This language pertains to disallowances, not whether the pipelines must be pressure tested or replaced. Witness Yap states further: "about eighteen months later, in D.15-12-020, the Commission said there should be a disallowance 'where pressure test records are not available that provide the minimum information to demonstrate compliance with the industry or regulatory strength testing and record keeping requirements then applicable…."[884] Again, this language does not address the Commission's express mandate that all transmission pipelines in the State must be brought into compliance with 1970 pipeline regulations. Rather, this language pertains to certain segments for which Applicants may not obtain rate recovery. It is incongruous for SCGC/TURN to argue that the above-quoted language about rate recovery indicates Phase 2B work has not been ordered: work would have to be performed as part of PSEP for rate recovery to even be implicated.

If, however, the Commission did not intend for Phase 2B work to be included within the scope of PSEP, SoCalGas has two requests with respect to this clarification. First, the ruling should be applied prospectively, and certain Phase 2B work should be permitted on a case-by-case basis depending on pipeline condition and project needs.[885] Second, SoCalGas requests that the Commission clarify that the documentation requirements set forth in Subpart J subsection 49 CFR 192.517 are not required for pipelines that are constructed prior to the adoption of the federal regulation (to be clear, *a* record of a pressure test meeting then-applicable standards would still be required). According to SoCalGas' interpretation of D.11-06-017, a pipeline operator would be out of compliance if it does not have all the documentation required by Subpart J, even if that documentation was not required by earlier standards and guidelines. The following table summarizes SoCalGas' understanding of documentation requirements that were not required prior to adoption of 49 CFR 192 in 1970:

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[884] *Id.*
[885] Ex. 235 SCG/Phillips and Chaudhury at 42.

Table 18.F
Documentation Requirements - >20% Specified Minimum Yield Strength (SMYS)

	Pre-1955	**1955-1961**	**1961-1970 (GO 112)**	**Post 1970 (49 CFR 192 Subpart J)**
Test Duration	No	No	No	Yes
Record of Pressure Readings	No	No	No	Yes
Significant Elevation Changes	No	No	No	Yes
Disposition of Leaks and Failures	No	No	No	Yes

If it is the Commission's intent that the documentation requirements of 49 CFR 192.169 (excluding subsection 49 CFR 192.619(c)) are not required for tests conducted prior to the effective date of Subpart J in November 1970, the Commission should state so explicitly.

18.10 Fourth Year

18.10.1 SoCalGas' Proposal

In the event the Commission grants SoCalGas' request for a four-year GRC term,[886] SoCalGas anticipates completing an additional five pressure test projects and three replacement projects within the additional year. These eight individual projects have been identified and scoped, and preliminary cost estimates have been prepared for them totaling $51,879,000 in O&M and $107,034,000 in Capital expenditures.[887] Thus, if a fourth year is added to the GRC cycle, SoCalGas' PSEP's request should be considered to be for the revenue requirement associated with the following O&M and Capital expenditures:

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[886] Ex. 242 SCG/Malik at 2-3.

[887] Ex. 231 SCG/Phillips 49-54. Additional PMO costs are also expected to be incurred in the fourth year as follows: $3,897,000 in O&M and $9,092,000 in Capital. *Id.* at 54.

Table 18.G
Summary of O&M and Capital Expenditures for Four-Year (2019-2022) GRC Cycle (Thousands)

	O&M	Capital	Total
Pressure Test Projects	$285,774	$86,610	$372,384
Replacement Projects		$386,117	$386,117
Valve Enhancement Plan		$246,000	$246,000
Miscellaneous Costs	$19,470	$46,726	$66,196
Total	**$305,244**	**$775,453**	**$1,070,697**

18.10.2 ORA's Proposal

ORA has not opposed Applicants' requests for fourth-year costs pertaining to replacement projects or miscellaneous costs for PMO.[888] ORA has proposed a reduction of approximately $9,601,000 with respect to pressure test projects proposed to be executed by Applicants if the Commission adopts a four-year GRC cycle.[889] These reductions are based on the results of applying ORA's pressure test linear regression model. As such, Applicants recommend that these reductions be rejected for unreliability and inaccuracy, for the same reasons stated *supra* at Section 18.4.

18.10.3 SCGC/TURN's Proposal

SCGC/TURN do not oppose Applicants' request for fourth-year miscellaneous costs for PMO. SCGC/TURN do, however, propose reductions of approximately $14,569,000 for pressure test projects and $77,713,000 for replacement projects. The reduction for pressure test projects is based on SCGC/TURN's misconception that a risk assessment factor is not a necessary component of an estimate. For the reasons stated *supra* at Section 18.4, this request must be rejected. With respect to replacement projects, SCGC/TURN also propose to exclude the risk assessment factor to the tune of $37,505,000; this request should be rejected for the same reasons.

SCGC/TURN also propose to omit the construction costs associated with the completion of the Line 44-1008 project (SCGC/TURN propose Applicants recover $700,000, whereas Applicants' have requested $76,582,000) on the basis that Applicants may not complete the

[888] Ex. 398 ORA/Stannik and Li at 27-28.
[889] *Id.*

necessary environmental review process during the four-year GRC cycle.[890] This is the same basis for SCGC/TURN's recommendation that construction costs expected to be incurred during the three-year GRC cycle should be rejected. SCGC/TURN's position that there certainly will be at least a two-year delay in commencing construction on the Line 44-1008 project is untenable. Moreover, Applicants' project substitution proposal more than accounts for the possibility that projects could be affected by delays, and SCGC/TURN support this proposal (as discussed *supra* at Section 18.8). SCGC/TURN's request to plan to delay the Line 44-1008 project should be rejected.

18.10.4 Indicated Shippers' Proposal

Indicated Shippers has not opposed the amounts requested by Applicants for fourth-year projects.[891] Indicated Shippers has, however, stated an opposition to a four-year GRC cycle; this position is addressed in the Direct Testimony of Jawaad Malik and the Rebuttal Testimony of Sandra Hrna.[892]

18.11 Conclusion

In summary, Applicants developed detailed cost estimates in support of the scoped-out PSEP pipeline pressure test and replacement and Valve Enhancement Plan projects proposed in this proceeding. In accordance with industry standards, the forecasts for the individual projects include a risk assessment component based on the attributes of that project; any cost estimate would be woefully incomplete without it. The Commission should approve the forecasts presented to it so Applicants may continue to execute important safety work and to meet the Commission's directive to execute PSEP as soon as practicable while meeting Applicants' PSEP objectives to (1) enhance public safety; (2) comply with Commission directives; (3) minimize customer impacts; and (4) maximize the cost effectiveness of safety investments. Moreover, the Commission should approve Applicants' request for two-way balancing account treatment as it provides assurance to customers that they will not pay more than the actual costs of completing these safety-related projects. Applicants' requests for project substitution and a pipeline failure allowance also should be granted in their entirety. Finally, the Commission should clarify whether Phase 2B work is required to be executed as part of PSEP.

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[890] Ex. 506 TURN-SCGC/Yap at 43-44, 46.
[891] Ex. 436 IS/Gorman.
[892] Ex. 242 SCG/Malik; Ex. 244 SCG/Hrna.

19. Procurement

19.1 Gas Procurement

SoCalGas' Gas Procurement's (Gas Acquisition) request is described and justified in Gas Acquisition's requested funding and forecasted activities for 2017-2019.[893] SoCalGas requests TY 2019 O&M funding totaling $4.230 million, an increase of $317 thousand over BY 2016 costs of $3.913 million. The $317 thousand increase consists of $267 thousand in labor for primarily filling existing vacancies and a reasonable $50 thousand increase in non-labor costs.

ORA was the only party to contest Gas Acquisition's request. ORA recommended an adjustment of $250,000[894] related to the two vacancies in the department.[895] ORA took issue with the TY 2019 O&M forecast for Gas Acquisition labor costs opposing ratepayer funding for two vacant positions, (1) a Director and (2) a Supply Forecast Analyst. ORA stated that SoCalGas had requested and was approved funding for these two positions in the previous TY 2016 GRC.[896] In addition, ORA stated that although the Commission previously authorized funding for the two positions, SoCalGas did not fill the positions and has been able to conduct its procurement activities without staffing the two positions since 2014.[897]

The following table summarizes SoCalGas' and ORA's positions:

Table 19.A

TOTAL O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SoCalGas	**$3,913**	**$4,230**	**$317**
ORA	**$3,913**	**$3,990**	**$77**

893 *See generally* Exs. 282-284 SCG/Lazarus.

894 Table 15-1, included in the ORA Report on the Results of Operations for San Diego Gas & Electric Company, Southern California Gas Company Test Year 2019 General Rate Case, SDG&E Electric and Fuel Procurement, SCG Gas Acquisition by Fransiska Hadiprodjo, incorrectly reflects as $250,000 the difference between Sempra Proposed and ORA recommended funding on the "SCG Gas Procurement" line of the table. Ex. 410 ORA/Hadiprodjo at 2. The corrected dollar difference for ORA's recommended adjustment should be $240,000. For the purposes of this brief, the $250,000 number will be used throughout instead of the $240,000 that would be reflective of the difference of $4.230 million and $3.990 million.

895 *Id*. at 8:5-9.

896 Ex. 410 ORA/Hadiprodjo at 7:13-15 (referring to D.16-06-054.)

897 *Id*. at 8:3-5.

SoCalGas disagrees with ORA's recommendation. SoCalGas' TY 2019 requested O&M funding is necessary to support the procurement of natural gas for SoCalGas and SDG&E core customers,[898] as well as the procurement of Cap-and-Trade emissions compliance instruments for SoCalGas covered end-use customers and transmission and storage facilities. More importantly, the requested O&M funding will enable Gas Acquisition to meet department priorities including providing reliable gas supplies to core customers cost-effectively,[899] and to lower customer carbon emission costs using Commission-authorized procurement tools. SoCalGas' forecast is a conservative one, proposing no incremental increase in headcount and filling two existing vacancies.[900] In an effort to control labor costs, Gas Acquisition is striving to maintain staffing at BY 2016 levels despite significant incremental activities/responsibilities being placed on its staff such as the procurement, regulatory, and administrative activities associated with Cap & Trade[901] as well as other Gas Acquisition recent and expected future increased activities including the following:

- Procurement of Renewable Natural Gas[902] (RNG): Anticipated potential future procurement[903] and recent Commission approved procurement[904] of RNG volumes to meet a portion of core load will increase workload including the following activities: 1) RNG / biogas market analysis, 2) physical and financial trading, 3) contract negotiation and administration, 4) settlement, 5) regulatory reporting, 6) management and administration of environmental credits that are generated when RNG is used for transportation load, and 7) regulatory and financial accounting.
- Operational Constraints[905]: Certain pipeline and storage field operational constraints (primarily maintenance-related events) occurring on SoCalGas' system have resulted in

898 Pursuant to the Omnibus Decision (D.) 07-12-019 at Ordering Paragraph (OP) 4, the core portfolios of SoCalGas and SDG&E were consolidated into one single portfolio managed by SoCalGas' Gas Acquisition Department, effective April 1, 2008.

899 Under SoCalGas' Gas Cost Incentive Mechanism (GCIM) Years 1-24, Gas Acquisition has saved ratepayers a total of $1.027 billion in gas costs. Application of Southern California Gas Company Regarding Year 24 of Its Gas Cost Incentive Mechanism, A.18-06-009 at Attachment A, Table 1, p.3.

900 Ex. 282 SCG/Lazarus at 8:9-19.

901 *Id.* at 8-9; Ex. 284 SCG/Lazarus at 4-5.

902 Ex. 282 SCG/Lazarus at 11:26-29

903 SB 1440, pending signature by the Governor, proposes that California gas corporations procure biomethane consistent with specified conservation requirements and policies in current law, and other requirements including that the gas corporations collectively procure RNG at a level to be determined by the CPUC.

904 The Commission approved SoCalGas Advice Letter No. 5295, "Balancing Account and Rate Schedule Modifications Supporting a Voluntary Renewable Natural Gas Procurement Pilot" on July 5, 2018.

905 Ex. 284 SCG/Lazarus at 5-7.

increased procurement and related support activities to ensure reliability of core flowing supplies at SoCalGas' city gate and to maximize core storage gas.

- Increased Analytical Work: Increased monitoring and analysis of factors impacting gas prices and understanding of price interactions among various producing regions.
- Monitoring Exports Activity: Monitoring increased exports to Mexico, as well as increasing LNG exports, and their impact on domestic prices.

Also, the incremental responsibilities related to RNG, operational constraints, increased analytical work and export activities facing Gas Acquisition would have justified adding additional employees. However, Gas Acquisition elected to maintain the same BY 2016 staffing level with the assumption that the two vacant positions would be filled and used to meet the additional responsibilities. In fact, the Director position was filled on an interim basis as of April 2018 (after direct testimony was filed in October 2017), and Gas Acquisition is currently in the process of filling the Supply Forecast Analyst position.[906] As such, SoCalGas disagrees with ORA's recommended decrease in labor funding for the Director and Supply Forecast Analyst positions as these positions are instrumental to Gas Acquisition's success in both the near and long-term in meeting department goals of cost-effective and reliable natural gas and cost-effective Cap-and-Trade compliance instruments.

Further, ORA's argument that Gas Acquisition has been able to conduct its procurement responsibilities without filling the vacancies assumes that Gas Acquisition responsibilities have remained unchanged since 2014 and fails to consider the additional responsibilities[907] that Gas Acquisition has been and continues to face. To continue to meet its goals, Gas Acquisition relies upon a skilled, experienced and professional department at optimal staffing levels. Funding for Gas Acquisition's two existing vacant positions contributes to the optimal staffing level, therefore ORA's recommendation to eliminate funding for the two vacant positions should be denied.

19.2 Electric and Fuel Procurement (E&FP) – (SDG&E Only)

SDG&E's Procurement, also referred to as E&FP, testimony and workpapers, supported by witness Kendall Helm, describes and justifies SDG&E's forecasted activities from 2017-19.[908] SDG&E forecasts a level of O&M costs in the test year necessary to plan, manage, and maintain the required expertise in order to sustain its mission of providing clean, safe, and

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[906] Ex. 284 SCG/Lazarus at 2:5-12.
[907] *Id.* at 4:2-7.
[908] Exs. 285-286 SDG&E/Helm.

reliable energy under an evolving technology and regulatory landscape.[909] Accordingly, SDG&E is requesting the Commission adopt SDG&E's E&FP TY 2019 forecast of $8.641 million of O&M expenses for E&FP to fulfill its responsibility for planning, procuring, managing, and administering the energy supply resources needed for SDG&E to deliver clean, safe, and reliable electricity to its approximate 3.6 million customers.[910] This request is consistent with O&M expenses recorded in prior years and represents an increase of $679,000 in O&M expenses from the 2016 adjusted recorded amounts.[911]

As explained in Ms. Helm's Direct Testimony, the TY2019 forecast is needed to support E&FP's function of procuring electricity of SDG&E's customers. Since 2013, the value of supply resources has exceeded $1.2 billion dollars on an annual basis, and in 2016, 43 percent of the electricity supplied to customers was from renewable sources.[912] E&FP must meet customer demand by acquiring both long-term and short-term resources, optimizing those resources in the wholesale energy and ancillary services markets, prudently administering contracts, and accurately settling all energy procurement transactions.[913] To meet state policy goals and comply with legislative and regulatory requirements, E&FP also develops comprehensive procurement strategies and tools to capture the benefits of clean and evolving technologies, such as energy storage, demand response, and distributed energy resources.[914] While costs for electricity supply are forecasted and recorded in SDG&E's Energy Resource Recovery Account (ERRA), E&FP's O&M costs[915] are part of the General Rate Case (GRC).

In addition to sponsoring the E&FP organization's costs, Ms. Helm's testimony supported the need for technology upgrades to enable SDG&E to maintain its legal obligation to provide scheduling services within the CAISO market.[916] There are four capital projects; (1) 2016 CAISO Mandates; (2) 2017 CAISO Mandates; (3) 2018 CAISO Mandates; and (4) Allegro

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[909] Ex. 285 SDG&E/Helm at 1.
[910] *Id.* at 1 and n.1 ("E&FP procures electricity for its bundled customer load, which represents the total demand from those customers that buy the commodity of electricity from SDG&E.").
[911] *Id.*
[912] *Id.*
[913] *Id.*
[914] *Id.* at 1-2.
[915] *Id.* at 2 and n.2. ("Exclusive of applicable software and subscription costs used exclusively for purposes of energy procurement-related requirements, which may be recovered through ERRA (for example, Tullett Prebon pricing subscriptions used exclusively for SRAC price indices).").
[916] *Id.* at 2.

Technology Upgrades.[917] The associated capital costs are sponsored by Mr. Christopher Olmsted.[918]

ORA was the only party to submit testimony in response to SDG&E's E&FP's request.[919] ORA did not oppose SDG&E's TY2019 expense forecast of $8.641 million.[920] In addition, ORA did not take issue with SDG&E's business justifications for the capital technology upgrades.[921]

ORA's table below compares SDG&E's TY 2019 forecast to ORA's forecast of the E&FP function groups:[922]

Table 19.B
Non-Shared Electric & Fuel Procurement Expenses
2012-2016 Recorded and 2019 Forecast
(in Thousands of 2016 Dollars)

Description	2012	2013	2014	2015	2016	SDG&E 2019	ORA 2019
LT Procurement	$2,504	$2,414	$2,253	$2,083	$1,762	$2,203	$2,203
Trading & Schedule	$3,280	$2,745	$2,991	$2,900	$2,830	$2,949	$2,949
Mid & Back Office	$3,379	$3,531	$3,610	$3,554	$3,370	$3,489	$3,489
Total	$9,163	$8,690	$8,854	$8,537	$7,962	$8,641	$8,641

Source: 2012-2016 data from Ex. SDG&E-12-WP, pp. 6-20. SDG&E 2019 forecasts from Ex. SDG&E-12, p. KKH-1, Table KKH-1.

Based on the foregoing, SDG&E requests that the Commission adopt its proposal for $8.7 million of O&M expenses in TY 2019 for E&FP in order to allow SDG&E to meet its electric commodity procurement responsibilities through the rate case cycle.

20. Advanced Metering Infrastructure (AMI) (SoCalGas Only)

20.1 Advanced Metering Infrastructure

SoCalGas' Advanced Metering Infrastructure (AMI) testimony and workpapers, supported by witness Rene F. Garcia, describe and justify the Companies' O&M and capital expenditure forecasts,[923] which in turn form the basis for the TY 2019 revenue requirement

[917] *Id.* at 14-16.
[918] Ex. 304 SDG&E/Olmsted.
[919] Ex. 410 ORA/Hadiprodjo.
[920] *Id.* at 1.
[921] *Id.* at 4.
[922] This table appears as Table 15-2 in Ex. 410 ORA/Hadiprodjo at 3 but is renumbered in this brief.
[923] Exs. 287-290. Mr. Garcia's testimony and workpapers also discuss O&M and Capital costs requested by witness areas impacted by the AMI deployment.

request for this area. The Advanced Meter Operations organization (AMO) is responsible for deploying, operating, monitoring and maintaining SoCalGas' AMI technology.

The Rebuttal Testimony of Mr. Garcia summarizes SoCalGas' forecast request and corresponding Intervenor proposals in this area.[924] Except as otherwise set forth below, no Intervenors have contested SoCalGas' requests for the forecasted items identified the AMI testimony and workpapers. While SoCalGas does not specifically address the uncontested items here, the items were fully supported in the direct testimony and workpapers and should be adopted by the Commission.

20.2 AMI-Related Operations and Maintenance Issues

The AMO organization has deployed nearly 6,000,000 AMI modules (MTUs) throughout SoCalGas' service territory. These MTUs are mounted on the gas meter as an additional piece of telemetry/communications equipment. Approximately 96,500 MTUs will be maintained by the Measurement and Regulation (M&R) workgroup within SoCalGas' Gas Distribution organization, with the balance being maintained by Customer Services-Field (CS-F) organization.[925]

As with any asset, there is ongoing maintenance for which costs must be accounted. In the case of MTUs, the annual module failure rates estimated in this GRC are driven by mechanical and electrical failures that can occur with such devices. SoCalGas estimates the annual MTU failure and field replacement rates for CS-F and M&R are 0.68% and 1.92%, respectively.[926]

The Coalition of California Utility Employees (CUE) proposes that "the O&M budget for the CS-F group be increased to allow for the same 1.92% per year failure rate expected for MTUs maintained by the M&R group."[927] CUE's proposed AMI module failure rate would result in an increase of the CS-F organization MTU maintenance cost forecast of $3.308 million. This CUE-proposed increase would raise the forecasted total cost for CS-F maintained MTUs to $5.122 million in TY 2019.

SoCalGas does not believe aligning the failure rates between the CS-F and M&R is appropriate. The failure rates for module types maintained by CS-F and the M&R are separately

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[924] Ex. 290, SCG/Garcia at 1-3.
[925] Ex. 7, SCG/Orozco-Mejia at 129 and Ex. 119 SCG/Marelli at 25.
[926] Ex. 290, SCG/Garcia at 6.
[927] Ex. 370, CUE/Marcus at 28-29.

defined because the M&R group maintains meters and modules that are more mechanically and electronically complex than those maintained by CS-F.[928] The increased complexity of the M&R maintained devices results in higher annual failure rate than those maintained by CS-F. Consequently, because SoCalGas finds no evidence or support for aligning M&R and CS-F MTU failure rates, SoCalGas does not believe the increased TY 2019 forecast increase proposed by CUE is appropriate or necessary, therefore, the CUE proposal should be rejected.

20.3 AMI-Related Capital Issues

Ms. Orozco-Mejia's testimony addressed Remote Meter Reading labor and non-labor capital expenditure forecasts. In particular, these forecasts covered CS-F curb meter replacements as part of the Planned Meter Changeouts (PMC) associated with the AMI implementation. As further summarized below, the resulting SoCalGas capital forecast for 2017 and 2018 is $0.727 and $2.032 million, respectively.[929]

For 2017, ORA recommends adopting the 2017 recorded expenditure of $1.278 million for remote meter reading, but disputes SCG's request of $2.032 million for 2018, and instead recommends a total disallowance of SoCalGas' 2018 request. ORA's proposal would result in a potential $1.411 million total disallowance associated with 2018 curb meter replacements.

ORA, recommends the total disallowance for 2018 based on the following assumptions: (i) the Commission-authorized AMI deployment period was to terminate at the end of 2017, and (ii) delays in manufacturing MTU issues meant that "ratepayers would be paying twice for the same parts if the Commission authorizes" the 2018 request.[930] ORA's assumptions for its recommended disallowance are incorrect.

First, while it is true that AMI deployment was originally intended to be completed in 2017, the Commission, pursuant to Advice Letter 5134-G: (i) extended the AMI deployment period for at least one year beyond the seven-year deployment period (2010-2017) through 2018, or until the associated costs and benefits are incorporated in a subsequent General Rate Case (GRC); and (ii) allowed for the establishment of separate subaccounts in the AMIBA to record costs associated with the deployment and post-deployment periods of the AMI project as well as for on-going meter reading costs in areas where the AMI network is not constructed."[931]

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[928] Ex. 290 SCG/Garcia at 6
[929] Ex. 7, SCG/Orozco-Mejia at 142.
[930] Ex. 406, ORA/Phan at 84.
[931] Ex. 290 SCG/Garcia at 4.

Second, ORA misunderstands the costs contained in this category. SoCalGas' capital funding request for curb meter replacements excludes AMI-related parts. Parts-related costs for MTUs and curb meters being installed as described in the corresponding testimony are not included in this cost category since these costs are funded by the AMI project implementation.[932]

Nonetheless, SoCalGas acknowledges the curb meter deployment effort's one-year delay in deployment due to vendor product manufacturing issues and appreciates ORA's position regarding unanticipated ratepayer impacts in 2018.[20] Therefore, SoCalGas agrees with ORAs recommendation adopting the 2017 recorded expenditure of $1.278 million, and the resulting total disallowance of $1.141 million in SoCalGas forecasted capital-related curb meter installation costs in 2018.

21. Electric Generation

21.1 Introduction

21.1.1 Summary of Costs

Exhibits 97-100[933] support SDG&E's TY 2019 forecasts for O&M and capital costs for the forecast years 2017, 2018, and 2019 associated with the Electric Generation area for SDG&E. Table DSB-1, from SDG&E's direct testimony (Ex. 97), summarizes these costs.

Table DSB-1
Test Year Summary of Costs

ELECTRIC GENERATION & SONGS (In 2016 $)			
	2016 Adjusted-Recorded (000s)	TY2019 Estimated (000s)	Change (000s)
Total Non-Shared Services	36,435	62,316	25,881
Total Shared Services (Incurred)	747	1,095	348
Total O&M	**37,182**	**63,411**	**26,229**

932 Ex.290 SCG/Garcia at 4-5.
933 Exs. 97-99 SDG&E/Baerman and Ex. 100 SDG&E/Baerman/Shimansky.

NEW GENERATION (In 2016 $)				
Categories of Management	**2016 Adjusted-Recorded**	**Estimated 2017 (000s)**	**Estimated 2018 (000s)**	**Estimated 2019 (000s)**
A. Generation Capital	22,984	12,807[934]	292,826	17,371
Total	**22,984**	**13,314**	**292,826**	**17,371**

21.1.2 Summary of Activities

As discussed in SDG&E's direct testimony (Ex. 97), the Electric Generation testimony covers four primary areas: Generation Plant, Administration, San Onofre Nuclear Generating Station (SONGS)-related O&M, and Resource Planning.

21.1.2.1 Generation Plant

SDG&E owns and operates two combined-cycle generating facilities, the Palomar Energy Center in Escondido, CA and the Desert Star Energy Center in Boulder City, NV. SDG&E owns and operates two peaking plants, Miramar Energy Facility in San Diego, CA and Cuyamaca Peak in El Cajon, CA. SDG&E also added two battery energy storage system projects to its fleet in early 2017, the 30 megawatt/120 megawatt-hour Escondido project and the 7.5 megawatt/30 megawatt-hour El Cajon project. A solar energy project located in Ramona, CA was also added to the portfolio that can produce up to 4.32 megawatts using smart inverters and fixed photovoltaic panels. SDG&E also includes costs associated with the potential acquisition of the Otay Mesa Energy Center (OMEC) into its test year forecast, as described in greater detail below.

With the exception of OMEC (separately addressed below), forecasting for Generation plant O&M is largely based on a 5-year average. This method was selected because it allows for inclusion of a variety of planned (*e.g.*, scheduled maintenance outages and repairs) and unplanned but typical (*e.g.*, steam valve damage, combustion turbine component failures, auxiliary equipment failures) maintenance events and provides a more representative history of recorded spending.

934 SDG&E agreed to accept ORA's recommended 2017 actual capital expenses in rebuttal Ex. 100 SDG&E/Baerman/Shimansky at 12. SDG&E's original request of $13,314,000 is replaced with $12,807,000.

With the exception of OMEC (separately addressed below), a 5-year average also is generally used to forecast capital expenditures. The average has been adjusted by removing some large, one-time, capital projects from the history. This method is appropriate because it reflects the operational needs of the assets, through the averaging period. SDG&E does not propose a specific list of capital projects, but instead will plan, schedule and perform capital projects, as appropriate, to best support the safe and reliable operation for Generation plants.

21.1.2.2 Administration

Generation Plant Administration provides managerial oversight and analytical support for the generating fleet. Electric Project Development supports Generation and Resource Planning, Smart Grid Projects and Distribution Planning.

The Base Year Recorded method is used for the forecast because of changes in the Administration staffing level during the historical period that are not representative of current staffing.

21.1.2.3 SONGS-related O&M

SDG&E's testimony also requests recovery of the following reasonably incurred SONGS-related O&M costs in this TY2019 GRC filing:

- $1.015M (2019$) for SONGS Marine Mitigation; and
- $0.461M (2019$) for Worker's Compensation under the Master Insurance Program (MIP) (Pre-2000) and SCE's self-insured Worker's Compensation (Self-Insured Worker's Compensation) (Post-1999 through June 7, 2013) programs (collectively "Worker's Compensation")
- Continuation of the SONGS Balancing Account, first authorized in D.06-11-026, and most recently re-authorized in SDG&E's TY2016 GRC (D.16-06-054).[935]

21.1.2.4 Resource Planning

Resource Planning is responsible for planning the long-term electric generation needs of SDG&E's bundled customers as well as planning for adequate resources to meet local capacity requirements of all customers. This group is managed by the Director – Resource Planning and supports the goals of safely delivering reliable power at the lowest possible cost while meeting the state's policy goals to reduce greenhouse gas emissions. Software-based production cost models are used to achieve this and these models are also used to evaluate resources proposed in

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[935] D.16-06-054 at 329, Ordering Paragraph (OP) 8(b) ("SDG&E shall continue the two-way balancing account for San Onofre Nuclear Generating Station through this rate cycle.").

request-for-offers, develop CPUC-required filings such as the integrated resource planning process, the annual ERRA filing, and to forecast greenhouse gas emissions.

Forecasting for labor and non-labor are largely based on the 5-year average with some adjustments to reflect some more recent information. This method was selected because it represents a reasonable foundation for forecasting the future needs of the organization.

21.1.3 Challenges Facing Operations

The key challenges facing Electric Generation during the next decade include the following:

- Maintaining high reliability and availability. As equipment ages and is called on for more frequent starts than originally anticipated, it is important to invest time and resources to ensure that equipment is kept up to date with the best available technologies and that the latest innovations in monitoring and maintenance practices are employed. Current industry best practice predictive maintenance techniques, predictive data analytics, transformer condition monitoring, vibration monitoring for rotating machinery and high energy pipe weld inspections are used to reduce unplanned failures and forced outages.
- Efforts to increase the effectiveness of network security, physical security and environmental monitoring are ongoing to address increased risk.

21.1.4 RAMP Costs

Certain costs supported in SDG&E's Electric Generation testimony are driven by activities described in SoCalGas and SDG&E's November 30, 2016 Risk Assessment Mitigation Phase (RAMP) Report.[936]

Table DSB-2, from SDG&E's direct testimony (Ex. 97), provides a summary of the RAMP-related costs supported by SDG&E's electric generation testimony by RAMP risk:

TABLE DSB-2
Summary of RAMP O&M Overlay

ELECTRIC GENERATION (In 2016 $)			
RAMP Risk Chapter	**2016 Embedded Base Costs (000s)**	**TY2019 Estimated Incremental (000s)**	**Total (000s)**
SDG&E-6 Fail to Black Start	20	20	40
Total O&M	**20**	**20**	**40**

[936] I.16-10-015/I.16-10-016 Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company, November 30, 2016.

Summary of RAMP Capital Overlay

NEW GENERATION (In 2016 $)			
RAMP Risk Chapter	**2017 Estimated RAMP Total (000s)**	**2018 Estimated RAMP Total (000s)**	**2019 Estimated RAMP Total (000s)**
SDG&E-6 Fail to Black Start	300	806	0
Total Capital	**300**	**806**	**0**

The Fail to Blackstart (*i.e.*, Blackstart) risk is the inability to restore electric services to customers in the SDG&E service territory following a disturbance or an event in which the SDG&E service territory suffers a complete blackout or shut down condition. No party challenged SDG&E's proposed RAMP projects. The Commission should approve them as reasonable.

21.1.5 Summary of Differences

The following tables, adopted from SDG&E's rebuttal testimony (Ex. 100 SDG&E/Baerman/Shimansky), summarize SDG&E's Electric Generation O&M and capital forecasts versus other parties' recommendations. Because ORA, TURN and Protect Our Communities Foundation (POC) recommend that the Commission address the revenue requirement associated with SDG&E's potential acquisition of OMEC in 2019 – which the Commission approved in Decision (D.) 06-09-021 – in a future Tier 1 Advice Letter,[937] "separate phase of this or another case,"[938] or not approved at all,[939] the summary tables below show the aggregate impacts of those recommendations, first showing SDG&E's position under the scenario under which OMEC remains in the case, and second under the scenario recommended by ORA, TURN and POC that OMEC is removed from this GRC, with the relevant recommendations by those parties.

TOTAL O&M - Constant 2016 ($000) with OMEC in the GRC			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	37,182	63,411	26,229

The table above shows the values supported by SDG&E with OMEC in the GRC.

937 Ex. 403 ORA/Logan at 1:26-29.
938 Ex. 492 TURN/Woodruff at 2:8-9.
939 Ex. 472 POC/Powers at 2:5-8.

TOTAL O&M - Constant 2016 ($000) with OMEC removed from the GRC			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E[940]	37,182	40,615	3,433
ORA	37,182	40,615	3,433
TURN	37,182	38,951	1,769
POC	NA	NA	NA

The table above shows SDG&E's, ORA's and TURN's positions with OMEC removed from this GRC. POC made no recommendations regarding non-OMEC O&M costs.

TOTAL CAPITAL - Constant 2016 ($000) with OMEC in the GRC					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	13,314	292,826	17,371	323,511	

The table above shows the values supported by SDG&E with OMEC in the GRC.

TOTAL CAPITAL - Constant 2016 ($000) with OMEC removed from the GRC					
	2017	**2018**	**2019**	**Total**	**Variance**[941]
SDG&E[942]	12,807[943]	12,826	12,020	37,653	-285,858
ORA	12,807	12,826	12,020	37,653	-285,858
TURN	13,314	12,826	12,020	38,160	-285,351
POC	NA	NA	NA	NA	NA

The table above shows SDG&E's, ORA's and TURN's positions with OMEC removed from this GRC. POC made no recommendations regarding non-OMEC capital costs.

21.1.6 Organization of Brief

In Section II below, SDG&E responds to parties' contested non-OMEC recommendations. In Section III below, SDG&E responds to parties' OMEC recommendations.

21.2 SDG&E Response To Other Parties' Contested Non-OMEC Recommendations

21.2.1 SDG&E Response to Parties Non-OMEC O&M Recommendations

21.2.1.1 ORA

ORA did not contest SDG&E's proposed non-OMEC electric generation O&M forecasts.

940 These values are derived from Ex. 97 SDG&E/Baerman at 1 (Table DSB-1) and 18 (Table DSB-6) [I see the figure $34,785 in Ex. 97, Table DSB-6].

941 Variances are shown in comparison to SDG&E's original request.

942 These values are derived from Ex. 97 SDG&E/Baerman at 28 (Table DSB-10).

943 SDG&E agreed to accept ORA's recommended 2017 actual capital expenses in rebuttal Ex. 100 SDG&E/Baerman/Shimansky at 12. SDG&E's original request of $13,314,000 is replaced with $12,807,000.

21.2.1.2 TURN

21.2.1.2.1 Electric Generation Power Plants

TURN challenges some of SDG&E's TY O&M forecasts of the Electric Generation Power Plants, including Palomar, Desert Star, Miramar and Cuyamaca, principally focusing on SDG&E's use of a five-year historical period of 2012-2016 for developing average amounts used for most of the base forecasts. TURN argues for use of a six-year historical period, using years 2012-2017, which reflects lower 2017 costs.

Consistent with the Rate Case Plan, SDG&E has prepared most of its forecasts using five years of historical data, 2012-2016. SDG&E continues to support adoption of those forecasts for the Test Year 2019 for SDG&E's power plants as the amounts needed by SDG&E to operate and maintain the power plants in a safe and reliable manner.

Below is a discussion by power plant of SDG&E's position on TURN's recommendations.

<u>Palomar</u>

For Palomar, TURN forecasts O&M of $18,063,000 using a six-year averaging methodology.[944] Compared with the SDG&E forecast amount of $18,556,000 using a five-year averaging methodology, the difference is a reduction of $493,000 from the SDG&E forecast.

As SDG&E explained in its rebuttal testimony (Ex. 100 SDG&E/Baerman/Shimansky at 7), SDG&E agrees with TURN's position that a portion ($119,000) of crane costs should be removed from the SDG&E base forecast as these costs will no longer occur due to the installation of the Palomar steam turbine gantry crane and Palomar combustion turbine bridge crane costs. Removal of the crane costs results in a revised SDG&E Forecast of $18,437,000, which is a reduction of $375,000 compared to the TURN Forecast. SDG&E supports the revised SDG&E forecast of $18,437,000.

<u>Desert Star</u>

For the Desert Star Power Plant, TURN forecasts O&M of $9,807,000 using a six-year averaging methodology.[945] Compared to the SDG&E forecast amount of $10,211,000 using a five-year averaging methodology, the difference is a reduction of $404,000 from the SDG&E forecast. As SDG&E explained in its rebuttal testimony (Ex. 100 SDG&E/Baerman/Shimansky

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[944] Ex. 494 TURN/Marcus at 59.
[945] *Id*. at 60-61.

at 7-8), SDG&E continues to support the labor and non-labor forecasted amount of $10,211,000. SDG&E also disputes the $5,000 reduction in the TURN non-labor forecast for Boulder City Chamber of Commerce dues reflected in 2016 historical costs. This charge should remain as it is for supporting Boulder City business and maintaining and fostering positive relationships with the community where Desert Star is located, and in which SDG&E employees live and work.

The table below also shows the TURN non-standard escalation (NSE) forecast for long-term service agreement (LTSA) expenses of $5,151,000 and the SDG&E NSE forecast of $5,350,000, a reduction of $200,000 from the SDG&E forecast. SDG&E disputes TURN's use of a two-year averaging methodology (2016 and 2017) for estimating the Test Year 2019 base forecast. SDG&E believes that using Base Year 2016 as the basis for the forecast submittal is the most reasonable method for forecasting future LTSA expenditures for Desert Star, and supports the NSE forecast amount of $5,350,000.

The net resulting TURN Total Forecast of Labor, Non-Labor and NSE costs is $14,962,000 compared to the SDG&E Total of $15,561,000, which is a reduction of $604,000. SDG&E supports the SDG&E Total Forecast of $15,561,000.

Desert Star Power Plant					
($ Thousands)	**Test Year 2019** **Labor Forecast**	**Test Year 2019** **Non-Labor Forecast (1)**	**Test Year 2019** **Labor & Non-Labor Forecast**	**Test Year 2019** **NSE**	**Test Year 2019** **Total Forecast**
TURN	**2,687**	**7,120**	**9,807**	**5,151**	**14,962**
SDG&E (1)	**2,713**	**7,498**	**10,211**	**5,350**	**15,561**
Difference	**(26)**	**(378)**	**(404)**	**(200)**	**(604)**

Miramar

For the Miramar Power Plant, TURN forecasts O&M of $2,265,000 using a six-year averaging methodology.[946] Compared to the SDG&E forecast amount of $2,380,000 using a five-year averaging methodology, the difference is a reduction of $115,000 from the SDG&E forecast. As SDG&E explained in its rebuttal testimony (Ex. 100 SDG&E/Baerman/Shimansky at 8), SDG&E continues to support the forecasted amount of $2,380,000.

Cuyamaca

For Cuyamaca, TURN forecasts O&M of $992,000 using a 2013-2017 five-year average methodology for labor and a 2012-2017 six-year average methodology for non-labor.[947]

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[946] *Id*. at 61-62.
[947] *Id*. at 62-63.

Compared to the SDG&E forecast amount of $1,078,000 using a 2012-2016 five-year averaging methodology, the difference is a reduction of $86,000 from the SDG&E forecast. As SDG&E explained in its rebuttal testimony (Ex. 100 SDG&E/Baerman/Shimansky at 9), SDG&E continues to support the forecasted amount of $1,078,000.

21.2.1.2.2 General Plant Administration

For Generation Plant Administration, TURN forecasts O&M of $258,000, in contrast to SDG&E's forecast of $349,000, a difference of $91,000. TURN's lower forecast is due to the use of a three-year average (2015-2017) compared to the SDG&E's forecast based on Base Year 2016 costs.[948]

As SDG&E explained in its rebuttal testimony (Ex. 100 SDG&E/Baerman/Shimansky at 9-10), SDG&E believes Base Year 2016 expenses are a reasonable basis for the forecasted costs as it includes costs for the approximate two FTEs in the organization, including a Director and Principal Business Analyst. The Principal Business Analyst position was vacant in 2017, but this position is necessary for required budgeting, accounting and supply management activities of generation power plants, which is currently being provided though borrowed labor. Therefore, SDG&E believes that the SDG&E forecast of $349,000 is reasonable.

21.2.1.2.3 Resource Planning

For Resource Planning, TURN forecasts $815,000, in contrast to SDG&E's forecast amount of $1,094,000, a difference/reduction of $279,000. TURN disputes the SDG&E labor forecast of $833,000, which is based on a five-year average and adjusted additions for a Resource Planning Manager position and a different workforce composition.[949]

SDG&E disagrees with TURN's recommendation. As SDG&E explained in its rebuttal testimony (Ex. 100 SDG&E/Baerman/Shimansky at 10-11), TURN fails to consider the additional activities SDG&E will need to be actively engaged in as the Commission moves from individual procurement proceedings to an Integrated Resource Planning (IRP) process, as required in SB 350. The SDG&E forecast also reflects staffing needed to meet greenhouse gas (GHG) target and reliability needs, which is incremental work. SDG&E continues to believe the complexity of the new IRP process requires additional effort and a greater skill set than was required in the past. The IRP has the potential to produce commodity cost savings for ratepayers

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[948] *Id*. at 64.
[949] *Id*. at 64-65.

but it will require incremental management expense. Failing to properly support the planning process could result in overall higher commodity costs. Additionally, the incremental manager position of IRP, included in the forecast adjustment, was delayed but has since been filled as of May 2018.

21.2.2 SDG&E's Response to Parties' Non-OMEC Capital Recommendations

21.2.2.1 ORA

The following is a summary of ORA's recommendations with respect to SDG&E's proposed non-OMEC electric generation capital forecasts.

- ORA recommends Year 2017 recorded capital costs of $12.807M be adopted in comparison to SDG&E Year 2017 forecasted capital cost of $13.314M.[950] SDG&E accepts ORA's recommendation.
- ORA does not dispute SDG&E's requested Year 2018 and 2019 Capital forecasted amounts of $12.826M and $12.020M, respectively, for generation power plants excluding OMEC.[951]

21.2.2.2 TURN

The following is a summary of TURN's recommendations with respect to SDG&E's proposed non-OMEC electric generation capital forecasts.

- TURN made no proposed adjustments to SDG&E's requested Capital forecasted costs for Years 2017 – 2019, excluding OMEC.[952]
- TURN identified two projects at Palomar that were disallowed in the 2012 Test Year rate case that were inadvertently included in the revenue requirement beginning in 2016.[953] SDG&E agrees with TURN that the revenue requirement associated with these two projects should be removed (retroactive to 2016) and any overcollections returned to ratepayers.

21.3 SDG&E RESPONSE TO PARTIES' OMEC PROPOSALS

21.3.1 Summary of SDG&E's Request

As explained in SDG&E's direct testimony (Ex. 97 at 5-7), OMEC is a 608-megawatt combined-cycle power plant that was built and is currently owned by Calpine. SDG&E has contracted for the plant's local capacity and energy through a Power Purchase Tolling Agreement (PPTA) since October 3, 2009 with the PPTA reaching the end of its term on October

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[950] Ex. 403 ORA/Logan at 18-19.
[951] *Id.*, at 19.
[952] Ex. 494 TURN/Marcus at 65.
[953] *Id.*

2, 2019. The PPTA has no renewal option but it includes "put" and "call" options. The Put Option - exercisable at OMEC's sole discretion and with OMEC's notice due to SDG&E no later than April 1, 2019 - would require SDG&E to purchase the Otay Mesa plant at a set price. The Call Option, exercisable at SDG&E's sole discretion, "would require OMEC to sell the Otay Mesa plant at a set price." (D.06-09-021 at 5).

In the Commission's decision that approved SDG&E's PPTA with Calpine (D.06-09-021), the Commission further described the "put" and "call" options for the OMEC. As noted in D.06-09-021, "Pursuant to the terms of the Put Option, there would be no additional Commission review or approval required before OMEC's potential exercise of the option. Under the price set for the Put Option, SDG&E would own the Otay Mesa plant in 2019 at a price that would be significantly below that of the Net Book Value of the Palomar Energy Center (Palomar) in 2019." *Id.* at 5 (internal citation omitted). Because of the Commission's determination in D.06-09-021 and the potential that Calpine will exercise its Put Option, SDG&E is including the $280M purchase price of the Put Option in this application. By way of contrast, the price of the call option – which SDG&E has decided *not* to exercise - would be $377M.[954]

To help ensure that ratepayers only pay SDG&E for the costs of owning and operating the plant when and if the ownership of the plant shifts to SDG&E,[955] SDG&E is proposing to track the revenue requirement for this particular asset in a balancing account so customers are indifferent to the timing of the transfer. SDG&E's balancing account proposal also would protect ratepayers in the event that the plant is not put to SDG&E and the PPTA merely expires. The annual revenue requirement is necessary to provide SDG&E with the necessary revenue requirement for the OMEC plant when the transfer occurs and for the attrition years beyond it and will ensure that revenues are available to own the plant at the commencement of the transfer date. The balancing account will ensure that no revenue requirement prior to the transfer date of

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[954] At the time the Commission issued D.06-09-021, the price of the Put Option ($280 million) and the Call Option ($377 million) were subject to the Commission's confidentiality rules, but the pricing has since been made public. *See, e.g.*, Calpine Corporation Securities and Exchange 10Q filing for the quarter ending March 31, 2009 at 11, *available at*: http://d1lge852tjjqow.cloudfront.net/CIK-0000916457/c2a0a247-8370-4d29-b066-805f2e2bc90e.pdf. (noting "a put option held by OMEC to sell the Otay Mesa Energy Center for $280 million to SDG&E, and a call option held by SDG&E to purchase the Otay Mesa Energy Center for $377 million at the end of the tolling agreement.").

[955] Ratepayers currently pay for the PPTA and rebalancing costs through the Electric Resources Recovery Account (ERRA), which is reviewed annually in ERRA Forecast applications and most recently approved in D.17-12-014.

plant ownership would be retained by SDG&E, aside from the PPTA and equity rebalancing costs included in the ERRA. There will be no double counting/collection because the invoices paid through ERRA (with the exception of fuel costs) will cease when SDG&E gains control of the plant and will no longer be balanced or accounted for there. In summary, the balance will be returned to or collected from ratepayers based on the actual date SDG&E obtains control of the plant. SDG&E's Regulatory Accounts witness provides additional information in her testimony on how the balancing account would work and the disposition of the balance.[956]

To integrate OMEC into SDG&E's generation fleet, SDG&E estimates that $5.351M in ongoing capital will be required to address areas such as site physical security, network cyber security, communications, modification of plant licenses and operating permits. On-going O&M costs, including expenses for contracted labor, materials and services for routine maintenance and planned outages, ground lease, and property insurance, are estimated to be $22.796M for Test Year 2019. Cost estimates are based on the 5-year forecast for the Palomar Energy Center, which is most similar in size, power plant type, and age to OMEC. Ground lease and property insurance costs are from OMEC'S 2016 Financial Statements.

21.3.2 This GRC Proceeding is the Time and Place to Establish SDG&E's Revenue Requirement for OMEC

In their opening testimony, ORA and TURN state that it is likely that the OMEC will exercise the option the Commission approved in 2006 in D. 06-09-021 to "put" the Otay Mesa plant to SDG&E in 2019:

- ORA: "ORA concurs with SDG&E that it is reasonable to expect Calpine to exercise its put option, and SDG&E will own the OMEC sometime in the 2019 timeframe."[957]
- TURN: "I agree with SDG&E that Calpine will likely exercise the Put Option and sell the plant to SDG&E . . .;"[958] and "To be clear, I agree with SDG&E that it is highly likely that Calpine will exercise its Put Option."[959]

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[956] Exs. 184 and 186 SDG&E/Jasso.
[957] Ex. 403 ORA/Logan at 7.
[958] Ex. 492 TURN/Woodruff at 2.
[959] *Id*. at 4. In support of its statement that "I agree with SDG&E that it is highly likely that Calpine will exercise its Put Option," TURN further explains: "The general complaints gas generators have expressed with electricity market conditions in California might by themselves encourage Calpine to exercise its Put Option. In addition, SDG&E believes that Calpine will also need to refinance about $280 million of debt on OMEC in 2019, as shown in Attachment C, SDG&E's response to the 6th Question of TURN's 23rd Data Request. If Calpine exercises the Put Option and closes the transaction, it could presumably more readily pay off this amount." *Id*. at 4.

ORA and TURN argue, however, that the Commission should delay consideration of the revenue requirement that will be necessary to support SDG&E's ownership and operation of OMEC until such time as OMEC actually exercises its Put Option and/or plant ownership is transferred.[960] In support of their argument, ORA and TURN assert that it is necessary to delay consideration of SDG&E's proposed OMEC revenue requirement to protect ratepayers against any potential overcollection of costs.[961]

ORA and TURN seem to ignore that a key purpose of the OMEC balancing account SDG&E has proposed in this GRC proceeding is to ensure that *any* overcollection of costs related to the transfer of the plant to SDG&E is returned to ratepayers. As SDG&E explained in its opening testimony, "[t]o help ensure that ratepayers only pay SDG&E for the plant (depreciation, taxes, and return, otherwise known as 'capital-related costs') when and if the ownership of the plant shifts to SDG&E, SDG&E is proposing to track the revenue requirement for this particular asset in a balancing account . . . "[962] In its opening testimony, SDG&E also explained that its balancing account proposal "also would protect ratepayers in the unlikely event that the plant is not put to SDG&E and the [existing] PPTA merely expires (which SDG&E does not expect)."[963]

If the Commission does not establish a revenue requirement for OMEC in this GRC proceeding, as ORA and TURN propose, SDG&E is concerned that it will be unfairly denied an opportunity to recover the revenue requirement necessary to own and operate the Otay Mesa plant during this 2019 GRC cycle. SDG&E's opening testimony explains that "[t]he annual revenue requirement is necessary to provide SDG&E with the necessary revenue requirement for the OMEC plant when the transfer occurs [2019] *and for the attrition years beyond it* . . . "[964]

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960 As explained above, if OMEC decides to exercise its Put Option, OMEC must provide notice to SDG&E no later than April 1, 2019. Under ORA's proposal, SDG&E would file a Tier 1 advice letter seeking recovery of its proposed revenue requirement sometime after it receives this notice but before the transfer in ownership occurs. Ex. 403 ORA/Logan at 9. Under TURN's proposal, SDG&E would not even seek review of its proposed revenue requirement until *after* the transfer in ownership occurs. Ex. 492 TURN/Woodruff at 7.

961 Ex. 403 ORA/Logan at 7; Ex. 492 TURN/Woodruff at 3.

962 Ex. 97 SDG&E/Baerman at 6 (internal citation omitted). In rebuttal testimony, SDG&E explained that in response to data requests, SDG&E has clarified that the proposed OMEC balancing account would track the revenue requirement for *both* capital *and* O&M costs. Ex. 100 SDG&E/Baerman/Shimansky at 14, fn. 28.

963 Ex. 97 SDG&E/Baerman at 6.

964 *Id*. at 6.

(emphasis added). Delaying the Commission's consideration of SDG&E's proposed revenue requirement for OMEC, as ORA and TURN propose, could result in SDG&E not having sufficient funds to own and operate the plant during this 2019 GRC cycle.

Thus, contrary to ORA's and TURN's assertions, *this* GRC proceeding is the time and place to establish SDG&E's revenue requirement for the Otay Mesa plant, subject of course to true up in the OMEC balancing account. The Commission already has approved the $280 million purchase price for the plant[965] and ORA has "verified that this price is consistent with the terms and conditions of the agreement approved by D.06-09-021."[966]

To the extent that SDG&E's final due diligence of the plant results in any adjustments to the $280 million set price, as TURN contends,[967] SDG&E's proposed OMEC balancing account will provide for a true-up of that revenue requirement variance by making an adjustment in the balancing account. The adjusted revenue requirement, including revised values (capital related costs of depreciation, taxes, and return, and O&M, should the ultimate purchase price be different than $280 million), would be shown as an attachment in the Annual Non-Fuel Generation Balancing Account advice letter, or another Tier 2 advice letter. Those adjustments for the updated revenue requirement would be shown in the OMEC balancing account, and subject to the Commission's and parties' standard review, just like any other balancing account.

With respect to SDG&E's 2019 forecasted going-forward O&M and capital costs for OMEC, ORA and TURN (and all parties) have had an opportunity in this GRC proceeding to review and comment on SDG&E's forecasts, and ORA and TURN have done so. For example, in its testimony, ORA has proposed a $1.1 million reduction in SDG&E's 2019 O&M forecast for OMEC[968] (which SDG&E addresses below), but "accepts" SDG&E's $5.351 million capital

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[965] In D.06-09-021 (at 5), the Commission stated that "Pursuant to the terms of the Put Option, *there would be no additional Commission review or approval required before OMEC's potential exercise of the option*." (emphasis added). In D.06-09-021, the Commission also expressly found that "[i]t is reasonable to approve the acquisition by SDG&E of the Otay Mesa plant at the end of the ten-year PPA if OMEC exercises the Put Option." *Id.* at Finding of Fact 18). In contrast to the procedure for the Put Option, had SDG&E decided to exercise the higher-priced Call Option, the Commission would have required SDG&E to "seek further Commission review and approval prior to exercising that option." *Id.* at 5.

[966] Ex. 403 ORA/Logan at 20. In addition, it is worth noting that, consistent with the Commission's expectation in D.06-09-021, the $280 million Put Option purchase price continues to be "significantly below that of the Net Book Value of the Palomar Energy Center (Palomar) in 2019." D.06-09-021 at 5 (internal citation omitted). As Mr. Baerman explained during the hearings, the current Net Book Value of Palomar is approximately $378 million. Tr. V15:1206:11-15 (Baerman).

[967] Ex. 492 TURN/Woodruff at 5-7.

[968] Ex. 403 ORA/Logan at 7-8.

forecast for OMEC.[969] In its testimony, TURN proposed a $493,000 reduction in SDG&E's 2019 O&M forecast for OMEC[970] (which SDG&E also addresses below), and did not address SDG&E's proposed capital forecast with respect to OMEC.

In summary, the CPUC should review and approve SDG&E's revenue requirement for the Otay Mesa plant in this pending GRC proceeding.

21.3.3 ORA's and TURN's Proposed O&M Adjustments to OMEC

21.3.3.1 ORA's Proposed $1.1 million adjustment to OMEC O&M

The table below of OMEC Power Plant 2019 Forecasted costs shows the ORA Forecast of $21,696,000 compared to the SDG&E Forecast of $22,796,000 and the difference of $1,100,000.

Otay Mesa Power Plant			
($ Thousands)	**Test Year 2019 Base Forecast**	**Test Year 2019 Forecast Adjustments**	**Test Year 2019 Total Forecast**
ORA		**21,696**	**21,696**
SDG&E		**22,796**	**22,796**
Difference		**(1,100)**	**(1,100)**

ORA recommends that SDG&E's proposed O&M expense for the operation and maintenance of OMEC be adjusted downward by $1.1 million for "Contracting/Procurement Efficiencies" by the same amount as a similar adjustment made by SDG&E to its Desert Star plant.[971] SDG&E opposes this recommendation. As SDG&E explained in its rebuttal testimony (Ex. 100 SDG&E/Baerman/Shimansky at 16-17), the OMEC plant is currently owned and operated by Calpine. It is SDG&E's position that it is unreasonable to expect that such a large reduction in O&M costs would be secured immediately upon a change of ownership. Given the nature of procurement for electric generation facilities, finding opportunities for sizeable discounts on parts and services has always been a challenge. SDG&E uses trade union labor for most plant maintenance and replacement parts for equipment are highly specialized and available only through a small number of suppliers or solely from the original equipment manufacturer. SDG&E will need time to familiarize itself with the operation and maintenance of the plant

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969 *Id.* at 20.
970 Ex. 494 TURN/Marcus at 63.
971 Ex. 403 ORA/Logan at 7-8.

before it can know what, if any, efficiencies can be achieved. If OMEC is removed from this GRC, this adjustment is moot (for purposes of the GRC revenue requirement).

21.3.3.2 TURN's Proposed $493,000 adjustment to OMEC O&M

The table below of OMEC Power Plant 2019 Forecasted costs shows the TURN Forecast of $22,303,000 compared to the SDG&E Forecast of $22,796,000 and the difference of $493,000.

Otay Mesa Power Plant			
($ Thousands)	**Test Year 2019** **Base Forecast**	**Test Year 2019** **Forecast Adjustments**	**Test Year 2019** **Total Forecast**
TURN		**22,303**	**22,303**
SDG&E		**22,796**	**22,796**
Difference	**-**	**(493)**	**(493)**

TURN proposes a $493,000 reduction in SDG&E's 2019 O&M forecast for OMEC. TURN argues that because SDG&E based its forecast for OMEC on Palomar, and TURN is proposing a $493,000 reduction in SDG&E's 2019 O&M forecast for Palomar, the Commission should adopt the same reduction for OMEC.[972]

SDG&E disagrees with TURN's recommendation. As SDG&E explained in its rebuttal testimony (Ex. 100 SDG&E/Baerman/Shimansky at 17-18), of TURN's $493,000 proposed reduction, $375,000 is due to TURN's use of a six-year historical average instead of the five-year average that SDG&E supports. The remaining $119,000 of the $493,000 is for a TURN reduction for Palomar historical crane costs, which is not applicable to OMEC. It is not known if fixed cranes exist at the OMEC plant, and if they do exist, their physical location and installation date is also unknown. For these reasons, it would not be appropriate to reduce the OMEC Forecast by $493,000. If OMEC is removed from this GRC, this adjustment is moot (for purposes of the GRC revenue requirement).

To summarize, SDG&E requests that the Commission adopt its proposal for Test Year 2019 forecasts for Electric Generation.

[972] Ex. 494 TURN/Marcus at 63.

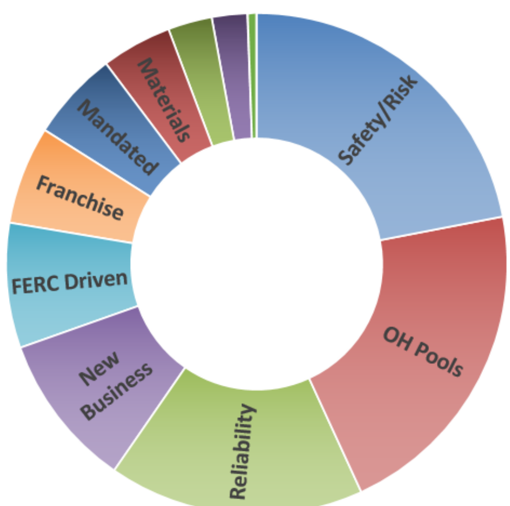
22. Electric Distribution (SDG&E Only)

22.1 Capital Projects (General)

SDG&E's Electric Distribution (ED) Capital testimony and workpapers, supported by witness Alan Colton, describes and justifies SDG&E's forecasted ED Capital activities from 2017-19.[973] SDG&E is requesting the Commission adopt SDG&E's ED Capital forecasts for 2017, 2018, and 2019 of $445,116,000, $588,317,000, and $700,757,000, respectively.[974]

Mr. Colton's testimony demonstrates SDG&E's need for the forecasted capital projects through individual descriptions and analysis of each project's business justification, need and support related to the safety and reliability for its customers, employees and communities,[975] as broken down into the following 11 primary cost categories shown in Figure 22.1.A: Capacity/Expansion, Equipment/Tools/Miscellaneous, Franchise, Mandated, Materials, New Business, Overhead (OH) Pools, Reliability/Improvements, Safety & Risk Management, Distributed Energy Resource (DER) Integration,[976] and Transmission/Federal Energy Regulatory Commission (FERC) Driven Projects.[977]

Figure 22.1.A



Category	3 Year Total
Safety/Risk	22%
OH Pools	21%
Reliability	16%
New Business	10%
FERC Driven	8%
Franchise	6%
Mandated	6%
Materials	5%
Capacity	3%
DER	2%
Tools	1%

[973] Exs. 74-76 SDG&E/Colton.
[974] As shown in Mr. Colton's rebuttal testimony, Ex. 76 SDG&E/Colton at 1.
[975] *See* Ex. 74 SDG&E/Colton, *passim*.
[976] Mr. Colton's revised direct testimony on DER Integration was adopted by Ted Reguly (Ex. 93 SCG/SDG&E/Reguly). DER Policy and Capital Projects are briefed in section 22.2, *infra*.
[977] *See* Ex. 74 at 2.

Each specific work category is described in greater detail in Mr. Colton's testimony. Four categories make up the majority (69%) of the overall forecast: Safety & Risk Management (22%), OH Pools (21%), Reliability (16%) and New Business (10%).

Mr. Colton's testimony also provides identification of SDG&E's key safety risk mitigation projects, which were translated from SDG&E's November 30, 2016 RAMP Report into its electric distribution capital request, as described in section II and Appendix C of Mr. Colton's revised direct testimony,[978] and according to the Commission-prescribed process described in the revised direct risk management testimony chapters of Diana Day and Jamie York.[979] Table 22.1.A shows the amounts of forecasted RAMP dollars contained within the total electric distribution capital forecasted amounts for 2017, 2018, and 2019, by RAMP risk:

Table 22.1.A– ED Capital RAMP Forecasts (by Risk, in 2016 $)

RAMP Risk Chapter	2017 Estimated RAMP Total (000s)	2018 Estimated RAMP Total (000s)	2019 Estimated RAMP Total (000s)
SDG&E-1 Wildfires Caused by SDG&E Equipment	90,648	115,920	148,608
SDG&E-3 Employee, Contractor and Public Safety	6,672	8,192	10,169
SDG&E-4 Distributed Energy Resources (DERs)	507	459	0
SDG&E-8 Aviation Incident	10,000	0	0
SDG&E-12 Electric Infrastructure Integrity	72,739	144,507	182,661
Total Capital	**180,566**	**269,078**	**341,438**

Mr. Colton's rebuttal testimony addressed electric distribution capital cost-related testimony by ORA, TURN, CUE, and FEA,[980] whose summary positions are compared to SDG&E's in the table below (using SDG&E's rebuttal proposed amounts as a starting point and applying the adjustments found in each party's testimony, for comparison purposes):

978 *See id.* at section II and Appendix C.
979 *See* Ex. 3 SCG/SDG&E/Day/York, Chapters 1 and 3.
980 Ex. 76 SDG&E/Colton.

Table 22.1.B – Summary of Proposals by Forecast Year[981]

TOTAL CAPITAL – Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$445,116	$588,317	700,757	1,734,190	---
ORA	$415,789	$449,382	$528,707	$1,389,670	-$344,520
TURN	$445,116	$499,624	$521,363	$1,466,103	-$268,087
CUE	$445,116	$588,317	$797,942	$1,831,375	$97,185
FEA	$415,789	$449,382	$528,707	$1,389,670	-$344,520

In their direct testimony, both ORA and TURN offer comments on the quality of SDG&E's cost estimating and forecasting. SDG&E's forecasting methodology presentation for this TY 2019 GRC is consistent with its presentation in prior rate cases, as described in Mr. Colton's direct and rebuttal testimony chapters.[982] In preparing its projections for TY 2019 requirements, SDG&E analyzed historical 2011 to 2016 spending levels, considered underlying cost drivers and developed an assessment of future requirements. Forecast methodologies were selected based on future expectations for the underlying cost drivers, and include:

- Forecasts based on historical averages;
- Forecasts based on the BY 2016 adjusted recorded spending; and
- Forecasts based on zero-based cost estimates for specific projects.

As Mr. Colton testified, zero-based cost estimates applied several methodologies, including the following:

- An arithmetic method such as unit cost multiplied by expected volume;
- Referencing an RFP response, an invoice, or other reference document;
- Use of subject matter expert judgment;
- Reference to a like-kind project or activity performed elsewhere; and
- Reference to a similar project or work done in the past and updated for current conditions.[983]

Although SDG&E's forecasting methodology presentation maintains a consistent presentation relative to prior rate cases, SDG&E strives for continuous improvements to enhance its processes and practices, as Mr. Colton explained.[984] This is particularly true in light of the Commission's increased focus on risk identification, analysis and mitigation. The direct and rebuttal testimony chapters of Diana Day, Greg Flores, and Jamie York regarding risk mitigation

981 *Id.* at 1, Table 1 and n.1 through n.6.
982 *See* Ex. 76 SDG&E/Colton at 16-20 (citing Ex. 74 SDG&E/Colton).
983 *Id.* at 18.
984 *Id.* at 19-20.

describe how SDG&E's risk mitigation processes have evolved and become more rigorous, and how they will continue to evolve in the future, through advancements in various CPUC proceedings.[985] Ms. Day's direct testimony describes SDG&E's strategic planning trajectory to integrate risk, asset and investment management in the TY 2019 GRC cycle, in which SDG&E

- "further aspires to connect the risks from the enterprise risk registry (informed by the operating unit risk registers) with investment decisions and to prioritize the risk mitigations with the ultimate goal of optimizing portfolios;"[986]
- is "committed to moving forward with a more formalized asset management program," by implementing ISO 55000 standards;[987] and
- will implement the outcome in the Commission's pending Safety Model Assessment Proceeding (S-MAP), which, "[d]epending on the outcome … may take considerable time, resources, and change management."[988]

With these new developments on the horizon, SDG&E expects that its GRC presentations will continue to evolve and present further detailed information, particularly in light of accountability reporting requirements for its next GRC presentation.[989] For this first risk-informed GRC,[990] SDG&E's presentation provides the necessary support for its requests in a manner consistent with past GRCs.

22.1.1 ORA's Methodology

ORA provided an analysis of electric capital categories divided between two witnesses, Mr. Tom Roberts and Mr. Greg Wilson. ORA analysts Mr. Roberts and Mr. Wilson adopted differing methodologies for their respective analyses of separate ED Capital categories, which are described and rebutted in detail throughout Mr. Colton's rebuttal testimony.[991] Although SDG&E provided detailed estimates per budget, Mr. Roberts stated: "my testimony does not include any individual program analyses…"[992] Instead, "[his] methodology involved a portfolio-level analysis."[993]

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985 Ex. 3 SCG/SDG&E/Day/Flores/York.
986 Ex. 3 SCG/SDG&E/Day at 27.
987 *Id.* at 26-27. *See also* SDG&E's Asset Management testimony of Kenneth J. Deremer, which describes SDG&E's commitment to and funding request for implementing ISO 55000 standards. Ex. 361 SDG&E/Deremer.
988 *Id.* Ex. 3 at 26.
989 *See* accountability reporting discussions in Ex. 3 SCG/SDG&E/Day at 3-5, 26-27.
990 *See* discussion of first risk-informed GRC presentation in Ex. 4 SCG/SDG&E/Day.
991 *See e.g.,* Ex 76 SDG&E/Colton at 20-29 (citing Ex. 401 ORA/Roberts and Ex. 402 ORA/Wilson).
992 Tr. V28:2684:3-4 (Roberts).
993 *Id.* at 2683:3-4.

Arbitrary Reductions to Historical Costs

Both Mr. Roberts and Mr. Wilson adopted 2017 actual costs as the forecast for 2017, but also excluded any new capital project spending in 2017 associated with 54 budget codes that were not identified in SDG&E's testimony, which represented a $20.908 million reduction (in 2016 dollars).[994] ORA does not take issue with any of the 54 budget codes individually; rather, ORA seems to suggest that SDG&E generally cannot recover its reasonably incurred costs unless those costs are foreseen and forecasted in GRC testimony.

In short, it is not consistent with law or Commission policy to disregard actual expenditures because projects had not been included in a GRC forecast. In every GRC, there will be projects that do not appear in testimony forecasts due to unavoidable timing issues. As Mr. Colton explained, the GRC forecasting process is lengthy and time-consuming, and is "locked-down" in several stages in advance of filing an application – in this case, well before the end of the third quarter of 2017.[995] In contrast, the capital management process is dynamic, and does not follow along a GRC timeline. New projects and programs can arise at any time, based on new information and analysis, and may require planning and construction that is either not forecasted far in advance or that spins off from other budget activities. A utility must be allowed the flexibility to undertake necessary projects in accordance with prevailing circumstances. The existence of these projects and programs demonstrates the flexibility needed by SDG&E to conduct its business year-after-year.

The projects and programs which appear in the 2017 actuals were representative of many types of projects similar to those found within the categories that are outlined within SDG&E's testimony. While not explicitly mentioned in the GRC planning, these projects and programs still fall within the types of costs presented in SDG&E's forecasts, and represent valid utility spending to serve customer needs. ORA has not provided any basis to conclude that the excluded projects are unreasonable, and it is well-established that the Commission sets rates in a GRC on the principle that a "utility is entitled to all of its reasonable costs and expenses …."[996] ORA's approach is thus incorrect and inconsistent with long-held utility ratemaking principles.

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[994] Ex. 402 ORA/Wilson at 10-11.
[995] Ex. 76 SDG&E/Colton at 23.
[996] D.03-02-035 at 6; *see also* D.14-08-011, at 31 ("[T]he basic principle [of ratemaking] is to establish a rate which will permit the utility to recover its cost and expenses plus a reasonable return on the value of the property devoted to public use[.]").

The 54 omitted projects should be included within any analysis of SDG&E's actual 2017 costs, including ORA's recommended forecast, if adopted.

<u>Using Historical Averages for Forecasts</u>

Mr. Colton's direct testimony provides "individual descriptions and analysis of each project's business justification, need and support related to the safety and reliability for our customers, employees and communities," and describes the selected appropriate forecast methodologies "based on future expectations for the underlying cost drivers." [997] In contrast, Mr. Roberts analyzed SDG&E's proposals at a high, 'portfolio' level, using the historical adjusted recorded values provided by SDG&E applicable to his six cost categories, lowering those historical amounts by certain projects that are not planned to continue into the TY 2019 GRC forecast years, then averaging that amount as a basis for his recommendations. SDG&E has concerns with ORA's methodology for several reasons, as summarized below and described in further detail in Mr. Colton's rebuttal testimony.[998]

First, SDG&E does not agree that historical recorded values indicate future need in every circumstance, particularly with respect to ED Capital projects.[999] ED Capital GRC forecasts should be based on the specific need for each project, including the duration of need, discrete or on-going scope, cost drivers, and business justifications for individual projects, as described in Mr. Colton's direct testimony and elucidated in discovery. Second, assuming an historical average were to be used (and SDG&E does not always agree that it should), arbitrarily removing project and program costs that fall off in the base year would skew the historical average, without any reasonable basis.[1000] Third, SDG&E takes issue with ORA recommendations that appear to be based in part on a premise that SDG&E should link its highest cost increases to the highest RAMP risk scores.[1001] The risk management rebuttal testimony of Diana Day, Greg Flores, and Jamie York explains why funding decisions based on RAMP risk scoring is not appropriate.[1002]

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[997] Ex. 74 SDG&E/Colton at 2-3.
[998] Ex. 76 SDG&E/Colton at 23-28.
[999] *Id.* at 25.
[1000] *Id.* at 26-27.
[1001] *Id.* at 27-28 (citing Ex. 401 ORA/Roberts at 8-10, 36-37).
[1002] Ex. 4 SCG/SDG&E/Day/Flores/York, section II.D at 12-14.

Use of Historical RAMP Proxies to Create a Trend Line for RAMP-Related Forecasts

SDG&E also disagrees with ORA's use of a RAMP trend line and RAMP reduction value, as shown in Mr. Wilson's testimony.[1003] Mr. Wilson appears to have created a proxy for a "RAMP" historical spend, when RAMP was not yet in existence, then used historical averages of this proxy to create a "RAMP" trend line for 2018 and 2019.[1004] For simplicity, Mr. Wilson's calculation appears to be as follows:

- 2018 = Average of ORA's trend line forecast + (SDG&E's forecast **minus** Average of ORA's trend line forecast) x 0.5
- 2019 = Average of ORA's trend line forecast + (SDG&E's forecast **minus** Average of ORA's trend line forecast) x 0.66

ORA's testimony does not provide justification or support for why the yearly factor increases of 0.5 and .66 are used. As Mr. Colton explained, this trend-based methodology lacks any basis for assuming that discrete capital projects would follow a linear trend; nor is there any basis for uniformly spreading reductions throughout SDG&E's proposed RAMP-related projects and programs. ORA offers no support for how SDG&E could implement its proposed RAMP-related projects and programs under ORA's proposed reductions; nor any proposals for which SDG&E's RAMP-related projects and programs should not be implemented.

As Mr. Colton explained, similar to SDG&E's TY 2016 GRC,[1005] approximately seventy-five percent of SDG&E's proposed ED Capital projects and programs are derived from zero-based estimates, and the zero-based methodology often applies to projects or programs that are not ongoing year after year and have a set duration. These types of budgets typically need a scale-up or ramp-up period where early years include planning, engineering, preparation and evaluation, with larger budgets being required during implementation and construction periods. ORA's methodology and recommendation does not take into account the discrete nature of many of SDG&E's proposed projects.

[1003] Ex. 76 SDG&E/Colton at 28-29 (citing Ex. 447 ORA/Wilson, Tab 5, RAMP-Driven Projects).
[1004] As Mr. Colton testified, SDG&E requested that ORA "describe in detail the step-by-step process ORA took to derive its forecasts" in Ex. 402 ORA/Wilson. ORA responded that "a step-by-step description of how ORA derived its forecasts would essentially be a replication of the 47 pages contained in ORA's testimony …" Ex. 76 SDG&E/Colton at 28, n.99 and Appendix A at 2-3 (citing SDG&E's response to Data Request SEU-ORA-DR-08 Q1).
[1005] *Id.* at 29.

Moreover, ORA's reductions are spread evenly throughout all RAMP related projects and programs, regardless of risk-management-based need. With no reasoning or justification, ORA's recommended cuts to SDG&E's RAMP projects and programs (intended to address SDG&E's key risks) are not appropriate.[1006] As ORA witness Mr. Stannik testified, RAMP projects should be subject to a "traditional review process in the GRC,"[1007] which ORA's RAMP linear trend analysis does not provide.

22.1.2 Capacity/Expansion

Table 22.1.C – Capacity/Expansion Rebuttal Positions – Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$13,269	$11,002	$25,176	**$49,447**	**-**
ORA	$16,796[1008]	$15,353	$15,353	**$47,502**	**-$1,945**
TURN	$13,269	$11,002	$25,176	**$49,447**	**$0**
CUE	$13,269	$11,002	$25,176	**$49,447**	**$0**
FEA	$16,796	$15,353	$15,353	**$47,502**	**-$1,945**

ORA's capital forecast for capacity (which is echoed by FEA) reduces the forecasted TY 2019 request by 39%, based on ORA's flawed historical average of SDG&E's 2013-2017 adjusted-recorded expenditures (described above in section 22.1.1) and its equally flawed reduction for the "Jamacha-New 12kV Ckt. 1090" capacity project. ORA's argument for this dramatic reduction is that the project is "more than ten times over-budget."[1009] But, as SDG&E explained in rebuttal, the Jamacha project is a good example of how project requirement variability can occur as the design and permitting processes proceed, warranting flexibility in capital budgeting. After planning for the Jamacha project, jurisdictional requirements mandated night construction and design modifications for underground installation within a busy highway. To accommodate these requirements, SDG&E had to adjust design and construction schedules and reduce funding on other projects within this or other budget categories to allow for this priority capacity project to be completed.[1010]

[1006] *Id.* (citing Ex. 4 SCG/SDG&E/Day at 6-8).
[1007] *Id.* (citing Ex. 398 ORA/Stannik at 15).
[1008] ORA appears to have inadvertently omitted two budget codes in the Capacity/Expansion category in its calculations. These omissions add up to approximately $3.793M (Missing Budget Codes: BC11256 = $2.316M, BC97248 = $1.477M). Ex. 76 SDG&E/Colton at 32, n.106.
[1009] Ex. 401 ORA/Roberts at 60.
[1010] Ex. 76 SDG&E/Colton at 32-33.

The electric system is dynamic and the increases or decreases in demand change each year, requiring the forecast for substations and circuits to also change each year. This constant adjustment requires flexibility in funding, resulting in either an increase in capacity projects for one year (*i.e.*, new large development) or a decrease in capacity-related projects (*i.e.*, changes in housing and commercial developments). ORA's chosen historical average of capacity projects does not represent SDG&E's future capacity and expansion needs, particularly where ORA has unjustifiably reduced SDG&E's historical average, as described *supra* in section 22.1.1. Moreover, ORA has also arbitrarily reduced the recorded value associated with the Jamacha project within this forecast, without accounting for budget modifications in other projects, resulting in a dramatic decrease.[1011]

ORA is also incorrect in its suggestion that SDG&E has not provided capacity project analysis.[1012] SDG&E's load/overload percentage values were captured and provided in its direct showing, within Mr. Colton's ED Capital workpapers, under the justification for many of the capacity projects with a zero-based forecast methodology.[1013] SDG&E also outlined its capacity analysis process in response to an ORA data request, by providing the specific elements evaluated, the organization responsible for the final results and types of information used along with the format generated by the planning process, when the data was submitted and the specific peak year used to establish the forecasted values; and provided the results in a load/overload-percentage format used by SDG&E to justify projects for the last several years, consistent with previous GRC requests, in response to ORA discovery.[1014] The corresponding data provided within the data requests, along with the information under the justification section in Mr. Colton's workpapers, and under the cost driver sections in Mr. Colton's direct testimony, all support SDG&E's need for the capacity projects. For all of the above reasons, ORA and FEA's proposals regarding the capacity category are unwarranted.

[1011] *Id*.
[1012] *Id.* at 33-34 (citing Ex. 401 ORA/Roberts at 61).
[1013] *See* Ex. 75 SDG&E/Colton at 22.
[1014] Ex. 76 SDG&E/Colton, Appendix. A at 36-37 (Data Requests ORA-SDGE-18-TCR and ORA-SDG&E-118-TCR).

22.1.3 Equipment/Tools/Miscellaneous

Table 22.1.D – Equipment/Tools/Miscellaneous Rebuttal Positions Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$4,833	$1,037	$1,037	**$6,907**	**-**
ORA	$8,130	$1,037	$1,037	**$10,204**	**$3,297**
TURN	$4,833	$1,037	$1,037	**$6,907**	**$0**
CUE	$4,833	$1,037	$1,037	**$6,907**	**$0**
FEA	$8,130	$1,037	$1,037	**$10,204**	**$3,297**

SDG&E accepted in rebuttal ORA's and FEA's recommendations to correct the 3-year average methodology used to derive SDG&E's 2018 and 2019 forecasts, acknowledging that a 3-year average had been intended to be used. ORA and FEA also recommended to incorporate recorded data in 2017, resulting in forecasted expenditures of $8.130 million in 2017, $1.037 million in 2018, and $1.037 million in 2019. These expenditure recommendations are $3.297 million higher than SDG&E's request for 2017, $1.494 million lower in 2018, and $1.992 million lower in 2019.[1015]

22.1.4 Franchise

Table 22.1.E – Franchise - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$34,463	$40,180	$35,190	**$109,833**	**-**
ORA	$31,374	$36,983	$35,190	**$103,547**	**-$6,286**
TURN	$34,463	$40,180	$35,190	**$109,833**	**$0**
CUE	$34,463	$40,180	$35,190	**$109,833**	**$0**
FEA	$31,374	$36,983	$35,190	**$103,547**	**-$6,286**

ORA did not take issue with SDG&E's forecast for TY 2019, but revised 2018 forecasts to reduce expenditures for budget codes 17250, 17251, and 17252, based on responses to ORA's data requests,[1016] which asked to distinguish between collectible and rate base funding. SDG&E included collectibles for these budget codes in direct testimony, but ORA recommends only the net cost to ratepayers be included, since this is the amount for which ratepayers will be responsible.[1017]

[1015] *Id.* at 34-35 (citing Ex. 402 ORA/Wilson at 24). SDG&E's total request for the Equipment/Tools/Miscellaneous budget category incorporate ORA's recommendation for the 2018 and 2019 requested amounts.

[1016] *Id.* at 35-36 and Appendix A at 38-39 (Data Request ORA-SDGE-18).

[1017] Ex. 402 ORA/Wilson at 27.

ORA's proposal leads to an inaccurate result because, in the GRC process, the estimated collectible amounts attributable to a project are recorded and later removed from the Results of Operations (RO) model during the calculation of rate base. It is thus correct to show the collectible amount (*i.e.*, the refundable costs obtained from the customer in advance of construction) as part of the direct costs to do the work. Removing collectible costs from those direct costs thus would have the effect of excluding them twice.

The rationale behind including the collectible portion of a given project in direct costs is to allow the full overhead pool to be allocated both to the collectible and the non-collectible portion of capital projects, thus accurately reflecting the appropriate amount of overheads to move into plant-in-service as capital project additions. Since SDG&E collects the applicable overheads from the customer, it would not be appropriate to include the entire overhead pool in rate base. Thus, collectibles should not be excluded from the forecasts for the three Franchise budget codes including budget code 213 (or other budget codes in Mr. Colton's testimony), because collectibles are removed from the RO model during the calculation of rate base.[1018]

22.1.5 Mandated

Table 22.1.F – Mandated – Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$33,169	$34,377	$32,662	**$100,208**	**-**
ORA	$28,641	$31,817	$31,817	**$92,275**	**-$7,933**
TURN	$33,169	$34,377	$32,662	**$100,208**	**$0**
CUE	$33,169	$34,377	$41,434	**$108,980**	**$8,772**
FEA	$28,641	$31,817	$31,817	**$92,275**	**-$7,933**

ORA – Mandated projects are required by the CPUC and other regulatory agencies, as explained in direct testimony. ORA's report does not dispute the purpose and need of any individual SDG&E project or program in the Mandated category, nor does ORA appear to dispute SDG&E's individual cost estimates or forecasting methodologies. Rather, ORA simply argues for a reduction from SDG&E's 2017 actual costs (as explained above in section 22.1.1), as well as a 7% reduction from 2018 and a 3% reduction from 2019. ORA does not provide a reason for reducing SDG&E's request for capital expenditure in this category, but simply offers an arithmetic adjustment that leads to a lower number.[1019]

1018 Ex. 76 SDG&E/Colton at 35-36.
1019 *Id.* at 36-37.

SDG&E's requested funding for the Mandated programs is needed to maintain compliance with applicable regulations, promote public and employee safety, protect the overhead and underground distribution facilities, maintain quality of service to customers, and avoid degradation of reliability due to aging electric systems, as the record demonstrates.[1020] ORA's recommended cuts are unwarranted and should be rejected.

CUE – CUE's testimony recommends cost increases above SDG&E's request for the following budgets in this category: an additional $4.905 million for the Avian Protection Program in Budget 10265, $3.201 million for Underground Switch Replacements in Budget 289, and $0.666 million for the Corrective Maintenance Program in Budget 229. SDG&E continues to support its proposals, but acknowledges there may be value in accelerating the replacement of various aging infrastructure items as recommended by CUE.

22.1.6 Materials

Table 22.1.G – Materials - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$24,871	$26,315	$27,694	**$78,880**	**-**
ORA	$18,303	$25,317	$26,316	**$69,936**	**-$8,944**
TURN	$24,871	$24,417	$24,928	**$74,216**	**-$4,664**
CUE	$24,871	$26,315	$30,434	**$81,620**	**$2,740**
FEA	$18,303	$25,317	$26,316	**$69,936**	**-$8,944**

ORA – ORA recommends lowering the Electric Meters and Regulators budget by the same percentage recommended for the New Business category (addressed in section 22.1.7). The Electric Meters and Regulators budget includes transformers, meters and regulators for new installation (which correlates with New Business) as well as routine replacements (which does not). ORA's testimony does not acknowledge that the Electric Meters and Regulators budget is also used for "replacements for meters that are damaged or not properly functioning," as shown in direct testimony.[1021] Because ORA does not distinguish between new meters and replacement meters for this budget, its recommended reduction for Electric Meters and Regulators is overstated. SDG&E therefore does not agree with a reduction to either component of this budget

[1020] Ex. 74 SDG&E/Colton at 44.
[1021] Ex. 74 SDG&E/Colton at 54 (stating that the Electric Meters and Regulators budget is used for "replacements for meters that are damaged or not properly functioning").

and recommends adoption of the requested funding for the Materials budget category in its entirety. [1022]

TURN – TURN recommends that Budget 202 for the Meters and Regulators component of this category be reduced by $1.898 million in 2018 and by $2.766 million in 2019 from SDG&E's proposal, based on the 2012-2016 historical average for this budget.[1023] TURN's recommendation is misguided, because the forecast for meters and regulators in large measure follows the trend of New Business, which is increasing, as further discussed in section 22.1.7 below. An historical average thus would not be appropriate. Without the proper inventory of electric meters, customers would be required to delay construction, potentially also delaying subsequent events such as occupancy of a premises or commencement of business. Budget 202 also includes replacements for damaged or malfunctioning units. The equipment associated with this budget is thus key to SDG&E's day-to-day operations of providing service to customers. TURN's proposed reductions should therefore be disregarded, and SDG&E's requested funding for the Materials budget category should be approved in its entirety.

CUE – CUE recommends an increase to Budget 214 for Distribution Transformers of $2.740 million above SDG&E's request for TY 2019. The purpose of this budget increase is to accommodate the increased New Business projections and replace failed equipment while allowing for potential cost increases for material and fabrication. SDG&E supports its direct testimony request, but acknowledges there may be value in accelerating the replacement of aging transformers while meeting the New Business demands.[1024]

22.1.7 New Business

Table 22.1.H – New Business - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$55,317	$57,186	$60,592	**$173,095**	**-**
ORA	$54,082	$46,007	$46,613	**$146,702**	**-$26,393**
TURN	$55,317	$56,016	$59,149	**$170,482**	**-$2,613**
CUE	$55,317	$57,186	$60,592	**$173,095**	**$0**
FEA	$54,082	$46,007	$46,613	**$146,702**	**-$26,393**

[1022] Ex. 76 SDG&E/Colton at 37-38.
[1023] *Id.* at 38 (citing Ex. 490 TURN/Borden at 10).
[1024] *Id.* at 39.

SDG&E's direct testimony summarized and explained the forecasted need for each of the New Business budget categories.[1025] SDG&E's New Business budgets are used to plan for and record capital expenditures associated with work performed to add new electric distribution system customers within the SDG&E service territory. Most of the expenditures associated with the New Business budgets are a direct result of customer requests, for example, for new services, upgraded services, new distribution systems for commercial and residential developments, system modifications to accommodate new customer load, customer requested relocations, rearrangements, removals, and the conversion of existing overhead lines to underground. All work and cost responsibilities are governed by applicable tariffs, which typically place the bulk of the cost on the utility. This category of work also has some budgets with collectible components.

SDG&E's New Business budgeting process is based on its construction unit (CU) forecast, a twice-yearly in-depth assessment that combines data on permit activity and the most current outlook on housing and land development, presented by a variety of economic forecasting entities.[1026] A CU is counted only once, when the company extends its system to serve a new unit. A CU is thus not the same as a "meter set," because a meter can be connected or disconnected to a residence many times over the life of the structure and is counted as one "set" each time the task is performed. One residential construction unit usually maps to one new dwelling unit. One new single-family residence or one new apartment unit equals one residential construction unit. Nonresidential construction units, on the other hand, do not match one-to-one to each related business. Rather, one nonresidential construction unit maps to one business structure (point of service). For example, one newly constructed office building may represent one nonresidential construction unit, even though there may be many tenant businesses occupying the same office building.

SDG&E's forecast of residential electric CUs is driven by a forecast of San Diego county residential building permits.[1027] The forecast of residential permits is usually permit information gathered locally, combined with permit information provided by a nationally recognized data service provider, such as Global Insight, Inc. The information gathered locally is used to

[1025] Ex. 74 SDG&E/Colton at 57-67.
[1026] Ex. 76 SDG&E/Colton at 40-42.
[1027] Ex. 74 SDG&E/Colton at 58.

develop a current-year and one-year-out forecast of permits. The permit series provided by the national data service provider is merged with the front end of the permit forecast to create a five-year set of residential permits to use as a model driver. SDG&E's direct testimony at Appendix E provides a chart of the latest CU forecast at the time of filing.[1028]

ORA – ORA takes issue with the capital forecast for the New Business category of projects, claiming it is not able to verify the methodology of SDG&E's CU forecast. ORA's recommendation incorporates adjusted-recorded 2017 data into its spreadsheet and revises the proposed expenditures to reflect what ORA believes to be the link between gross meter sets and forecasts for customer driven capital projects. ORA further states such a linkage is utilized by other energy utilities.[1029]

But SDG&E has used its CU forecasting methodology for many years and believes it is superior to the meter growth forecast model, for SDG&E's purposes, because it is based on a forecasted number of permits and therefore minimizes lag and is better correlated to budget timing. SDG&E supports its use of CU forecasting methodology because it is a leading indicator, as opposed to meter growth (based on permit applications), which is lagging. SDG&E finds CU forecasting to be more appropriate, because it is a leading indicator and "an in-depth assessment that combines data on permit activity and the most current outlook on housing and land development, presented by a variety of economic forecasting entities," as explained in direct testimony.[1030] In fact, the CU forecasting methodology was accurate within a 7% variance from actuals in 2017, as discussed below. Construction units are also an integral and necessary element of SDG&E's work order system (*i.e.*, the Distribution Planning & Scheduling System—DPSS).[1031] The forecast results of construction units are not simply relegated to GRC forecasting, it is incorporated into one of SDG&E's major construction planning systems.

ORA states that there appears to be a problem in gathering accurate data on building permits, and/or a problem in translating the data into CUs, and that the forecast of CUs has been a poor predictor of the actual number of CUs that occur. ORA's GRC forecast recommendation is based on projected meter growth instead of the CU Forecast, for the customer driven budget

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[1028] *Id.* at Appx. E.
[1029] Ex. 76 SDG&E/Colton at 34.
[1030] Ex. 74 SDG&E/Colton at 57-58 and Appx. E.
[1031] Ex. 76 SDG&E/Colton at 40.

codes.[1032] But despite ORA's arguments, SDG&E's actual 2017 recorded CUs came within approximately 7% of the CU forecast (10,253 actual CUs, compared to our forecast of 11,023 CUs for 2017), and actuals appear to be continuing on track with forecasts. This is supported by the behavior of Budget Code 225 (Customer Requested Upgrades and Services), which spiked well above the 2017 forecast.

Finally, ORA's recommendation does not reflect collectible costs, which are included in SDG&E's direct forecasts and removed during the RO model process, as explained above in section C (Franchise). All of the New Business budget codes, except BC 204 and 15258, include collectible costs in the forecast, and should appropriately remain in the forecast to avoid being removed a second time during the RO model process. For all of these reasons, ORA's New Business forecasting recommendations should be rejected.

TURN – TURN takes issue with only one of the capital forecast budget codes within the New Business category of projects, Budget Code 211 – Overhead to Underground Conversions. TURN argues that the premise of SDG&E's estimate is flawed "because there is no indication that increased building development, even if it were to happen, results in increased overhead to underground conversions in a given year." TURN further states that "there is no positive correlation between residential or small commercial building growth and OH-UG conversion – in fact, the correlation between meter growth and conversion cost is weak and negative."[1033]

SDG&E's forecast of this budget code is based on an historical 5-year average, with a 10% adder for each forecast year to account for development projections as discussed above. SDG&E's 2017 actuals came in approximately 7% over forecast for OH to UG conversions, and SDG&E does not expect this demand to decline over the next few years of the GRC period.[1034]

Furthermore, similar to ORA, TURN's recommendation does not reflect collectible costs, which are included in SDG&E's direct forecasts and removed during the RO model process, as explained above in section C (Franchise). All of the New Business budget codes, except BC 204 and 15258, include collectible costs in the forecast, and should appropriately remain in the forecast to avoid being removed a second time during the RO model process.

[1032] Ex. 402 ORA/Wilson at 34-38.
[1033] Ex. 490 TURN/Borden at 11-12.
[1034] Ex. 76 SDG&E/Colton at 42-43.

22.1.8 Overhead (OH) Pools

Table 22.1.I – OH Pools - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$85,103	$120,386	$162,491	**$367,980**	**-**
ORA	$85,634[1035]	$86,855	$115,247	**$287,736**	**-$80,244**
TURN	$85,103[1036]	$71,029	$71,029	**$227,161**	**-$140,819**
CUE	$85,103	$120,386	$162,491	**$367,980**	**$0**
FEA	$85,634	$86,855	$115,247	**$287,736**	**-$80,244**

SDG&E's direct testimony describes how it incurs OH Pools project costs originating from central activities, which are subsequently distributed to those capital projects based on one or more factors, such as project direct labor, contracted invoice amounts, or total project direct costs.[1037] Examples of costs included in this category are engineering capacity studies, reliability analysis, and preliminary design work, many of which cannot be attributed to a single capital project and are thus spread to those projects that are ultimately constructed and placed into service. These central activity costs are also called 'pooled' or 'indirect' costs, and consist of costs related to Local Engineering - Electric Distribution (ED) Pool, the Department Overhead Pool (DOH), the Contract Administration Pool (CA) and the distribution portion of the Local Engineering - Substation Pool.

More recent regulatory and risk-reduction requirements have required increased levels of project engineering. The forecasts of the engineering pools are based on historical information with a trend applied to synchronize the pool forecasts with the overall increases in forecasted capital projected work.[1038]

ORA – ORA takes issue with the capital forecast for the Overhead Pools, primarily Local Engineering Electric Distribution Pool Budget 901, and Local Engineering, Substation Pool Budget 904, recommending that the budget for those pools be based on SDG&E's model, with

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[1035] It appears that ORA inadvertently understated 2017 actual expenditures for a budget code within Overhead Pools. This understatement adds up to approximately $0.415M and is included in Table 14 (Understated Budget Code BC904 = Understated by $0.415M). *Id.* at 43, n.137.

[1036] TURN referenced actual expenditures in 2017, however, they made no recommendation regarding adjustments to SDG&E's 2017 forecast request in their testimony. Table 14 thus assumes TURN does not take issue with SDG&E's overall 2017 forecast request for this category. *Id.* at 43, n.138.

[1037] Ex. 74 SDG&E/Colton at 68; Ex. 76 SDG&E/Colton at 45.

[1038] *Id.*, Ex. 74 at 68.

two adjustments: (1) updating the model inputs to use ORA program and project forecasts, and (2) reducing the number of programs that contribute to the Budget 904 forecast.[1039]

Table 22.1.J shows the ORA recommendation for the Overhead Pools in comparison to SDG&E's request:

Table 22.1.J ORA OH Pool Proposal Compared to SDG&E			
Overhead Pool	**ORA Proposed 2017 - 2019**	**SDG&E 2017 - 2019**	**Variance 2017 - 2019**
Local Engineering ED Pool (BC901)	$208,427	$239,606	-$31,179
Local Engineering Substation Pool (BC904)	$47,631[1040]	$88,218	-$40,587
Department Overhead Pool (BC905)	$12,079	$17,522	-$5,443
Contract Admin. Pool (BC906)	$19,600	$22,634	-$3,034

ORA also argues that SDG&E should use a direct-charging method and "scale back its use of engineering overhead pools."[1041] But the pool method is more efficient than direct charging, while achieving the same basic result. It would be administratively burdensome, costly, and inefficient to require charging these types of costs directly to projects, while providing no appreciable benefit.[1042]

As described in detail in rebuttal testimony, SDG&E's overhead pool methodology applies general accounting concepts, including the Overhead Pools procedure as stated in the Code of Federal Regulations.[1043] SDG&E therefore does not agree with ORA's proposed reductions based on the overhead pool methodology described above and recommends adoption of the requested funding for the Overhead Pools budget category in its entirety.

TURN – TURN takes issue with the capital forecast for the Overhead Pools category of capital projects, proposing they should be based on five-year historical averages for all four of the overhead pools.[1044] While TURN made no recommended adjustments to SDG&E's 2017

[1039] *See* Ex. 76 SDG&E/Colton at 44.

[1040] It appears that ORA inadvertently understated 2017 actual expenditures for this Local Engineering Substation Pool (BC904). This understatement adds up to approximately $0.415M and is included in the totals for Table 15 (Understated Budget Code BC904 = Understated by $0.415M). *Id.* at 44, n.141.

[1041] Ex. 401 ORA/Roberts at 55.

[1042] Ex. 76 SDG&E/Colton at 45.

[1043] *Id.* (citing Code of Federal Regulations, Title 18, Conservation of Power and Water Resources, Chapter I, Subchapter C, Part 101, Electric Plant Instructions, Paragraph 4, Overhead Construction Costs).

[1044] Ex. 490 TURN/Borden at 13.

forecast, it was assumed that TURN took no issue with SDG&E's 2017 forecast request.[1045] TURN's proposed Overhead Pools forecasts for 2018 and 2019 are shown in Table 22.1.K:

Table 22.1.K – TURN OH Pools Proposal Compared to SDG&E			
Overhead Pool	**TURN Proposed 2018 - 2019**	**SDG&E Request 2018 – 2019**	**Variance 2018 - 2019**
Local Engineering ED Pool (BC901)	$109,110	$178,818	-$69,708
Local Engineering Substation Pool (BC904)	$18,020	$74,270	-$56,250
Department Overhead Pool (BC905)	$32,000	$13,027	-$7,127
Contract Admin. Pool (BC906	$9,030	$16,762	-$7,732

SDG&E believes its forecast methodology of calculating the growth in capital pool expenditures is the more accurate and appropriate methodology compared to the use of historical averages alone. TURN's use of an historical average does not account for the forecasted changes in the underlying capital work such as New Business, and the increased scope of regulatory requirements, risk mitigation and engineering work required.[1046]

CUE – Although CUE does not propose specific increases or decreases to the pools, CUE does propose increases to SDG&E's underlying electric-related capital expenditures for 2019 totaling $97.185 million, with associated pool and overhead loadings also added in later modeling.[1047] SDG&E agrees that overhead loadings should be calculated consistently with authorized proposals.

FEA – FEA adopted ORA's position, and for the same reasons stated above, SDG&E supports its original recommendations.

22.1.9 Reliability/Improvements

SDG&E provided its forecasted expenditures and project descriptions for the Reliability/Improvements capital category in direct testimony.[1048] This category consists of a variety of capital budgets aimed at improving distribution system reliability and integrity, including the major budgets Replacement of Underground Cables (Budget Code 230), Capital Restoration of Service (Budget Code 236) and 4KV Modernization (Budget Code 6260).[1049]

[1045] Ex. 76 SDG&E/Colton at 46.
[1046] *Id.*
[1047] *Id.* at 46-47 (citing Ex. 370 CUE/Marcus at 84).
[1048] Ex. 74 SDG&E/Colton at 75-109.
[1049] *Id.* at 76, Table AFC-11.

Several of the budget codes in this category support activities that mitigate SDG&E's Electric Infrastructure Integrity RAMP risk.[1050]

Table 22.1.L – Reliability/Improvements - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$74,863	$108,418	$103,448	**$286,729**	**-**
ORA	$77,593	$51,479	$51,479	**$180,551**	**-$106,178**
TURN	$74,863	$103,262	$95,853	**$273,978**	**-$12,751**
CUE	$74,863	$108,418	$161,537	**$344,818**	**$58,089**
FEA	$77,593	$51,479	$51,479	**$180,551**	**-$106,178**

ORA – ORA proposes to adopt SDG&E's 2017 actual expenditures for Reliability/Improvements and, based on the historical average of Reliability projects and programs from 2013 to 2017, reduce both 2018 and 2019 expenditures by approximately 50%.[1051] Throughout ORA's testimony for Reliability/Improvements, ORA states SDG&E's increased request for funding over prior GRC years is unsubstantiated and does not support the need for increased reliability.

ORA's recommended funding for the Reliability/Improvements category is lower than SDG&E's historical average, a result of eliminating historical project costs for projects completed prior to 2017, arguing that SDG&E already has a reliable system. SDG&E disagrees with ORA's proposed funding reductions as maintaining a high level of reliability requires continued and potentially increased spending as discussed in more detail below.

Additionally, SDG&E disagrees with ORA's methodology for assessing RAMP projects within the Reliability/Improvements category, as discussed at length in rebuttal testimony and SDG&E's risk management testimony rebuttal.[1052] Although the category title is "Reliability/Improvements," many of the projects in this category are RAMP-related and address mitigation of one or more RAMP risks, and are thus inherently related to safety

[1050] *See id.,* Appendix C at 2-3. The Electric Infrastructure Integrity RAMP Risk "addresses the occurrence of a safety, environmental, or reliability incident due to electric equipment failure," *Id.* at 4. For more information, *see* I.16-10-015, Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company (November 30, 2016) (RAMP Report), Chapter SDG&E-12, Electric Infrastructure Integrity, *available at* http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M170/K705/170705141.PDF.

[1051] Ex. 401 ORA/Roberts at 25.

[1052] Ex. 76 SDG&E/Colton at 48-53; Ex. 4 SCG/SDG&E/Day/Flores/York at 12-14.

improvements.[1053] All of the risks included in SDG&E's RAMP Report addressed risk impacts scoring four (major) or more in the Safety, Health and Environment category, as described in the RAMP Report's "Overview and Approach" Chapter:[1054]

> SoCalGas and SDG&E's risk framework uses a 7X7 matrix where the Safety, Health and Environment category is weighted at 40% as compared to 20% for each of the other three risk categories. For each of the categories, the utilities assigned a score ranging from one (1) ("Insignificant") to a seven (7) 2 ("Catastrophic"). *Since, in general, the primary focus of the Commission and, in particular, the RAMP is understanding and mitigating safety risks, SoCalGas and SDG&E selected for inclusion in the RAMP all risks that received a score of four (4) or more in the Safety, Health and Environment category.* The risks that qualified for inclusion in the RAMP are referred to as "RAMP Risks."

The Electric Infrastructure Integrity risk impact scored four (major) in 2015 and six (extensive) in 2016, "due to the fact that a fatality or serious injury also could occur as a result of inadvertent electrical contact involving an energized wire down."[1055] Thus, it would be incorrect to dismiss RAMP-related projects tied to reliability as unrelated to safety, or otherwise unnecessary.

ORA's main arguments and SDG&E's rebuttal arguments are summarized below:

ORA Claims that SDG&E Already has a Reliable System

ORA points out that SDG&E has a high level of reliability, quoting from a CPUC report stating that SDG&E has maintained a consistently high level of reliability within its service territory.[1056] This appears to argue that SDG&E's system is reliable enough and does not warrant continued funding of reliability-improvement efforts. SDG&E disagrees with ORA's proposed cuts of nearly 40% between 2018 and 2019. Maintaining a high level of reliability does not mean that reliability will remain at a constant if spending levels are reduced. Rather, continued and potentially increased spending is needed to stay ahead of additional challenges to system reliability. To obtain additional improvements is potentially even more costly than to simply maintain a current reliability level. And, as noted above, many of the projects that improve system reliability and integrity also improve safety, and in many cases are intended to address serious RAMP risks.

[1053] *See* Ex. 76 SDG&E/Colton at 51, Table 18, for a complete listing of RAMP-related Reliability/Improvements projects.
[1054] I.16-10-015, RAMP Report, Chapter RAMP-A, Overview and Approach at 4 (emphasis added).
[1055] *Id.*at Chapter SDG&E-12, Electric Infrastructure Integrity at 11.
[1056] Ex. 401 ORA/Roberts at 29.

ORA's Claims Regarding Reliability Justification Based on RAMP

SDG&E's rebuttal testimony addresses ORA's suggestion that SDG&E's highest cost percentage increases due to RAMP risks do not match up with the risk scores assigned to the risk that the spend is intended to address; *i.e.*, that the risk score is not high enough to warrant a high percentage increase spend.[1057]

SDG&E's risk management rebuttal testimony of Diana Day, Greg Flores, and Jamie York explains why funding decisions based on RAMP risk scoring is not appropriate, including the fact that many of SDG&E's risk mitigating activities, programs and projects may mitigate several different types of risks.[1058] Mitigation efforts of different risks are not mutually exclusive, for example electric infrastructure integrity and wildfire risks are interrelated, and several mitigations that address infrastructure integrity would also help manage the wildfire risk. Vegetation management is such an effort. And the fact that a high level of reliability has been maintained in the past due to prudent vegetation management activities does not mean that activities could therefore cease, or be arbitrarily reduced, while maintaining the status quo. Moreover, as noted above, both the electric infrastructure integrity and wildfire RAMP risk-related activities address SDG&E's key safety risks – *i.e.*, risks scoring four (major) and above – as detailed in SDG&E's RAMP Report.

ORA witness Neil Stannik agrees that "it is not appropriate to compare risk scores, expected results of mitigations, and funding of those mitigations between risks."[1059] Rather, Mr. Stannik agrees that the information produced by RAMP and integrated into SDG&E's direct testimony presentation should be used "to <u>inform</u> funding decisions, but not to dictate these decisions or bypass the traditional review process in the GRC," as Ms. Day, Mr. Flores, and Ms. York discuss.[1060]

ORA's Forecast Methodology

ORA's Reliability/Improvements forecast methodology is based on an historical average of years 2013 to 2017 of $51.479 million for years 2018 and 2019 results in across-the-board cuts to projects that warrant full funding, as Mr. Colton testified.[1061] ORA's recommendation

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[1057] *See* Ex. 76 SDG&E/Colton at 50-52 (addressing Ex. 401 ORA/Roberts at 8-10).
[1058] *Id.* at 52 (discussing Ex. 4 SCG/SDG&E/Day/Flores/York at 12-14).
[1059] Ex. 398 ORA/Stannik at 12.
[1060] Ex. 4 SCG/SDG&E/Day/Flores/York at 6-8 (quoting and discussing Ex. 398 ORA/Stannik at 15).
[1061] Ex. 76 SDG&E/Colton at 53.

fails to recognize that 25 of the 32 Reliability/Improvements items utilized zero-based forecasting and will require full funding in order to see them to completion. ORA's recommendation is also based in part on the unwarranted omission of completed projects from the historic average, projects for which valid historical spending occurred but which are not carried forward into forecast years, as discussed in section 22.1.1, *supra.* Indiscriminately applying ORA's average to the Reliability/Improvements category as a whole also disproportionally affects the remaining 7 budget codes that should be based on a 3, 4, or 5-year average. Even though these project forecasts were based on the average spend from prior years, ORA has indiscriminately recommended a lower forecast, simply because these projects are associated with the Reliability/Improvements category as a whole.

TURN – TURN contests the capital forecast for only one of the budget codes within the Reliability/Improvements category of projects, Budget Code 6260 – 4kV Substation Modernization, stating: "TURN agrees that some proactive replacement of 4kV equipment may be necessary over the longer term. The question is, at what pace should this be accomplished starting today?"[1062] Additionally, TURN recommends normalizing the 2019 forecast request over the TY period (to 2021), which would result in a disallowance of $5.156 million in 2018 and $7.595 million in 2019.[1063]

TURN claims SDG&E's "…4kV systems actually have better reliability than 12kV systems…,"[1064] alluding to Table 7 of their rebuttal showing fewer outages of 4kV substations versus greater outages of 12kV substations for years 2010 to 2016.[1065] SDG&E's antiquated 4kV substations require equipment that is no longer standard design or compliant with current specifications, and is either problematic to obtain or obsolete. With the potential to improve system reliability through a targeted program of distribution upgrades to meet current standards along with replacing aged equipment, SDG&E continues to support its request to fund the its 4kV Substation Modernization budget.[1066]

CUE – CUE proposes expenditure increases above SDG&E's proposals for the following budgets: Budget 230 for Unjacketed Cable Replacement (increase by $48.699 million); Budget

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[1062] Ex. 490 TURN/Borden at 22.
[1063] *Id.* at 23.
[1064] *Id.* at 21.
[1065] Ex. 76 SDG&E/Colton at 54.
[1066] *Id.* (citing Ex. 74 SDG&E/Colton at 85).

11249 for SCADA Conversions (increase by $5.295 million); and Budget 6260 for 4kV Substation Elimination (increase by $4.095 million).[1067] CUE bases these proposed expenditure increases supporting the change-out of aging infrastructure and installation of newer technology on SDG&E's system at a faster pace than what is proposed by SDG&E in support of the continued reliability of the electric system. SDG&E acknowledges there may be value in accelerating the replacement of various aging infrastructure items or installation of newer technologies for this category as recommended by CUE, and SDG&E continues to support its proposed funding as an appropriate balance of process and resource constraints, while meeting reasonable infrastructure replacement rates.

FEA – FEA adopted ORA's position, and for the same reasons stated above, SDG&E supports its original recommendations.

22.1.10 Safety and Risk Management

SDG&E's forecasted capital investments requested in this category address the mitigation of safety and physical system security risks, including those identified in SDG&E's RAMP Report, such as the risk of wildfire.[1068] Mr. Colton's direct testimony describes the portfolio of eleven Safety and Risk Management budgets.[1069] The rebuttal summary party positions are shown in Table 22.1.M below:[1070]

Table 22.1.M – Safety and Risk Management - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$83,747	$113,497	$184,333	**$381,577**	**-**
ORA	$69,634	$97,619	$157,883	**$325,136**	**-$56,441**
TURN	$83,747	$92,097	$124,287	**$300,131**	**-$81,446**
CUE	$83,747	$113,497	$211,917	**$409,161**	**$27,584**
FEA	$69,634	$97,619	$157,883	**$325,136**	**-$56,441**

ORA – ORA proposes to adopt recorded data for 2017, and make adjustments in 2018 and 2019 to the eight RAMP-driven projects in the Safety and Risk Management category, using ORA witness Mr. Wilson's RAMP methodology discussed *supra* in section 22.1.1. ORA did not adjust the three non-RAMP projects for 2018 and 2019.

1067 Ex. 370 CUE/Marcus at 60-64, 68-70, 71-73, 84, n.586.
1068 Ex. 74 SDG&E/Colton at 110.
1069 *Id.* at 110, Table AFC-12.
1070 Ex. 76 SDG&E/Colton at 55.

While SDG&E agrees with ORA's determination to not adjust SDG&E's requested funding to the three non-RAMP driven capital projects, it does not make sense for ORA to support wholesale cuts to funding for a project simply because it addresses a RAMP risk. Mr. Colton has testified that the projects are justified by safety and risk management drivers that are established outside of RAMP.[1071] Association with RAMP should not predispose a more critical recommendation that reduces funding, as Ms. Day, Mr. Flores, and Ms. York testified: "[I]t is not reasonable to reduce funding for RAMP projects merely because those projects have been identified as RAMP-related, or to otherwise ignore or mischaracterize RAMP-related testimony and information..."[1072] The use of ORA's historical trend methodology is also flawed, as discussed *supra* in section 22.1.1, and should therefore be rejected for these budgets.[1073]

Certain projects within this category were discussed in greater detail by the parties, as discussed below:

PRiME **–** ORA took issue with the capital forecast for the PRiME program, stating "SDG&E has not thoroughly explained how it intends to scale-up its resources to meet its ambitious expenditure forecasts in 2018 and 2019,"[1074] in making an argument very similar to its position regarding the FiRM project in SDG&E's TY2016 GRC.[1075]

SDG&E described the rationale behind the initial pilot phase of the PRiME program in its original testimony, excerpted below:

> The initial subset of poles will be made up of approximately 1,600 poles as a pilot phase spread across SDG&E's service territory. Appropriate conclusions can be drawn geographically to determine the differences in expected outcomes and population sizes that vary across SDG&E's service territory.[1076]
>
> And:
>
> PRiME is a nine-year program designed to address risks related to pole loading, specifically focused on wood poles. SDG&E will focus on the areas of highest risk first. During initial implementation years, SDG&E will aggressively analyze

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[1071] Ex. 74 SDG&E/Colton at 110-126; Ex. 76 SDG&E/Colton at 55.
[1072] Ex. 4 SCG/SDG&E/Day/Flores/York at 9-10.
[1073] *See also* Ex. 76 SDG&E/Colton at 21-22, 55.
[1074] Ex. 402 ORA/Wilson at 14.
[1075] Ex. 76 SDG&E/Colton at 56 (citing Ex. 401 ORA/Roberts at 34-37 and Application (A.) 14-11-003/-004 (cons.), ORA Report on Results of Operations for San Diego Gas & Electric Company and Southern California Gas Company Test Year 2016 General Rate Case, SDG&E – Electric Distribution Capital Expenditures, Part 1 of 2 (Greg Wilson), dated April 24, 2015).
[1076] Ex. 74 SDG&E/Colton at 125.

> the poles based on a risk model where wood poles will be replaced and designed for known local wind conditions, and for all known attachments.[1077]

The PRiME program generated a significant amount of discovery. In response to ORA-SDGE-089-GAW question 5, part c, SDG&E re-iterated the rationale behind the scale-up approach:[1078]

> The pilot phase of 1600 poles will allow SDG&E to achieve a higher confidence level to verify pole failure rates to further assist in project forecasting. SDG&E will ramp from 1600 poles in 2018 to 22,600 poles in 2019 in order to ensure SDG&E can complete pole analysis within SDG&E's Fire Threat Zone/Highest Risk Fire Areas by 2021.

SDG&E plans to conservatively develop a pilot program in 2018 to ensure that the overall program's approach and methodology is appropriate, then aggressively analyze and replace poles in high-risk areas of SDG&E's territory.

***Twin Engine Helicopter* –** ORA recommends that no additional funding beyond what was spent in 2017 be allowed for Budget 17242 – Twin Engine Helicopter. It was anticipated that the entire purchase would occur in 2017; however, due to fabrication constraints, final payment for the helicopter was delayed until 2018 (but has now occurred, an example of delays that can occur to various projects).[1079] ORA did not take issue with the purchase of the twin engine helicopter itself, but only appears to dispute the timing of the purchase. ORA has presented no reason why this budget should not be fully funded, as proposed in direct testimony.[1080]

TURN

***PRiME* –** TURN generally supports the scope of work for the PRiME program as a reasonable effort to mitigate risk posed by overloaded poles, however recommending adjustments to the cost forecast under a perception that PRiME overlaps other programs such as FiRM. TURN also recommends reductions to SDG&E's estimated pole replacement costs and replacement rates.[1081]

1077 *Id.* at 126.
1078 Ex. 76 SDG&E/Colton at 56-57 (citing discovery response ORA-SDG&E 089 Q5, Appx. A at 42).
1079 *Id.* at 57.
1080 Ex. 74 SDG&E/Colton at 121-22.
1081 Ex. 76 SDG&E/Colton at 57-58 (citing Ex. 490 TURN/Borden at 28-37).

TURN's assumption that PRiME overlaps other pole replacement efforts (FiRM and Budget Code 87232 – Pole Replacements) results in its recommended reduction of PRiME by approximately 12%. But, in designing the PRiME program, SDG&E incorporated a factor which would accommodate anticipated overlaps from other programs. The pole count estimated for the PRiME program is 170,000 poles[1082] of a total inventory of approximately 200,000[1083] poles, or 85% of the total population. That difference of 15% was made as a conservative estimate to account for any potential future overlap from other programs (including Budget 87232). This 15% reduction is already 3% more than TURN is proposing to reduce the program. TURN's proposal, using the PRiME's approximate total pole count of 200,000 poles, would increase the scope of the program by approximately 6,000 poles. TURN's proposal would result, in effect, in a double-reduction: SDG&E's original 15% and then by TURN's 12%. SDG&E therefore supports its request as proposed.

TURN also claims that SDG&E fails to provide a reasonable basis for the replacement rate and cost for the PRiME program and recommends pole replacement costs be reduced from $25,000 to $22,706 per pole and the replacement rate reduced from 7% to 2.2%, based on assumptions taken from SDG&E's Corrective Maintenance Program (CMP).[1084] The CMP program is not a pole replacement program as defined by TURN, but is a visual configuration and maintenance inspection program conducted under the criteria of CPUC G.O. 165, which may incidentally result in the need to replace or reinforce some poles. The distinctions of these two programs are discussed in greater detail in Mr. Colton's rebuttal testimony[1085] and at hearings.[1086] As described in rebuttal[1087] and introduced at hearings,[1088] SDG&E had utilized a $25,000 per-pole cost estimate based on its FiRM program, based on similar construction activities.

The PRiME program is being established to utilize new known local wind data conditions gathered from SDG&E's fleet of anemometers and new 3-D modeling software that goes beyond the capability of the visual inspections, allowing for an analysis of the structure at all reasonably

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1082 *Id.* at 58 (citing Ex. 74 SDG&E/Colton at 125).
1083 *Id.* (citing Ex. 74 SDG&E/Colton at 123).
1084 *Id.* (citing Ex. TURN/Borden at 31-35).
1085 *Id.* at 58-59.
1086 Tr. V13:996:6 to 997:16 (Colton).
1087 Ex. 76 SDG&E/Colton at 60:15.
1088 Ex. 78 at 4 (SDG&E's response to Data Request TURN-SEU-077 Q2).

known potential wind and conductor loading conditions, including worst case conditions not visible during a CMP inspection. The CMP plan addresses compliance with all applicable general orders, while PRiME will go further to mitigate the risks of a structure failure by analyzing structural performance under more strenuous environmental and loading conditions.[1089]

With respect to the estimated pole replacement rate adopted for SDG&E's initial PRiME program pilot study, a heading in TURN's testimony states "SDG&E Provides No Reasonable Basis for the Replacement Rate and Cost of Replacement for the PRiME Program,"[1090] and "TURN learned through discovery that the PRiME program cost forecasts include both analysis and pole replacement/rearrangement assumptions, shown in Table 14 below."[1091]

SDG&E elaborated in rebuttal that, due to scope similarities between programs, SDG&E utilized some initial assumptions from SCE's 2012 pole loading study to create initial baselines for the PRiME program. As described in rebuttal[1092] and reiterated at hearings,[1093] this is the only similar program of which SDG&E is aware; thus it made sense for SDG&E to take note of SCE's non-conformance rates in establishing preliminary assumptions for the PRiME Program's starting point.[1094] SDG&E further described its adoption of a "one in 10" estimate of poles that would need to be changed out after consideration of initial assumptions with the Edison information.[1095] For the initial non-conformance assumption, SCE's 2012 study resulted in a 9.8% non-conformance rate which SDG&E used as a basis to determine a baseline non-conformance rate for the PRiME program.

SDG&E's initial pole replacement rate may actually be higher, because the initial assessment will be located within SDG&E's Fire Threat Zone and High Risk Fire Area (FTZ/HRFA).[1096] SDG&E's Pole Loading Risk Model will begin by identifying SDG&E's highest risk poles within the FTZ/HRFA where higher elevations and wind speeds are prominent,

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1089 Ex. 76 SDG&E/Colton at 59.
1090 Ex. 490 TURN/Borden at 31.
1091 Ex. 490 TURN/Borden at 31-32.
1092 Ex. 76 SDG&E/Colton at 59-60.
1093 Tr. V13:1005:27 to 1006:15 (Colton).
1094 Ex. 78 at 2 (SDG&E's response to Data Request TURN-SEU-077 Q1b).
1095 Tr. V13:1006:6-15 (Colton).
1096 Ex. 76 SDG&E/Colton at 60.

which is expected to result in higher non-conformance rates. This is expected to be determined and validated during the proposed pilot study.

SDG&E's initial pole replacement rate may actually be higher, because the initial assessment will be located within SDG&E's Fire Threat Zone and High Risk Fire Area (FTZ/HRFA).[1097] SDG&E's Pole Loading Risk Model will begin by identifying SDG&E's highest risk poles within the FTZ/HRFA where higher elevations and wind speeds are prominent, which is expected to result in higher non-conformance rates. This is expected to be determined and validated during the proposed pilot study.

SF6 Switch Replacement (14249) – TURN agrees that SDG&E should monitor SF6 switches and replace them if they are leaking, but does not support proactive replacement if a switch has remaining useful life and evidences no leaks. Since there are no historical costs for this effort from 2012 to 2015, TURN recommends that the actual recorded expenditures in 2017 be utilized as the approved expenditures in 2018 and 2019, a reduction of $10.985 million from SDG&E's forecast in each year.[1098]

SDG&E does not agree with this recommendation, because regulatory requirements from CARB and EPA require increased tracking of SF6 switches, while proactive removal and replacement of SF6 switches throughout SDG&E's distribution system will reduce the likelihood of SF6 emissions from leaking switches, thus reducing emission rates of SF6 gases.[1099]

SDG&E is also working with CARB to identify this industry constraint within their regulation on this topic, to potentially modify the CARB requirement for specific situations outlined above (*i.e.*, emergency situations). This budget should be fully funded as proposed.

Electric Integrity RAMP (16252) – TURN does not support the expenditure request in this budget as inconsistent with the preliminary state of the projects, instead recommending a figure that is 50% of the requested amount: $7.429 million in 2018 and $26.203 million in 2019. TURN also recommends a one-way balancing account, subject to an overall cost cap, and each activity's spending and unit costs to be tracked separately to inform future budgeting decisions.[1100]

[1097] Ex. 76 SDG&E/Colton at 60.
[1098] Ex. 490 TURN/Borden at 24-26.
[1099] Ex. 76 SDG&E/Colton at 61 (citing Ex. 74 SDG&E/Colton at 113).
[1100] Ex. 490 TURN/Borden at 28.

SDG&E disagrees with TURN's recommendations, having provided an appropriate estimate of costs for the proposed work in work papers and discovery responses.[1101] SDG&E does not support the use of a one-way balancing account for the Electric Integrity RAMP program as it reduces SDG&E's ability to reprioritize and adjust funds to meet customer needs within an overall cost cap, as also discussed in the rebuttal risk management testimony chapter.[1102] Additionally, the rebuttal risk management testimony chapter notes that arbitrarily limiting RAMP-related spending in this fashion would set a poor public policy precedent that is inconsistent with the Commission's directive to place "an emphasis on programs and activities that enhance the safety and reliability of the Applicants' natural gas and electric power infrastructure and operations."[1103]

CUE – CUE recommends cost increases in addition to SDG&E's requests to the following budgets for 2019; Budget 14248 for SF6 switches for an increase of $17.610 million; and Budget 17249 for 600 Amp Tee Connectors for an increase of $9.974 million. CUE also proposes a two-way balancing account for Budget 17254 for PRiME due to the potential uncertainty of costs as the program begins to scale up.[1104]

SDG&E acknowledges there may be value in accelerating the replacement of various aging infrastructure items as recommended by CUE, and SDG&E believes the proposed plan balances the process and resource constraints while meeting infrastructure replacement rates appropriately.[1105] Additionally, SDG&E does not agree with CUE's recommendation of using a two-way balancing account as suggested for the PRiME project, as it reduces SDG&E's ability to reprioritize and adjust funds to meet customer needs, as also discussed in the rebuttal risk management testimony chapter.[1106]

FEA – FEA adopted ORA's position, and for the same reasons discussed above, SDG&E supports its original recommendations.

1101 Ex. 76 SDG&E/Colton at 62.

1102 *See* Ex. 4 SCG/SDG&E/Day/Flores/York at 12 (discussing how balancing of RAMP costs would be incompatible with the Commission's decisions D.14-12-025 and D.16-08-018, including accountability reporting requirements).

1103 *Id.* at 8-10; D.16-06-054 at 37.

1104 Ex. 370 CUE/Marcus at 60-85.

1105 Ex. 76 SDG&E/Colton at 62.

1106 *See* n. 131 *supra.*

22.1.11 Transmission/FERC-Driven Projects

SDG&E proposed funding for distribution capital work associated with a portfolio of FERC transmission projects, such as 12kV circuits mounted on 69kV transmission lines, and the distribution components of transmission substations.[1107] While the transmission costs are recovered through the FERC ratemaking process, the distribution component of transmission projects is included in the overall request in this GRC. Risks to key transmission/FERC facilities have been identified as part of the previously discussed RAMP Report. The CPUC jurisdictional costs of those risk-mitigation projects were translated from that RAMP Report into the Transmission/FERC-driven capital budgets. The positions of the parties on this category of funding are shown in Table 22.1.N below:

Table 22.1.N – Table Transmission/FERC Driven Projects - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$32,183	$57,576	$50,118	**$139,877**	**-**
ORA	$21,641	$50,694	$41,552	**$113,887**	**-$25,990**
TURN	$32,183	$57,576	$50,118	**$139,877**	**$0**
CUE	$32,183	$57,576	$50,118	**$139,877**	**$0**
FEA	$21,641	$50,694	$41,552	**$113,887**	**-$25,990**

ORA – ORA utilized recorded actual data for 2017, and made adjustments in 2018 and 2019 to the six RAMP-driven projects (Cleveland National Forest Powerline Replacements (8165), TL649 (9137), TL691 (10144), TL695/6971 (10146), TL697 (10147), and TL6912 (10149)) based on an historical RAMP trend methodology stemming from ORA's analysis of the 15 RAMP-driven projects.[1108] None of the non-RAMP-driven capital projects were adjusted by ORA. As with the previously-discussed Safety and Risk Management category of capital projects (section 22.1.10), SDG&E takes issue with ORA's treatment of those projects that are identified as supporting RAMP. ORA's focus on those projects appears to be based again on the premise that they are solely justified by RAMP. Association with RAMP should not result in a more critical recommendation that reduces funding, as discussed in the Companies' risk management rebuttal testimony.[1109]

1107 Ex. 74 SDG&E/Colton at 138-154.
1108 Ex. 402 ORA/Wilson at 44-47.
1109 Ex. 76 SDG&E/Colton at 64 (citing Ex. 4 SCG/SDG&E/Day/Flores/York at 8-10).

These projects are justified by other purposes and needs as determined through the CPUC G.O. 131d approval process and other Federal approval processes to meet the Transmission/FERC-Driven needs for the projects. In most cases, these projects have either already been approved or are undergoing the process of being approved by the CPUC through an Advice Letter or a Permit to Construct filing. Once the CPUC approves a Transmission project, the associated distribution work required to be constructed needs to be fully funded through the GRC process. It would be inconsistent and problematic to approve the transmission component of the project and to not approve, or to reduce the funding for the companion distribution component.[1110]

FEA – FEA adopted ORA's position, and for the same reasons stated above, SDG&E supports its original recommendations.

22.1.12 IT-Sponsored Projects

SDG&E proposed a portfolio of IT-related projects in its Electric Distribution Capital testimony.[1111] These projects are those driven by a business need within Electric Distribution and described within the Electric Distribution Capital testimony, with the cost justification being discussed within the testimony and workpapers of Mr. Chris Olmsted.[1112]

Table 22.1.O – IT-Sponsored Projects - Constant 2016 ($000)[1113]					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	$36,811	$38,134	$33,071	**$108,016**	**-**
ORA	$23,578	$11,513	$11,513	**$46,604**	**-$61,412**
TURN	$36,811	$38,134	$33,071	**$108,016**	**$0**
CUE	$36,811	$38,134	$33,071	**$108,016**	**$0**
FEA	$23,578	$11,513	$11,513	**$46,604**	**-$61,412**

ORA – ORA takes issue with recorded data provided within SDG&E's response to data request "ORA-SDGE-159-MRL-IT,"[1114] specifically for "Electric GIS 2017 Enhancements".

1110 Ex. 74 SDG&E/Colton at 138; Ex. 76 SDG&E/Colton at 65.

1111 *Id.*, Ex. 74 at 155-64.

1112 *See* Exs. 304-306 SDG&E/Olmsted.

1113 IT Project costs are addressed in section 28 *infra*, and Exs. 303 and 304 SDG&E/Olmsted. IT Projects sponsored by DER Policy is addressed in section 22.2 *infra* and Ex. 93 SDG&E/Reguly.

1114 Ex. 76 SDG&E/Colton at 65 and Appendix A at 61-62 (citing SDG&E's response to Data Request ORA-SDG&E 159-MRL-IT Q2).

ORA states the adjustment captured within the data request response for "Electric GIS 2017 Enhancements" was "unsupported and appeared unreasonable," and therefore was removed.[1115]

As discussed in detailed rebuttal regarding ORA's methodology[1116] and *supra* in section 22.1.1, SDG&E does not agree with ORA's use of reduced historical averages to predict necessary funding for these projects. The initial requested funding for the projects submitted in this GRC in the IT-ED capital section was lower than the 2017 recorded actual costs. The increase in funding for this project was a result of accelerating the start date of the project from 2018 to 2017, based on a re-evaluation of priorities for business needs and scope enhancements, which occurred after finalizing testimony forecasts. As discussed in the rebuttal regarding ORA's methodology,[1117] removal of the recorded value from the historical average is not justified.

FEA – FEA adopted ORA's position, and for the same reasons described above, SDG&E supports its original recommendations.

22.1.13 Conclusion

SDG&E's TY 2019 direct testimony showing offers the first-ever risk informed GRC presentation, in a manner the Commission has approved as being useful and informative in the context of this GRC proceeding.[1118] In the first RAMP phase of the GRC, the Companies filed a RAMP Report comprising over 900 pages of written descriptions and analysis of the Companies' key risks, and their baseline and proposed risk mitigation activities.[1119] The recent decision closing the Companies' RAMP proceedings noted the Commission's Safety and Enforcement Division (SED) observation that "the risks identified in the RAMP Report offer a complete description of risk scenarios and proposed mitigation measures and provides a reasonable basis for understanding the intent of the mitigations and how they might be able to reduce the impact or frequency of [RAMP risk-related] incidents."[1120] The decision further noted that "the risk rankings and proposed mitigations provide more data, information, and analysis regarding SDG&E's and SoCalGas' methodologies in assessing risks and how to mitigate those risks."[1121]

[1115] Ex. 401 ORA/Roberts at 82.
[1116] Ex. 76 SDG&E/Colton at 20-29.
[1117] *Id.*
[1118] Ex. 4 SCG/SDG&E/Day/Flores/York at 7.
[1119] *Id.* at 8 (citing I.16-10-015/-016 (cons.)).
[1120] *Id.* at 9 (citing D.18-04-016 at 8).
[1121] *Id.* (citing D.18-04-016 at 9).

As SDG&E's risk management rebuttal testimony states:

> The "purpose of RAMP is 'to examine the utility's assessment of its ***key*** risks and its proposed programs for mitigating those risks.'" Thus, identifying a project or program as RAMP-related is a useful indicator that the project or program is intended to mitigate one of the Companies' key safety risks, and should be viewed in that light. The "RAMP" designation in the GRC alerts parties that more information is also available in the RAMP Report, including information about risk mitigation activities that are ongoing (and may have been ongoing for some time), as well as risk mitigation activities that are newly proposed in this proceeding. Finally, the RAMP designation also alerts parties to the fact that *the Companies will be held accountable for risk spending and effectiveness through accountability reporting.*[1122]

Thus, while RAMP-related information in SDG&E's direct ED Capital testimony presentation *does not* provide sole justification for RAMP projects, it *does* provide more information to parties and the Commission than in any prior GRC, about the key safety risks that each RAMP project is meant to address.

The principal parties that submitted proposals for SDG&E's Electric Distribution Capital were ORA, TURN, CUE and FEA. ORA recommended adjustments to each budget category based on various forecasting methods including historical averages, historic trends or an imputed RAMP trend and generally ignoring zero-based forecasts. This is not appropriate, given that three-quarters of ED Capital budgets are not ongoing year after year with comparable historic costs (*e.g.*, cable replacements), but are associated with specific projects with set durations and in-service dates. The use of an historical average or trend does not account for the inherent variabilities of projects that are not ongoing. Additionally, ORA recommends adoption of reduced 2017 recorded capital expenditures, rather than the 2017 forecast. This casts a narrow year-to-year cost view of activities that were forecast over the span of three years, and ignores the broader spectrum of various projects' total costs and activities that were reasonably forecasted and whose schedules and/or scopes may have had to be adjusted to meet a variety of requirements. Capital projects not completed in a given year do not simply vanish, but very often add to the needed capital work forecasted for the following year. The capital forecasting for the General Rate Case is performed for the multi-year period and should not be viewed simply as year-by-year increments.

[1122] Ex. 4 SCG/SDG&E/Day/Flores/York at 6-8.

For all of the reasons discussed above and throughout SDG&E's testimony presentation, SDG&E's ED Capital forecasts should be approved, as summarized in Table 22.1.P below.

Table 22.1.P – Total Capital - Constant 2016 ($000)			
	2017	**2018**	**2019**
Capital	$445,116	$588,317	$700,757

22.2 Distributed Energy Resources (DER) Policy and Capital Projects

Distributed Energy Resources (DER) are being installed at a rapid pace throughout SDG&E's service territory. The growth in DER installations SDG&E is experiencing is due to a variety of factors, including California's low carbon policy and customer adoption of innovative energy technologies. The prepared direct testimony of Alan M. Dulgeroff, adopted by SDG&E witness Ted Reguly, describes, at the policy level, the considerations driving the expenditures related to DER proposed in this GRC.[1123] This testimony is unrebutted.

As this testimony demonstrates, SDG&E faces new challenges in operating the distribution grid safely and reliably. Changing operational characteristics of SDG&E's distribution system include greater variability and composition of load and resources throughout the system, two-way power flows on distribution circuits, and increasing complexity to maintenance and emergency operations. These changes require corresponding modifications in the design and operation of the distribution system. In other words, the electric distribution system must evolve to meet the future needs of customers and society.

To support these changes while maintaining the service reliability and safety SDG&E's customers expect, SDG&E needs to make investments in resources, tools, sensors, systems, communications, and infrastructure. These will help SDG&E's distribution system to become a platform for distributed resources and devices to connect and interact more easily and reliably, and will promote the adoption of distributed technologies, and enhance consumer choice. Properly redesigned, the distribution system of the future and associated new operating procedures will more seamlessly facilitate DER integration in a manner that promotes fairness and equity for all customers, while maintaining safe and reliable energy production and delivery.

[1123] *See* Tr. V14:1072:13-22; Ex. 92 SDG&E/Dulgeroff (adopted by Reguly).

Continued growth in the DER market is expected to continue as the costs of DER technologies decline.[1124] SDG&E needs to support this influx of DERs and provide avenues to allow for continued growth, while at the same time managing the integrity of its distribution system and the safety of utility workers, communications workers, and the general public. To accomplish this task, investments are needed to change the distribution grid from its original design of point-source, one-way power flows, to a grid that can accommodate multi-point, two-way power flows. This affects the basic capacity specifications of overhead conductors and underground cables, and the design of segmentation and safety equipment such as fuses, interrupters, switches, and other controlling devices. SDG&E also seeks to gain experience with the types of technologies that DER providers are expected to install through the acquisition of related equipment, in order to develop the instrumentation, troubleshooting and safety procedures necessary to the modern DER-enabled grid. SDG&E believes its installation of energy storage and the continued advancement of the Distributed Energy Resources Management System (DERMS), among other projects discussed herein, are key enablers of a safe, reliable distribution system that accommodates customer choice. SDG&E's proposed package of DER-related expenditures is reasonable and reflects prudent utility decision-making to address changing circumstances.

Therefore, SDG&E takes issue with the recommendations by ORA and TURN to reduce or eliminate budgets for these projects. The proposed expenditures are not in conflict with or duplicative of the Electric Program Investment Charge (EPIC) or other CPUC initiatives/proceedings. Rather, these projects are intended primarily for maintaining and/or enhancing the electric distribution system's reliability, aiding with the integration of intermittent renewables, and/or addressing distribution circuits that are most prone to outages. SDG&E believes these projects are foundational to the safe, reliable and continued operation of SDG&E's electric distribution system as the San Diego region, and California generally, evolves to a lower carbon economy.

SDG&E's requested capital project funding in connection with DERs and DERMS is summarized in the succeeding subsections. The table below summarizes SDG&E's requested capital expenditures and the adjustments proposed by ORA and TURN.[1125]

[1124] Ex. 92 SDG&E/Dulgeroff/Reguly at 4.
[1125] *See* Ex.93 SDG&E/Reguly at 3.

Table 22.2 Summary of DER Capital Proposals

	Figures in thousands of 2016$								
	2017			2018			2019		
	SDG&E	ORA	TURN	SDG&E	ORA	TURN	SDG&E	ORA	TURN
BC 11246 Smart Transformers	$258	$4	$258	$-	$-	$-	$-	$-	$-
BC 11247 Advanced Energy Storage	$-	$1	$0	$5,154	$1,748	$0	$10,000	$3,452	$0
BC 14243 Borrego Springs Microgrid Enhancements	$1,769	$3,531	$1,769	$515	$175	$515	$-	$-	$-
BC14259B Vanadium Flow Battery Project	$539	$408	$539	$-	$-	$-	$-	$-	$-
BC 16243 Microgrid for Energy Resilience	$-	$-	$-	$5,894	$1,999	$-	$7,916	$2,733	$-
BC 17244A Volt-Var Optimization Transformer	$-	$16	$-	$500	$170	$500	$100	$35	$100
BC 17245 ITF	$523	$-	$523	$1,050	$356	$1,050	$-	$-	$-
BC 17246 Borrego Microgrid 3.0	$209	$-	$209	$5,230	$1,773	$5,230	$-	$-	$-
BC 14860A DERMS	$2,243	$2,109	$2,243	$3,627	$-	$3,627	$3,678	$-	$3,678
TOTAL	**$5,541**	**$6,069**	**$5,541**	**$21,970**	**$6,221**	**$10,922**	**$21,694**	**$6,220**	**$3,778**
VARIANCE		**$528**	**$-**		**$(15,749)**	**$(11,048)**		**$(15,474)**	**$(17,916)**

22.2.1 Smart Transformers

As specified in the table immediately above, SDG&E's forecasts for Smart Transformers for 2017, 2018 and 2019 are $258, $0 and $0, respectively, in thousands of 2016 dollars. As explained in the portion of the direct testimony of Alan F. Colton adopted by SDG&E witness Mr. Reguly,[1126] the purpose of this budget item is to provide funding for the installation of monitoring devices on some transformers serving customers with charging stations for plug-in

[1126] Ex. 74 SDG&E/Colton at 127-137 (adopted by Reguly); Ex. 93 SDG&E/Reguly at 1.

electric vehicles purchased between 2010 and 2020. This is a period of substantial growth in the deployment of electric vehicles in SDG&E's service area.[1127]

Distribution transformers will be converted to smart devices by installing monitoring equipment on the secondary transformer bushings, which will be performed as part of phase one of this project. The project will also allow for SDG&E to learn about the plug-in electric vehicle charging patterns of customers on a real-time basis. This information is important in determining the effects of electric vehicle charging on distribution transformers. The information will also be useful in determining if loading guidelines for transformers serving customers with plug-in electric vehicles need to be revised. This load data would also be used to proactively troubleshoot customer voltage problems that could occur due to an overloaded transformer.

ORA recommends a reduction to SDG&E's proposed budget request but provides no supporting analysis or explanation. Accordingly, the budget request included in SDG&E's direct case should be approved.[1128]

22.2.2 Advanced Energy Storage

The forecasts for Advanced Energy Storage (AES) for 2017, 2018 and 2019 are $0, $5,154 and $10,000, respectively.[1129] As explained in the direct testimony of Mr. Colton adopted by Mr. Reguly, advanced energy storage devices will help minimize impacts of intermittency and operational problems associated with the variable output of renewable energy resources.[1130]

SDG&E believes the AES program will provide value to ratepayers through the strategic deployment of energy storage devices on distribution circuits with an abundance of solar photovoltaic (PV) penetration. The energy storage devices will be able to leverage excess renewable energy to charge during the day when the circuit is experiencing lighter load levels, and discharge during times of higher loading. The AES program will allow for the increase of

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[1127] *Id.*, Ex. 74 at 128-129 (summarizing Smart Transformers business case).
[1128] Ex. 93 SDG&E/Reguly at p. 19.
[1129] Figures are in thousands of 2016 dollars as specified in Table 22.2. Information regarding the Advanced Energy Storage project is found in SDG&E's capital workpapers. *See* Ex. 75 SDG&E/Colton, Section 112470, Advanced Energy Storage at 819-826.
[1130] Ex. 74 SDG&E/Colton/Reguly at 129-130.

generation interconnection capacity, thus enabling more DER to interconnect without reaching system limitations by mitigating power backflow from distributed generators.[1131]

In addition, as SDG&E integrates additional energy storage managed by DERMS, it will help enhance the integration process and operability of future energy storage, utility owned or third-party owned. These preferred resources could also be used to fulfill SDG&E's remaining Local Capacity Requirement (LCR) as identified in the CPUC's Track 4 decision.[1132]

ORA recommends a 34% reduction of this budget item. ORA challenges this program on grounds including that it is a "distribution deferral proposal" that needs to meet the criteria established by the Commission governing distribution deferral investments.[1133] Additionally, in pointing out that SDG&E has already met its energy storage mandate under Assembly Bill (AB) 2514[1134] for distribution connected energy storage, ORA highlights that the energy storage that is part of the AES program will not count towards SDG&E's AB 2514 target.[1135]

As an initial matter, ORA's recommendation is based on the flawed assumption that the AES program is intended for distribution deferral purposes, which it is not. Indeed, even in the 2013 Capital Budget Documentation referenced by ORA, which preceded the Distribution Resources Plan (DRP) rulemaking,[1136] distribution deferral is not listed as a primary objective. Rather, that document only suggests that the AES program has "potential" to support distribution deferral.[1137]

In fact, as stated above, the energy storage devices deployed as part of the AES will be able to leverage excess renewable energy to charge during the day when the circuit is experiencing lighter load levels, and discharge during times of higher loading. The AES program will allow for the increase of generation interconnection capacity, thus enabling more DER to interconnect without reaching system limitations by mitigating power backflow from distributed generators. The AES program is thus designed to maintain and/or enhance the safety

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1131 Mr. Reguly explains that energy storage and renewable generation may not share the same point of common coupling when installed on a distribution circuit, necessitating further installation and analysis to determine the effectiveness of PV smoothing and voltage control for decoupled generation and storage. Ex. 93 SDG&E/Reguly at 5.

1132 *See* Decision (D.) 14-03-004; D.15-05-051.

1133 Ex. 431 ORA/Roberts at 93-94. See also *id.* at 94-96, 98.

1134 AB 2514, Stats. 2010-2016, Ch. 469 (Cal. 2010).

1135 *Id.* at 97.

1136 The Commission initiated the DRP rulemaking, R.14-08-013, on August 14, 2014.

1137 Ex. 93 SDG&E/Reguly at p. 4.

and reliability of the electric distribution system in that higher DER environment. Therefore, since the AES program was not intended to defer traditional distribution capacity upgrades, but rather to integrate renewables and harness their benefits, the processes and solicitations established in proceedings with respect to distribution deferrals do not apply.

ORA additionally relies upon California Public Utilities (P.U.) Code § 2836.6 as support for its proposed budget reduction,[1138] and further claims that SDG&E has exceeded its distribution-connected need so the AES program would not count towards SDG&E's D.13-10-040 targets.[1139] ORA's contention is belied by the very language of the statute, which expressly contemplates the possible deployment of storage resources in contexts other than the proceeding established by the statute.[1140] Given that, it obviously follows that SDG&E's AES program proposal is not subject to the requirements (*e.g.,* solicitation, ownership) in that decision.

Moreover, even assuming *arguendo* that SDG&E's AES proposal is subject to the requirements of D.13-10-040, the specific purpose of the AES program proposal—facilitating the integration of renewable energy—would fall within an exception expressly noted in D.13-10-040.[1141] Accordingly, there is no prohibition on SDG&E proposing energy storage projects, such as the AES program, for the Commission's approval outside of D.13-10-040, nor is there any Commission prohibited from approving such proposals. On the contrary, requesting approval for proposals outside of that proceeding, as SDG&E is doing here, is specifically permitted by the authorities relied upon by ORA.

For its part, TURN, contending that SDG&E did not demonstrate the need for the AES project, challenges the sufficiency of SDG&E's demonstration of operational problems at the distribution level resulting from solar PV.[1142] Moreover, TURN avers that SDG&E did not

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1138 Ex. 431 ORA/Roberts at 96. SDG&E notes that P.U. Code § 2836, *et seq.* implemented AB 2514, which resulted in the Decision Adopting Energy Storage Procurement Framework and Design Program (D.13-10-040).

1139 *Id.* at 97.

1140 P.U. Code § 2836(a)(4) ("Nothing in this section prohibits the commission's evaluation and approval of any application for funding or recovery of costs of any ongoing or new development, trialing, and testing of energy storage projects or technologies *outside of the proceeding required by this chapter*.") (emphasis added).

1141 D.13-10-040 at 56 ("We acknowledge that, in some instances involving distribution-connected storage, beyond distribution reliability applications, utility-owned storage may be allowable to facilitate preferred resources (*e.g.*, intermittent) and for reliability purposes outside of a competitive solicitation. Accordingly, as noted earlier, procurement of energy storage in these instances outside of a competitive solicitation can be considered on a case-by-case basis.").

1142 Ex. 490 TURN/Borden at 37.

present alternatives to storage to help identify the most cost-effective solution.[1143] TURN recommended zero funds allocated to this budget based on TURN's concerns summarized above. The rebuttal testimony of SDG&E witness Mr. Reguly addresses TURN's position and shows these concerns to be unfounded.[1144]

Accordingly, the budget request included in SDG&E's direct case should be approved.[1145]

22.2.3 Borrego Springs Microgrid Enhancements

The forecasts for the Borrego Springs Microgrid Enhancements for 2017, 2018 and 2019 are $1,769, $515 and $0, respectively.[1146] As explained in the direct testimony of Mr. Colton adopted by Mr. Reguly, this budget provides funding for improved and expanded utilization of the Borrego Springs Microgrid in responding to a variety of outage situations, demand response requests, and voltage/frequency regulation.[1147]

Located in the Anza Borrego Desert, the community of Borrego Springs is a remote community served by a single radial transmission line running from Narrows to the Borrego Springs Substation. Borrego Springs is subject to frequent and severe weather conditions, including high temperatures above 120 degrees Fahrenheit, high winds, flash floods, and lightning. Through the Borrego Springs Microgrid Demonstration (BSMD) Project, SDG&E has learned that a microgrid can be an effective solution to mitigating outage impacts. Specifically, SDG&E has successfully demonstrated that the microgrid can temporarily island a single circuit.

Subsequent expansions of the BSMD project included serving additional load, islanding multiple circuits and utilizing solar generation owned by NRG. In its current configuration, Borrego Springs has encountered many challenges while trying to utilize the microgrid to serve the entire community, while maintaining electric service to critical loads of Borrego. The current challenges will be mitigated with the following goals in mind: enhance emergency readiness, increase operational flexibility, decrease outage response time, decrease interruptions, increase

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[1143] *Id.* at 38.
[1144] Ex.93 SDG&E/Reguly at 7:6 -- 8:2.
[1145] *Id*. at 8-10.
[1146] Figures are in thousands of 2016 dollars as specified in Table 22.2. Information regarding the Borrego Springs Microgrid Enhancements project is found in SDG&E's capital workpapers. *See* Ex. 75 SDG&E/Colton, Section 142430, Microgrid Systems for Reliability at 827-835.
[1147] Ex. 74 SDG&E/Colton/Reguly at 130-132.

grid resiliency, demonstrate new microgrid technologies, increase microgrid load capacity, and utilize increased renewable generation.[1148]

This project will leverage various new technologies and resources, including advanced inverter functionality, automated switching, local power generation and energy storage, as well as adding, hardening, reconfiguring, and upgrading key infrastructure, so that the newly enhanced microgrid will become more flexible and automated, with remote access capabilities. The Borrego Springs Microgrid Enhancements project consists of two phases. Phase 1 of the project involves near-term solutions to operationalizing the microgrid, specifically allowing SDG&E's Electric Distribution Operators to operate the microgrid as an asset. Phase 2 of the project involves increasing the operational flexibility and capability of the current microgrid, which includes hardening key distribution infrastructure, additional SCADA devices, upgrades to the protection schemes, integration of the NRG solar facility, and the ultracapacitor.[1149]

ORA recommends a reduction to SDG&E's proposed budget request, generally arguing that the microgrid has been, and should continue to be, funded as a research, development, and demonstration (RD&D) project utilizing EPIC funding. While it is true that SDG&E has utilized such funding for the Borrego Springs microgrid, as explained by SDG&E witness Mr. Reguly, however, the Borrego Microgrid is now an integral part of SDG&E's distribution system and not merely a demonstration testbed for which reliance on RD&D funds is appropriate. Rather, the funds requested in this GRC are not for RD&D purposes; on the contrary, they are required to enhance facilities used to provide safe and reliable electric service to SDG&E's customers in the Borrego Springs community. Accordingly, the budget request included in SDG&E's direct case should be approved.[1150]

22.2.4 Vanadium Flow Battery Project

The forecasts for Vanadium Flow Battery Project for 2017, 2018 and 2019 are $539, $0, and $0 respectively.[1151] As explained in the direct testimony of Mr. Colton adopted by Mr. Reguly, this budget provides funding for the installation and evaluation of a Vanadium-Redox

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1148 *Id*. at 131.
1149 *Id*.
1150 *See* generally, Ex. 93 SDG&E/Reguly at 8-10.
1151 Figures are in thousands of 2016 dollars as specified in Table 22.2. Information regarding the Vanadium Flow Battery Project is found in SDG&E's capital workpapers. *See* Ex. 75 SDG&E/Colton, Section 14259A, Vanadium Flow Battery Project at 836-840.

Flow (VRF) Battery system (2MW / 8 MWh) with support from the Japanese New Energy and Industrial Technology Development Organization (NEDO) (analogous to the U.S. Department of Energy), to assess appropriateness for SDG&E's needs.[1152]

NEDO is targeting strategic partnerships in the US for grid technology demonstrations of energy storage. NEDO has selected Sumitomo to conduct VRF demonstrations in California. NEDO will fund up to $10M per site for Sumitomo's VRF. The VRF system will be installed to demonstrate both grid support and market functions.

Flow battery technologies are appropriate for MW scale energy storage applications; however, no North American demonstrations have been conducted. Accordingly, this project will provide a low cost/low-risk VRF demonstration, at modest cost to SDG&E and its customers. The objectives of this project include evaluating the system's size and performance (a 4 MWh VRF footprint is equal to a tennis court with a claimed infinite cycle life), evaluating flow system relevance for multi-MWh applications (i.e., substation and larger), addressing the ability of the system to perform market functions (CAISO market) in addition to grid services, and differentiating VRF system performance from lithium-ion.[1153]

ORA recommends a reduction to SDG&E's proposed budget request but provides no supporting analysis or explanation.[1154] Accordingly, the budget request included in SDG&E's direct case should be approved.

22.2.5 Microgrid for Energy Resilience

SDG&E's forecasts funding needs for Microgrid for Energy Resilience for 2017, 2018, and 2019 are $0, $5,894 and $7,916, respectively.[1155] The purpose of this initiative is to enhance system reliability by using microgrids and energy storage projects. Specifically, this budget item will provide funding to engineer and construct solutions utilizing microgrids and DER to enhance energy resilience for public purpose and critical applications.

SDG&E has demonstrated that microgrids can provide additional reliability and operational flexibility, while also affording opportunities to integrate greater levels of renewable

[1152] Ex. 74 SDG&E/Colton/Reguly at 132-133.
[1153] *Id*.
[1154] Ex. 93 SDG&E/Reguly at 19.
[1155] Figures are in thousands of 2016 dollars as specified in Table 22.2. Information regarding the Microgrid for Energy Resilience project is found in SDG&E's capital workpapers. *See* Ex. 75 SDG&E/Colton, Section 162430, Microgrid for Energy Resilience at 862-869.

resources. The project would utilize microgrids to enhance electric service reliability while also enabling increased renewable energy penetration levels. Depending on the size of the microgrid, renewable energy may be in the form of smaller or larger sources connected to the distribution feeder. To date, SDG&E has been approached and invited to propose projects for local agencies and the military, and this project will provide the funds for these solutions. ORA challenges this budget request as duplicative to the AES program and AB 2868 investments.[1156] SDG&E disagrees.

Regarding the latter point first, as Mr. Reguly explains, AB 2868 directs SDG&E to "file applications for programs and investments to accelerate widespread deployment of distributed energy storage systems" and "prioritize programs and investments toward public sector and low-income customers."[1157] SDG&E's AB 2868 application focuses on investing in energy storage to provide back-up power to public critical agencies like Cal Fire, local sheriff departments, water pumping stations, and emergency shelters. SDG&E's GRC request is not duplicative of AB 2868 because SDG&E's AB 2868 application, A.18-02-016, has not even been approved. Indeed, SDG&E's rebuttal testimony was only filed last month. Therefore, it is impossible to know the future outcome of a pending application. Moreover, SDG&E's AB 2868 application is incremental to the need to provide energy storage-based utility microgrids in SDG&E fire prone areas that are the focus of this budget request.[1158]

ORA's allegation that this program overlaps with the AES program is incorrect. Rather, the microgrid for energy resilience is distinct from the AES program. The AES program, in contrast to the Microgrid for Energy Resilience project, is aimed at deploying energy storage for purposes of intermittency smoothing needed due to high solar PV penetration on circuits to maintain and enhance reliability. The AES program is not designed to provide microgrid resiliency benefits for customers located out in the backcountry and other wildfire prone areas.[1159]

For its part, TURN would eliminate funding on the ground that SDG&E has not performed a cost-benefits analysis of the proposed Microgrid for Energy Resilience budget

[1156] Ex. 431 ORA/Roberts at 105-06.
[1157] Ex. 93 SDG&E/Reguly at 11.
[1158] *Id.*
[1159] *Id.* at 11-12.

request.[1160] SDG&E believes the benefits of these projects are amply supported. These projects will provide backup power to customers that would otherwise be disconnected from service during times of wildfire risks. The benefits of maintaining basic energy service to customers in a safe manner, particularly in regions that typically endure high temperatures, is critically important. Microgrid for Energy Resilience projects will provide backup power to customers that would otherwise be disconnected from service during times of wildfire risks. Additionally, SDG&E will deploy this energy storage in a way that maximizes grid benefits for all customers. Therefore, SDG&E believes the costs of these projects will be reasonable for the benefits to SDG&E's customers from the capabilities these resources will provide.[1161]

22.2.6 Volt/VAR Optimization Transformer

The forecasts for the Volt/VAR Optimization Transformer for 2017, 2018, and 2019 are $0, $500 and $100, respectively.[1162] This budget will provide funding to install Gridco Systems secondary regulation devices to correct voltage issues (low or high) on the secondary network (240kV) created by increased PV installations. Changes in voltage profiles have caused several distribution circuits to violate the ANSI standard of +/- 5% of nominal, which can cause damage to customer equipment and decrease energy efficiency. By optimizing the voltage profile, SDG&E's distribution system will be more energy efficient and maintain ANSI standards.

ORA recommends suspending investments on this budget item pending the availability of alternative equipment from a new manufacturer.[1163] SDG&E disagrees. While the manufacturer involved has ceased operation, that does not change the fact that SDG&E has already deployed nearly three dozen of these regulation devices in the field.[1164] Additionally, SDG&E has more than two dozen additional devices in inventory, which SDG&E is considering for installation at locations where they are the most cost-effective solution to resolve a localized secondary voltage issue and, potentially improve energy efficiency. These devices are also being considered as a possible solution for situations where high penetration of rooftop solar and/or electric vehicles on a circuit results in voltage issues on the secondary.

[1160] Ex. 490 TURN/Borden at 23-24.
[1161] Ex. 93 SDG&E/Reguly at 12.
[1162] Figures are in thousands of 2016 dollars as specified in Table 22.2. Information regarding the Volt/VAR Optimization Transformer project is found in SDG&E's capital workpapers. *See* Ex. 75 SDG&E/Colton, Section 17244A, Volt/VAR Optimization Transformer at 849-853.
[1163] Ex. 93 SDG&E/Reguly at 12-13 at n. 33 (citing Ex. 431 ORA/Roberts at 107).
[1164] *Id*. at 13.

In any event, SDG&E not only is aware of other manufacturers actively considering acquiring the intellectual properties of the devices to continue with this technology commercialization, but also has been in contact with other companies capable of providing a similar technology.[1165] For the foregoing reasons, the budget request included in SDG&E's direct case should be approved.[1166]

22.2.7 Integrated Test Facility (ITF)

The forecasts for ITF – Integrated Test Facility Improvements for 2017, 2018 and 2019 are $523, $1,050, and $0, respectively.[1167] This budget provides funding to upgrade ITF and test equipment to support safe and reliable deployment of advanced technologies driven by state policy and consumer adoption.

SDG&E's ITF serves as a testing and evaluation facility, to help ensure technologies and operational schemes, both traditional and advanced, are clean, safe, and reliable. It is intended to promote the safe and reliable deployment of advanced technologies to support state policy and consumer adoption. The ITF uses a Real-Time Digital Simulator to test actual products such as inverters, electric vehicle chargers, and various other controllers. Many use cases, both past and present, focus on penetration levels of DER and to help identify the capabilities of smart inverters, power electronic devices, or other mechanical devices. This type of testing guides engineers, operators and others on how to integrate more DER devices while maintaining an efficient and reliable grid. As more DER are installed on the electric grid, dynamic modeling becomes more important. The ITF supports this type of testing and simulation.[1168]

A wide variety of projects have utilized the ITF, including renewable integration, electric vehicle charging, Home Area Networks, cyber security, and telecommunication advancement. These current projects have maximized available bench space and simulation capacity, therefore an ITF expansion, including purchasing new equipment and computing resources, is required. SDG&E's ITF must evolve with the electric grid to sustain collaborative efforts associated with policy and industry trends and standards.

[1165] *Id.*
[1166] *Id.* at 19.
[1167] Figures are in thousands of 2016 dollars as specified in Table 22.2. Information regarding the ITF – Integrated test Facility project is found in SDG&E's capital workpapers. *See* Ex. 75 SDG&E/Colton, Section 172450, ITF – Integrated Test Facility at 854-861.
[1168] Ex. 74 SDG&E/Colton/Reguly at 135.

ORA recommends a reduction to SDG&E's proposed budget request but provides no supporting analysis or explanation. Accordingly, the budget request included in SDG&E's direct case should be approved.[1169]

22.2.8 Borrego Microgrid 3.0

The forecasts for the Borrego Microgrid 3.0 for 2017, 2018 and 2019 are $209, $5,230 and $0, respectively.[1170] The underlying cost driver for this project is to increase grid resiliency for the entire Borrego Springs community by developing the capability for the Borrego Microgrid to operate with 100% renewables while in island configuration.

The Borrego Microgrid could operate from 100% renewable energy by increasing the amount of energy storage and PV resources. The project includes the installation of 12MW of utility-owned solar and 150MWh of utility-owned energy storage to support a local, renewable generation portfolio of 100%, while operating in island mode. This will increase grid resiliency for the entire Borrego Springs community and demonstrate low inertia microgrid control technologies. The advanced functionality helps enable DERs to maintain reliability of the microgrid. For clarity, this request is separate from and in addition to the Borrego Springs Microgrid Enhancements project described above, which involves major improvements to maximize renewable energy integration through advanced control systems that allow for remote operation.

ORA challenges SDG&E's requested funding on a variety of grounds, including the sufficiency of the showing made and the need for incremental resources given existing diesel generators and third-party owned renewable generation.[1171] SDG&E witness Mr. Reguly addressed these arguments in his rebuttal testimony.[1172] As Mr. Reguly explained, SDG&E's Electric Operations relies on the Borrego Springs microgrid as an operational tool to mitigate outages in Borrego Springs. Upon completion of the EPIC Project EPC-14-060, this will cease to be a R&D funded program even though the assets will be in the field and serving as components of SDG&E's electric system. Moreover, the existing backup diesel generation

[1169] Ex. 93 SDG&E/Reguly at 19.
[1170] Figures are in thousands of 2016 dollars as specified in Table 22.2. Information regarding the Borrego Microgrid 3.0 project is found in SDG&E's capital workpapers. *See* Ex. 75 SDG&E/Colton, Section 172460, Borrego Microgrid 3.0 at 862-869.
[1171] *See, e.g.*, Ex. 431 ORA/Roberts at 99, 104.
[1172] *See generally*, Ex. 93 SDG&E/Reguly at 13:21 -- 16:2.

requires frequent maintenance and repairs and, as a long-term matter, reliance on these resources to be available could put the microgrid capabilities at risk. The existing 1.5 MW/4.5 MWh of energy storage is insufficient. And, as Mr. Reguly explained, SDG&E has experienced issues with utilizing the third-party owned PV resource identified by ORA.[1173] Thus, a long-term and more sustainable solution is required.

SDG&E's proposed Borrego 3.0 project will add 12 MW of solar generation and 30 MW, 150 MWh of energy storage to the Borrego microgrid yard. The additional DER will create a renewable-based microgrid that can island for more extended periods on solar generation resources. It builds off the R&D efforts of Borrego 2.0, which integrated a third party's 26 MW solar array into the microgrid, but in its current state, diesel generators are still required for microgrid operations, due to insufficient amounts of energy storage relative to the amount of solar on the circuits. In addition, by coupling utility owned solar with storage, it will allow SDG&E to take advantage of Federal Tax Credits, which will reduce the overall solution cost to ratepayers.

The solar and storage proposed in Borrego 3.0 will ensure operational success and is sized to meet long term energy needs of the Borrego Springs community. Borrego 3.0 will build on what has already been installed through Borrego 1.0 and 2.0, including infrastructure, assets and control systems, and will provide enhanced reliability, safety and renewable integration to the 2,800 customers that reside in Borrego Springs. SDG&E's forecast of $5,439K for this project will initiate the land acquisition process and the engineering and planning to build the expansion to the current Borrego Microgrid. SDG&E will continue to apply for grants to cover the costs of the proposed distributed energy as part of Borrego 3.0.

Finally, ORA is incorrect in claiming that SDG&E's request for this project represents an attempt to bypass the cost cap for DRP Demonstration Project E. As Mr. Reguly explains, that demonstration project involved performing and reporting on performance tests utilizing the existing microgrid, at an incremental cost of $550,000 for engineering design and analysis. In contrast, SDG&E, in this GRC, is proposing to add capabilities and resources to make the microgrid itself more robust for the benefit of SDG&E's customers. Thus, the work proposed here is not an expansion of Demonstration Project E. Accordingly, the funding reduction advocated by ORA is not warranted.

[1173] Tr. 1120:23 -- 1121:17.

22.2.9 Distributed Energy Resources Management System (DERMS)

The forecasts for the DERMS project for 2017, 2018 and 2019 are $2,243, $3,627 and $3,678, respectively.[1174] DERMS is an enterprise-wide solution for monitoring, optimizing, and dispatching DER connected to SDG&E's electric system, and the purpose of the requested funding is to continue the development of DERMS to incorporate additional capabilities needed by SDG&E.

The version of DERMS that is currently deployed and in use by SDG&E is a continuation of the DERMS project that was funded through prior GRCs. Since 2014, SDG&E has continually worked with the DERMS software vendor to develop additional functionality and implement product enhancements from one release to the next. DERMS is currently capable of monitoring and dispatching DER in real-time, and scheduling operations at future dates for automatic dispatch. DERMS is being used to monitor and control the Borrego Microgrid, the Carmel Valley energy storage system, and the Ortega energy storage system. Additionally, DERMS is capable of real-time optimization of DER operations to meet specified business objectives.

The testimony of ORA witness Mr. Roberts expresses support for the DERMS program, but generally challenges the adequacy of SDG&E's evidentiary showing.[1175] In discovery in this proceeding, as explained by SDG&E witness Mr. Reguly, "SDG&E provided a substantial amount of detail about the DERMS project – including development status, scope, objectives, and total estimated costs across rate cases."[1176] The rebuttal testimony of Mr. Reguly thoroughly addresses ORA's concerns and demonstrates the need for funding to continue to develop DERMS.[1177] Finally, Mr. Reguly also provided substantial oral testimony concerning DERMs in the evidentiary hearings convened by the Administrative Law Judge.[1178] In light of the foregoing, the funding requested by SDG&E is reasonable, justified, and should be approved.

[1174] *See* Table 22.2, *supra*. Figures are in thousands of 2016 dollars.
[1175] *See, e.g.*, Ex. 431 ORA/Roberts at 3-4.
[1176] Ex. 93 SDG&E/Reguly at 16, n.46. (citing Ex. ORA-SDG&E-DR-178-TCR, Questions 1, 3, 7, attached as Appendix A thereto).
[1177] *Id.* at 17-19.
[1178] Tr. V14:1078:16 -- 1094:22.

22.3 Operations and Maintenance (O&M)

SDG&E's Electric Distribution Operations and Maintenance (ED O&M) testimony and workpapers, supported by witness William Speer, describe and justify SDG&E's forecasted ED O&M activities from 2017-19.[1179] SDG&E is requesting the Commission adopt SDG&E's ED O&M TY 2019 forecast of $168,184,000.[1180]

Mr. Speer's direct testimony presents the costs forecasted to operate and maintain the SDG&E electric distribution system in a safe and reliable manner, to comply with applicable laws and regulations, and to provide system integrity and reliability in accordance with our commitment to safety. The O&M electric distribution costs are broken down into 26 primary cost categories, four of which comprise the majority (68.1%) of the overall forecast. The four major categories are Construction Services (11.4%), Electric Distribution Operations (13.4%), Electric Regional Operations (27.7%), and Vegetation Management (15.7%). Each specific work category is described in greater detail in the testimony and workpapers.[1181]

In accordance with the Commission's risk-informed GRC framework, discussed *supra* in section 6 and in the Companies' risk management testimony presentation,[1182] Mr. Speer presented the risk and RAMP-related projects and programs included within SDG&E's ED O&M request, as summarized in Table 22.3.A below.[1183] Mr. Speer also provided a summary of SDG&E's safety culture as related to its ED O&M request, as part of his risk-informed direct testimony presentation.[1184]

Table 22.3.A

RAMP Risk Chapter	2016 Embedded Base Costs (000s)	TY 2019 Estimated Incremental (000s)	Total (000s)
SDG&E-1 Wildfires Caused by SDG&E Equipment	34,919	5,807	40,726
SDG&E-3 Employee, Contractor and Public Safety	29,610	6,000	35,610
SDG&E-4 Distributed Energy Resources (DERs)	0	575	575
SDG&E-8 Aviation Incident	55	355	410

1179 Exs. 68-71 SDG&E/Speer.
1180 Ex. 71 SDG&E/Speer at 1.
1181 Exs. 68, 69 SDG&E/Speer.
1182 Exs. 3, 4 SCG/SDG&E/Day/Flores/York.
1183 Ex. 68 SDG&E/Speer at 2-5, Table WS-2; *id.* at 6-16.
1184 *Id.* at 16-17.

SDG&E-11 Unmanned Aircraft System (UAS) Incident	0	162	162
SDG&E-12 Electric Infrastructure Integrity	1,261	21,040	22,301
SDG&E-13 Records Management	4,855	1,281	6,136
SDG&E-14 Climate Change Adaptation	24	403	427
SDG&E-17 Workforce Planning	1,206	152	1,358
Total O&M	71,930	35,775	107,705

Mr. Speer testified how, in developing its request, SDG&E prioritized these key safety risks to determine funding for currently established risk-control measures and incremental efforts needed to further mitigate these risks. Mitigating the risk of wildfire threat, for example, has been one of SDG&E's top priorities since the 2007 fires and has become ingrained in the company's culture. SDG&E's company-wide, single-minded focus on addressing and minimizing wildfire-related risks is described in our Fire Prevention Plan (FPP)[1185] and RAMP Report. SDG&E takes a leadership role in addressing fire threats in the communities we serve by sharing our personnel, resources, information, communications facilities, and/or fire-defense assets so as to enhance the capabilities of our local communities to defend against any repeats of catastrophic wildfire events experienced in southern California. SDG&E spent approximately $35M in electric distribution O&M wildfire risk mitigation programs in 2016, including vegetation management, Capstone fire brigade crews, and the O&M component of the FiRM capital project. In addition, SDG&E is proposing $5.8M in new mitigation programs, including year-round availability of the helitanker discussed in the supplemental direct testimony of David Geier,[1186] an expanded long span inspection and repair program, and new software and information management tools for improved emergency response.

SDG&E's ED O&M direct testimony forecasts are organized within the work categories listed in the chart below. Intervenor testimony recommending modifications to SDG&E's

[1185] Ex. 68 SDG&E/Speer at 7 (citing SDG&E's Oct. 31, 2016 FPP). SDG&E's 2017 FPP is available at http://webarchive.sdge.com/sites/default/files/documents/2021898396/SDGE_Fire_Prevention_Plan_for_2017.pdf.

[1186] Ex. 360 SDG&E/Geier, discussed in section 22.4 (Supplemental Year-Round Wildfire Risk Mitigation), *infra.*

proposals were presented regarding the areas that are preceded by an asterisk in the list below, and are addressed in the sections that follow:

Reliability & Capacity	*Distribution and Engineering
*Construction Services	Troubleshooting
DistOps Enterprise Geographic Info Sys Standards	*Vegetation Management
*Electric Distribution Operations	*Regional Public Affairs
*Kearny Operations Services	Major Projects
Grid Operations	Technology Utilization
*Project Management	Compliance Management
*Electric Regional Operations	*Technology Solutions and Reliability
Officer	*Emergency Management
Skills & Compliance Training	*Strategic Planning and Business Optimization
Service Order Team (SOT)	Distributed Energy Resources
*Substation Construction and Operations	Asset Management
System Protection	*Performance Based Ratemaking

22.3.1 Summary of Proposals

Parties addressing SDG&E's ED O&M forecasts were ORA, FEA, CUE, SDCAN and SBUA.[1187] In general, FEA adopted the recommendations of ORA with some exceptions. Not all parties made recommendations on all portions of SDG&E's ED O&M forecasts, and several areas were not challenged. SDCAN, SBUA and CUE with a few exceptions generally made non-financial recommendations; those are reflected in the appropriate sections following and are not shown in the summary table below:[1188]

TOTAL O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**122,467**	**168,184**	**46,159**
ORA	**122,467**	**133,019**	**10,552**
FEA	**122,467**	**134,915**	**12,448**

1187 Respectively, Ex. 400 ORA/Godfrey, Ex. 366 FEA/Smith, Ex. 370 CUE/Marcus, Ex. 220 SDCAN/Shames, Ex. 221 SDCAN/Conery, and Ex. 439 SBUA/Rafii.
1188 Ex. 71 SDG&E/Speer at 1, reflecting errata corrections shown on pp. 73-74.

The major points are summarized in the sections following. In many instances in rebuttal, SDG&E provides data request responses received from the parties in support of the utility's position in the respective areas. Those data request responses are not repeated in this brief, but can be informative, and are found in SDG&E's ED O&M rebuttal testimony.[1189]

ORA's Methodology

ORA's analysis of SDG&E's TY 2019 forecasts was based on an arithmetic analysis of historical costs, apparently without consideration of the merits of the proposed activities for either customer value, system integrity, or risk mitigation. This technique is discussed in rebuttal in several locations.[1190] This also occurred within FEA's analysis.[1191] While analysis of historical costs is reasonable, it should not be relied upon as the exclusive and sole basis for justification of expected future costs, and should be considered in context with the anticipated needs and risk-mitigation efforts of the utility in the future.

ORA (and most other parties) also did not take into account any of the RAMP or risk-related ED O&M direct testimony in their analyses.[1192] As Mr. Speer explained, "SDG&E expected other parties to discuss and evaluate these programs and provide explanation as to why they should or should not [be] funded in whole or in part," given the Commission's new risk-informed GRC framework and focus.[1193] As Ms. Day, Mr. Flores, and Ms. York testified in their risk management rebuttal testimony, "it is not reasonable to reduce funding for RAMP projects merely because those projects have been identified as RAMP-related, or to otherwise ignore or mischaracterize RAMP-related testimony and information …."[1194] Further, "[r]ather than ignoring the RAMP information presented in this proceeding and evaluating safety risks consistent with prior GRCs, which were not subject to the new risk-based framework, the Commission should use the RAMP-related showing in this proceeding to inform funding decisions."[1195]

1189 Ex. 71 SDG&E/Speer *passim*.
1190 *See, e.g., id.* at 24, 49, 50.
1191 *See, e.g., id.* at 40.
1192 *Id*. at 2-3.
1193 *Id.* at 2.
1194 Ex. 4 SCG/SDG&E/Day/Flores/York at 10.
1195 *Id.* at 18. This is consistent with ORA witness Nils Stannik's testimony: "The data produced by the RAMP and integrated into this GRC should be used to <u>inform</u> funding decisions, but not to dictate these decisions or bypass the traditional review process in the GRC." Ex. 398 ORA/Stannik/Li at 2.

Many of ORA's arguments, while based on the simple arithmetic analysis, justify the recommended disallowances under the premise that the proposed costs are already included in rates, can be performed by existing personnel, or are costs for the same or similar projects that are ongoing. In these instances, SDG&E demonstrated in its rebuttal that ORA's presumptions are incorrect, that the costs for the proposed programs are for incremental new or increased-scope activities.[1196]

22.3.2 Construction Services

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**5,363**	**19,167**	**13,804**
ORA	**5,363**	**8,531**	**3,168**
FEA	**5,363**	**5,659**	**296**

ORA and FEA – ORA and FEA both take issue with the test year O&M forecast for the Construction Services work group.[1197] ORA's methodology involved subtracting SDG&E's TY 2016 GRC authorized amount for Construction Services from its TY 2019 GRC request, and adding this incremental amount to the 2016 Base Year actual expenditures. FEA's methodology for its TY 2019 estimate is a two-year average. SDG&E disagrees with these approaches. SDG&E's 2016 authorized amount in the Construction Services work group has no direct bearing on future expenditures, as shown in detail in rebuttal.[1198] SDG&E has developed detailed cost estimates for its proposed programs, based on forecasting analysis and cost pressures that are described in Mr. Speer's direct testimony.[1199] Rather than analyzing this testimony, ORA and FEA simply substituted their own methodologies without describing any issues with SDG&E's chosen method or with the underlying justification for the program, and without analyzing the RAMP and risk mitigation testimony, in accordance with new Commission procedures.[1200]

Several issues were a common thread in proposed reductions to SDG&E's requested funding. These were the O&M expenses associated with capital programs, the underspending of

[1196] Ex. 71 SDG&E/Speer, *passim.*
[1197] Ex. 400 ORA/Godfrey at 7-18; Ex. 366 FEA/Smith at 80-84.
[1198] Ex. 71 SDG&E/Speer at 7-18.
[1199] Ex. 68 SDG&E/Speer at 21-29.
[1200] *See* discussion in section 6.4, *supra,* and Ex. 4 SCG/SDG&E/Day/Flores/York, *passim.*

2016 authorized expenses, program costs that are spread among more than one workgroup, and the perceived insufficiency of detailed cost estimates. SDG&E rebuttal discussed each of these issues at length, providing background, testimony citations and context to these issues associated with particular activities and supporting SDG&E's forecast methodologies and requests.[1201]

CUE – CUE has recommended an acceleration of the 4kV Modernization capital program, which also influences the related O&M expenditures, with CUE recommending increases to SDG&E's forecast for expenses associated with that accelerated capital program.[1202] While the methodology for the calculation of associated O&M costs used by Mr. Marcus is correct,[1203] the original O&M amount used in CUE's testimony has been corrected in errata; the corrected O&M costs associated with 4kV Modernization (both Distribution and Substation) for the capital expenditure recommended by CUE is $0.774 million.[1204]

As in the case of SDG&E's Electric Distribution Capital forecasts, although SDG&E acknowledges there may be value in accelerating the replacement of various aging infrastructure items or installation of newer technologies for this category as recommended by CUE, SDG&E's direct testimony proposal appropriately balances process and resource constraints while meeting reasonable infrastructure replacement rates.[1205]

22.3.3 Electric Distribution Operations

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**15,590**	**22,546**	**6,956**
ORA	**15,590**	**17,517**	**1,927**
FEA	**15,590**	**15,130**	**-460**

ORA and FEA – ORA and FEA take issue with SDGE's Electric Distribution Operations non-labor forecast, particularly the use of a three-year linear trend as SDG&E's base estimate methodology.[1206] In direct and rebuttal testimony, Mr. Speer explains that the reason for

1201 Ex. 71 SDG&E/Speer at 8-18.
1202 Ex. 370 CUE/Marcus at 71-73.
1203 Ex. 370 CUE/Marcus at 93.
1204 Ex. 71 SDG&E/Speer at 17-18 and fn. 54 (showing $15.488 million x 5% = $0.774 million).
1205 Ex. 76 SDG&E/Colton at 54.
1206 Ex. 400 ORA/Godfrey at 20; Ex. 366 FEA/Smith at 77-80.

the three-year trend was the expected need for increased exempt materials related to both capital and O&M programs. [1207]

SDG&E believes ORA's and FEA's recommendations should be disregarded and recommends the Commission adopt SDG&E's forecasted expenses for Electric Distribution Operations.

22.3.4 Kearny Operations Services

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**1,350**	**2,133**	**783**
ORA	**1,350**	**1,721**	**371**

ORA – ORA takes issue with the test year O&M forecast for the Kearny Operations Services work group.[1208] Both ORA and SDG&E used a five-year historical average,[1209] although ORA would disallow SDG&E's incremental request to hire three new employees to support a new training program contending it is already built into rates.[1210] ORA states that expenses in this work group have declined,[1211] but SDG&E utilized a 5-year average as the base estimate, which includes the declining years; ORA's method does not justify disregarding the $0.412 million incremental request for the requested training program staffing. ORA's presumption that these costs are already embedded in historical expenses is incorrect, as the training program is new.

SDG&E believes its direct testimony presentation and the discussion and data response references provided in rebuttal[1212] provide the necessary background to adopt SDG&E's forecast for Kearny Operations Services over ORA's recommendations, which are derived from arithmetic means rather than an evaluation of the necessary training programs.

[1207] Ex. 68 SDG&E/Speer at 31-32; Ex. 71 SDG&E/Speer at 18-19.
[1208] Ex. 400 ORA/Godfrey at 23-25.
[1209] *Id.* at 23.
[1210] *Id.* at 25.
[1211] *Id.* at 23.
[1212] Ex. 68 SDG&E/Speer at 34-35; Ex. 71 SDG&E/Speer at 19-24.

22.3.5 Project Management

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**660**	**1,347**	**687**
ORA	**660**	**822**	**162**

ORA – ORA takes issue with SDG&E's request to increase funding for increased staffing and training-related costs for the area of Project Management, based on its belief that the proposed training classes and support staffing are unnecessary. SDG&E provided the support for those expenses in discovery responses and discussion which can be found in rebuttal testimony.[1213]

In 2017, Project Management utilized significant contract labor to address a shortfall in staffing levels, which is evidenced in the increased non-labor spend in 2017. Ironically, ORA's recommendation would fund Project Management at a lower level than its 2017 spend. SDG&E believes ORA's recommendations should not be adopted, and recommends the Commission adopt SDG&E's forecasted expenses for Project Management.

SDCAN[1214] **–** In this area, SDCAN recommends a bill credit or direct payment to developers where SDG&E has either failed to reschedule an appointment for trench inspections and gas line installations at least 24 hours in advance.[1215] As explained in rebuttal, all trench inspection requests received prior to 2:00 p.m. are scheduled for the following day. While various conditions will necessitate rescheduling, SDG&E implemented a process change during the 4th quarter of 2017 whereby dedicated contract crews are now available for all service work in new subdivisions and tie-ins for applicant installations, thus alleviating the occurrence of missed appointments.[1216]

SDCAN also recommends that SDG&E should be ordered to pay customers or developers where SDG&E's installation of gas or electric lines exceeds five days after SDG&E

1213 Ex. 71 SDG&E/Speer at 24-27.

1214 SDCAN's testimony and requested relief discussed here is unusual, in part because the Commission does not typically micromanage utilities' relationships with their contractors, and doing so is not the focus of the GRC proceeding. Regardless, SDG&E's rebuttal testimony provided factual information that responded to SDCAN's claims.

1215 Ex. 220 SDCAN/Shames at 7; Ex. 221 SDCAN/Conery at 4.

1216 Ex. 71 SDG&E/Speer at 27-30.

inspectors release the project to the Construction Department.[1217] Mr. Speer provided reasons in rebuttal showing why requirements related to posting of safety notices and the coordination of any required permits and/or traffic control make this proposal unrealistic.[1218] Mr. Speer also provided data demonstrating significantly improved turnaround times for these services.

SDCAN also argues that SDG&E's proposed increase in Project Management is excessive and should be reduced,[1219] while simultaneously maintaining that the Department must be adequately funded and staffed to better interface with third-party contractors.[1220] This includes funding to allow for the completion of Project Work Order packages in three to five days.[1221]

Mr. Speer's rebuttal demonstrates that while SDG&E agrees that additional funding will allow Project Management to expand resources to better service customers, SDCAN's proposed three to five-day turnaround for Project Work Order packages is simply not feasible, since the scope of those orders varies widely. For all of these reasons, SDCAN's proposals for SDG&E's Project Management should be disregarded.

22.3.6 Electric Regional Operations

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E[1222]	**35,613**	**46,689**	**11,706**
ORA	**35,613**	**37,823**	**2,210**
FEA	**35,613**	**34,329**	**-1,284**

ORA – ORA seeks to eliminate all incremental labor funding requests for Electric Regional Operations. ORA specifically takes issue with incremental costs for SDG&E's proposed Overhead/Underground Switch Inspection and High-Risk Switch Replacement projects, arguing that SDG&E is requesting TY funding twice for the same activities.[1223]

1217 Ex. 220 SDCAN/Shames at 7; Ex. 221 SDCAN/Conery at 4.
1218 Ex. 71 SDG&E/Speer at 27-30.
1219 Ex. 220 SDCAN/Shames) at 7.
1220 Ex. 220 SDCAN/Conery at 4.
1221 *Id.*
1222 Ex. 68 SDGE/Speer at 18.
1223 Ex. 400 ORA/Godfrey at 31.

SDG&E demonstrated in rebuttal that these programs are being split amongst multiple workgroups and thus there is no duplication of its cost request.[1224]

ORA also takes issue with SDG&E's labor funding request for the proposed Long Span Inspection and Repair program, indicating that costs related to long span inspections are embedded in historical costs. There were no long span inspection and repair costs embedded into the 2016 base year to which SDG&E is basing its forecast; accordingly, there are no costs embedded in the request. These long span projects represent an integral part of reducing wildfire risk and are an important component of SDG&E's strategy in addressing our most important RAMP risk. Given the greater level of impact from high wind events and the need to ensure proper clearances, funding for these projects is a necessity.[1225]

ORA also objects to labor funding requests for a new EDO Project Management Organization under the supposition that this activity could be performed with existing personnel. In response, SDG&E referenced an ORA data request response[1226] describing the proposed organizational structure and the need for the additional resources.

ORA also objects to labor funding requests for a new Permitting group, which would be responsible for the management of requesting, filing, and managing the many and increasing jurisdictional construction permits that are required for SDG&E's work throughout the service territory. ORA argued that the proposed activities are not new and have costs incurred for these same activities already included in rates.[1227]

The additional resources for a new permitting group will help to address the consistently changing and expanding requirements imposed by the government entities. Rebuttal testimony provides an illustration of the increasing permitting requirements placed upon SDG&E to complete its needed work.[1228]

ORA also objects to SDG&E's request for additional linemen, which are intended to address outage response times and reliability. As explained in rebuttal,[1229] ORA's recommendation rests upon an erroneous presumption that there are somehow sufficient

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1224 Ex. 71 SDG&E/Speer at 30.
1225 *Id*. at 32.
1226 *Id*.
1227 Ex. 400 ORA/Godfrey at 32.
1228 Ex. 71 SDG&E/Speer at 33.
1229 *Id*. at 35-36.

"eliminated projects, maintenance costs from eliminated projects/programs, costs incurred for eliminated procedures and processes, and overtime costs" to absorb the necessary incremental funds for additional linemen. That is not the case, and SDG&E restates its request for the Commission to approve funding for the requested additional linemen.

Finally, ORA opposes SDG&E's request for incremental non-labor funding for its proposed Customer Communication Safety program.[1230] This proposal is a result of RAMP analysis, during which SDG&E identified the Customer Communication Safety program as a risk mitigant.[1231] ORA agrees that outreach and education geared toward wire-down awareness and other electric safety issues are important,[1232] yet disallows funding the entire program under the premise that SDG&E has cost included in rates for the same or similar communications projects that are ongoing. SDG&E disagrees with this assertion. While SDG&E has undertaken many activities to reduce the public safety risks associated with the electric system, SDG&E has not had an outreach program like the one proposed through the RAMP filing and included in this rate case. The Customer Communication Safety program is new and specifically designed to provide customers with the education and tools to respond to electric emergencies, and will also provide information on how to proactively avoid dangerous situations. SDG&E countered ORA's assertion that the program is already included in rates in its rebuttal in a data request response as shown in rebuttal.[1233]

Mr. Speer also demonstrated the amount of detail SDG&E has provided in a table of more than 22 line items and descriptions of the activities and costs of the communications program, which were also included in Mr. Speer's direct testimony workpapers.[1234]

FEA – FEA takes issue with the test year O&M forecast for the Electric Regional Operations work group.[1235] FEA disagrees with SDG&E's use of a 2016 Base Year estimate for its underlying forecast, and instead recommends a four-year average. The 2016 Base Year was chosen by SDG&E because changes in 2016 included staffing levels for Apprentice Linemen,

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[1230] *Id*. at 36-40 (addressing Ex. 400 ORA/Godfrey at 33).
[1231] *Id.*, (citing I.16-10-015/-016, Risk Assessment and Mitigation Phase Report of [SDG&E and SoCalGas], Chapters SDG&E-3 (Employee, Contractor and Public Safety) and SDG&E-15 (Public Safety Events – Electric) (November 30, 2016), *available at* https://www.sdge.com/regulatory-filing/20016/risk-assessment-and-mitigation-phase-report-sdge-socalgas).
[1232] Ex. 400 ORA/Godfrey at 33.
[1233] Ex. 71 SDG&E/Speer at 36.
[1234] *Id*. at 38 (citing Ex. 69 SDG&E/Speer at 146).
[1235] *Id*. at 40 (citing Ex. 366 FEA/Smith at 72-77).

C&O Planners and Supervisors not reflected in previous years. The 2016 Base Year costs are $35.6 million, and the four-year average used by FEA is $34.3 million, or a reduction of $1.3 million. FEA does not address or take issue with any of the $7.2 million of incremental activities that SDG&E is proposing for TY 2019, only the underlying base forecast. These incremental activities include risk-mitigation RAMP-related items, and FEA does not address which activities should be reduced or removed to meet its proposed TY 2019 estimate.

SDG&E supports its 2016 Base Year forecasting methodology in this area, and requests that the Commission authorize its funding request for Electric Regional Operations.

22.3.7 Substation Construction and Operations

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**4,582**	**5,322**	**740**
ORA	**4,582**	**4,759**	**177**

ORA – ORA takes issue with the Test Year O&M forecast for the Substation Construction and Operations work group.[1236] While ORA does not oppose SDG&E's estimate for non-labor, which is based on a five-year average with adjustments for incremental programs, ORA finds SDG&E's five-year average forecast for labor unjustified.[1237] ORA argues that because SDG&E has shown decreasing recorded labor expenses, and is not proposing to add headcount, and also has not reported problems maintaining the distribution substation at the current expense levels, that the base year would be a better estimate.[1238]

SDG&E disagrees with this conclusion.[1239] The costs of substation maintenance activities are variable and can change from year to year. Significant preventative maintenance activities such as circuit breaker overhauls and Load Tap Changer (LTC) maintenance are dependent on time-based maintenance cycles that are not constant from year to year. In SDG&E's experience, substation maintenance is cyclical, and a return to a period of increased expenses is expected. SDG&E's use of a five-year average considers the recent low years as well as the previous high years, providing a reasonable estimate that accounts for the variability of the maintenance requirements. There have been no significant reductions to substation

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1236 Ex. 400 ORA/Godfrey at 38-41.
1237 Ex. 400 ORA/Godfrey at 39.
1238 Ex. 400 ORA/Godfrey at 39-40.
1239 Ex. 71 SDG&E/Speer at 40-42.

maintenance requirements; rather, there have been increased reporting requirements. General Order (GO) 174 has required additional accountability to substation inspection and maintenance programs through the addition of annual substation audits.[1240] SDG&E believes the five-year average methodology is correct for this area, as described in rebuttal.

SDG&E believes ORA's recommendations should be disregarded and recommends the Commission adopt SDG&E's forecasted expenses for Substation Construction and Operations.

22.3.8 Technology Solutions and Reliability

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**2,544**	**3,260**	**716**
ORA	**2,544**	**2,751**	**207**

ORA – ORA takes issue with the funding requests for system enhancements and added functionality, as well as increased labor support, indicating that these costs represent "…routine and ongoing activities."[1241] SDG&E has stated that additional funding addresses needs related to both increased scope and an expanding volume of work.[1242]

ORA also contends that SDG&E's proposed consolidation of Technology Solutions and Reliability into the new Asset Management group should result in efficiencies and cost savings "… from the elimination of costs associated with employees performing duplicate functions in separate work groups."[1243] However, the establishment of the Asset Management group does not influence the historical costs or incremental requests related to Technology Solutions and Reliability. The requests identified within the Technology Solutions and Reliability workpaper are related solely to needs within the defined scope of this group. The funding request for the Asset Management group specifically addresses the costs to establish the ISO 55000-certified program, and is independently identified and explained within the Asset Management workpaper.[1244] Additional discussion regarding SDG&E's support for the creation of its comprehensive program for Asset Management and its relationship to SDG&E's Enterprise Risk

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[1240] Ex. 71 SDG&E/Speer at 42 (citing California Public Utilities Commission, General Order 174, *Rules for Electric Utility Substations* (October 25, 2012)).
[1241] Ex. 400 ORA/Godfrey at 60.
[1242] Ex. 71 SDG&E/Speer at 43-44 (quoting its response to ORA-SDGE-095-TLG, Q1s, memorialized to ORA on February 9, 2018).
[1243] Ex. 400 ORA/Godfrey at 61.
[1244] Ex. 71 SDG&E/Speer at 44-45; Ex. 68 SDG&E/Speer at 62; Ex. 69 SDG&E/Speer at 315.

Management organization, including the costs proposed by SDG&E and rejected by ORA, is shown in the rebuttal testimony of Mr. Kenneth J. Deremer.[1245]

For these reasons SDG&E believes ORA's recommendations should be disregarded and recommends the Commission adopt SDG&E's forecasted expenses for Technology Solutions and Reliability.

22.3.9 Emergency Management

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**2,503**	**5,344**	**2,841**
ORA	**2,503**	**3,079**	**576**

ORA – ORA takes issue with the test year O&M forecast for the Emergency Management work group, again stating that the incremental requested funding is not related to new, never-before performed or implemented programs.[1246] Specifically regarding SDG&E's weather stations, ORA takes issue with SDG&E's labor costs, because ORA believes SDG&E's historical expenses should already include costs incurred to maintain, repair and upgrade equipment for its weather network.[1247] SDG&E provided a breakdown of the various weather-related RAMP items, including the historical embedded costs; these are shown in the RAMP Item workpapers for Emergency Management.[1248]

In its rebuttal, SDG&E also provided additional reference to cost breakdowns found in both workpapers[1249] and the RAMP report,[1250] in support of its proposed expenses to which ORA had stated lacked a cost breakdown.[1251] It should be noted that SDG&E's weather stations are not a long-standing equipment type in SDG&E's portfolio, those installations having begun only during this decade, increasing rapidly over a few years. This is a relatively new activity at SDG&E, and to SDG&E's knowledge it is also relatively new for other utilities in the state.

[1245] Ex. 247 SDG&E/Deremer.
[1246] Ex. 400 ORA/Godfrey at 63-69.
[1247] Ex. 71 SDG&E/Speer at 46-49 (citing Ex. 400 ORA/Godfrey at 64-65).
[1248] *Id*. at 47 (citing Ex. 69 SDG&E/Speer at 278-296).
[1249] Ex. 69 SDG&E/Speer at 300.
[1250] *Id*. at 292.
[1251] Ex. 400 ORA/Godfrey at 64.

In a variety of other components, ORA also took exception which SDG&E countered in its rebuttal.[1252] Again in this area, ORA's analysis appeared to be an arithmetic exercise rather than a need-based critique of the merits of the proposed RAMP-related functions, as it should be in accordance with the Commission's new risk-informed GRC framework.[1253]

For these reasons, SDG&E believes ORA's recommendations should be disregarded and recommends the Commission adopt SDG&E's forecasted expenses for Emergency Management.

22.3.10 Distribution and Engineering

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**2,341**	**4,297**	**1,956**
ORA	**2,341**	**2,867**	**526**

Both ORA and SBUA make recommendations regarding Distribution and Engineering. ORA makes a funding recommendation, SBUA makes a recommendation regarding the encouragement of small business to engage in energy solutions.

ORA – ORA takes issue with the Test Year O&M forecast for the Distribution and Engineering work group.[1254] ORA does not oppose SDG&E's estimate for labor, which is based on a three-year average with adjustments, but does contest SDG&E's estimate of non-labor, which also uses a three-year average with adjustments.[1255] ORA has not taken issue with the methodology contained within those incremental estimates, but has simply substituted its own underlying base forecast without substantiating the supposed shortcomings of SDG&E's chosen method and appears to be simply a means to choose a lower value.

For unspecified reasoning, ORA chose to divide the total incremental request by four and add that to base year funding to obtain the recommended test year funding. This methodology to fund 25% of the incremental request does not identify which programs, including RAMP-related items, should be reduced or removed to meet ORA's proposed funding. Given the Commission's direction to complete RAMP and to assess risk reduction effectiveness, SDG&E expected ORA to demonstrate a more need-based critique for proposed RAMP-related activities.

[1252] Ex. 71 SDG&E/Speer at 48-49.
[1253] *See* discussion in section 6.4, *supra*, and Ex. 4 SCG/SDG&E/Day/Flores/York, *passim.*
[1254] Ex. 400 ORA/Godfrey at 41-42.
[1255] *Id*. at 42-43.

SDG&E's rebuttal presentation provided support for its proposed expenses, citing data request responses to ORA.[1256]

PRiME

ORA took particular interest in the Pole Risk Mitigation and Engineering (PRiME) program, which consists of both capital and expense components. ORA recommended considerably inconsistent treatment for the capital and expense components, in part owing to the perception that PRiME was a duplicative program associated with two other pole-related activities at SDG&E: Fire Risk Mitigation (FiRM), and routine pole replacements performed under SDG&E's Corrective Maintenance Program (CMP), in compliance with G.O. 165 under capital budget code BC87232.[1257]

ORA took issue with costs for these programs being split amongst multiple work groups, stating that it appears SDG&E is requesting TY funding twice for the same activities.[1258] SDG&E demonstrated the differences in the work being performed by the two work groups and that these are not overlapping activities, in a data request response discussed in rebuttal testimony.[1259]

Regarding SDG&E's incremental request for expenses related to PRiME, ORA appears to suggest funding this program at 25% of SDG&E's request. However, this is inconsistent with ORA's ED Capital testimony recommending 84.8% of SDG&E's capital request for the same program.[1260] It would be inconsistent to adopt ORA's 85% funding recommendation for the capital portion of the PRiME program without also adopting an equivalent amount of the related O&M expenses. SDG&E recommends that the O&M portion for PRiME should be adopted at the originally requested level of $2.142 million. Should the Commission adopt ORA's recommended capital portion, the equivalent O&M fraction would be $1.804 million.

SBUA – SBUA recommends that SDG&E encourage small business customers to engage in energy solutions.[1261] SDG&E agrees with the importance of engaging every customer in

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[1256] Ex. 71 SDG&E/Speer at 49-56.
[1257] Ex. 71 SDG&E/Speer at 51-55 (discussing Ex. 400 ORA/Godfrey). For a descriptive comparison of the PRiME, FiRM and CMP programs please see Ex. 71 SDG&E/Speer at Appx. A, A-3 to A-5.
[1258] Ex. 400 ORA/Godfrey at 45-46.
[1259] Ex. 71 SDG&E/Speer at 51-55.
[1260] Ex. 402 ORA/Wilson at 43, Table 7-10. The values at line 11 for Budget Code 17254-PRiME for SDG&E for years 2019 are $40,430 the ORA recommended value is $34,269 for 2019, or 84.76% of SDG&E's request.
[1261] *See discussion at* Ex. 71 SDG&E/Speer at 56-59.

energy solutions, and established a budget to assist all customers with interconnecting to the electric distribution grid safely and reliably. SBUA asserts that no small commercial customers have participated in SDG&E's "Fast Track" process to install private solar. Because the Fast Track process is designed for systems under 30 kW and not requiring any additional equipment such as an additional electrical disconnect or metering, no small commercial customer has yet qualified for the Fast Track process. Additionally, SBUA recommends SDG&E offer the equivalent of renewable meter adaptors for small commercial customers. However, the Renewable Meter Adaptor is only approved for residential use on electric service panels below 200 amps and generation systems less than 12kW. Due to loading levels of small commercial customer we are unable to offer an equivalent renewable meter adaptor. Regrettably, small commercial customers do not meet the qualification criteria for these specific programs. SDG&E has a trained staff that is available during the workday to assist and answer questions from small business owners regarding engagement in energy solutions.

SBUA recommends that SDG&E dedicate 25% of the total forecast of $4.299 million of Electric Distribution and Engineering for outreach to small businesses. SDG&E's $4.299 million funding request is based on a three-year average of recorded costs plus incremental funding for proposed activities as summarized in rebuttal.[1262] SDG&E believes it is infeasible to reallocate 25% of this request without additional incremental funding.

SBUA recommends that SDG&E conduct studies on the challenges faced by small commercial customers in adopting energy solutions, and also recommends SDG&E evaluate small commercial customers in its customer service tracking. In addition to information provided to SBUA through discovery, SDG&E has performed surveys and targeted efforts for small business and provides customer support for the energy management challenges they face. Customers with greater incidence of energy management issues may be assigned Account Executive Support to assist with complex needs and Commercial Energy Specialists are also available to help small business one-on-one with specific issues. Considering the resources presently available to the small business community, SBUA recommendations to require additional specific studies and customer service tracking would be redundant and burdensome.

[1262] Ex. 71 SDG&E/Speer at 57.

For these reasons, SDG&E believes ORA's and SBUA's recommendations should be disregarded and recommends the Commission adopt SDG&E's forecasted expenses for Distribution and Engineering.

22.3.11 Strategic Planning and Business Optimization

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**1,630**	**2,390**	**760**
ORA	**1,630**	**1,630**	**0**

ORA – ORA takes issue with the TY 2019 O&M forecast for the Strategic Planning and Business Optimization work group.[1263] ORA disagrees with the use of a five-year historical average for future labor and non-labor expenses in this work group, due to declining expenses in recent years. SDG&E believes the five-year average estimating methodology is reasonable, as discussed in Mr. Speer's rebuttal testimony.[1264]

SDG&E utilized a five-year average forecasting methodology to account for historical variations, both high and low.[1265] In contrast, ORA's recommendation to use a base year methodology does not account for historical variances in spending and costs for this activity. SDG&E does not request additional incremental funding beyond a five-year average and finds this methodology to be the most appropriate to account for variances in costs experienced from year to year. Again, ORA has not argued the merits of the activities in Strategic Planning and Business Optimization, but has simply substituted its own forecast, appearing to be simply a means to choose a lower value.

SDG&E believes ORA's recommendations should be disregarded and recommends the Commission adopt SDG&E's forecasted expenses for Strategic Planning and Business Optimization.

[1263] Ex. 400 ORA/Godfrey at 70.
[1264] Ex. 71 SDG&E/Speer at 60-61.
[1265] Ex. 69 SDG&E/Speer at 91-92.

22.3.12 Regional Public Affairs

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**1,630**	**2,390**	**760**
SDCAN	**1,630**	**683**	**-947**

SDCAN – Only SDCAN challenged SDG&E's forecast for Regional Public Affairs, taking issue with the Test Year 2019 forecast for the Regional Public Affairs work group.[1266] SDCAN made this same argument in the TY 2016 GRC, which SDG&E addressed and refuted. In this 2019 GRC, SDCAN dusted off a data request from the TY 2016 GRC without updating the time period dates, and once again asked the same questions. As described in rebuttal, SDCAN's use of different organization structures at different times produce a seeming discrepancy, thereby deriving its recommended reductions.[1267] SDG&E's historical spending includes three cost centers: RPA, Regional Vice President (RVP) and Economic Development. The forecast was developed from historical spending at $1,687,000 which was also the actual spend in 2013.[1268]

SDCAN's perennial argument is that the department exists "to engage in activities in support of lobbying and corporate image enhancement."[1269] RPA educates officials at the county and city levels about SDG&E issues that may have an impact on its customers, and serves as the point of contact in the communities that SDG&E serves, educating stakeholders about SDG&E activities, programs and services, resolving customer complaints and working with under-represented communities.

RPA's primary function is to work with local government regarding existing or proposed operations, which include franchise compliance, energy efficiency program outreach, distribution underground conversions (Rule 20 A&C), street light process improvement, wood-to-steel projects, pipeline safety, substation relocation and enhancement, electric vehicles, emergency planning and response, major construction outreach, summer and winter preparedness, and vegetation management. RPA is the principal liaison between the utility and regional stakeholders, including elected officials, municipal staff, community organizations, and the

[1266] Ex. 220 SDCAN/Shames at 46-49.
[1267] Ex. 71 SDG&E/Speer at 62-66.
[1268] *Id*. at 65 (discussing Ex. 220 SDCAN/Shames at 46-47).
[1269] *Id*.

general public, and is usually the first point of contact when stakeholders have questions or concerns on issues related to SDG&E.[1270]

SDCAN's arguments should therefore be disregarded, and SDG&E's proposals should be adopted. SDCAN has not raised any new issues or arguments that were not refuted in previous GRC proceedings. The Commission did not adopt SDCAN's proposed funding levels for Regional Public Affairs in 2016, and should not approve SDCAN's proposed funding levels now.

22.3.13 Vegetation Management (Tree Trimming)

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**23,005**	**22,674**	**-331**
FEA	**23,005**	**22,620**	**-385**

FEA – FEA takes issue with the Test Year O&M forecast for Tree Trimming.[1271] SDG&E recognizes FEA's methodology incorporating the 2017 actual expenses into its forecast. SDG&E had prepared its forecasts using the five years of historical data, 2012-2016, customarily available according to the Rate Case Plan in development of its detailed forecast estimates, and continues to support adoption of those forecasts for TY 2019. Within those historical years, SDG&E noted that for the Vegetation Tree Trim activity, 2012 represented an unusually high cost year, and for that reason, SDG&E used a four-year average, omitting 2012.[1272]

ORA AND FEA – ***Two-way balancing account for Tree Trimming*** **–** ORA and FEA take issue with SDG&E's request for two-way balancing treatment and propose to continue the one-way balancing account of SDG&E's tree trimming workgroup. Two-way balancing would provide flexibility and sufficient funding for work resulting from 2016 and 2017 winter storm events and tree mortality associated with the ongoing effects of drought and beetle infestation.[1273] Utility vegetation management involves some of the most hazardous work and requires a very high skill level when working in proximity to powerlines. SDG&E contractors have experienced a greater need for additional tree crews to perform the work, and SDG&E dedicates fire safety personnel and equipment such as water tenders when working in the highest

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1270 *Id.* at 65-66.
1271 Ex. 366 FEA/Smith at 89-92.
1272 Ex. 71 SDG&E/Speer at 66.
1273 *Id*. at 67.

fire threat zones. Lastly, SDG&E has continued to explore the use of even more advanced technology and use of Light Detection and Ranging (LiDAR) to help develop tools for inspections, patrols, and quality assurance. The application of a two-way balancing account will both permit the adoption of these measures and serve to protect customers.

For these reasons, the Commission should adopt SDG&E's proposal for two-way balancing treatment of Tree Trimming Vegetation Management.

22.3.14 Vegetation Management (Pole Brushing)

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**3,450**	**3,741**	**291**
FEA	**3,450**	**3,368**	**-82**

FEA – FEA takes issue with the Test Year O&M forecast for Pole Brushing, using the same argument for Pole Brushing as for Tree Trimming,[1274] disagreeing with SDG&E's use of a five-year average for pole brushing and instead propose a four-year average that includes 2017 data. Specifically, FEA states: "As can be seen, historical costs were higher in 2012 and 2013 and have remained fairly constant in a four-year period from 2014-2017."[1275]

FEA disregarded two years of historical costs, 2012 and 2013, apparently because they are the highest and second highest expense years, respectively, without providing a basis for doing so. SDG&E tested those values, finding that only 2012 could be considered a true outlier.[1276] FEA therefore misinterprets the historical data, and its proposal should not be adopted.

22.3.15 Reliability

SDCAN – SDCAN's testimony claims that SDG&E's reliability data is unreliable and misreported[1277] based on media outage reports and requests that $5 million of SDG&E's O&M or capital revenues be redirected to fund an independent analysis.[1278] SDG&E refutes the claim of unreliable data and disagrees with SDCAN's proposal. SDG&E's response is documented in

[1274] Ex. 366 FEA/Smith at 84-87.
[1275] *Id*. at 85.
[1276] Ex. 71 SDG&E/Speer at 68.
[1277] Ex. 220 SDCAN/Shames at 23-25.
[1278] *Id.* at 33.

"Reply to Protest of Advice Letter 3217-E: Distribution PBR Reliability Performance Incentives for 2017" filed with the CPUC on May 29, 2018, and can be found in rebuttal testimony.[1279]

SDG&E asserts that its data is accurate and a truthful representation of the reliability impacts for the outage events listed. The outages are recorded in accordance with SDG&E's internal practice and with the reporting requirements governed by the CPUC in D.16-01-008. In rebuttal, SDG&E reiterated its several levels of internal controls to ensure records accurately represent electric outages. These include a rigorous quality control process in its outage recording and a data integrity process that exceeds the standard set by most utilities within North America. The steps used to endure accurate outage data are articulated in detail in rebuttal to SDCAN's assertions.[1280]

Additionally, SDG&E has identified that SDCAN may have had errors in their analysis. SDG&E reviewed each media report and verified that SDG&E's audited outage record matches the outage details reported in each of the media articles.[1281] Because of a variety of factors either not included or not properly represented in media reports, SDCAN's analysis does not properly depict outage records. Not all outages are reported in local media. Media reports often aggregate several individual outage records to create customer impact totals; a single outage event may sometimes be split into separate circuit outage records. These and other factors detailed in rebuttal illustrate that outage analysis based on media reports is unreliable and will likely lead to erroneous conclusions.[1282] SDG&E therefore recommends the Commission similarly disregard SDCAN's recommendation in its entirety.

22.3.16 Performance Based Ratemaking

CUE – SDG&E has made no proposal for the continuance of Electric Reliability Performance rewards or penalties in this GRC from Performance Based Ratemaking (PBR). CUE proposes the continuance of a PBR mechanism resulting from prior GRCs and negotiations with CUE between GRC decisions. SDG&E opposes CUE's recommendation.

[1279] Ex. 71 SDG&E/Speer at 68-70 (quoting Reply to Protest of Advice Letter 3217-E: Distribution PBR Reliability Performance Incentives for 2017).
[1280] Ex. 71 SDG&E/Speer at 69.
[1281] *Id.* at 70.
[1282] *Id.*

SDG&E's direct testimony described and supported SDG&E's decision not to propose an electric reliability performance-based ratemaking mechanism (PBR) in the TY 2019 GRC.[1283] ORA's Report on Electric Distribution Expenses took no issue with this testimony and made no recommendation regarding PBR.[1284] To the contrary, ORA's Report on Electric Distribution Capital argued against funding SDG&E's reliability-related projects, claiming that "SDG&E has a very reliable electric system and it has not demonstrated a need for increased reliability."[1285] Similarly, no party other than CUE took issue with SDG&E's decision not to propose a PBR.

CUE mistakenly characterizes SDG&E's decision not to propose an electric reliability PBR mechanism in this proceeding as an "ask … to drop the existing PBR mechanisms completely."[1286] This is inaccurate because SDG&E is under no Commission requirement to propose a PBR. It is true that SDG&E has, in the past, proposed PBR incentive mechanisms as part of its GRC applications. However, these proposals were made voluntarily, and they were made with the understanding that the PBR would fairly provide a balancing of incentives for the improvement of electric distribution reliability. There is no CPUC requirement for electric utilities to propose PBRs, and they are unnecessary to providing safe and reliable service, as the Commission stated in SDG&E's TY 2008 decision:

> The Commission has the authority and discretion to adopt incentive mechanisms when it finds that by providing specific, measurable targets, the utility can intentionally improve performance and thereby increase customer satisfaction or employee safety. (Pub. Util. Code § 701.) <u>We are not required to approve incentive mechanisms because properly determined rates are sufficient to provide safe and reliable service.</u>[1287]

A variety of other argument points by CUE are refuted in rebuttal, including discussion of the nature of incentive mechanisms, the potential unintended conflict with safety measures (particularly with respect to wildfire risk), other safety and risk-mitigation efforts, and comparison by CUE of SDG&E's reliability and that of SCE and PG&E.[1288] For all of the reasons provided in testimony and herein, the Commission should disregard CUE's PBR proposal for the TY 2019 GRC cycle.

1283 Ex. 71 SDG&E/Speer at 70-73 (citing Ex. 68 SDG&E/Speer at 94-98).
1284 Ex. 400 ORA/Godfrey at 73.
1285 Ex. 401 ORA/Roberts at 28.
1286 Ex. 370 CUE/Marcus at 96.
1287 D.08-07-046 at 49 (emphasis added).
1288 Ex. 71 SDG&E/Speer at 70-73.

22.3.17 Conclusion

In summary, the parties submitting proposals for Electric Distribution O&M were ORA, FEA, CUE, SDCAN, and SBUA. There were several areas that intervenors did not challenge Several forecasted areas in SDG&E's direct testimony were unchallenged by intervenors. The largest proposed reductions between SDG&E's test year forecast and party forecasts were within the Construction Services and Electric Regional Operations work groups. ORA recommends a $10.6 million reduction and FEA recommends a $13.6 million reduction in the Construction Services work group, seemingly disregarding the justification for the incremental RAMP proposed programs.

SDG&E rebutted these proposals in its rebuttal testimony, providing testimony and data request responses refuting various claims. The funding levels of previous programs should not solely dictate the approval of new proposed risk reduction programs, particularly where O&M is tied to newly approved RAMP capital projects. In many cases, SDG&E developed its forecasts using discrete incremental adjustments to the underlying base year or averages and trends of historical costs. ORA's and other parties' methods that rely almost exclusively on historical averages neglect to consider the individual merits of important new and necessary programs. SDG&E recommends that the Commission disregard recommendations based solely on those methods.

SDG&E has provided a substantial amount of detail supporting its forecasts in testimony, workpapers, and data requests, including a new and significant amount of information regarding projects and programs that are proposed to address SDG&E's key safety risks, as presented in its RAMP Report. SDG&E respectfully requests its requested funding be approved by the Commission.

22.4 Supplemental Year-Round Wildfire Risk Mitigation (O&M)

On May 7, 2018, SDG&E filed a motion requesting leave to submit supplemental testimony supporting additional incremental funding for an annual lease of a helitanker to provide firefighting support for SDG&E's service territory,[1289] which was granted by ALJ ruling dated May 25, 2018. SDG&E's October 2017 direct testimony presentation originally requested costs for the lease of a helitanker to provide firefighting support for its service territory,

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[1289] A.17-10-007/008 (cons.), Motion for Leave to Submit Supplemental Testimony of [SDG&E] (Motion) (filed May 7, 2018). No party opposed the Motion.

proposing incremental funding for an extended lease of the helitanker for five months a year, to reflect an expanded fire season. However, since the time SDG&E's GRC application was filed, SDG&E experienced an even greater need for the helitanker, for use throughout the year.

Mr. Geier testified that the helitanker is a regional firefighting asset that has been an important component of SDG&E's fire risk mitigation program for eight years.[1290] It can and has proven to help quickly suppress and contain fires when they occur, to reduce the potential of catastrophic damage. The helitanker, along with other SDG&E developed fire-related analytics, are tools that benefit the public and fire agencies. The helitanker has a 2,650-gallon capacity, can be deployed within fifteen minutes, and is capable of dropping more than 25,000 gallons (~95,000 liters) every hour. SDG&E has historically leased the helitanker during what used to be known as San Diego's fire season, for a three-month period.

California experienced its deadliest, most destructive fire season in late fall of 2017, as Mr. Geier testified. The extreme fire conditions plaguing California in late 2017 were rare from a historical perspective, but resulted from climate trends that are expected to continue, as a combination of factors leads to increases in both fire season duration and severity. SDG&E brought the helitanker into San Diego County beginning December 6, 2017, in response to the extreme burning conditions and the significant commitment of firefighting aircraft elsewhere.[1291] The helitanker flew 4.2 hours and dropped 30,200 gallons of water in support of the Lilac Fire.[1292] As stated in Governor Edmund G. Brown Jr.'s December 7, 2017 emergency proclamation, San Diego's Lilac Fire caused "conditions of extreme peril to the safety of persons and property," "threatened thousands of structures and critical infrastructure, forced the closure of roadways," and "caused the evacuation of hundreds of residents," such that the fire's "magnitude … [was] or [was] likely to be beyond the control of the services, personnel, equipment, and facilities of any single local government and require[d] the combined forces of a mutual aid region or regions to combat."[1293] Governor Brown had previously declared a state of

1290 Ex. 360 SDG&E/Geier at 1.
1291 *Id.* at 2 and 4. Mr. Geier describes how fires typically start in the north during Santa Ana wind conditions, and mutual aid California firefighting resources can only come to San Diego from the north. Thus, firefighting resources may already be deployed elsewhere when needed. *Id.* at 4, fn.6.
1292 *Id.* at 4.
1293 *Id.* at 3 (quoting the Proclamation of a State of Emergency in San Diego County due to Lilac Fire, Office of Governor Edmund G. Brown Jr. (December 7, 2017), *available at* https://www.gov.ca.gov/2017/12/07/news20089/).

emergency for Los Angeles and Ventura counties due to the effects of multiple fires earlier in the week.[1294]

San Diego's December 2017 experience is consistent with what SDG&E has been seeing as an increase in duration and frequency of fire-weather and burning conditions. Statewide, eight of the twenty most destructive fires in California history have occurred since 2015.[1295] Mr. Geier explains how the extreme fire conditions plaguing California in late 2017 were rare from a historical perspective, but resulted from climate trends that are expected to continue, as a combination of factors leads to increases in both fire season duration and severity. Record rainfall during the preceding (2016-17) winter spurred abundant vegetation growth across the state, which quickly dried out during the hottest summer in 122 years of state history. SDG&E activated its EOC seven times in late 2017 (contrasted with four activations in late 2016) in association with the threat of wildfires. SDG&E's meteorology experts expect extreme climate-change-related trends to continue, as a combination of factors leads to increases in both fire season duration and severity through the end of the century, as well as projected warming across the region. As the Commission observed in recently opening a climate change rulemaking, "California utilities are already experiencing impacts from climate change such as increased temperatures, an increased number of wildfires, sea level rise, and severe drought."[1296]

California and San Diego's 2017 experience caused SDG&E to explore the need for a year-round helitanker lease and secure a superior helitanker model for SDG&E's purposes, which maximizes performance capabilities and minimizes limiting factors. Mr. Speer's second revised direct testimony and supplemental workpapers requested O&M costs within the Electric Regional Operations (ERO) organization that reflect these changes, extending helitanker coverage to reflect a year-round lease.[1297] Those costs were anticipated in the Case Management Exhibit of Charles Manzuk,[1298] which summarized the impact of the Tax Cuts and Jobs Act (TCJA) on SDG&E's TY 2019 revenue requirement and provided a roadmap to the various

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[1294] *Id.*

[1295] *Id.* at 4.

[1296] *Id.* at 2 (citing R.18-04-019, Order Instituting Rulemaking to Consider Strategies and Guidance for Climate Change Adaptation (issued April 26, 2018) at 11 (internal footnote omitted)).

[1297] Ex. 68 SDG&E/Speer at 14 and 47; Ex. 70 SDG&E/Speer. The 365-day helitanker program requires additional functions and support beyond SDG&E's previous helitanker program, which costs are reflected in the testimony and workpapers.

[1298] Ex. 253 SCG/SDG&E/Manzuk at 2.

witness TCJA-related submissions on April 6, 2018. Mr. Manzuk's testimony proposed to "maintain the revenue requirement at the initial Application level," because:

> [SDG&E] is currently examining options for securing the use of a high-capacity, quick strike firefighting helicopter on a year-round basis. SDG&E anticipates requesting leave from the CPUC to submit supplemental testimony detailing its proposal for updating its request to reflect the need for additional use of a firefighting helicopter.[1299]

Mr. Speer's supplemental workpapers show costs for the year round helitanker lease of $3.897 million.[1300] However, Mr. Ryan Hom's August 24, 2018 update testimony shows no revenue requirement impact from the year-round proposal, as it was deducted from the offsetting adjustment reflecting SDG&E's TCJA impacts, consistent with Mr. Manzuk's testimony.[1301]

No party rebutted Mr. Geier's or Mr. Speer's Supplemental Year-Round Risk Mitigation testimony presentation, despite SDG&E's offer to accommodate such testimony in the proceeding schedule.[1302] Because of the extreme weather events and the necessary efforts to mitigate fire hazard within its service territory, as described in Mr. Geier's and Mr. Speer's testimony, the requested funding for year-round lease of the helitanker should be approved by the Commission.

22.5 Asset Management

SDG&E's Electric Distribution (ED) O&M testimony and workpapers, supported by witness William Speer, describes and justifies SDG&E's forecasted ED O&M activities from 2017-19, including $4.6 million for a newly formed asset management organization (Asset Management.[1303] The Asset Management group is creating and developing a strategic asset management capability for SDG&E, in accordance with the world-class standard of ISO 55000. ISO 55000 compliance was recommended in a report by the Safety and Enforcement Division (SED) in March 2015:

> Sempra should continue to evolve its Risk Management Program. Risk Management encompasses many interrelated programs and processes that cut across many different Business Functional Areas. Given constraints, an expedient

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[1299] *Id*. Notice was also provided to the official service list of A.17-10-007/-008 (cons.) in the December 20, 2017 email service of SDG&E's (and SoCalGas') revised testimony. Motion at 5 and fn. 11.

[1300] Ex. 70 SDG&E/Speer.

[1301] Ex. 514 SCG/SDG&E/Hom Update Testimony (August 2018) at 26.

[1302] Motion at 8. SDG&E's expanded helitanker program costs show in the Electric Regional Operations (ERO) section of Mr. Speer's direct testimony. ERO costs are discussed in section 22.3, *supra*.

[1303] Ex. 68 SDG&E/Speer at 62-65; Ex. 69 SDG&E/Speer at 315-327.

> way to validate the effectiveness of these processes in managing assets in a safe, reliable, and efficient manner, would be for Sempra to demonstrate accredited 3rd party certification of compliance with the ISO 550001 Asset Management Standard.[1304]

The Asset Management organization will be the program structure that assesses, leverages, and integrates the in-flight improvement work across all aspects of the business, and creates select new asset management capability, to benefit SDG&E's ratepayers and employees by supporting our goals of safety, reliability, affordability, and customer satisfaction.[1305]

The rebuttal testimony of SDG&E witness Kenneth Deremer[1306] regarding Asset Management: (1) adopted Mr. Speer's direct testimony supporting SDG&E's incremental cost forecasts necessary to implement and sustain its newly formed Asset Management organization and program;[1307] and (2) provided rebuttal testimony addressing issues raised regarding Asset Management in ORA's[1308] and OSA's[1309] direct testimony.

Mr. Deremer testified that SDG&E's Asset Management organization was newly forming when SDG&E filed its GRC Application, and thus SDG&E's direct testimony regarding the Asset Management organization described high-level goals and paths toward achieving those goals.[1310] SDG&E's Asset Management organization continued to develop after filing the GRC Application. The updated information in Mr. Deremer's testimony provides further evidence of SDG&E's continued commitment to evolving its Asset Management organization in furtherance of its safety goals, along the strategic planning trajectories shown in Ms. Day's TY 2016 and TY 2019 GRC testimony[1311] – and consistent with SED guidance and the Commission's Risk Framework Decision, with its planned requirements to implement the S-MAP, RAMP, and annual accountability reporting as part of the GRC process – rebutting ORA's and OSA's

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[1304] A.14-11-003/-004 (cons.), March 27, 2015, *Safety and Enforcement Division, Risk Assessment Section, Staff Report on [SoCalGas' and SDG&E's] 2016-2018 Consolidated General Rate Case* at 43.
[1305] Ex. 68 SDG&E/Speer at 63.
[1306] Ex. 361 SDG&E/Deremer.
[1307] Ex. 68 SDG&E/Speer at 63-65 (adopted by Deremer); Ex. 69 SDG&E/Speer at 315-327 (adopted by Deremer).
[1308] Ex. 400 ORA/Godfrey at 48-55.
[1309] Ex. 442 OSA/Contreras, *passim*.
[1310] Ex. 361 SDG&E/Deremer at 2-3.
[1311] *Id.* (citing Ex. 3 SCG/SDG&E/Day at 21).

claims.[1312] A summary comparison of SDG&E's, ORA's and OSA's rebuttal positions is provided below:[1313]

TOTAL O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E – As filed	**--**	**$4,610**	**$4,610**
ORA	**--**	**$0**	**$0**
OSA			

22.5.1 OSA

OSA recommends that SDG&E adopt a safety management system (SMS) for its electric business that includes an asset management system that is certifiable under American Petroleum Institute (API) 1173, instead of ISO 55000, as SDG&E proposes.[1314] Specifically, OSA recommends that SDG&E should develop a SMS framework to address electric operations, and present its proposal in the next GRC; and that SDG&E's SMS framework should leverage the API 1173 framework's emphasis on safety culture.[1315]

Mr. Deremer explained that SDG&E appreciates OSA's focus and attention on enhancing safety efforts at the utilities in a systematic way, and that SDG&E shares this core belief and is committed to addressing safety as its top priority.[1316] Mr. Deremer testified that OSA's recommendations are consistent with the spirit and objectives of SDG&E's asset management initiative, newly formed organization, and planned conformance with ISO 55000.

OSA is correct that ISO 55000 is an asset management system, and API 1171 is a safety management system for pipelines.[1317] However, OSA does not appear to have a complete view of ISO 55000 as it relates to asset safety and risk and does not acknowledge the important similarities between ISO 55000 and API 1173. Also, because SDG&E is largely an electric distribution company, its electric distribution assets form the basis of its core operations. Therefore, the safety of SDG&E's core operations directly depends upon safely and competently managing its assets. SDG&E's asset management initiative, which is outlined in further detail below, is directly aligned with and is a critical extension of SDG&E's enterprise risk

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1312 *Id.* at 2-4.
1313 *Id.* at 1.
1314 *Id.* at 4 (citing Ex. 442 OSA/Contreras at 2-4).
1315 Ex. 442 OSA/Contreras at 2-20 – 2-25.
1316 Ex. 361 SDG&E/Deremer at 5.
1317 *Id.* (citing Ex. 442 OSA/Contreras at 2-21).

management program (as described in Ms. Day's direct testimony),[1318] and is identified as a RAMP activity addressing critical risks categories, including wildfire mitigation, electric infrastructure integrity and records management, among others. As explained in direct testimony, the Commission has recognized the importance of establishing a comprehensive asset management program that comports with ISO 55000 in advancing and evolving risk management and asset safety across business functional areas.[1319]

Because API 1173 is specifically for entities that operate pipelines, SDG&E's electric business would not be able to receive certification under the standard. ISO 55000 is a broader standard that incorporates key elements of API 1173 in managing assets and ultimately drives the mitigation of safety risk as the cornerstone of decision-making. It contains many of the key tenets of API 1173, but makes more practical sense for SDG&E's electric assets, since API 1173 is specifically geared for oil and gas pipeline operators.[1320]

It is estimated that about 80% of the key principles of API 1173 are included in ISO 55000.[1321] For example, a critical element to SDG&E's current and future asset management program (under ISO 55000) is the Corrective Maintenance Program (CMP), which is an asset safety process deployed to provide oversight and structure around SDG&E's inspection, maintenance, and repair of electric facilities in compliance with General Orders 95, 128 and 165.[1322] The fundamental provisions of SDG&E's CMP directly align with the safety and compliance objectives of API 1173.

For all of these reasons, although the details may differ, SDG&E's proposal should be considered consistent with the nature of OSA's proposals.

22.5.2 ORA

ORA issued its report on electric distribution operations and maintenance (O&M) on April 13, 2018, addressing, among other things, SDG&E's asset management initiative and organization.[1323] ORA recommends denying SDG&E's request for incremental funding of

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[1318] *Id.* (citing Ex. 3 SDG&E/Day at 26-27).
[1319] *Id.* (citing Ex. 68 SDG&E/Speer/Deremer at 60).
[1320] Ex. 361 SDG&E/Deremer at 6.
[1321] *Id.* at 7.
[1322] *Id.; See also* Ex. 74 SDG&E/Colton at 46-47.
[1323] *See* Ex. 400/Godfrey at 48-55.

$4.610 million to establish an Asset Management group in its entirety, based on the following arguments:

- ORA states that the funding for Asset Management should be done within current funding levels (*i.e.*, reallocating and utilizing embedded historical costs).
- SDG&E's asset records management and maintenance functions are routine and ongoing activities with historical costs already funded by ratepayers.
- Groups subsequently transferred into the new Asset Management organization (Compliance Management and Technology Solutions and Reliability) are overlapping functions with the proposed Asset Management group.
- SDG&E is not a start-up company and its historical expenses should include labor costs for several groups that have been performing the same or similar activities proposed for the Asset Management group.
- SDG&E's testimony does not discuss or demonstrate the benefit to ratepayers for funding asset management.

Mr. Deremer testified that these arguments indicate a lack of understanding and appreciation of the purpose, extensive effort, and ratepayer benefits of SDG&E's plan to implement a comprehensive and integrated asset management program that will enhance the safety, performance and utilization of SDG&E's electric assets.[1324] SDG&E's incremental cost request to establish a comprehensive and integrated Asset Management organization and program is critical to SDG&E's asset risk strategy, as described in Ms. Day's testimony and summarized above. Moreover, SDG&E's plan to create a central asset management organization is consistent with key Commission objectives, including the emphasis on asset safety that is the subject of OSA's testimony in this GRC proceeding.

As a matter of policy, the Commission has endorsed and adopted funding for incremental programs and initiatives that focus on the prioritization and enhancement of safety and risk management. This is evident in the Commission's adoption of a settlement that included incremental funding for SDG&E to establish an Enterprise Risk Management organization in the TY 2016 proceeding[1325] and their funding for PG&E to implement various certifiable asset management programs.[1326]

In the S-MAP applications currently before the Commission, ORA, SDG&E, OSA, and numerous other parties recently jointly requested adoption of a settlement agreement adopting a

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[1324] Ex. 361 SDG&E/Deremer at 8.
[1325] D.16-06-054 at 144-45.
[1326] *See, e.g.,* D.14-08-032, *passim*, authorizing funding for various PG&E asset management initiatives to "bring[] PG&E's mapping and asset management into line with best industry practices." *Id.* at 137.

risk management methodology that relies on assessing risk by groups of assets with like characteristics.[1327] The settling parties, including ORA, noted that this approach is consistent with the Commission guidance to create and maintain asset-level risk models to provide the safe operation and management of utility assets:

> Moreover, the settlement is consistent with the Commission's conclusion that the utilities should "create risk models either at the asset level or structured by event and rolling up into higher levels," an effort that will "contribute to safety objectives over time."[1328]

To implement this type of asset-level risk model approach, which the Commission has approved by adopting the S-MAP settlement agreement, SDG&E should implement an asset management program such as ISO 55000.

As described in Mr. Speer's direct testimony and in Mr. Deremer's rebuttal, the implementation of ISO 55000 would accomplish this goal. OSA recognizes the importance of a comprehensive asset safety system in its testimony filed in this GRC; and SED recommended ISO 55000 compliance as part of SDG&E's plans for maturing its risk management program. By rejecting funding for the ISO 55000 asset management program, ORA fails to acknowledge these key policy objectives as well as the extensive and comprehensive effort needed to establish such an initiative.[1329] Instead, ORA suggests that simply through re-aligning the organization, SDG&E can build and sustain an asset management program that is certifiable under ISO 55000.

ORA's testimony claims that SDG&E did not provide an adequate explanation as to how the asset management organization is being developed nor what the benefits would be to ratepayers. SDG&E acknowledges that during the time that the direct testimony in this GRC was prepared, specific details were not known on the new program, as it was just commencing formation.[1330] This is similar to SDG&E's circumstances in the TY 2016 GRC, with respect to the newly forming Enterprise Risk Management organization, and in light of the evolving GRC risk framework in CPUC proceedings. However, Mr. Deremer's rebuttal testimony explained

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[1327] A.15-05-002 (cons), Joint Motion for Approval of Settlement Agreement Plus Request for Receipt into the Record of Previously Served Documents and for Expedited Comment Period of Pacific Gas and Electric Company (U-39 E), Southern California Edison Company (U-338 E), Southern California Gas Company (U-904 G), San Diego Gas & Electric Company(U-902 M), The Office of Ratepayer Advocates, The Utility Reform Network, and Energy Producers and Users Coalition and Indicated Shippers (filed May 2, 2018) at 19-20.
[1328] *Id.* at 19-20 (quoting D.16-08-018, COL 15).
[1329] Ex. 361 SDG&E/Deremer at 10.
[1330] *Id.*

that SDG&E has established incremental leadership and program management positions with governance and organization structures, since the time of filing the TY 2019 GRC application, and provided a detailed description of SDG&E's Asset Integrity Management Program developments, including ratepayer benefits. SDG&E's launching of a formal asset management initiative under the provisions of ISO 55000 is consistent with the strategic planning trajectories for risk, asset, and investment management shown in Ms. Day's testimony.[1331]

23. Customer Service

23.1 Customer Services Filed and Meter Reading

SoCalGas' Customer Services – Field and Meter Reading and SDG&E's Customer Services – Field (Collectively, CS-F) testimony and workpapers, supported by witness Gwen Marelli, describe and justify the utilities' CS-F Operations and Maintenance (O&M) and capital expenditure forecasts,[1332] which in turn form the basis for the Test Year 2019 (TY 2019) revenue requirement request for this area.

SoCalGas and SDG&E's respective CS-F organizations are responsible for, among other things, completing customer and company generated work orders which include requests to establish/remove utility service, light gas pilots, check gas appliances, shut off and restore gas service for fumigation, investigate the potential causes of high gas bills, respond to emergency incidents, investigate potential gas leaks, meter and regulator changes and other meter work necessary to maintain company assets, and collecting customer payments for delinquent bills. Additionally, the SoCalGas CS-F organization is required to perform inspections of each meter set assembly (MSA) for atmospheric corrosion, to identify conditions which require remediation by CS-F and Distribution field employees, contact customers to resolve meter access issues, and ultimately perform remediation work.

The Rebuttal Testimony of Ms. Marelli and the Joint Comparison Exhibits summarize SoCalGas' and SDG&E's forecast request and corresponding Intervenor proposals in this area. While SoCalGas and SDG&E do not specifically address the uncontested items here, the items were fully supported in the direct testimony and workpapers and should be adopted by the Commission.

[1331] *Id.*

[1332] *See* Exs. 119-121 SCG/Marelli and Exs. 122-124 SDG&E/Marelli.

23.1.1 SoCalGas Issues

23.1.1.1 CS-F Operations and Maintenance

SoCalGas is requesting TY 2019 total forecast for shared and non-shared O&M expenses of $171.440 million or an increase of $4.239 million or 2.5% over 2016 BY adjusted recorded expenses for SoCalGas' CS-F activities.[1333] SoCalGas' request for TY 2019 reflects the full effects of the Advanced Metering Infrastructure (AMI) implementation and includes ongoing savings of $6.231 million and implementation costs of $0.109 million for the Fueling our Future initiative. Approximately $57.5 million or 33.8% of total costs are RAMP-related costs, and a list of mitigation items and associated costs are provided in Exhibit 119. ORA supported SoCalGas' initial TY 2019 funding level forecast for CS-F.[1334] TURN proposed a $1.543 million disallowance to SoCalGas' forecast.[1335] TURN's proposed reductions include: a) $1.169 million for the CS-F Meter Set Assembly (MSA) Inspection Program; b) $0.217 million in CS-F Meter Reading Operations; and c) $0.157 million in the CS-Field Staff Manager.

23.1.1.2 CS-F MSA Inspection Program

SoCalGas is requesting TY 2019 funding of $18.121 million for CS-F organization's MSA Inspection Program. TURN proposed a reduction of $1.169 million from SoCalGas' initial forecast.[1336] TURN points generally to SoCalGas' underspending in 2017 as the basis for their proposed TY 2019 disallowance[1337] However, SoCalGas' 2017 adjusted recorded costs do not represent ongoing annual expenses that will be incurred in TY 2019. Since 2016, SoCalGas has been performing the more comprehensive inspections, and the funding requested for TY 2019 is necessary to continue the activities performed by this group in accordance with federal

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[1333] Ex. 119 SCG/Marelli at 1 (Table GRM-1 showed a total of $170.021 million which is an increase of $2.820 million or 1.7%. The updated amount of $171.440 million includes $1.419 million increase for CS-F MSA Inspection Program Cost Category as submitted in SoCalGas' Update Testimony on August 2018 for Customer Services – Field. Ex. 514 SCG/SDG&E/Marelli Update Testimony (UT) (August 2018) at 3 (Table GRM-1). No intervenor has opposed this updated forecast).
[1334] Ex. 412 ORA/Yeh at 2 (Table 17.1). As noted in fn. 2, SoCalGas has submitted Update Testimony. *See* Ex. 514 Marelli UT at 3.
[1335] Ex. 494 TURN/Marcus at 5 (Table 2. Note a calculation typo in the "CS Field Staff Manager" category actually results in a total difference of 1.543, not 1.544.). As noted in fn. 2, SoCalGas has submitted Update Testimony. *See* Ex. 514 Marelli UT at 3.
[1336] *Id.* at 6 (Table 3).
[1337] *Id.*

requirements.[1338] As Ms. Marelli stated in her rebuttal testimony, the MSA Inspection Program group has yet to reach steady-state levels and is continuing to ramp-up its workforce to full capacity.[1339] This ramp-up to steady-state levels is needed to perform and complete all MSA Inspection Program activities, as demonstrated by the significant increase in 2017 recorded costs as compared to BY 2016 recorded costs. Indeed, in 2017, the group directed most of their attention to the management and completion of MSA inspection work to meet compliance requirements, refining processes and procedures, and handling chronically inaccessible facilities.[1340] Consequently, SoCalGas was unable to complete all planned MSA remediation work order which resulted in an underspending of approximately $2.7 million. This work will be completed in addition to all other remediation work identified annually during the TY 2019 GRC cycle. Consequently, the MSA Inspection Program group is continuing to staff up workforce to complete its required activities. SoCalGas' TY 2019 MSA Inspection Program funding request reflects the staffing levels necessary to accomplish the required steady-state flow of inspecting 2.1 million MSAs and resulting remediation activities. For the reasons set forth above, SoCalGas believes that the Commission should reject TURNs proposed reductions to the CS-F MSA Inspection Program.

23.1.1.3 CS-F Meter Reading Operations

SoCalGas is requesting TY 2019 funding of $2.219 million for SoCalGas to conduct manual meter reading (SoCalGas estimates a total of 335,744 manual reads in TY 2019) for the following: a) customers enrolled in the AMI Opt-Out Program (173,180 manual reads in TY 2019); b) customers located in AMI's "escalated" jurisdictions (156,000 manual reads in TY 2019); and c) customers affected by AMI Meter Transmission Unit (MTU) failures (6,564 manual reads in TY 2019).[1341]

SoCalGas' 2017 manual meter reading costs, including opt-out reads, is $3.485 million.[1342] SoCalGas' TY 2019 request of $2.219 million reflects a reduction of $1.266 million (36% less than 2017-meter reading expenditures). TURN proposed a further reduction of $0.217

[1338] *See* Ex. 121 SCG/Marelli at 4:22-24 ("Pursuant to 49 CFR § 192.481, the Department of Transportation (DOT) requires each MSA be inspected once every three calendar years, with intervals not exceeding 39 months, for atmospheric corrosion.").
[1339] *Id.* at 7:11-13.
[1340] *Id.* at 7:15-18.
[1341] *Id.* at 8:18-24.
[1342] *Id.* at 10 (Table GRM-5).

million in TY 2019. TURN defends its proposed reduction, arguing that 2017 labor costs were approximately the same as 2019 projected costs, and that SoCal Gas will need to read fewer meters in 2019 than it read in 2017.[1343] TURN is correct that SoCalGas will read fewer meters in TY 2019 than SoCalGas read in 2017. Indeed, SoCalGas' TY 2019 forecast already reflects significantly less total meter reads than 2017. However, SoCalGas' 2017 adjusted recorded costs exclude costs related to over 160,000 opt-out meter reads.[1344] Consequently, TURN's comparison of the 2017 adjusted recorded costs million to SoCalGas' TY 2019 request is not appropriate.

TURN also points out that one of SoCalGas' assumptions regarding the number of meters read per hour (3.7) may be understated, where SoCalGas's forecast is based on the assumption that all meters are spread out across the service area.[1345] TURN looks to the number of opt-out meters that SDG&E staff can read per hour in comparison to SoCalGas, and assumes that SoCalGas is less productive.[1346] However, SoCalGas has different factors affecting reads per hour as compared to SDG&E. Specifically, TURN refers to a 9.2 minute drive time for SDG&E to derive the 4.8 opt out meter reads per hour.[1347] SoCalGas' average drive time is higher, at 13.1 minutes in BY 2016.[1348] Additionally, SDG&E's field personnel can read two meters (electric and gas) per field visit whereas SoCalGas' field personnel only read one meter per visit. The difference in the number of opt-out meters per hour is not due to productivity; rather, it is due to different traffic congestion levels and the number of meter reads per facility.

For the reasons set forth above, SoCalGas believes that the Commission should reject TURNs proposed reductions to the CS-F Meter Reading Operations forecast.

23.1.1.4 CS-F Staff Manager

SoCalGas is requesting funding for TY 2019 forecasted expenses of $1.514 million for this cost category, an increase of $0.320 million from BY 2016 adjusted recorded costs.[1349] The CS-F Staff Manager category is comprised primarily of management personnel who develop and

1343 Ex. 494 TURN/Marcus at 7:4-6.
1344 Ex. 119 SCG/Marelli at 45-46 & n.25.
1345 Ex. 494 TURN/Marcus at 7. *But see* Tr. V16:1378:1-11 (Marelli) (explaining that escalated cities will not necessarily have a better rate of meter reads per hour as TURN suggested).
1346 Ex. 494 TURN/Marcus at 7.
1347 *Id.*
1348 Ex. 121 SCG/Marelli at 11:8-9.
1349 *Id.* at 11:15-16.

implement processes, policies and procedures, including Gas Standards and Information Bulletins; track, analyze and report operational data; and manage special projects for CS-F operations.

SoCalGas' TY 2019 forecast for the CS-F Staff Manager category is based on a five-year average of 2012 to 2016 adjusted recorded costs. TURN states that this five-year average is an unreasonable way to forecast this account, and instead proposes using a 4-year average, leaving out 2012 and 2013.[1350] TURNS four-year averaging results in a reduction of $0.157 million in this expense category.[1351]

SoCalGas explained an adjustment of $225,000 to 2016 adjusted recorded costs necessary to return CS-F Staff to normal operations after temporary assignments to support the Aliso incident. TURN did not take issue with the five-year average methodology for the CS-F Dispatch and CS-F support cost categories.[1352] Yet, for the CS-F Staff cost category, TURN elected to use a four-year average methodology (presumably since it yielded a lower forecast than SoCalGas' proposed five-year methodology). [1353] Furthermore, TURN's four-year average methodology also excluded the $225,000 adjustment to 2016 adjusted recorded costs to return CS-F Staff to normal operations after temporary assignments to support the Aliso incident. TURN's TY 2019 forecast for the CS-F Staff cost category should be rejected because TURN's forecast methodology is without merit.

23.1.1.5 CS-F Operations – CUE's proposal

SoCalGas' TY 2019 request forecasts $1.814 million to address AMI modules failure remediation. CUE proposed a TY 2019 funding of $5.122 million, an increase of $3.308 million or 182.4%.[1354] As explained by Ms. Marelli in her testimony, CUE's proposal is based on a misunderstanding of the annual AMI module failure rate.[1355] Because SoCalGas' methodology is based on reasonable assumptions reflecting most recent recorded performance, CUE's proposals should be rejected.

[1350] Ex. 494 TURN/Marcus at 8 (TURN argues total costs declined in each year from 2012-2016, and the earliest years, are statistically higher than the last 4 years (2014-2017)).
[1351] *Id.* at 8 (Table 5).
[1352] *Id.* at 3.
[1353] Ex. 121 SCG/Marelli at 13 (Table GRM-7).
[1354] Ex. 370 CUE/Marcus at 29:13-17.
[1355] Ex. 121 SCG/Marelli at 18:3-24 ("The 0.68% annual failure rate for AMI modules which was used to derive the volume of MTU remediation work specifically applies to those meters handled by CS-F.").

23.1.2 SDG&E Issues

23.1.2.1 CS-F Operations and Maintenance

SDG&E's CS-F organization is forecasting TY 2019 total non-shared O&M estimated expenses of $23.723 million or an increase of $2.284 million.[1356] SDG&E's TY 2019 forecast includes ongoing savings of $0.344 million from the Fueling our Future (FOF) initiative.[1357] Approximately $4.8 million (or 20.4% of total costs) of SDG&E's TY2019 forecasts are RAMP-related costs.[1358]

As discussed below, both ORA's and TURN's proposed disallowances to SDG&E's requested TY 2019 estimated expenses for CS-F are not justified and should be rejected.

23.1.2.2 CS-F Order Forecast Methodology

For TY 2019, SDG&E proposed a total CS-F Operations forecast of $15.993 million.[1359] Of the $15.993 million, $.967 million is due to the order forecast methodology.[1360] To create the forecast, SDG&E used a three-year average of orders-per-active meter for 47 of the 53 order types because this allowed the full effects of smart meter implementation to be reflected in work order volumes.[1361] For the other six order types, an alternate forecast methodology was used.[1362]

ORA disagrees with the increase due to the upwards adjustment based on the order forecast methodology.[1363] ORA's position seems to derive from SoCalGas' use of the three-year average methodology as the basis for SDG&E's order volume forecast for most order types. However, ORA does not acknowledge the alternate forecast for the 6 order types. The increase due to the order forecast methodology is not solely attributable to the three-year average methodology used for 47 of 53 order types (which also incorporates the active meter forecast for TY 2019), but also pertains to the alternate forecast methodology for the other 6 order types.

1356 Ex. 124 SDG&E/Marelli at 1 n.2 (Table GRM-1).

1357 Ex. 122 SDG&E/Marelli at 3 (Table GRM-4).

1358 *Id.* at 2-3 (Table GRM-3). A list of mitigation items and associated costs are also provided in Exhibit 122 at pages 5-8.

1359 Ex. 124 SDG&E/Marelli at 5 (Table GRM-3).

1360 *See* Ex. 124 SDG&E/Marelli at 5 (Table GRM-3). The increase of $.977 due to the order forecast methodology is revised to $.967 million.

1361 *Id.* at 6:14-16.

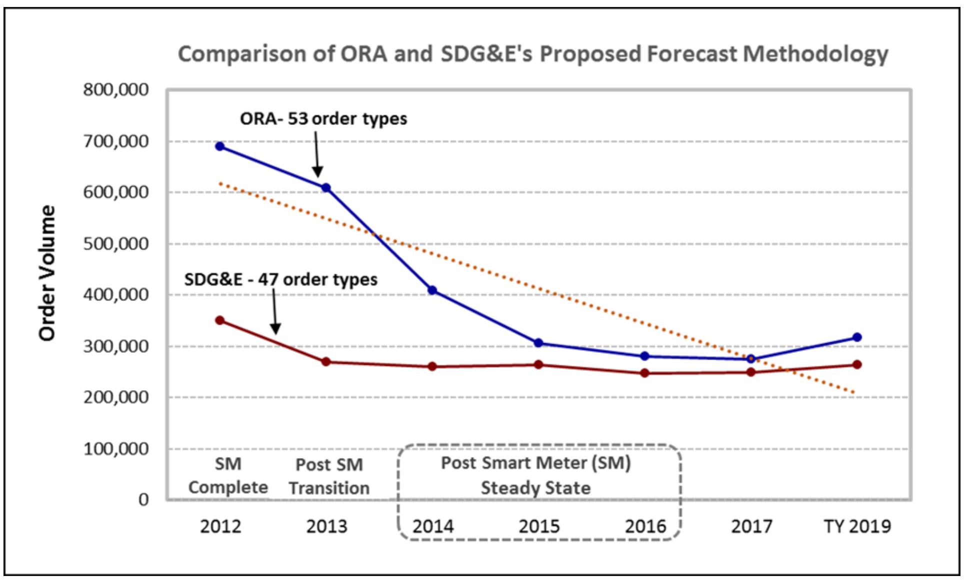
1362 Ex. 122 SDG&E/Marelli at 10.

1363 Ex. 411 ORA/Yeh at 8:12-13. Also, see note 29 above identifying a revision in the order forecast methodology.

ORA depicts a distorted view of the order volume trend by including all 53 order types and showing a declining trend line as its basis for its TY 2019 forecast. As discussed by Ms. Marelli in her testimony, one of the 6 order types with the alternate forecast methodology was the "Collections – First Call" order type. During 2014, SDG&E changed the collections process which significantly reduced the volume of orders in 2014 and 2015 for this order type. The volume for the "Collections – First Call" order type declined from 274,409 in 2012 to 1,655 in BY 2016 which is a total reduction of 272,754 orders. Consequently, a two-year average methodology (2015-2016) was used to forecast TY 2019 "Collections-First Call" orders. The significant reduction for this order type clearly skews ORA's linear trend line for the historical work volume from 2012 through 2016 shown in its testimony in Figure 16-1.

Exhibit 124's Figure GRM-1 shows the activity volume for the 47 order types in comparison to ORA's linear trend line for 2012 through 2016 which is based on the volume of 53 order types.

FIGURE GRM-1



	Historical Order Volume						Forecast
	2012	2013	2014	2015	BY 2016	2017	TY 2019
Volume for 47 order types	349,717	269,886	259,620	264,192	247,572	248,748	262,875
Volume for 53 order types	689,871	608,362	408,945	306,310	279,961	275,523	316,315

ORA's claim that "[t]here is no historical basis from recent years to suggest that the volatility between years negates the clear downward trend of work order volumes[]"[1364] is not valid. As shown in Figure GRM-1, total order volume for the 47 orders types which utilized the three-year average methodology are relatively flat between 2013 and 2017. SDG&E's TY 2019 forecast for the 47 order types using a three-year average from 2014-2016 better reflects the historical order patterns.

TURN agreed with ORA's proposed reduction of $0.977 million due to the order forecast methodology and make the same erroneous comparison as ORA.[1365] However, neither ORA nor TURN provided support to demonstrate SDG&E's forecast methodology is not reasonable. Consequently, both ORA and TURN's recommendation should be rejected.

23.1.2.3 CS-F Drive Time

SDG&E proposed an annual 1% increase in average drive time per CSF order, resulting in an increase of $0.147 million in TY 2019 estimated expenses.[1366] ORA did not disagree with the proposed incremental funding requests or the 1% increase in drive time upward adjustments.[1367] TURN, however rejected SDG&E's 1% drive time increase as speculative and compares the drive time forecast from the 2016 GRC cycle as the basis for its disallowance.[1368] Specifically, TURN compares the TY 2016 GRC forecast in drive time of 13.5 minutes which is based on a 1% increase per year to actual 2016 drive time of 13.0 minutes and states, "In light of SDG&E's having forecast non-existent increases in drive time as part of the last rate case cycle, TURN recommends that no drive adjustment be made in this rate case cycle."[1369]

TURN's comparison is flawed. The BY 2016 actual drive time includes the effects of SDG&E's initiative to reduce drive time such as more efficient routing and clustering different types of work together to achieve drive time efficiencies, and therefore, minimize the impact of increased traffic congestion.[1370] SDG&E took an average of the five-year percentage change each year which equates to a 1.3% increase in drive time, and thus, proposed the 1% increase

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[1364] Ex. 411 ORA/Yeh at 9:13-15.
[1365] Ex. 494 TURN/Marcus at 33.
[1366] Ex. 124 SDG&E/Marelli at 5 (Table GRM-3).
[1367] Ex. 411 ORA/Yeh at 8:10-11.
[1368] Ex. 494 TURN/Marcus at 33.
[1369] *Id.* at 33-34.
[1370] Tr. V16:1400:6-16 (Marelli).

each year.[1371] "Moreover, the actual 2017 average drive time is 13.2 minutes which is a 1.8% increase over BY 2016 actual drive time; therefore, SDG&E's forecast of 1% increase is more than justified and a conservative forecast for increased drive time."[1372] Additionally, as provided in Exhibit 124, TomTom's Traffic Index information shows that San Diego's congestion level has been increasing since 2012.[1373] Based on the information presented on SDG&E's BY 2016 and 2017 actual drive times and San Diego's congestion level history, SDG&E's asserts that its request for an annual 1% increase in drive time is appropriate, and TURN's recommendation should be rejected.

23.1.2.4 CS-F Supervision

SDG&E is requesting $1.422 million for the CS-F Supervision cost category, an increase of $0.185 million. CS-F Operation field employees report to field supervisors. Like field technicians and collectors, field supervisors are geographically dispersed across SDG&E's five operating bases. Field supervisors hire and coach employees, conduct safety and job observations, coordinate with dispatch and others to address and resolve field issues, respond to emergency incidents to provide on-site leadership, and manager the overall performance of CS-F employees who work at each of the operating bases.

Both ORA and TURN opposed SDG&E's TY 2019 request. ORA proposed a funding reduction to $1.144 million, which is $0.278 million less than SDG&E's TY 2019 forecast,[1374] and TURN proposed a funding reduction to $1.237 million, which is $0.185 million less than SDG&E's TY 2019 forecast.[1375] As discussed in Ms. Marelli's testimony, SDG&E's incremental request for TY 2019, or 2.7 additional FTEs is needed to maintain the employee-to-supervisor ratio of 11.5. This ratio is based on the three-year average of 2014 to BY 2016.

ORA does not object to SDG&E's proposed employee-to-supervisor ratio nor provide justification why the three-year average ratio is not reasonable. Yet, ORA assumes that BY 2016 supervisor levels will be sufficient to meet TY 2019 supervision needs which equate to 13.3 employee-to-supervisor ratio. However, ORA's alternative forecast fails to provide additional

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[1371] Ex. 124 SDG&E/Marelli at 12 (Table GRM-6).
[1372] *Id.* at 12:13-15.
[1373] *Id.* at 13.
[1374] Ex. 411 ORA/Yeh at 10:22-23.
[1375] Ex. 494 TURN/Marcus at 35 (Table 25).

CS-F Supervision FTEs to maintain the appropriate employee-to-supervisor ratio for the work ORA did not oppose.

TURN also does not take issue with SDG&E's employee-to supervisor ratio. However, TURN's proposed CS-F Supervision funding is based on its proposed CS-F Operations FTEs which, as Ms. Marelli explained, is erroneous and unjustified.[1376]

SDG&E has justified its TY 2019 request for CS-F Operations and explained in sections 3.1 and 3.2 why ORA and TURN's proposed disallowances for CS-F Operations should be rejected. Hence, SDG&E's proposed funding for the CS-F Supervision cost category to maintain the 11.5 CS-F Operations employee-to-supervisor ratio should be accepted.

23.1.2.5 CS-F Support

SDG&E is forecasting $2.517 million for the CS-F Support cost category, a reduction of $0.138 million.[1377] The CS-F Support cost category includes: (1) centralized training (classroom instructors and training manager located at SDG&E's skills training center); (2) field instructors who accompany new field employees immediately following their formal training; (3) QA inspectors and QA supervisor who inspect the work of technicians; (4) district operations clerks who are located at the field operating bases; (5) District Operations Managers who oversee the day to day operations of each field operating base; (6) a Meter Access group that resolves any difficulty field technicians might be experiencing in gaining safe access to meters at customer premises; (7) a safety group that fosters safe work practices among CS-F employees; and (8) field technology support personnel who maintain the field Mobile Data terminals (MDTs), work management, routing and reporting systems used for CS-F operations.

TURN proposed a reduction to SDG&E's forecast of $0.102 million.[1378] As shown in Exhibit 124, TURN's forecast methodology results in a 16.6% weighting for each year from 2014 to 2016 and a disproportionate 50% weighting to 2017.[1379] TURN does not provide justification or analysis for giving 2017 a disproportionate weight in its proposed TY 2019 forecast; rather, it appears that TURN's rationale for using this methodology is simply to achieve a lower forecast.

[1376] Ex. 124 SDG&E/Marelli at 18:14-20.
[1377] Ex. 122 SDG&E/Marelli at 23 (Table GRM-20).
[1378] Ex. 494 TURN/Marcus at 37 (Table 26).
[1379] Ex. 124 SDG&E/Marelli at 20:4-5 (Table GRM-11).

SDG&E's forecast is based on a three-year average (2014 – 2016 adjusted recorded costs), because this best reflects the effects of SDG&E's post-Smart Meter implementation. This is also consistent with the three-year average methodology SDG&E used to forecast most of its order types in the CS-F Operations cost category.[1380] This same three-year methodology was also used for the CS-F Dispatch cost category which TURN did not take issue with.[1381] Additionally, in Exhibit 124, SDG&E provided the historical adjusted recorded costs for CS-F Support during the last 6 years (2012 – 2017) which clearly shows fluctuation during the 6-year period.[1382] Consequently, SDG&E asserts that its TY 2019 forecast is reasonable and should be adopted.

23.1.2.6 Service Guarantee

SDCAN proposes that service guarantees should be increased from $50 up to $100 per missed appointment. As discussed in Exhibit 124, SDCAN does not take into account the relationship between responding to emergency orders and missed appointments.[1383] Customers call SDG&E's Customer Contact Center to report emergency safety incidents such as when they smell gas or hear gas hissing. Based on the information provided by the customer, SDG&E classifies these customer requests as its highest priority gas emergency orders known as P1 orders. SDG&E's goal is to respond to all P1 orders within 60 minutes of a customer's call; therefore, it is sometimes necessary for SDG&E CS-F to divert field technicians from their prescheduled work appointments to respond to P1 orders. Additionally, SDG&E also explained in Exhibit 124 the factors contributing to the significant increase in missed appointments during 2017.[1384] SDG&E has no control on the volume of emergency orders received; hence, SDCAN's recommendation to increase the Service Guarantee credit from $50 to $100 should be rejected.

Additionally, SDCAN recommends SDG&E should be obligated to split the cost of the program with its shareholders. In fact, the Service Guarantee credit is and has been 100% shareholder funded.

[1380] *See id.* 4-14.
[1381] *Id.* at 20-21.
[1382] *Id.* at 21 (Figure GRM-3).
[1383] *Id.* at 21-22.
[1384] *Id.* at 22:12-21.

23.2 Customer Service Office Operations

23.2.1 SoCalGas Summary of Office Operations Request

SoCalGas seeks $90.011[1385] million for operations and maintenance (O&M) costs to support the shared and nonshared services activities within Customer Services - Office Operations (CSOO), that deliver safe, efficient, reliable and effective service through the Customer Contact Centers (CCC), Branch Offices (BO) and Authorized Payments Locations (APL), Billing Services, Credit and Collections, and related supporting functions including CCC Support, Remittance Processing, Measurement Data Operations (MDO) and CSOO Technology and Support. The CSOO request further includes Postage and the Uncollectable Rate. Cost efficiencies related to Fueling Our Future (FOF) (such as increased self-service adoption, continuous improvement in CSR average handle time savings), completion of the Advanced Meter Project, and increased customer adoption of paperless billing, lead to a reduction of $2.6 million (almost 3%) below base year (BY) 2016 adjusted recorded costs.[1386] CSOO is also requesting IT Capital expenditures of $13.190 million in 2017, $12.412 million in 2018, and $23.663 million in 2019 to deliver an improved customer experience, replace obsolete technology, deliver operational efficiencies and comply with regulatory mandates.[1387]

Examples of the types of services offered by these cost centers include responding to customer calls, processing customer service requests, resolution of billing exceptions, investigation of delinquent accounts, printing of customer bills, processing of customer payments, and business support for system changes to the customer information system. The estimated operating expenses and IT Capital expenditures support the Office Operations' fundamental goal of maintaining operational excellence and are required to provide basic, convenient, responsive, efficient, reliable, and safe customer service. In addition, SoCalGas filed Supplemental Testimony to provide an analysis, as required by Senate Bill 598, of the impact of rates on disconnections for nonpayment.[1388] Support for SoCalGas' Office Operations-related

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[1385] Ex. 514 SCG/SDG&E/Baldwin Update Testimony (UT) (August 2018) at 10-11.
[1386] *See* Ex. 130 SCG/Baldwin at 1, Tables MB-1 and MB-2 for O&M and Capital summary request.
[1387] Ex. 130 SCG/Baldwin at 56-57, Table MB-39 and Table MB-40.
[1388] *See* Ex. 131 SCG/Baldwin. No one commented upon or contested SCG' SB 598 analysis. Further to SB 598 requirements, the Commission opened a statewide rulemaking that will specifically examine the causes of disconnection for nonpayment, appropriate rules governing disconnections for nonpayment and subsequent reconnection processes and whether utility rates have an impact on disconnections for nonpayment. See Rulemaking 18-07-005.

requests was provided in the testimony and workpapers of SoCalGas witness Michael Baldwin (Exs. 130-133A).

SoCalGas used a BY methodology to forecast estimated 2017-2019 expenses. This approach was used because BY 2016 represented the most recently available adjusted recorded expenditures, transactions and activity levels, customer service policies, practices and procedures prior to the October 2017 filing of Mr. Baldwin's prepared direct testimony. ORA did not oppose the BY forecasting methodology used by SoCalGas. Only TURN recommended adjustments to SoCalGas Test Year (TY) 2019 forecasts based on forecast methodology. In each instance, described more fully below, TURN selectively chose a different forecast methodology for every area of CSOO it challenged. TURN was selective in both the historical average period used to create TURN's own forecasted revenue requirement, and in using 2017 actual recorded costs. SoCalGas neither utilized nor had 2017 recorded data available at the time it filed its TY 2019 GRC Application. The provision of Base Year + 1 data (in this case 2017 data) is outside the scope of the Rate Case Plan; nonetheless, SoCalGas provided information above and beyond the Rate Case Plan's requirements.

The only parties to rebut portions of SoCalGas' O&M revenue request were ORA, TURN and CUE. And, no party opposed SoCalGas' business justification for IT Capital expenditure requests. With one exception, ORA did not oppose SoCalGas' forecasted revenue requirement.[1389] Although CUE recommended that SoCalGas hire additional Customer Service Representatives (CSRs) and operate to an unspecified, but mandatory, level of service (LOS), CUE made no specific funding proposals.[1390] The only areas where ORA or TURN recommended adjustments to SoCalGas' revenue request concerned the following cost centers:

- ORA recommended a reduction of $167,000 in labor from SoCalGas' TY 2019 request of $9,024,000 to the CCC Support group.[1391]
- TURN recommended the following reductions primarily based upon its use of numerous alternative forecasting methodologies:
    - Customer Contact Center Operations (2OO000.000): a reduction of $2,335,000 for labor expenses and a $27,000 reduction in non-labor expenses from a total SoCalGas TY 2019 request of $29,872,000 (labor and non-labor);[1392]

[1389] Ex. 412 ORA/Yeh at 14.
[1390] *See* Ex. 374 CUE/Salas at 6.
[1391] Ex. 412 ORA/Yeh at 14.
[1392] Ex. 494 TURN/Marcus at 12, Table 7.

- Customer Contact Center Support (2OO001.000): a reduction of $239,000 in labor expenses and a $232,000 reduction in non-labor expenses from a total SoCalGas TY 2019 request of $9,024,000 (labor and non-labor);
- Branch Offices (2OO002.000): a reduction of $82,000 in labor expenses and $45,000 in non-labor expenses from a total SoCalGas TY 2019 request of $12,011,000 (labor and non-labor);
- Billing Services (2OO003.000): a reduction of $415,000 in labor expenses and an increase of $93,000 in non-labor expenses from a total SoCalGas TY 2019 request of $6,264,000 (labor and non-labor);
- Credit and Collections Postage (2OO004.001): a reduction of $44,000 in Non-standard escalation (NSE) non-labor expenses from a SoCalGas TY 2019 request of $995,000;
- Remittance Processing Postage (2OO005.001): a reduction of $276,000 in NSE non-labor expenses from a SoCalGas TY 2019 request of $13,812,000;
- Customer Service Other Office Operations and Technology (2OO006.000): a reduction of $474,000 in labor expenses and an increase of $154,000 in non-labor expenses from a total SoCalGas TY 2019 request of $3,180,000 (labor and non-labor);
- Measurement Data Operations (2OO007.000): a reduction of $113,000 in labor from a SoCalGas TY 2019 request of $1,042,000; and
- Major Market Credit and Collections (2200-0354): a reduction of $124,000 in labor from a SoCalGas TY request of $1,604,000.
- For the Uncollectible Rate, TURN proposed a ten-year rolling average whereas SoCalGas proposed a static five-year average.[1393]

Each of the areas recommended for adjustment will be discussed below. The following areas were not objected to by intervenors and the Commission should adopt these requests as reasonable:

- No party opposed SoCalGas' shared services requests for Payment Processing $3,511,000 or Manager of Remittance Processing $377,000.[1394]
- No party opposed SoCalGas' IT Capital Project business justifications totaling $49.265 million.[1395]

23.2.1.1 Customer Contact Center (CCC) Operations

The CCC handles a variety of customer service needs with the largest volume of interactions consisting of billing and payment inquiries as well as customer-requested service orders. SoCalGas' CCC handles over 11 million annual contacts for residential, commercial, and industrial customers through CSRs as well as automated self-service.[1396] Utilizing a BY

[1393] Ex. 130 SCG/Baldwin at 54; Ex. 497 TURN/Goodson at 3.
[1394] Ex. 130 SCG/Baldwin at 52-54. *See also* Ex. 494 TURN/Marcus at 12, Table 7.
[1395] *See* Ex. 130 SCG/Baldwin at 56-57, Tables MB-39 and MB-40.
[1396] Ex. 130 SCG/Baldwin at 11.

forecasting methodology, SoCal Gas requested $29,872,000 (labor and non-labor) in TY 2019, accounting for incremental changes in CSR call volume, increasing customer self-service, changes in average handle time (AHT), customer growth, and update of customer contact information resulting in a net reduction of $271,000 over 2016 Adjusted Recorded expenses.[1397] TURN recommends a downward adjustment of $2,335,000 for labor expenses and a $27,000 reduction in non-labor expenses, reflecting its view that 2017 actuals establish the appropriate forecast floor arguing that 2017 reflects CSR call volumes lower than SoCalGas' 2017 forecast.[1398] TURN's recommendation is not supported and should be rejected.

SoCalGas' CCC Operations TY 2019 funding request is summarized in Mr. Baldwin's prepared direct testimony and supporting workpapers. Each change (increases or decreases) to BY 2016 is reflected in Table MB-12.[1399] Mr. Baldwin's workpapers provide support and explanation for each of the line items shown on Table MB-12.[1400] Forecasted decreases in CSR answered calls is the most significant driver in decreasing CCC Operations TY 2019 costs. Even with customer growth, increases in AHT (from updating customer contact information and paperless billing enrollment) and increasing level of service (LOS), the CCC Operations is forecasted to have a net reduction in TY 2019 forecasted expenses from BY 2016. For SoCalGas to achieve CCC Operations' TY 2019 expense reductions, 467,828 CSR calls must move to self-service from the BY level of 5,294,765. This means almost 9% of CSR answered calls must move to self-service by TY 2019.[1401]

In direct contrast to TURN's recommendation to slash CSR resources, CUE claims that SoCalGas needs a mandatary LOS and additional CSR resources to increase LOS above SoCalGas' LOS target of 60%.[1402] SoCalGas believes that its TY 2019 request provides a balance between cost and responsiveness and is consistent with recent historical CSR LOS levels. SoCalGas proposes to add 19.7 FTEs from 2017-2019 to meet this 60% target, and no mandatory LOS is warranted.[1403] TURN's proposed forecast of $27,510,000[1404] is simply not

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[1397] *Id*. at 13-14.
[1398] Ex. 494 TURN/Marcus at 14 and 16-17.
[1399] Ex. 130 SCG/Baldwin at 14, Table MB-12.
[1400] Ex. 132 SCG/Baldwin at 10-12 and 25-26.
[1401] Ex. 130 at 13, Table MB-11; Ex. 132 SCG/Baldwin at 11.
[1402] Ex. 374 CUE/Salas at 6-7.
[1403] Ex. 133 SCG/Baldwin at 13.
[1404] Ex. 494 TURN/Marcus at 18.

sufficient to operate the CCC Operations to an adequate level of service, and SoCalGas' original proposal of $29,872,000 should be adopted.

23.2.1.2 Customer Contact Center Support

SoCalGas seeks $9,024,000 for CCC Support expenses, representing an $1,242,000 increase over BY 2016. CCC Support provides the necessary services to maintain efficient and effective CCC operations, through forecasts of customer call volume, CSR planning, scheduling and training, handling customer complaints, analysis, strategy and continuous improvement and monitoring of customer experience to identify improvement opportunities. SoCalGas' request for CCC Support addresses incremental needs for CCC system and software maintenance fees, IVR fees, expansion of the training and CSR development team, increased quality assurance support, necessary staffing adjustments, and expansion of the Special Investigations (SI) team that responds to customer complaints.[1405] ORA and TURN recommend downward adjustments to SoCalGas' forecast, questioning the need to increase staffing.

ORA takes issue only with SoCalGas' request to expand its SI team by two Special Investigation Clerks, for a reduction of $167,000, and points to a three-year average as the basis for their recommended disallowance.[1406] The SI team plays a critical role in ensuring timely investigation and resolution of formal and informal customer complaints and issues, social media inquiries, and all escalated customer communications received through the CPUC and Company Officers.[1407] SoCalGas seeks to expand this team to improve its level of customer service because the number of business days needed to respond to these complaints has increased to 19 days on average in 2017, indicating the lack of available workforce to respond in a timely manner to issues of increasing complexity and broader scope.[1408] SoCalGas' request is reasonable and should be adopted.

For SoCalGas' CCC Support function, TURN again utilizes 2017 actuals for a $471,000 reduction, recommending a decrease of $239,000 in labor expenses and a $232,000 reduction in non-labor expenses.[1409] SoCalGas addressed each of these issues in its rebuttal testimony, demonstrating that TURN's use of a two-year (2016/2017) average to forecast TY 2019

[1405] Ex. 130 SCG/Baldwin at 23-24.
[1406] Ex. 412 ORA/Yeh at 14.
[1407] Ex. 130 SCG/Baldwin at 23.
[1408] Ex. 133 SCG/Baldwin at 14-15 and Table MHB-7 and Table-MHB-8.
[1409] Ex. 494 TURN/Marcus at 19-20.

expenses is flawed because it: (1) ignored 2017 data that demonstrated SoCalGas was in the process of hiring to fill vacant positions and its forecasted TY 2019 labor expense forecast represents the full annualized effect of partial 2017 labor expenses;[1410] and (2) understates the actual expected 2017 annual expenses, again by ignoring a one-time credit of $270,000 from SoCalGas' telecommunications provider that was given due to reliability problems that occurred in March of 2017. TURN did not include an adjustment for this one-time credit in their calculations.[1411] The Commission should adopt SoCalGas' forecast as reasonable.

23.2.1.3 Branch Offices

SoCalGas currently operates 44 BOs throughout its service territory, which provide customers the option of paying their bills in-person, inquiring about accounts, and completing other customer service transactions. Approximately 98% of all BO transactions are related to bill payments. Although BO transaction volumes are declining at some locations, BOs are staffed at optimal levels to provide service during current operating hours, and labor costs are not projected to decline.[1412] The majority of non-labor expenses are fixed and not sensitive to transaction volume reductions.[1413] SoCalGas also provides customer services through a network of APLs. These APLs provide similar payment services for SoCalGas customers and offer convenient locations and extended hours with no transaction fee to the customer. SoCalGas has enhanced access to APLs by expanding the APL network to over 380 locations. SoCalGas requests $12,012,000 in TY 2019, an increase of $420,000, which is comprised of $657,000 for proposed compliance activities in connection with the Americans with Disabilities Act (ADA), the addition of an ADA Coordinator position, and $97,000 for full year impact of Aliso Canyon incident temporary assignments offset by a $334,000 reduction due to branch closures.[1414]

TURN recommends a reduction of $127,000 ($82,000 labor, and $45,000 non-labor) to SoCalGas' forecast. Using a 2017 baseline forecast for TY 2019 labor expenses, TURN asserts 2017 is the most recent adjusted recorded expenses that reflect normal branch office

[1410] Ex. 135 (TURN), Sempra Utilities Response to TURN DR-62, Question 13.
[1411] Ex. 133 SCG/Baldwin at 16.
[1412] Ex. 130 SCG/Baldwin at 28.
[1413] *Id.*
[1414] Ex. 130 SCG/Baldwin at 29-30. SoCalGas, SDG&E and the Center for Accessible Technologies jointly sponsored a proposal for ADA activities and the creation of an ADA Coordinator position. *See* Ex. 365 SCG/SDG&E/Kasnitz/Manzuk. A discussion of that proposal, which was unopposed, is contained in Chapter 50.1, Accessibility Issues.

operations.[1415] SoCalGas demonstrated in rebuttal testimony that lower 2017 labor expenses were accounted for because of the VREP transition period that necessitated the need to fill vacant positions (represented employees) due to the retirements. Specifically, the VREP vacancies were previously occupied by represented employees at the highest pay progression within their job classification. Incoming replacements start at the lowest pay step in the progression but will achieve the highest pay level by TY 2019.[1416]

Further TURN's recommended reduction in non-labor costs is based upon a misunderstanding of SoCalGas' ADA compliance obligations.[1417] As SoCalGas explained in rebuttal testimony, Walmart recently discontinued its self ADA certifications. SoCalGas will now bear the recurring expense for required third party certification of Walmart's 100 APL locations.[1418] The Commission should adopt SoCalGas' request.

23.2.1.4 Billing Services

Billing Services is responsible for calculating bills and maintaining accurate customer account information. Billing Services at SoCalGas consists of two distinct organizations: (1) billing for residential, small commercial, and industrial customers; and (2) billing for large commercial and industrial customers.[1419] SoCalGas is requesting $6,265,000, a reduction of $703,000 from BY 2016 adjusted recorded expenses.[1420] Using a base year 2017 forecast, TURN would further reduce the Billing Services request by an additional $323,000.[1421] SoCalGas disagrees that 2017 provides an appropriate forecast for its request. Billing Services was substantially impacted by the retirement of numerous management and non-management employees who elected to retire under VREP.[1422] Actual costs in 2017 were impacted by gaps between the time of employee retirement and employee replacement.[1423] This timing impact was transient and SoCalGas' request should be adopted.

[1415] Ex. 494 TURN/Marcus at 20-21.
[1416] Ex. 133 SCG/Baldwin at 17-18.
[1417] *Id.* at 18.
[1418] *Id.*
[1419] Ex. 130 SCG/Baldwin at 32.
[1420] *Id.* at 31 and Table MB-21.
[1421] *See* Ex. 494 TURN/Marcus at 22-23 and Table 15; Ex. 133 SCG/Baldwin at 19-20.
[1422] Ex. 133 SCG/Baldwin at 19.
[1423] *Id.* at 19-20.

23.2.1.5 Credit and Collections Postage

Credit and Collections postage expenses include the cost of mailing collection notices. As noted above, based on the United States Postal Service (USPS) most recent rate increase, SoCalGas' updated request for credit and collections postage cost is $1,002,560 for TY 2019, an increase of $7,230 from BY 2016 adjusted-recorded costs.[1424] TURN recommends a $44,000 reduction to the original credit and collections postage forecast due to using a two-year average (2016-2017).[1425] TURN's use of a two-year average forecasting methodology is arbitrary and is selected by TURN because it provides the lowest forecast. TURN's recommendation should be rejected, and SoCalGas' request should be adopted as reasonable.

23.2.1.6 Remittance Processing Postage

As noted above, based on the USPS most recent rate increase, SoCalGas' updated request for remittance processing postage costs is $14,027,000 for TY 2019, a decrease of $2,984,000 from the BY 2016 adjusted recorded costs.[1426] TURN recommends an additional $276,000 reduction in addition to the already reduced forecast of $2,984,000. SoCalGas shows that based on the paperless bill adoption rate year-to-date May 2018, the TY 2019 postage reduction expenses will be not achieved.[1427] TURN's additional reduction of $276,000 beyond SoCalGas's proposed reduction of $2,984,000 is illogical given that SoCalGas appears to be on pace to fall short of the TY 2019 reductions driven by the goal to achieve a net additional increase of one million accounts to paperless billing.[1428]

23.2.1.7 Other Office Operations and Technology

Customer Services Other Office Operations and Technology consists of three groups with broad functions: the Vice President of Customer Services, providing oversight and leadership for all Customer Services activities; Customer Operations Technology, which serves as a business liaison with IT to support customer related systems and data; and Customer Service Technology Project Management, which helps ensure that customer related IT projects deliver the intended business value in alignment with the priorities of the Customer Services and Customer Solutions organizations by developing and managing the governance and standards for

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[1424] Ex. 514 SCG/SDG&E/Baldwin Update Testimony (UT) (August 2018) at 10 and Attachment F.
[1425] Ex. 494 TURN/Marcus at 23.
[1426] Ex. 514 Baldwin UT at 10-11 and Attachment F.
[1427] Ex. 133 SCG/Baldwin at 22-23 and Table MHB-13.
[1428] *Id*. at 22.

customer service technology projects, and monitors and reports on project status. SoCalGas requests $3,180,000, a $1,115 increase from 2016 adjusted recorded expense level to bolster the Company's Customer Privacy Program oversight as well as administration and education of third parties who request customer data, and increased support for data analytics, mobile customer applications and Advanced Meter and technology support. The adjustments are specifically explained in Mr. Baldwin's direct testimony, including detailed descriptions of the required labor positions.[1429]

TURN recommends a net reduction of $321,000, consisting of $474,000 less in labor expenses and $154,000 more in non-labor expenses, by using 2017 recorded labor activity plus half the incremental request in TY 2019, which does not accurately reflect the group's costs due to partial year vacancies in 2017. Most of the vacancies have been filled, and a full staffing level is required in TY 2019 to support the increasing number of customer technology application functions at SoCalGas.[1430] SoCalGas appreciates the recommended increase in nonlabor proposed by TURN, but SoCalGas believes that filling staffing positions internally, with decreased vendor and contractor assistance provides the best solution for this area's needs. SoCalGas' request should be adopted.

23.2.1.8 Measurement Data Operations

MDO monitors and maintains accurate and timely usage measurement reporting to support SoCalGas and SDG&E[1431] Major Markets Billing functions for nearly 1,300 large gas volume meters. MDO also receives and processes measurement and gas quality data from other electronic devices such as storage field meters, producer meters, supplier meters and company facility meters. In addition, MDO is responsible for the processing of the monthly British Thermal Unit (BTU) averages used to bill core customers in the CIS.[1432] SoCalGas requested $1,043,000, a decrease of $271,000 from BY 2016. Using a base year 2017 forecast, TURN would further reduce the MDO request by an additional $114,000.[1433] SoCalGas disagrees that 2017 provides an appropriate forecast for its request. MDO was substantially impacted in 2017

1429 Ex. 130 SCG/Baldwin at 45-49.
1430 Ex. 133 SCG/Baldwin at 24-25.
1431 SoCalGas directly bills SDG&E for any costs to perform MDO services on behalf of SDG&E, so this is not a shared service cost center.
1432 Ex. 130 SCG/Baldwin at 34-35.
1433 Ex. 133 SCG/Baldwin at 25.

by employees on disability and those who elected to retire under VREP. As a result, actual costs in 2017 were impacted by gaps in time for employees returning to service or replacement after retirement.[1434] This timing impact was transient and SoCalGas' request should be adopted.

23.2.1.9 Major Market Credit and Collections

Major Market Credit and Collections is a shared service utilized by several departments at both SoCalGas and SDG&E including: SoCalGas Gas Acquisition; SDG&E Electric & Fuel Procurement (E&FP); Contracted Marketer program; CAT program; Capacity Products; California Producers; Renewable Energy & Long-Term Power Contracts; Interconnection Agreements; and Large Commercial & Industrial Customers. The group has broad responsibility including establishing credit, mitigating credit risk, maintaining collateral, negotiating contract credit terms, monitoring accounts receivable, and performing collections activity.[1435]

SoCalGas requested $1,604,000, which after adjustments for a full year of staffing to restore staff after temporary redeployment and FOF reductions, constitutes a $4,000 decrease from BY 2016 adjusted recorded expenses.[1436] TURN recommends a reduction of $124,000 based upon its use of a three-year average (2015-2017) for labor that does not accurately reflect the group's costs because 2015 and 2017 had partial year vacancies during those years.[1437] TURN's proposal should be rejected by the Commission as unreasonable.

23.2.1.10 Uncollectible Rate

SoCalGas requested a static 5-year average for an uncollectable expense rate of 0.316%, an increase from the current authorized rate of 0.298%.[1438] TURN recommends a rolling 10-year average approach to the uncollectable expense rate.[1439] TURN's proposal is acceptable to SoCalGas.

1434 *Id.* at 25-26.
1435 Ex. 130 SCG/Baldwin at 50-51.
1436 *Id*. at 50, Table MB-36.
1437 Ex. 133 SCG/Baldwin at 27 and Table MHB-16.
1438 Ex. 130 SCG/Baldwin at 54.
1439 Ex. 497 TURN/Goodson at 3.

23.2.2 SDG&E Summary of Office Operations Request

SDG&E seeks $44,360,000[1440] for operations and maintenance (O&M) costs to support the nonshared services activities within Customer Services - Office Operations (CSOO), that deliver safe, efficient, reliable and effective customer service through the Customer Contact Center (CCC), Branch Offices (BO) and Authorized Payments Locations (APL), Advanced Metering Operations (AMO), Billing, Credit and Collections, and related supporting functions including Remittance Processing, and CSOO Support and Projects. The CSOO request further includes Postage and the Uncollectable Rate. Examples of the types of services offered by these cost centers include responding to customer calls, processing customer service requests, resolution of billing exceptions, investigation of delinquent accounts, printing of customer bills, processing of customer payments, and the implementation of system changes to the customer information system. The estimated operating expenses and IT Capital expenditures support the Customer Service Office Operations' fundamental goal of maintaining operational excellence and are required to provide basic, convenient, responsive, efficient, reliable and safe customer service. In addition, SDG&E filed Supplemental Testimony to provide an analysis as required by Senate Bill 598 of the impact of rates on disconnections for nonpayment.[1441] Support for SDG&E's Office Operations-related requests was provided in the testimony and workpapers of SDG&E witness Jerry Stewart (Exs. 146-149).

This request represents a $7,542,000 increase or 20% change between the BY 2016 adjusted recorded and TY 2019 request.[1442] The increase in request also reflects an update to the postage rate that occurred in January of 2018. CSOO is further requesting IT Capital expenditures of $14,897,000 in 2017, $15,774,000 in 2018, and $16,332,000 in 2019 to deliver an improved customer experience, replace obsolete technology, deliver operational efficiencies and comply with regulatory mandates.[1443] In all cases, SDG&E used a BY methodology to

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[1440] On August 24, 2018, SDG&E made its Update filing to reflect an increase in postage rates for Remittance Processing Postage, among other adjustments. Ex. 514 SCG/SDG&E/Stewart Update Testimony (UT) (August 2018) at 12.

[1441] *See* Ex. 147 SDG&E/Stewart. No one commented upon or contested SDG&E's SB 598 analysis. Further to SB 598 requirements, the Commission opened a statewide rulemaking that will specifically examine the causes of disconnection for nonpayment, appropriate rules governing disconnections for nonpayment and subsequent reconnection processes and whether utility rates have an impact on disconnections for nonpayment. *See* Rulemaking 18-07-005.

[1442] Ex. 514 SCG/SDG&E/Stewart UT at B-26.

[1443] Ex. 146 SDG&E/Stewart at 1 and 63-64.

forecast estimated 2017-2019 expenses. This approach was used because base year 2016 represented the most recently available adjusted recorded expenditures, transactions and activity levels, customer service policies, practices and procedures prior to the October 2017 filing of Mr. Stewart's prepared direct testimony. Also detailed throughout the SDG&E's Rebuttal Testimony are the various reasons why 2017 adjusted recorded costs were not representative of normal operating levels and should not be used to forecast future activity and staffing levels.

The only parties to rebut portions of SDG&E's O&M revenue request were ORA, TURN, SDCAN and UCAN. NDC and UCAN only challenged the business justification for two of SDG&E's eighteen IT capital expenditure requests for CSOO.[1444] No party contested the reasonableness of the expenses recorded to the Residential Disconnection Memorandum Account (RDMA). The following areas are the only areas where a party has recommended an adjustment to SDG&E's revenue request:

- ORA did not oppose the BY forecasting methodology used by SDG&E, with the exception of SDG&E Billing. ORA recommends a reduction for two workgroups as follows:
  - AMO: ORA proposes a disallowance of $836,000 on SDG&E's $10,034,000 TY 2019 forecast.[1445]
  - Billing: ORA proposes a disallowance of $2,183,000 on SDG&E's $8,023,000 TY 2019 forecast.[1446]
- TURN recommended adjustments to SDG&E revenue requests primarily based on forecast methodology. In each instance, TURN selectively chose a different forecast methodology for every area of CSOO it challenged, which ranged not only in the period it selected to create its own forecasted revenue requirement, but used 2017 actual recorded costs, which SDG&E neither utilized nor had available at the time it filed its TY 2019 GRC Application.[1447] TURN recommends the following reductions to portions of SDG&E's workgroups primarily based upon its use of these alternative forecasting methodologies:

[1444] SBUA also filed comments seeking confirmation of customer privacy compliance with California Public Utilities Code (Pub. Util. Code) Section 8380. Ex. 438 SBUA/Brown at 21.
[1445] Ex. 411 ORA/Yeh at 18:17 (Table 16-14).
[1446] *Id.* at 21:17 (Table 16-15).
[1447] *See* Ex. 149 SDG&E/Stewart at 10 and Table JS-5.

TABLE 23.2.2.A
TURN Forecast Methodologies

TURN Forecast Methodologies		
CS Office Operations Workgroups	**Labor**	**Non-Labor**
Advanced Metering Operations	Base Year 2016 reduced by 5%	Base Year 2016 reduced by 5%
Billing	2017 Actuals - Base	2017 Actuals - Base
Credit & Collections	Two-Year Average (2016-2017)	Two-Year Average (2016-2017)
Remittance Processing	Base Year 2016	Base Year 2016
Postage	Base Year 2016	Base Year 2016
Branch Offices	2017 Actuals - Base	2017 Actuals - Base
Customer Contact Center Operations	2.5% reduction to modeled costs in 2019	Six-Year Average (2012-2017)
Customer Contact Center Support	Two-Year Average (2016-2017)	Two-Year Average (2016-2017)
CCC Operations Support & Projects	Three-Year Average (2015-2017)	Three-Year Average (2015-2017)

- AMO: TURN proposes a disallowance of $1,219,000 on SDG&E's $10,034,000 TY 2019 forecast.1448
- Billing: TURN proposes a disallowance of $1,767,000 on SDG&Es $8,023,000 TY 2019 forecast.1449
- Credit and Collections: TURN proposes a disallowance of $297,000 on SDG&E's $3,073,000 TY 2019 forecast.1450
- Remittance Processing: TURN proposes a disallowance of $7,000 on SDG&E's $745,000 TY 2019 forecast.1451
- BO and APL: TURN proposes a disallowance of $167,000 on SDG&E's $2,209,000 TY 2019 forecast.1452
- CCC Operations: TURN proposes a disallowance of $283,000 on SDG&E's $10,097,000 TY 2019 forecast.1453
- CCC Support: TURN proposes a disallowance of $58,000 on SDG&E's $2,680,000 TY 2019 forecast.[1454]

[1448] Ex. 494 TURN/Marcus at 43 (Table 29).
[1449] *Id.* at 45 (Table 30).
[1450] *Id,* at 47 (Table 31).
[1451] *Id.* at 48 (Table 32).
[1452] *Id.* at 49 (Table 33).
[1453] *Id.* at 53 (Table 37).
[1454] *Id.* at 54 (Table 38). While SBUA did not contest SDG&E's requests, it seeks certain assurances related to customer privacy protections discussed more fully below.

- Customer Operations Support & Projects: TURN proposes a disallowance of $340,000 on SDG&E's $3,605,000 TY 2019 forecast.[1455]
- TURN proposes a 10-year rolling average to calculate the SDG&E Uncollectible rate, starting with 2008-2017, with adjustments to be made annually by advice letter.[1456]
- Neither ORA nor TURN oppose SDG&E modifying Electric and Gas Rule 9, Rendering and Payment of Bills, to authorize SDG&E to default SDG&E customers to receive electronic bills as their regular bill starting January 1, 2021. UCAN, however, recommends the Commission deny SDG&E's request to default customers to electronic billing.[1457]
- SDCAN makes the following recommendations: (a) SDCAN proposes $36,818,000, constituting a disallowance of SDG&E's entire incremental CSOO request of $7,542,000 over the BY 2016 recorded actuals,[1458] and (b) although SDCAN would fully disallow the incremental increase requested by CSOO, SDCAN also recommends that SDG&E should receive more than ORA's recommended $1,127,000 for its Residential Time of Use (TOU) billing costs if certain conditions are applied.[1459]
- UCAN makes the following recommendations: In addition to its recommendation on electronic bill default above, UCAN further recommends that the Commission deny SDG&E's proposal to close the Oceanside and Downtown branch office (BO) locations and to direct SDG&E to continue the search for a new branch location for an Oceanside BO replacement under the direction of the Energy Division (ED) to ensure the search is being conducted with due diligence.[1460]
- UCAN recommends that SDG&E's IT Capital request for the Bill Redesign project be reduced to $800,000 for 2017 and 2018, with no funding allowed for 2019.[1461]
- NDC recommends that all but the $150,000 cost of the phase I pilot for the Branch Office Kiosk Capital project be denied.[1462]

Each of the areas recommended for adjustment will be discussed below. No party contested the following requests and the Commission should adopt these requests as reasonable:

1455 *Id.* at 55 (Table 39).
1456 Ex. 497 TURN/Goodson at 3:3-5.
1457 Ex. 512 UCAN/Charles at 4:12-13.
1458 *See* Ex. 220 SDCAN/Shames at 7, 42. SDCAN asserts that SDG&E's customer service is lacking. To address this perception, SDCAN's solution is to recommend disallowance of all incremental funding requests, and to require SDG&E to demonstrate a reduction in customer complaints before future GRC revenue increases would be considered by the Commission. *Id.* at 7. SDG&E disagrees with SDCAN's premise-and its proposed solution. Rather than address the impact of SDCAN's proposal in each workgroup, SDG&E will respond to SDCAN's recommendation in its discussion of CCC-Operations, which appears to be the root of this proposal. *Infra* at 23.2.2.7.
1459 *Id*. at 7.
1460 Ex. 512 UCAN/Charles at 3:22 – 4:2.
1461 *Id*. at 5:3-10.
1462 Ex. 437 NDC/Bautista at ii.

Expenses recorded to the RDMA, Postage,[1463] the business justification and rational for the other 16 IT Capital projects proposed by CSOO.[1464]

23.2.2.1 Advanced Metering Operations

AMO supports the delivery of customer services on premises, responds to customer inquiries, resolves customer problems, and ensures safe, accurate, and reliable metering for SDG&E's 2.3 million meters, covering all of San Diego County and South Orange County. The key subgroups within the AMO organization are: Smart Meter Data Operations, Electric Metering Operations, Quality Assurance & Training, Electric Metering Engineering, Network Operations & Engineering, and Smart Meter Technical Support.[1465] Additional staff is needed to be trained and perform increased work orders involving investigation and troubleshooting for TOU accounts.[1466]

ORA and TURN recommend a downward adjustment to SDG&E's forecast of AMO expenses related to FTE resource needs. ORA claims SDG&E should only receive half of the incremental AMO resources to support the upcoming Residential (Res) TOU Mass Default, stating that although some additional labor will be necessary, SDG&E's proposed incremental FTEs are speculative and not based upon precedent.[1467] TURN similarly asserts that a reduced labor forecast is in order because the work to justify new FTE's did not materialize in 2017. The approach suggested by both ORA and TURN is short-sighted and incorrect. Clearly reflected in SDG&E's testimony was the calculation for AMO resources to assist with the impending Res TOU Mass Default. This calculation was based upon SDG&E's experience with the small and medium business default to time varying rates in BY 2016, and SDG&E's experience with the success or failure rate of its Smart Meters, which is expected to remain at historical levels.[1468] SDG&E used established failure rates for Smart Meters and applied the number of meters

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[1463] See SDCAN's recommendation to disallow all incremental funding requests would have an impact on SDG&E's Postage funding request even though postage is unrelated to SDCAN's stated concern. The impact of SDCAN's proposal to disallow all SDG&E TY 2019 funding requests would lead to a Postage cost increase of $256,000 rather than a deduction of that amount from SDG&E's revenue requirement. Ex. 149 SDG&E/Stewart at 33. No other party contested SDG&E's Postage funding request of $3,904,000. Ex. 514 SCG/SDG&E/Stewart UT at 12.
[1464] *See* Ex. 146 SDG&E/Stewart at 64, Table JS-35.
[1465] *Id*. at 10.
[1466] *Id*. at 13-17.
[1467] Ex. 411 ORA/Yeh at 20:19-22.
[1468] Ex. 149 SDG&E/Stewart at 9-10; *see also* Ex. 146 SDG&E/Stewart at 16:17-29; Ex 148 SDG&E/Stewart at 21.

shifting to time varying rates in the mass Res TOU Mass Default (800,000) to create its $1,877,000 incremental revenue requirement for the AMO workgroup.[1469]

TURN's reduction of resources is similarly flawed. First, TURN modified SDG&E's BY forecast methodology by arbitrarily reducing 5% of SDG&E's request because 2017 expenses were less than as forecast.[1470] Although TURN recognizes that SDG&E's spend will likely increase as it hires more staff,[1471] it penalizes SDG&E based on factors that did not exist at the time SDG&E filed its Application. Specifically, TURN's use of 2017 historical recorded data to justify its arbitrary 5% reduction is inappropriate because work planned for 2017 was shifted to 2018 as a result of seven additional labor vacancies during 2017 related to long-term disability and employee attrition.[1472] The Commission should reject the recommendations made by ORA and TURN and adopt SDG&E's revenue request for AMO.

23.2.2.2 Billing

Billing Operations expenses cover the cost of calculating customer bills and maintaining accurate customer account information. The Billing Operations organization has four distinct areas: Customer Billing, Customer Account Verification, Customer Billing Resources, and Rate Entry Team. At a high level, these four areas cover billing exception processing, corrective billing, updating and maintaining billing attributes such as rates and contract agreements, and entering and validating pricing entries.[1473]

SDG&E seeks $8,023,000 in support of its Billing operations, which constitutes $3,760,000 over BY 2016 adjusted recorded expenses. This request serves to address the following significant changes in operations since BY 2016: From 2015 to 2016, the number of interval billed accounts increased from 33,076 to 177,985, due to the small and medium commercial TOU default. Billing also implemented Net Energy Metering (NEM) 2.0 and saw an increase in the number of customers electing more complex solar rate options such as Net Energy Metering Aggregate (NEM-AGG) and Net Energy Metering Virtual (NEM-V). In addition to the regulatory changes implemented, Billing Operations saw an exponentially large increase in the number of delayed bills due to the aging billing system. Upcoming regulatory

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[1469] *Id.*
[1470] Ex. 494 TURN/Marcus at 42.
[1471] *Id.* at 43.
[1472] Ex. 149 SDG&E/Stewart at 11-12.
[1473] Ex. 146 SDG&E/Stewart at 19.

implementations include TY 2016 GRC Phase 2, Residential TOU pilot (deployed March 2018), and the Res TOU Mass Default (anticipated in TY 2019).[1474]

ORA, TURN and SDCAN recommend disallowances or other changes to SDG&E's proposed Billing revenue requirement. ORA proposes a reduction in SDG&E's forecast of $2,183,000, questioning SDG&E's need for additional resources to address two areas: Growth in Interval Billed Accounts and Res TOU Mass Default. ORA used a linear trend analysis based on historical FTE's to determine future FTE requirements to support Growth in Interval Billed Accounts.[1475] ORA's use of a linear trend analysis is premised on a faulty analysis of SDG&E's approach to forecasting the FTEs and resources needed to address the significant growth in interval billed accounts. ORA's analysis, which concludes that "it would require about $222,087 to hire two new FTEs in this section"[1476] does not account for contract labor that was hired in 2017, mandatory overtime of all 22 resources in BY 2016, and engagement of employees outside of the Billing department to work billing exceptions. SDG&E's requested resources are required in order to prevent significant delays in customers receiving accurate monthly billing statements.[1477]

ORA then moves to SDG&E's request for Res TOU Mass Default and suggests there is no historical basis or precedence in the Billing workgroup to determine the need for SDG&E's 15.5 FTE request.[1478] ORA, again, ignores SDG&E's analysis and the calculations used in developing SDG&E's TY 2019 expense request for resources needed to manage Res TOU Mass Default. SDG&E applied the experience and lessons learned from the Small and Medium Business TOU Default project and error rate calculations to forecast Billings resource requirements for Res TOU mass default.[1479]

TURN also focuses on 2016 and 2017 spend without taking into consideration the fact that TURN used data that was not available to SDG&E at the time it filed its TY2019 request. Contrary to TURN and ORA's assertion that SDG&E's forecast appears arbitrary, SDG&E justified the reasonableness of its projected costs, demonstrating the need for additional

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1474 *Id*. at 18:21 – 19:12 and Table JS-11.
1475 *See* Ex. 411 ORA/Yeh at 24-25.
1476 *Id*. at 25:16.
1477 Ex. 149 SDG&E/Stewart at 13.
1478 Ex. 411ORA/Yeh at 27:4-7.
1479 Ex. 149 SDG&E/Stewart at 17.

resources to address billing exceptions on a go forward basis.[1480] Due to the number and complexity of TOU rates, TOU exceptions take more time to troubleshoot and resolve, and are difficult to bill in SDG&E's current aging billing system.[1481] ORA and TURN's proposals do not account for known and realistic expenses for SDG&E to meet the TY 2019 needs within the Billing workgroup and should be rejected. The Commission should adopt SDG&E's request.

Although SDCAN indicates that it concurs with ORA that the amount of resources and FTEs forecast by SDG&E for Res TOU Billing resources is excessive, it "is supportive of SDG&E receiving a higher budget than ORA's $1.127 million recommendation," if certain conditions are met: SDG&E hires at least 20 FTEs at an average salary and cost of $100,00 per FTE, and SDG&E "compiles and reports to the Commission about the nature of residential billing inquiries and the incidence of bill protection/shadow billing disputes."[1482] SDCAN asserts such conditions are necessary due to its concern that residential TOU customers will "experience unexpected and unwarranted bill impacts due to flawed rate design or inadequate customer education."[1483] This concern, according to SDCAN, arises out of one NEM customer's poor customer service experience with SDG&E's Billing group after requesting a change to SDG&E's EV-TOU rate program in 2017.[1484]

As witness Stewart testified, SDG&E appreciates SDCAN for bringing the customer's poor customer service experience to its attention, and SDG&E has already taken action to ensure that future customers will not experience the same difficulties in receiving a prompt and complete response to their inquiries.[1485] SDG&E does not believe additional Commission action is required, including any mandated reporting of residential billing inquiries or billing disputes. While there is no evidence to support SDCAN's assertion that SDG&E provided a flawed rate design or inadequate customer education, SDG&E understands SDCAN's concern. SDG&E strives to educate its customers about rate changes that may impact their bills and to design rates in a thoughtful manner. SDG&E's CS-Information's request seeks approval for funds to educate customers about the changing landscape of energy pricing and new rate options.[1486]

[1480] *See id.* at 16.
[1481] *Id.* at 16-17.
[1482] Ex. 220 SDCAN/Shames at 43.
[1483] *Id.* at 44.
[1484] *See id.* at 43-44.
[1485] *See* Tr. V17:1514:1-25 (Stewart).
[1486] *See, e.g.*, Ex. 151 SDG&E/Davidson at 34.

SDG&E also appreciates SDCAN's support for SDG&E's Res TOU Billing costs; however, SDCAN's alternative proposal misses the mark. SDCAN's proposal is based on incorrect comparison that is not apples to apples. SDCAN believes that incremental SDG&E billing analyst employees would be less costly than third-party contractors. SDCAN's proposal assumes that the average cost of an SDG&E employee, for a billing analyst role, could be employed at an average annual salary of $100,000 while a third-party contractor at an average $145,500 is excessive.[1487] However, SDCAN's proposed $100,000 average annual salary for an SDG&E billing analyst employee does not include associated costs for an employee's overhead costs (benefits, payroll taxes, matching defined contributions, etc.).[1488] In contrast, third-party contractors must include fully loaded costs (benefits and other employee non-wage costs) in their total charges. Therefore, SDCAN's comparison of SDG&E's labor expenses with third-party contractor expenses must include the full costs of an SDG&E employee. The Commission should reject the recommendations made by ORA, TURN and SDCAN, and adopt SDG&E's Billing revenue request.

23.2.2.3 Credit and Collections

Credit and Collections costs are comprised of skip tracing (research to locate a customer after they terminate service) credit policy and procedure development and review, management reporting and analysis, management of outside collection agencies, final bill collection, management of delinquent residential and small commercial customer accounts, and bankruptcy processing. These activities are critical in assessing risk exposure and managing bad debt expense by creation of credit risk guidelines and securing payment of balances on active and final accounts.[1489] Customer Payment Services is included in this organization. Customer Payment Services handles all exception payments and performs reconciliation for all payment sources. Exception payments are caused when the payment cannot automatically post in the Customer Information System (CIS). Reconciliation of payment sources is the balancing of payments posted in the CIS with payments posted into the SDG&E bank account. Meter

[1487] Ex. 149 SDG&E/Stewart at 21.
[1488] SDG&E's GRC labor cost reflected in operating cost centers are direct labor costs (wages and salaries) and do not reflect associated overhead costs.
[1489] Ex. 146 SDG&E/Stewart at 26.

Revenue Protection (MRP) is also part of Credit and Collections. The major function of MRP is to prevent and investigate customer energy theft.[1490]

SDG&E is requesting $3,073,000 in TY 2019, an increase of $446,000 from the 2016 adjusted recorded expense level. The incremental request supports an increase in the amount of delinquent final bills that SDG&E must send to outside collection agencies, and the need for additional resources due to growth in credit activities such as delinquent customer accounts and implementation of operational efficiencies designed to help SDG&E better detect potential energy theft and assess credit risk.[1491] Based on its use of a two-year average (2016-2017) forecast method, and a rejection of SDG&E's customer growth assessment, TURN recommends a 10% decrease in forecast to $2,776,000.[1492] This recommendation includes 2017 actuals, ignores the data provided by SDG&E that demonstrates the need for non-labor funding for collection agency costs, and resources to ensure timely and responsive customer service to support the increased volume of credit and collection transactions. There has been a demonstrable increase in the number and dollar value of customer final bills and limited SDG&E resources leading to an increased use of collection agencies who earn a commission on the size of the delinquent accounts they recover.[1493] Moreover, even though 2017 actuals in Credit & Collections were lower than originally forecast primarily due to temporary labor vacancies and employee attrition, the data provided by SDG&E demonstrates that 61% of excessively aged accounts between 2014 and 2016 are unworked.[1494] And final bill delinquencies have increased on average 3% year over year from 2015 to 2017, which is above the annual customer growth rate of 0.97%.[1495] SDG&E's request is reasonable and should be adopted by the Commission.

23.2.2.4 Remittance Processing

Remittance processing covers the expense for paper, envelopes and vendor fees to deliver customer bills. SDG&E is seeking $745,000, which is a $40,000 decrease from BY 2016.

[1490] *Id.* at 26-27.
[1491] *Id.* at 28-30.
[1492] *See* Ex. 494 TURN/Marcus at 46.
[1493] Ex. 146 SDG&E/Stewart at 28:5-7.
[1494] Ex. 149 SDG&E/Stewart at 25 and Table JS-14.
[1495] *See id.* at 25 and Table JS-13; *See also*, Ex. 331 SDG&E/Schiermeyer at 1 (Electric Customer Forecast).

TURN correctly identified that SDG&E had inadvertently left in an accounting adjustment for inflation that should have been removed. Accordingly, SDG&E seeks $738,000.[1496]

SDG&E also seeks to modify Electric and Gas Rule 9, Rendering and Payment of Bills, to authorize SDG&E to default SDG&E customers who have provided an email address or are enrolled in SDG&E's MyAccount® to receive electronic bills as their regular bill *starting January 1, 2021*. SDG&E would exempt CARE and medical baseline customers from this default to paperless billing, and would allow customers who wish to retain paper billing to request resumption of their paper bills.[1497] SDG&E will notify the customers of this change at least one month prior to the proposed transition, with reminders and communications by phone, mail and electronically, with an associated link that allows customers to opt out of paperless billing at any time.[1498] Any savings associated with adoption of paperless billing would be made to SDG&E's authorized revenue requirement in a future GRC.

Only UCAN opposes a default to paperless billing, claiming SDG&E's request is premature, and unwarranted until a study is conducted that indicates customers prefer paperless billing.[1499] The evidence provided by SDG&E indicates otherwise. Numerous studies have shown that customers increasingly prefer electronic billing and other paperless transactions.[1500] That customer satisfaction in paperless transactions is also evident in SDG&E's experience. Of the 38,000 SDG&E paper billed customers originally enrolled in MyAccount® over 12 years ago, the majority pay online today, and 92% of the customers who receive their bill electronically today, also render their payment electronically.[1501] Moreover, SDG&E's survey of customers to determine customer acceptance of electronic billing and payment alternatives indicated 79% of residential paper billed customers pay online and 65% of paper billed business customers pay online.[1502] In other words, SDG&E customers are already e-channel savvy

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1496 *See* Ex. 149 SDG&E/Stewart at 27.
1497 *Id*. at 27-28.
1498 *Id.* at 30. SDG&E will also inform the Commission through an appropriate process prior to implementation of any paperless default program. Tr. V17:1523:2-22 (Stewart).
1499 Ex. 512 UCAN/Charles at 66, 70. UCAN also voiced its concern that vulnerable customers and those unfamiliar with electronic billing may be harmed by SDG&E's proposal. SDG&E's description of the program boundaries and process should assuage UCAN's concern in this regard. *See* Ex. 149 SDG&E/Stewart at 28, 30-31; Tr. V17:1521:2 – 1523:22 (Stewart).
1500 Ex. 149 SDG&E/Stewart at 28-29.
1501 *Id.*
1502 *Id.* at 29-30 and Appendix G.

regarding bill payments and other communications. Current incumbent and new customers often take the path of least resistance by not pro-actively requesting a paper bill. Other utilities have successfully transitioned to electronic billing, and SDG&E believes that most customers will benefit from and prefer this mode of billing once implemented.[1503] SDG&E's request is reasonable and should be adopted.

23.2.2.5 Branch Offices

SDG&E currently operates five dedicated Branch Offices (BO) and two shared BO facilities (Downtown Branch Office – California Coast Credit Union and the Oceanside Branch Office-UPS Store that is now closed). Branch Offices provide customers the option of paying their bills in-person, inquiring about accounts and completing other customer service transactions. Although BO transaction volumes are declining, BOs are staffed at optimal levels to provide service during current operating hours.

SDG&E also contracts with a third-party vendor that provides a network of approximately 55 APLs throughout its territory. [1504] These APLs provide similar payment services for SDG&E customers and offer convenient locations and extended hours with no transaction fee to the customer. SDG&E seeks $2,209,000, which is $230,000 above BY 2016 adjusted recorded expenses. This incremental expense relates to the results of a job study that reclassified the work performed by ESS and ESAs to more accurately reflect the work performed by these job classifications, and to increased labor and non-labor expenses to ensure compliance with ADA requirements and to improve accessibility for customers. The increase will also cover the costs associated with adding an ADA Project Manager position.[1505] SDG&E and SoCalGas have jointly sponsored testimony with the CforAT that provides the details of SDG&E's ADA and accessibility request.[1506]

TURN selected a 2017 base forecast for its recommendation to disallow $167,000 of SDG&E's request, arguing that even with the salary adjustment, SDG&E's labor spend in 2017 was below forecast as was non-labor spend.[1507] As explained in Witness Stewart's testimony,

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[1503] *See id*. at 31-32.
[1504] Ex.149 SDG&E/Stewart at 35 and n. 94 (the number of APLs fluctuates due to a variety of factors).
[1505] Ex.146 SDG&E/Stewart at 36-39.
[1506] *See* Chapter 50.1 and Ex. 365 CforAT/SEU. No party has opposed this accessibility-related request.
[1507] Ex. 494 TURN/Marcus at 48. TURN further questions whether the incremental ADA spend will occur annually, but defers to a review of the CforAT Joint testimony (Ex. 365), to which no objection has been raised.

TURN's 2017 forecast did not account for unplanned labor vacancies, including a BO manager position and temporary leaves of absence, which have since been re-filled. SDG&E's 2016 base year forecast methodology should be accepted because it represents a more accurate representation of labor and non-labor expenses at normal operating levels.[1508] SDG&E's request is reasonable and should be adopted.

23.2.2.6 Branch Office Closure

SDG&E is requesting approval to close two of its BOs located at the Oceanside and Downtown locations. As demonstrated by SDG&E, use of BOs and APLs for payments continues to decline,[1509] and the Oceanside and Downtown locations are by far the lowest utilized and least cost effective.[1510] The Oceanside Branch Office was located inside a UPS Store, a partnership with SDG&E. UPS terminated the relationship with SDG&E, and the Oceanside UPS Store no longer serves as either a BO or an APL effective First Quarter 2017. Although SDG&E has attempted to find a replacement location for a BO in Oceanside, it has been unable to find a replacement office.[1511] Two APLs are within a 3- mile radius of the former Oceanside BO location and 4 additional APLs are located within a 5-mile radius.[1512] The Downtown BO is located inside the California Coast Credit Union[1513] and staffed by an SDG&E employee who processes payments and performs other non-payment services. After Oceanside, this office is the lowest volume BO in SDG&E's service territory, with a long-term downward trend in payment transactions.[1514] There are five APLs within a 3-mile radius of Downtown location and four of these APL locations are trained and equipped to process ID verification on behalf of SDG&E. Estimated annual savings less one-time implementation costs for closure of the two BO locations is $226,246.

UCAN is the sole intervenor challenging closure of these two locations, expressing concern that customers will be adversely affected by the closure.[1515] UCAN's concern is

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[1508] Ex. 149 SDG&E/Stewart at 34; Ex. 146 SDG&E/Stewart at 38-39.
[1509] Ex. 146 SDG&E/Stewart at 44:11-45:8, and Figures JS-8 and JS-9.
[1510] Ex. 146 SDG&E/Stewart at 36:12-14, and Figures JS-2, JS-3 and JS-7.
[1511] Ex. 146 SDG&E/Stewart at 39-40, 42. SDG&E's efforts to find an alternative location will be terminated upon the Commission's approval of this BO closure.
[1512] *Id*. at 47.
[1513] California Coast Credit Union is in the process of selling this location, and such a sale may impact SDG&E's ability to maintain a BO at this location. *See* Ex. 146 SDG&E/Stewart at 42, n.13.
[1514] Ex. 146 SDG&E/Stewart at 42 and Figure JS-6 and Table JS-22.
[1515] Ex. 512 UCAN/Charles at 53:8-13.

unfounded, as demonstrated by the evidence after the involuntary closure of the Oceanside BO. The Oceanside BO closure reflects the fact that 38% of CARE customers who paid at the Oceanside Branch found an alternate method to pay and demonstrates the flexibility and the ability to make changes to meet their needs, while the remaining 62% chose an alternate APL. As shown in Ex. 149, pages JDS-36 and JDS-37, the customers reflected in Figures JS-1 and JS-2 have several alternate payment locations that are available to them. In most cases, the alternate location is closer to their place of residence. Also, it is important to note that no customers have expressed concerns or complaints to SDG&E since the closure of the Oceanside BO location.[1516] SDG&E anticipates a similar experience upon closure of the Downtown BO. As referenced above, Figure JS-1 in Exhibit 149 on page JDS-36 clearly shows that CARE customers who utilized the Downtown Branch Office have many reasonably comparable alternatives, typically, closer to their place of residence. Furthermore, SDG&E has five APL's within a three-mile radius of the Downtown Branch Office and four of those APL's have employees trained and equipped to process ID verification on behalf of SDG&E. In addition, the nearby Market Creek Branch office is located directly adjacent to public transportation and has ample public parking available.

While UCAN asserts that the closure of a BO will lead to an increase in late payments and disconnections for impacted customers that previously utilized the BO locations, that claim is unsupported by evidence and is based on UCAN's misinterpretation of SDG&E's data.[1517] Under Commission precedent, SDG&E's obligation is to weigh customer preference and have the ability to meet customer needs with cost-effective and convenient options.[1518] As demonstrated above, SDG&E has clearly met this standard. The request to close the Oceanside and Downtown branch offices is based on the low volume of payment transactions that can be managed by the remaining 55 APLs (including 12 that can verify ID), and the low volume of

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[1516] Ex. 149 SDG&E/Stewart at 41; Tr. V17:1541:18 – 1542:27 and 1544:27 – 1545:28 (Stewart).

[1517] *See* Ex.512 UCAN/Charles at 59:14-60:7; Ex. 149 SDG&E/Stewart at 39-41; Tr. V17:1538:1-12 (Stewart).

[1518] *See* D.16-06-046 (June 23, 2016) at 36 ("We must consider the impacts on all SoCalGas' customers and balance that with the decline in usage at many of these offices. Reasonably comparable alternatives now exist for most transactions.") and D.07-05-058 at 16 ("We conclude the uncontested Settlement is in the public interest because it permits PG&E to reduce costs and rates by closing nine front counters with relatively few transactions while ensuring that customers directly affected by closure receive reasonably comparable service through alternate means."). APLs are considered a reasonably comparable alternative.

non-payment transactions across all branch offices, that can be managed through various other means such as calling SDG&E's Customer Contact Center, the Internet, or SDG&E's mobile application. And SDG&E is prepared to serve the customers who currently pay at the Downtown Branch Office with alternate options that will meet customer needs. As noted above, there are five APLs near the Downtown Branch within a 3-mile radius, and four of these APLs are trained and equipped to process ID verification on behalf of SDG&E.[1519] Moreover, the same careful and informative notification to customers about the BO closure plans and alternatives that was provided prior to the Oceanside BO involuntary closure will be provided to customers who have previously utilized the Downtown BO.[1520] UCAN further claims that the amount of savings from closure of these two BO does not justify their closure. [1521] That assertion is also unpersuasive. SDG&E has requested closure of these locations because the convenience value they provide to a declining number of customers is vastly outweighed by the overall cost and lack of efficiencies to SDG&E's customer base as a whole.[1522] SDG&E believes an effective communication plan informing customers of alternate and in most cases more convenient options available to them led to zero customer complaints from the Oceanside BO and expects the same result for the Downtown BO. SDG&E's request to close the Oceanside and Downtown BO is reasonable and in the best interests of its customers. Accordingly, the Commission should adopt this proposal.

23.2.2.7 Customer Contact Center Operations

The CCC handles a variety of customer service needs with the largest volume of interactions consisting of billing and payment inquiries as well as customer-requested service orders and inquiries.[1523] SDG&E CCC agents have evolved from the prior role as transaction-focused agents to an Energy Services Specialist (ESS) who performs not only transactions but also provides customer support on complex billing issues, applicable rate choices, and the offering of tools and solutions to aid in energy or bill reduction. Calls are routed to the first available ESS with the right skillset to address the customer's need. SDG&E's CCC handles

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[1519] Ex. 149 SDG&E/Stewart at 38-39.
[1520] *See* Ex. 146 SDG&E/Stewart at 48:10-31.
[1521] Ex. 512 UCAN/Charles at 61-62.
[1522] Tr. V17:1534:11- 1535:8 (Stewart) ("When you factor in 30 seconds per transaction that comes to a total of one hour of work a day for the SDG&E person that staffs the office. So that isn't a very efficient utilization of time and comparable alternatives. . . ."); Ex. 146 SDG&E/Stewart at 43.
[1523] Ex. 146 SDG&E/Stewart at 49.

over 3.5 million annual contacts and transactions for residential, commercial and industrial customers through ESSs as well as automated self-service.[1524] A BY forecast methodology was utilized because the changes in customer-preferred channels to communicate and self-service channel improvements have impacted ESS calls in the last five years.[1525] SDG&E requested $10,096,000 (labor and non-labor) in TY 2019, taking into account incremental increases for expected impacts on call volume from meter growth, the implementation of Res TOU Mass Default; impacts on Average Handle Time (AHT) for the RAMP initiative for validating and updating customer contact information as well as CARE program enrollments by ESSs offset by FOF and other business optimization efforts. This constitutes a $1,159,000 increase over 2016 Adjusted Recorded expenses.[1526]

TURN and SDCAN recommend disallowances to SDG&E's CCC request. These disallowances are without merit. TURN recommends a downward adjustment of $195,000 for labor expenses under an adjusted BY 2016 forecast and an $88,000 reduction in non-labor expenses utilizing a six-year average, arguing that "Costs are lower. More calls are being answered for less money and less FTEs per call. Handle time is below and occupancy is above SDG&E's modeled estimates, both of which would tend to reduce the number of FTEs required."[1527] TURN's methodology is flawed because SDG&E's use of historical performance to model future staffing requirements includes productivity of SDG&E's ESS through AHT and utilization rates (known as occupancy), and TURN does not account for such key factors.

The total staffing requirement for ESS in the CCC is based upon numerous factors, including AHT, ESS occupancy and annual call volume (calls answered by an ESS). SDG&E relies on historical performance to model future staffing requirements in the absence of actual AHT performance that is not known until one year later. TURN incorrectly states that a reduction in AHT results in a reduced staffing requirement without factoring in call volume and occupancy.[1528] When comparing the SDG&E 2017 expense forecast to 2017 actual expense, in addition to AHT, the actual call volume must also be factored. A proper comparison of the 2017

[1524] *Id*. at 51.
[1525] *Id*. at 50.
[1526] *Id.* at 49 (Table JS-25).
[1527] Ex. 494 TURN/Marcus at 52.
[1528] Ex. 149 SDG&E/Stewart at 42.

actual versus 2017 forecasted total annual AHT and call volume results in a negligible 0.65% difference,[1529] reflecting no adjustment to staffing is required.

TURN's "reach back in time" to construct a 6-year average for non-labor costs is further flawed as it ignores the fact that these non-labor dollars are necessary to achieve associated projected FOF business optimization labor savings. While using annual averages can be a good tool for trending, it does not take into consideration costs to achieve business optimization goals.[1530]

SDCAN similarly has no support for its arbitrary expense reduction recommendation. SDG&E's total CSOO TY 2019 forecast is $44,360,000. SDCAN proposes to disallow the entire incremental request of $7,542,000 above BY 2016 expenses[1531] due to what it claims is an unacceptable increase in customer complaints.[1532] It further asserts that SDG&E should be required to demonstrate a reduction in customer complaints in its next GRC application for revenue increases to be considered in future GRC applications.[1533] To make this argument, SDCAN attempts to compare historical periods of (a) informal complaints made with the Commission's Consumer Affairs Branch (CAB), (b) residential customer escalated complaints and (c) total claims payments to draw the inference that "because of the absence of a competitive alternative to SDG&E, customer responsiveness is given inadequate priority by the utility."[1534] SDCAN's assertion is entirely unsupported for several reasons. As SDG&E demonstrated in its testimony, informal claims filed with CAB have decreased, not increased, as SDCAN claims in its comparison of 2009 with 2017 figures.[1535] And escalated residential customer complaints track a large variety of categories across different departments, not merely customer service matters, as does the amount paid for claims resolution.[1536] Most importantly, SDG&E's complaint history shows that the actual percentage of customers having complaints is relatively

[1529] Ex. 149 SDG&E/Stewart at 42 and Table JS-21.
[1530] Ex. 149 SDG&E/Stewart at 43.
[1531] As adjusted in Ex. 149 SDG&E/Stewart at 26 and Ex. 514 Stewart UT at 12.
[1532] Ex. 220 SDCAN/Shames at 7, 42 (dollar amounts were subsequently corrected as noted in Ex. 149 at 27.
[1533] *Id.*
[1534] *Id.* at 42.
[1535] Ex. 149 SDG&E/Stewart at 45.
[1536] *Id.*; *see also* Ex. 220 SDCAN/Shames at 41 (showing claims payment data represents all claims payments, including those related to motor vehicle accidents, power and gas incident losses, and other business-related incidents).

small. In 2016 and 2017, the total number of residential customer written/escalated complaints were less than 0.06% of the residential customer base. When compared to the total number of customer contacts at SDG&E in 2016,[1537] the total number of residential customer written/escalated complaints represents less than 0.004% of total customer transactions with SDG&E. The impact of SDCAN's recommendation would result in a reduction of $1,159,000 to CCC operations. It would be unreasonable, and counterintuitive, to reduce the revenue requirement and staffing of the CCC in an effort to improve customer service to customers. The Commission should reject TURN's and SDCAN's proposals and adopt SDG&E's reasonable revenue requirement.

23.2.2.8 Customer Contact Center Support

The Customer Contact Center Support group supports the CCC by providing resource planning and scheduling; technology support (including software licensing, maintenance and support service); training; quality assurance; policy and procedures support; planning and analysis functions; and clerical support. SDG&E's request of $2,679,000 reflects a reduction from BY 2016 of $111,000 in labor and non-labor expenses due to the realization of business improvements that combined different systems into one platform and implemented online training in the CCC.[1538] TURN is the sole objector to this request, and recommends reducing this request $58,000 further under a two-year average baseline (2016-2017) it selectively crafted.[1539] This two-year average forecast should be rejected as it fails to reflect that recorded expenses in 2017 were $167,000 less than forecast due to four labor vacancies that reduced labor costs while the positions were vacant. These positions were replaced at the end of 2017.[1540] TURN's forecast methodology is therefore inaccurate. The Commission should adopt SDG&E's request as reasonable.

SBUA does not oppose SDG&E's revenue requirement request for CCC Support. It does however seek assurances that SDG&E is in compliance with Pub. Util. Code Section 8380. Specifically, SBUA seeks (1) confirmation that SDG&E is in compliance with Section 8380, and

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[1537] SDG&E handled over 3.5 million customer contacts in the CCC, over 300,000 AMO and CSF work orders, over 900,000 Branch Office transactions, and issued 17.03 million bills in 2016. Ex. 149 SDG&E/Stewart at 45.

[1538] Ex. 146 SDG&E/Stewart at 56-57.

[1539] Ex. 494 TURN/Marcus at 53.

[1540] Ex. 149 SDG&E/Stewart at 46.

(2) a Commission order requiring SDG&E to comply with Section 8380 in connection with (a) sharing information from its Smart Meter Network with third parties; (b) disclosure of customer usage information to third-party debt collectors; and (c) the creation of a new system for managing Letters of Authorization through which customers may provide their consent for SDG&E to share their data with third parties.[1541] SDG&E takes customer privacy very seriously and appreciates SBUA's attention to it. No Commission order is needed for SBUA's requests. SDG&E affirmatively states that it believes it is in compliance with Pub. Util. Code Section 8380. Further SDG&E has controls in place to protect customer privacy, including an Office of Customer Privacy that provides governance over activities involving customer privacy considerations, a privacy policy that aligns with Section 8380, and stringent internal processes, known as Privacy Green Light, that apply before customer information receives approval to be shared with authorized third parties. Data related to the Smart Meter Network Enhancement program would be subject to the Privacy Green Light process before any customer data is shared.[1542] Further, while SDG&E does not share customer usage information with debt collection agencies, it recognizes that the customer data it does share with these agencies is sensitive and therefore does include safeguards in its agreements to ensure no customer data is used improperly.[1543] No additional requirements are necessary for SDG&E to meet its obligations with respect to customer data.

23.2.2.9 Customer Operation Support and Projects

Customer Operations Support and Projects (COSP) consists of two groups: Customer Operations Support (COS) and Customer Service Project Management Office (CSPMO). COS represents the Customer Service organization and is the liaison between the business and IT organization. COS is responsible for the support and delivery of major Customer Service projects and initiatives; maintenance; and production support for existing technology and business integration of technology. COS provides support for many of the key systems within the Customer Service organization such as the CIS, My Account, Centralized Calculation Engine (CCE), C3 and Customer Relationship Management (CRM) among others.[1544] CSPMO manages a portfolio of IT capital and regulatory projects from all Customer Services business units,

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[1541] Ex. 438 SBUA/Brown at 4.
[1542] Ex. 149 SDG&E/Stewart at 48-50.
[1543] *Id.* at 50.
[1544] Ex. 146 SDG&E/Stewart at 58.

including, COS, Business Services, Customer Programs, Marketing Research & Analytics, Residential Services, Customer Service Field (CSF) and Smart Meter Operations. The CSPMO facilitates the initial phase of project development, including business case development and project portfolio selection. CSPMO has a focus on business responsibilities throughout the lifecycle of a project and partners with IT personnel on the project management of technology and software development.[1545]

SDG&E requests $3,604,000 for COSP, an increase of $484,000 over BY 2016. This increase was necessitated by the need for additional FTE resources (two production support Business System Analysts to support additional ongoing activities and technical expertise for enhancements, requests, and defect resolutions associated with the GRC Phase 2 and CCE Phase 3 capital projects; and one Business Architect to align strategic business goals and priorities with decisions regarding projects, applications/systems, processes, and capabilities across the organization) and to add back in full year salaries for employees, development training to ensure employees keep abreast of industry standards and best practices and management software subscription fees.[1546] TURN selectively crafted a three-year average forecast (2015-2017) to recommend a reduction of $340,000 to SDG&E's forecast.[1547] TURN's recommendation is flawed, since it fails to address the basis for SDG&E's selection of a base-year forecast method to account for "the transition of ongoing Dynamic Pricing support from capital to O&M as approved by our TY 2016 GRC D.16-06-054,"[1548] and the fact that its three-year average forecast level is not representative of SDG&E's TY 2019 forecasted activity levels.[1549] TURN's recommendation and forecast methodology are arbitrary and should be disregarded.

23.2.2.10 Uncollectable Rate

SDG&E requested a static 10-year average for an uncollectable expense rate of 0.174%, maintaining the current authorized rate.[1550] TURN agrees with the 10-year average approach to the uncollectable expense rate; however, TURN recommends that this rate be calculated on a rolling average basis. SDG&E disagrees that a rolling average "better smooths the impacts of

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1545 *Id.*
1546 Ex 149 SDG&E/Stewart at 51-52.
1547 Ex. 494 TURN/Marcus at 54.
1548 Ex. 149 SDG&E/Stewart at 51.
1549 *Id.*
1550 Ex.146 SDG&E/Stewart at 61.

cyclical changes in the economy,"[1551] as argued by TURN, than the flat 10-year average approach requested by SDG&E. A rolling average approach would require SDG&E to prepare and file an advice letter each year, which adds unnecessary administrative burden and cost to ratepayers.[1552] An adjustment every GRC cycle is sufficient to meet the objectives of the uncollectable rate, and TURN's proposal should be rejected.

23.2.2.11 IT Capital Proposals

SDG&E has provided sufficient evidence to justify the approval of its TY 2019 IT capital projects, which are proposed to address technical obsolescence, modernize and improve customer experience, comply with Commission and other legal mandates, and to optimize several business practices.[1553] Only two of the IT capital project business justifications proposed by witness Stewart were challenged by intervenors. Neither challenge is well founded and should be rejected by the Commission.

23.2.2.11.1 Branch Office Kiosk Replacement

SDG&E is requesting $.0150 million in 2017 and $1.837 million in 2018 for this IT Capital project. Kiosks are an important component of the Branch Office locations, allowing customers to quickly complete payment transactions similar to a bank ATM. SDG&Es proposed addition of new kiosks and replacement of the existing kiosks (which had surpassed their useful lives) with modern kiosks having enhanced functionality to provide additional service features and 24/7 availability for customers. The existing kiosk vendor suspended its maintenance and support services due to security concerns, and SDG&E's BO kiosks are currently inoperable and unavailable as a payment option to customers, creating greater urgency for their replacement.[1554]

NDC recommends that the Commission deny in total SDG&E's request to replace the BO kiosks or alternatively allow SDG&E to recover only the costs for a pilot phase. NDC incorrectly asserts that customers will lose their ability to have face-to-face customer service interaction if the project proceeds.[1555] Replacing the existing kiosks and expanding their use will not take away the availability of face-to-face interaction with SDG&E customer service representatives. SDG&E will continue to have necessary staff in the branch offices, providing

[1551] Ex. 497 TURN/Goodson at 10.
[1552] Ex. 149 SDG&E/Stewart at 52-53.
[1553] Ex. 146 SDG&E/Stewart at 64 and Table JS-35.
[1554] Ex. 146 SDG&E/Stewart at 71-72; Ex. 149 SDG&E/Stewart at 55.
[1555] Ex. 437 NDC/Bautista at 25:20-26:1.

customer service and assistance in processing payments and other transactions.[1556] Similar to other service industries, self-service transaction kiosks have grown substantially. SDG&E experienced a 200% increase in the use of SDG&E's self-serve payment kiosks since their inception in 2007 through 2016, while face-to-face payments in the branch offices and APLs continue to decline at a rate of 36% and 48% respectively.[1557] The BO kiosks have provided a cost effective, convenient and valuable service to SDG&E customers, allowing them to minimize wait times when a simple bill payment transaction is required.[1558] Accordingly, the Commission should adopt the TY 2019 IT Capital project expenses for the new and replacement of obsolete self-service kiosks that lack sufficient security protection.

23.2.2.11.2 Bill Redesign Phase 2

SDG&E requested $1.110 million in 2017, $1.226 million in 2018 and $0.612 million in 2019 to complete the Bill Redesign Phase 2 project. This project will improve customer experience by enhancing key aspects of the paper bill that customers receive each month. The new paper bill includes color to make it easier to read and improved charts and infographics to support increased customer engagement relating to Rate Reform and TOU rate changes.[1559] SDG&E proposed a Bill Redesign project in its TY 2016 GRC. This project was later broken into multiple phases due to a larger scope and complexity involved for a paper bill redesign. Bill Redesign Phase I, authorized (in TY 2016 GRC) and completed in TY 2016, included *electronic bill* enhancements to the Bill Ready Notification capabilities. Those enhancements incorporated cost breakdowns, Highest Usage Point data, Tier and Energy Use Charts, updates for ADA compliance standards, CSR access to customer specific email information, Net Energy Metering template language updates and commercial customer links to their bill presentment application.[1560] UCAN claims "while providing clear and useful information on paper bills is important, SDG&E was already provided $2.3 million for this purpose in the [TY] 2016 [GRC]

[1556] SDG&E is adding new self-service kiosks and replacing obsolete kiosks that have cybersecurity concerns. The obsolete kiosks have been in place in SDG&E BO's for over a decade. Customers have adjusted to using self-service kiosks for bill payment transactions at SDG&E BO's. The only decline in service for SDG&E BO customers would be if SDG&E eliminated self-service bill payment kiosks. Customers who need to perform a non-bill payment transaction can still do so at a SDG&E BO as has been done for over a decade.

[1557] *See,* Ex. 146 SDGE/Stewart at 36: Figure JS-2.

[1558] Ex. 149 SDG&E/Stewart at 59.

[1559] Ex 146 SDG&E/Stewart at 67. Tr. V17:1531:11-18 (Stewart).

[1560] Ex. 149 SDG&E/Stewart at 59-60.

and, after the overspend on the Bill Ready Notification project, still had $1.5 million in bill redesign funding available; however, SDG&E decided not to use these funds for bill redesign."[1561] As SDG&E explained in testimony and discovery responses, the paper bill element of the TY 2016 GRC Bill Redesign project was removed from Bill Redesign Phase I due to its complexity and larger scope.[1562] Bill Redesign Phase 1, which enhanced SDG&E's electronic bills, was completed in 2015 and 2016, and any remaining authorized capital dollars were redeployed to other priority capital projects.[1563] Bill Redesign Phase 2, which enhances SDG&E's paper bills, was implemented in July 2018.[1564] SDG&E's Bill Redesign request should be adopted by the Commission.

23.3 Customer Service Information -- SoCalGas

SoCalGas seeks $25.055 million for O&M costs for both non-shared and shared services of Customer Service Information (CS-I). This area of SoCalGas provides customers information and services through multiple channels to enhance the ability of SoCalGas' customers to understand and manage their energy usage. CS-I's communications include but are not limited to safety and reliability of the natural gas system, support to increase efficient use of natural gas, reduce associated greenhouse gas emissions, and improve air quality. Additionally, this area provides outreach, education, programs, and account management services to residential, commercial and industrial customers, low-income, and customers in disadvantaged communities (DACs), as well as communications and marketing, customer research, and insight into the programs that serve these customers. Major divisions within the CS-I area include Customer Strategy and Engagement, Customer Assistance Programs, Customer Segment Services, Clean Transportation Services, and Renewable Gas Customer Outreach, which manage and implement products and programs for these areas.[1565] The increase of $7.159 million over BY 2016 adjusted recordable expenses, are primarily to help meet natural gas appliance testing (NGAT) requirements, ambitious state greenhouse gas reduction goals, needs of DACs, and customer desire for frequent and timely communication through ever-increasing channels.[1566]

[1561] Ex. 512 UCAN/Charles at 84:10-14 (internal citation omitted).
[1562] Ex. 149 SDG&E/Stewart at 59.
[1563] *Id*. at 59:28-60:9 and Tr. V:17:1528:20 - 1530:2 (Stewart).
[1564] Tr. V17:1531:11-1532:7 (Stewart).
[1565] Ex. 156 SCG/Cheung (adopted by Magana) at iii-iv.
[1566] *Id.* at 2-5 (delineating increased legislation and rise in social media requiring actions to meet customer needs and compliance).

In particular, TY 2019 expenses include incremental activities and resources to (1) increase support and analysis of customers on the impacts of state environmental and climate change priorities, as well as to offer programs and services related to such priorities, (2) expand communications and outreach to customers in DACs, (3) increase the number of NGAT-treated homes (RAMP-related), (4) streamline and increase services and communications through all channels with an emphasis on e-channels, (5) expand customer research and analyses to enhance customer service offerings, (6) expand customer service account support to increase awareness and accessibility of services and products for residential, commercial and industrial customers, and (7) implement clean transportation and renewable gas programs consistent with state legislative and regulatory efforts and mandates.[1567]

CS-I is also requesting IT Capital expenditures of $4.464 million in 2017, $6.510 million in 2018 and $12.483 million in 2019 to improve customer experience and compliance with mandated requirements.[1568]

The only parties to rebut portions of SoCalGas' O&M revenue request were ORA, NDC and SBUA. ORA accepted SoCalGas' 5-year forecast methodology and did not contest its TY 2019 forecast for nonshared services for Customer Assistance Programs and Customer Segment Services. No parties opposed SoCalGas' shared services request or its justification for IT capital projects.

The only areas where parties recommended adjustments to SoCalGas' CS-I O&M revenue request were the following:

23.3.1 Customer Strategy and Engagement

SoCalGas requested $7.098 million in TY 2019, an increase of $1,914 above BY 2016 for the Customer Strategy and Engagement (CSE) workpaper. The primary functions of CSE are to manage marketing and communication efforts across various channels and mediums to keep customers informed of the latest products, services, and programs. To do this, the CSE teams are responsible for determining customer needs, perceptions and behavior and then creating and delivering targeted communications designed to provide customers with information relevant to the programs, products and services of their interest.[1569] Collectively, the four areas of CSE:

1567 *Id.* at 5.
1568 *Id.* at 50-55.
1569 *Id.* at 13-17.

Marketing and Communications, Creative Services, Insight and Analytics, and Digital Engagement share the responsibility to inform and enhance customer experience and offerings for the entire Company. Often times, third-party services are contracted to help create messages for customers. As such, the CSE teams collaborate with internal and external subject matter experts to help ensure content and material is relevant to customer interests.

ORA agrees with the 5-year average methodology used to forecast TY 2019 expenditures but challenges several components of CSE and recommends the Commission disallow $1.158 million of SoCalGas' incremental request after adjustments for FOF and Aliso Canyon.[1570] In support of its adjusted forecast, ORA makes several specious arguments that the incremental activities and resources that SoCalGas seeks are unnecessary or unjustified.

23.3.1.1 Customer Marketing and Communications—Climate Program Communications

First, ORA asserts that SoCalGas provided insufficient information to demonstrate the need for additional resources to proactively educate and increase customer awareness about the state's environmental and climate goals and the role of renewable gas to meet these goals. ORA further claims that use of FTEs to communicate about "the role of natural gas to meet California's climate change goals, . . . [is] merely just to create a positive PR image of SCG to customers by telling customers how proactive they are being."[1571] And, their lack of understanding of the Customer Marketing and Communications organizational chart leads them to assert that SoCalGas "already has sufficient staffing in this work group."[1572] ORA is incorrect on both accounts.

SoCalGas demonstrated in its testimony, data responses and workpapers that now more than ever, customers need to understand climate change imperatives and the linkage between those goals and the energy programs offered by the Company. SoCalGas' request for an incremental amount of $100,000 for labor was requested to properly develop and manage the increased communications and materials regarding environmental and climate change policies and the role of natural gas in relation to these policies. As SoCalGas explained, SoCalGas offers numerous customer programs and services, including but not limited to: the Energy Savings Assistance Program, Low-Income Home Energy Assistance Program, Middle Income Direct

[1570] *See* Ex. 412 ORA/Yeh at 26; Ex. 158 SCG/Magana at 7 and Table RM-4.
[1571] Ex. 412 ORA/Yeh at 29.
[1572] *Id.*

Install Program, Comprehensive Mobile Home Program, California Alternative Rates for Energy, California Solar Initiative – Thermal Water Heating, and Self-Generation Incentive Program, where the overarching goal is to support California's initiatives for the purpose of reducing climate change impacts.[1573] Climate change imperatives will also have impacts on new offerings, such as the programs and services related to biogas that are contemplated by California Public Utilities Code (Pub. Util. Code) § 399.20(f)(2)(D).[1574] Rather than boosting SoCalGas' image, the incremental resources in Customer Strategy and Engagement are needed because of the expected increase in workload specific to the development and management of communications to help inform customers about the relationship between climate change policies and information, education and outreach of program or service offerings that benefit end-use customers.[1575] Contrary to ORA's assertion, CSE is not sufficiently staffed to handle these incremental activities. As ORA was informed in responses to its data requests, no FTEs currently perform this work, and communications on climate change and DAC topics have been handled on an ad hoc basis.[1576] This level and method of staffing is unsustainable for the additional activities that SoCalGas has identified and documented, and merely pointing to an organizational chart does nothing more than identify headcount contemporaneous with the chart's publication date.[1577]

In summary, the requested resources and activities that will help increase communications to inform natural gas ratepayers about the state's environmental policies and related offerings by SoCalGas, are appropriate. Accordingly, the Commission should adopt SoCalGas' request as reasonable.

23.3.1.2 Customer Marketing and Communications—Disadvantaged Community Communications

SoCalGas' request for $130,000 for a Communications Advisor and $46,000 of non-labor expenses for Customer Communications and Outreach were requested to provide additional outreach and education for DACs. Priority for DACs is required by SB 350, § 454.52(a)(1)(H)

1573 Ex. 158 SCG/Magana at 9-11.
1574 *Id.* at 10.
1575 *Id.* at 11. *See also* Ex. 159R (Sierra Club/UCS), attachments to SC-UCS DR-03, Question 14a.
1576 Ex. 158 SCG/Magana at 12-14 and Appendix A.1 (ORA-SCG-142-CY3, Question 1(b)).
1577 Ex. 158 SCG/Magana at 13-14. CSE is responsible for managing customer communications across all segments of SoCalGas, GRC, and non-GRC funded activities.

and necessary to help minimize localized air pollutants and other greenhouse gas emissions.[1578] SoCalGas has the opportunity to help guide and direct customers located in disadvantaged communities to specific programs such as: CSI – Solar Thermal, Self-Generation Incentive Program, Energy Efficiency, and other DAC-targeted programs that will help those customers better manage their energy usage.[1579] However, ORA's recommendation to disallow this resource and activity would result in a missed opportunity to increase benefits to customers in DACs. Further, ORA's recommendation is not only unsupported, it also has the potential to negatively impact customer communications in the most disadvantaged areas. Therefore, ORAs recommendation should be ignored.

23.3.1.3 Creative Services and Digital Engagement

SoCalGas requests in the Creative Services cost centers $130,000 and $100,000, respectively, for an incremental Project Manager and Production Advisor to support increasing customer communications. Further, SoCalGas requests in the Digital Engagement cost centers $90,000 for a Project Specialist responsible for administering increasing social media communications as well as $60,000 of resources for increased video productions to target DACs and climate change content, all of which ORA opposes. Incredulously, ORA justifies its position by claiming it is unaware of increased customer demand for "responses to their questions in a timely manner" through multiple channels.[1580] SoCalGas demonstrated not only the tremendous growth in activity levels for social media channels, but the steady growth in SoCalGas customer adoption of digital portals such as My Account and My Business Account.[1581] By the end of 2017, activity levels in SoCalGas' Facebook, Instagram, Twitter and YouTube channels showed growth of 30%, 47%, 255%, and 123% respectively, when compared to 2015. Creative Services creates and manages the content for all channels in which SoCalGas communicates to its customers, digital or otherwise, and there are no FTEs currently meeting the growing need for the increasing number of channels and associated content.[1582] ORA ignores the evidence provided in testimony and discovery not only demonstrating growth in SoCalGas customer usage

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[1578] California Legislative Information, SB-350 Clean Energy and Pollution Reduction Act of 2015 (October 2015), *available at* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350.
[1579] Ex. 158 SCG/Magana at 12.
[1580] Ex. 412 ORA/Yeh at 30.
[1581] Ex. 158 SCG/Magana at 14-18 and Appendix I.
[1582] *Id.* at 17 and Appendix A.1.

and digital platforms, but the independent findings of Pew Research that 69% of the public uses some type of social media.[1583]

SoCalGas' request is justified, reasonable, and will allow the Creative Services and Digital Engagement team to properly manage the increase in communication channels and should be adopted.

23.3.1.4 Customer Insights and Analytics

SoCalGas seeks $90,000 for one FTE Data Analyst and $156,000 in non-labor for communications analyses to track the effectiveness of ongoing communications with DACs and for Spanish language research to gain a better understanding of communication comprehension in order to customize and enhance customer education and increase program participation of Spanish language customers in DACs.[1584] ORA challenges the need for these resources, asserting that SoCalGas has failed to justify the need for $90,000 associated with an incremental Data Analyst to help provide greater granularity on how to best address customer needs, and $110,000 and $46,000 respectively, to conduct DAC and Spanish language surveys. According to ORA, ad hoc contract resources could be utilized to support incremental analytics.[1585] ORA ignored the evidence SoCalGas provided in testimony that demonstrated why data analytics was valuable to understand customer preferences, habits and sentiments, and how SoCalGas intended to leverage data it possessed to better understand customer needs and preferences and to direct communications, products and services accordingly.[1586] Accessing and analyzing this type of data requires a different technical focus and skill set than that possessed by current FTEs in this work group. Advanced analytics will enable more targeted and effective communications designed to deliver compelling, timely, and actionable information for various market segments so that new tailored programs and services can be offered and adopted by customers. ORA's recommendation would be costly and fail to unlock the value of advanced analytics. Industry experts have identified that utilities are adopting and employing advanced data mining and mathematical modeling techniques to discover insights in the data. Along with this task, utilities are beginning to complement their existing workforces with data-savvy talent (data scientists)

[1583] *See id.* at 17 and Appendix E.
[1584] Ex. 156 SCG/Cheung/Magana at 20-21.
[1585] Ex. 412 ORA/Yeh at 31-32.
[1586] Ex. 158 SCG/Magana at 17-19.

that bring advanced analytics, modeling, and visual presentation skills to bear on these efforts.[1587]

NDC supports SoCalGas' request to expand minority communication campaign analysis in this area and seeks to expand the breadth without specifying funding. Specifically, NDC recommends that SoCalGas be required to conduct its multicultural and language surveys yearly, and to expand the surveys to include Asian communities and customer assistance campaigns.[1588] SoCalGas appreciates NDC's support, but the recommendation is unnecessary. As SoCalGas informed NDC in data responses, it already tracks the performance of campaign messaging tactics uniformly across all customer sectors. It obtains insight into the effectiveness of its marketing efforts, including efforts with minority and low-income customers, and that the results of the analysis are considered during the planning of following campaign strategies.[1589] While not opposed to conducting the same type of qualitative analysis on Asian language as it requests for Spanish language, such a proposal requires additional funding.[1590]

The Commission should adopt SoCalGas' request as it will maximize ratepayer benefits by utilizing customer data to form effective communications.

23.3.1.5 Other CSE Incremental Funding Requests

ORA's recommendation to disallow CSE funding, effectively eliminated all funding for incremental costs outside of FOF and Aliso adjustments. This recommendation however overlooked all the incremental non-labor costs related to the migration of on-going maintenance and support from the Advanced Meter Project to the CS-I and CS-OO witness areas. These costs represent (1) $168,000 of incremental funding for Aclara annual CE/EP software licensing fees to support Ways to Save, an online tool that allow customers to view and manage their natural gas consumption.[1591] These are on-going committed expenses that are now being transitioned from advanced metering infrastructure (AMI) Regulatory Account funding to GRC O&M; and (2) $88,000 of incremental funding for Bill tracker SMS fees to provide customers their bill tracker alerts through outbound SMS texts, which help customers track their ongoing natural gas usage, through comparisons of their usage to their prior month/year and projections of their

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[1587] Ex. 158 SCG/Magana at Appendix H.
[1588] Ex. 437 NDC/Bautista at ii and 20:12-13.
[1589] Ex. 158 SCG/Magana at Appendix A.2.
[1590] *Id.* at 21-22.
[1591] Ex. 156 SCG/Cheung/Magana at 23:5-7.

monthly bill.[1592] These costs are also on-going committed expenses that are now being transitioned from AMI Regulatory Account funding to GRC O&M.[1593] ORA missed these costs. As they relate to the specific mission of CS-I depicted by ORA, to provide "assistance to customers and help customers manage their energy usage more efficiently and effectively,"[1594] the Commission should adopt them.

23.3.2 Small Business Customer Service

SBUA asserts that SoCalGas does not adequately support small business customers. In this regard, SBUA recommends that the Commission require SoCalGas to create a department focused exclusively on improving services to small business customers, and staffed with at least 10 FTEs.[1595] SBUA additionally recommends that the Commission require SoCalGas to conduct a detailed small business customer study and specifically target small commercial customers with education and outreach campaigns.[1596] SoCalGas disagrees with SBUA's assertion that SoCalGas does not have appropriate resources in place to serve the unique interests of small commercial customers. Even though SoCalGas does not have a separate small business customer department, it is adequately staffed throughout the many customer service departments of SoCalGas to support SBUA customers. Collectively, SoCalGas provides competent and specific services and programs to small business customers in the following manner; outreach and education through mandated programs, customer panel research, Commercial Service Technicians, Commercial Customer Service Representatives (1-800-GAS-2000), Account Representatives, and other digital tools such as Business My Account, and SoCalGas.com Website.[1597]

Moreover, SoCalGas has, for the last several years, conducted monthly panels that reach 500 to 600 small and medium business customers who agree to participate for one year and provide SoCalGas with perspective on their needs and interests. SoCalGas synthesizes the feedback received from these panels and other marketing surveys and customer comments to adjust its messaging, products, programs and services for small business customers.[1598] In view

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1592 *Id.* at 23:8-11.
1593 *Id.* at 10:3-10.
1594 Ex. 412 ORA/Yeh at 26:12-14.
1595 Ex. 158 SCG/Magana at 23-24.
1596 Ex. 439 SBUA/Rafii at 8.
1597 Ex. 158 SCG/Magana at 23-25; Tr. V18:1665:27 – 1668:19 (Magana).
1598 Ex. 158 at 24-25; Tr. V18:1659:25 – 1664:24 (Magana).

of all the resources and intelligence SoCalGas utilizes today to ascertain and meet small commercial customer needs, a dedicated department of small business customer service FTEs and a separate detailed study of small commercial customers are unnecessary. SBUA's proposal should not be adopted by the Commission. Instead, the Commission should adopt SoCalGas' proposal as it already contemplates the needs of not only small commercial customers and does so in a way that leverages costs to ensure a higher ratepayer value.

23.4 Customer Service Information and Technologies -- SDG&E

SDG&E seeks $26,401,000 for O&M costs for both non-shared and shared services associated with Customer Service Information and Technologies (CSIN). This area of SDG&E serves as a trusted energy advisor to all segments of customers by offering relevant information about their energy consumption, pricing plans, programs and tools to manage and control their use through residential customer services, business services, marketing and communications, research and analytics, customer programs, and customer pricing, among other services.[1599] While this represents an increase of $4,314,000 over BY 2016 adjusted recorded expenses, the majority of the incremental expenses relate to research and rate education communications to prepare customers for new and changing pricing plans and program options related to residential rate reform and rate education plans, customer privacy and data access initiatives to comply with new regulations enabling customers to securely share their energy usage data with third parties, expansion of clean transportation programs in support of ambitious state greenhouse gas reduction goals, expansion of research and communication to engage customers in diverse and disadvantaged communities, additional RAMP-related Natural Gas Appliance Testing (NGAT), support for the wide array of business customers' energy needs and operational efficiency projects.[1600]

CSIN is also requesting: (1) IT Capital expenditures of $20,583,000 in 2017, $21,109,000 in 2018 and $1,818,000 in 2019 to improve customer experience related to My Account, system updates and enhancements to support residential time of use (TOU) default and rate reform, business optimization and compliance with mandated requirements such as privacy controls[1601]

[1599] Ex. 151 SDG&E/Davidson at iv-v.
[1600] *Id*.
[1601] *Id*. at 52-53.

and (2) $1,850,000 in future capital improvement costs associated with the Energy Innovation Center related to facilities upkeep, equipment upgrades and security improvements.[1602]

The only parties to rebut portions of SDG&E's O&M revenue request were ORA, UCAN, NDC[1603] and SBUA.[1604] No parties opposed SDG&E's business justification for IT or facilities capital expenditure requests. Nor did any party contest SDG&E's shared service request, or SDG&E's justification for the recovery of recorded costs in the Rate Reform Memorandum Account (RRMA), or the recovery of recorded costs and closure of the Alternative Vehicle Fuel Memorandum Account (AFVMA), the Energy Data Request Memorandum Account (EDRMA), and the AB 802 Commercial Benchmarking Memorandum Account.

The only recommended adjustments to SDG&E's O&M revenue request were in the following workgroups:

23.4.1 Residential Customer Services – Expansion of Clean Transportation

SDG&E requested $498,000 in labor expenses above BY 2016 for 4.7 full-time equivalents (FTEs) to support expansion of Clean Transportation programs in accordance with state mandates and Commission-approved expansion of electric vehicle charging facilities. ORA recommends a $137,000 reduction of the amount requested due to its objection to having a non-whole number of FTE's performing clean transportation functions in TY 2019.[1605] ORA provides no justification for reducing SDG&E's requested FTEs other than its objection to approving fractional FTEs. ORA's justification is flawed since FTEs represent full-time equivalents employees and are commonly in fractions and are only coincidently in whole numbers. FTE's in BY 2016 are in fractions and incremental requests represent additional employees needed to meet the additional workload. ORA's rationale is insufficient for an adjustment where SDG&E met its burden to demonstrate these additional resources, who will be supporting GRC and non-GRC funded activities, will be fully engaged to support the areas of Business Development, Financial Analysis and Customer Engagement for Clean Transportation,

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1602 *Id*. at 58.
1603 NDC also expressed its support for the Multicultural and Language Survey SDG&E requests to fund. *See* Ex. 437 NDC/Bautista at 21:15-22:2; Ex. 153 SDG&E/Davidson at 16-17.
1604 SBUA also sought assurance that SDG&E complies with California Public Utilities Code Section 8380 to protect its customers' privacy. Ex. 438 SBUA/Brown at 19. SDG&E does. In addition, SDG&E outlined the controls in place to protect customer data where the customer has consented to third-party access to that data. Ex. 153 SDG&E/Davidson at 22-25.
1605 Ex. 411 ORA/Yeh at 35:13-18.

providing analysis, regulatory strategy testimony and discovery responses in support of current and future filings, as well as monitoring markets, trends and technological advances in support of the Governor's goal of 5 million zero emission vehicles by 2030.[1606] The Commission should adopt SDG&E's request as reasonable.

23.4.2 Marketing, Research & Analytics – Rate Education and Outreach

SDG&E seeks $1,700,000 in non-labor above BY 2016 expenses to educate business and residential customers about changes in energy pricing and new rate options.[1607] ORA, UCAN and NDC object to this request misapprehending the purpose of these expenses and spending levels in earlier years for rate education and outreach efforts. Clear and consistent in SDG&E's testimony on this topic,[1608] rate reform has moved at a slower than anticipated pace and has now resumed an upward trajectory that compels SDG&E's multimedia and proactive communications with its business and residential customers about the numerous changes to rates and rate structure, so they may understand and navigate the options available to them.

ORA claims SDG&E's request is "unprecedented" and should be reduced by $562,000, using a four-year average of 2013-2016 recorded costs.[1609] ORA is incorrect. SDG&E used a base-year forecast and developed a specific estimate of incremental rate education funding needs precisely because rate reform measures and related expenses have previously fluctuated based on circumstances including the pace and timing of the various rate reform decisions. SDG&E spent $1.9 million in 2013 and $1.5 million in 2014 when significant bill increases, initially affecting Tier 3 and 4 residential customers, required increased communications expenses for mass communication tactics to raise customer awareness of higher electricity prices and to provide solutions to manage and mitigate energy bill impacts. Additional tactics were utilized as rate reform progressed in 2014 and 2015.[1610] SDG&E now expects that marketing, education & outreach (ME&O) efforts around rate reform will begin to accelerate again through 2020, with targeted and frequent customer communications to better prepare customers for changes, such as TOU peak period changes, rate changes for NEM customers and education about High Usage

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[1606] Ex. 153 SDG&E/Davidson at 5-7.
[1607] Ex. 151 SDG&E/Davidson at 34.
[1608] *See id*. at 34:10-36:2, Ex. 153 SDG&E/Davidson at 7-9, 11-16 and 17-19, Tr. V18:1564:13-1565:27, 1577:2-1578:10 (Davidson).
[1609] Ex. 411 ORA/Yeh at 40:11-19.
[1610] Ex. 153 SDG&E/Davidson at 8.

Charges (HUC), and the available rate options.[1611] SDG&E has planned for numerous activities to provide education and encourage customer behavioral changes through multiple direct and mass communications.[1612]

Both UCAN and NDC express concern that SDG&E is essentially double collecting either through the recent Commission Resolution E-4910 authorizing $19.4 million spending through the RRMA for incremental ME&O costs associated with residential rate reform including customer mass default to TOU pricing plans in 2019 (UCAN), or due to lower than authorized spend in TY 2016 (UCAN and NDC).[1613] As SDG&E explained, there are numerous changes related to rate education and outreach that fall outside of the residential customer mass default and cannot all be funded through the RRMA. Those will be covered by SDG&E's TY 2019 request.[1614] Witness Davidson explains the distinction and separate accounting for RRMA spending on residential mass default and GRC funding for ME&O activities related to other rate reform initiatives and programs.[1615] Moreover, there are controls in place to ensure that SDG&E customers are not paying twice for the same rate education and outreach. SDG&E files a quarterly Progress of Residential Rate Reform (PRRR) report with the Commission that includes information on all residential rate reform costs, whether GRC or RRMA funded.[1616]

With regard to UCAN's and NDC's claim that SDG&E's TY 2019 request should be reduced by amounts that were authorized, but unspent on ME&O activities, SDG&E explained that the statewide progress of rate reform efforts progressed more slowly than anticipated, and BY 2016 was an anomaly.[1617] Spending in BY 2016 was unusually low because many of the communications anticipated for BY 2016 did not begin their deployment until mid to late 2017. 2017 demonstrated that spending levels increased consistent with expectations and increasing need for timely communications and expenditures.[1618] Going forward, SDG&E will require an incremental $1.7 million to fund the additional rate education and outreach activities for both residential and business customers described above.[1619]

[1611] *Id*. at 9.
[1612] *Id*.
[1613] *See* Ex. 512 UCAN/Charles at 73:11-19, 77:15-20; Ex. 437 NDC/Bautista at 22-23.
[1614] Ex. 153 SDG&E/Davidson at 12-14. *See also* Tr. V18:1579:20 – 1581:3 (Davidson).
[1615] Tr. V18:1579:20 – 1581:8 (Davidson).
[1616] Ex. 153 SDG&E/Davidson at 15.
[1617] *Id*. at 7-8, 14, 18.
[1618] *Id*. at 8, 18. *See also* Tr. V18:1577:13 – 1578:10 (Davidson).
[1619] Ex. 153 SDG&E/Davidson at 19.

Furthermore, if SDG&E spends less than the GRC-authorized amount for a certain activity, that does not necessarily mean that those funds are "overcollected" and available to offset future expenses. GRC-authorized O&M budgets can also be reprioritized to fund other company activities unless they are required to be tracked separately in a regulatory account and used for a specific purpose (*e.g.*, tree trimming).[1620] NDC implies that SDG&E should continue spending authorized GRC funding on rate reform outreach, communications and education even if this spending would be unnecessary. Since rate reform was not progressing at the pace anticipated in the TY 2016 GRC, SDG&E did not need to spend the funds. Spending funds for the sake of spending funds, even when such expenditures are not needed does not make sense and is not a prudent prioritization of resources. SDG&E's request is reasonable and should be adopted by the Commission.

23.4.3 Customer Programs, Pricing and Other Office – Customer Pricing Regulatory Compliance

SDG&E proposed $332,000 in labor and $9,000 in associated non-labor above the BY 2016 expenses for Customer Pricing to support expanding workload due to increasing legislative and regulatory requirements regarding the analysis and development of rate options and the necessity for additional analysis to better understand impacts and needs due to changes in customer energy usage and the utility grid.[1621] ORA recommends denial of SDG&E's incremental request, claiming that SDG&E failed to specify particular legislative and regulatory requirements and that staffing levels should remain flat when reviewed against a three-year (2014-2016) recorded average of FTEs.[1622] SDG&E disagrees. As SDG&E demonstrated in its rebuttal testimony, "the case activity that the Customer Pricing area supports has dramatically increased over the last six years with SDG&E seeing an approximate increase of 50% in the number of active cases as well as an approximate increase of 70% in advice letter filings."[1623] Almost every proceeding and all proceedings with cost recovery or revenue requirements that are submitted to the Commission require analysis, input, support, and in many cases, oversight by the Customer Pricing group. In addition, the level of complexity and analysis required to support these proceedings has increased. For example, SDG&E must develop rates and cost studies

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[1620] *Id.*; *See also* Tr. V18:1568:5-10 (Davidson).
[1621] Ex. 151 SDG&E/Davidson at 48; Ex. 153 SDG&E/Davidson at 10-11.
[1622] Ex. 411 ORA/Yeh at 42:14-25.
[1623] Ex. 153 SDG&E/Davidson at 10 and Table LD-5.

based on greater segmentation than in the past to account for technologies like electric vehicles and solar. SDG&E also includes comprehensive bill impact analysis for each rate design application that requires significant resources to develop. In addition, SDG&E is required to conduct multiple new studies for new customer classes created by various rate schedules and options (*e.g.*, schools)[1624] that recover distribution, transmission and commodity costs.[1625] There is also a more collaborative stakeholder process, where the utility leads multi-party efforts (*e.g.*, workshops and working group meetings) to explain new rate making requirements (*e.g.*, implementation of residential rate reform).[1626] The Customer Pricing group is critical to this activity, and the Commission should adopt SDG&E's proposal to support required staffing levels to perform Customer Pricing Regulatory Compliance activities.

23.4.4 Small Business Customer Service

SBUA contests SDG&E's overall O&M request for CSIN as unreasonable due to its view that SDG&E does not adequately support small business customers.[1627] In this regard, SBUA recommends that the Commission adopt a $225,000 increase to SDG&E's Business Services budget to provide 2 FTEs who would be specifically trained and dedicated to serve small commercial customers.[1628] SBUA additionally recommends that the Commission require SDG&E to create a department focused exclusively on improving services to small business customers, and staffed with at least 10 FTEs.[1629] SDG&E disagrees with SBUA's assertion that it does not have a plan or resources in place to serve the unique interests of small commercial customers. Even though SDG&E does not have a separate small business customer department, it is adequately staffed to provide specific services and support to small business customers. SDG&E Customer Energy Specialists, Account Executives, Business Contact Center Energy Specialists and Outreach Advisors all act as trusted energy advisors that deliver energy expertise to small businesses. Funded through various CPUC proceedings, assistance is provided on any number of energy-related topics such as bill and rate-related questions/concerns, regulatory proceedings, energy efficiency and other demand side management opportunities, and general

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[1624] D.17-08-030 at Ordering Paragraph (OP) 36.
[1625] *Id*. at OP 33-35.
[1626] Ex. 153 SDG&E/Davidson at 11.
[1627] *See* Ex. 438 SBUA/Brown at 5.
[1628] *Id*.
[1629] *See* Ex. 439 SBUA/Raffi at 9.

service questions.[1630] For example, SDG&E Account Executives are trained to provide support to business customers in the areas of rates, billing, infrastructure, energy efficiency, and most other energy related topics. They participate in weekly, monthly, and quarterly training sessions that cover topics including rates, regulations, billing, energy efficiency, energy delivery, energy equipment characteristics, and effective communication. These topics, combined with years of industry experience, provide the foundational knowledge required to provide expert support to all customers, regardless of industry, size, or rate classification. Account Executives provide direct support to their assigned industry segment, which includes small business customers, through direct phone calls, on-site presentations, and rate analysis.[1631] A dedicated department and dedicated small business customer service FTEs are unnecessary, and SBUA's proposal should not be adopted by the Commission.

SBUA also raised concerns with customer privacy and stated that the Commission should order SDG&E to affirmatively state that it believes it is in compliance with privacy laws.[1632] SDG&E applauds the SBUA's attention to customer privacy in SDG&E's GRC filing. SDG&E takes customer privacy very seriously and appreciates the opportunity to discuss its privacy practices. A Commission order is not required for SDG&E to comply with SBUA's request: SDG&E affirmatively states that it believes it is in compliance with California Pub. Util. Code § 8380.[1633]

23.5 Customer Service Technologies, Policies, and Solutions (SoCalGas Only)

SoCalGas is requesting $19,234,000 for Test Year (TY) 2019 O&M costs associated with the Customer Service Technologies, Policies and Solutions (CSTP&S) cost categories; an increase of $4,608,000 over base year (BY) 2016 levels.[1634] Included within CSTP&S are three key areas: Research Development and Demonstration (RD&D); Policy and Environmental Solutions (P&ES); and Business Strategy and Development. These workgroup areas cover a variety of functions and activities to: (a) promote the development and implementation of policies, regulations, and technologies that optimize the use of natural gas and renewable gas (RG) as an environmentally beneficial and cost-effective energy solution, (b) enhance safety and

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[1630] Ex. 153 SDG&E/Davidson at 20-22.
[1631] Ex. 153 SDG&E/Davidson at 21; Tr. V18:1601:4 – 1602:9 (Davidson).
[1632] Ex. 438 SBUA/Brown at 4.
[1633] Ex. 153 SDG&E/Davidson at 23-25.
[1634] Ex. 137 SCG/Alexander (adopted by Tomkins) at iii.

reliability of the natural gas delivery system, (c) support customer adoption and use of low-emission technologies, and (d) support a variety of statewide initiatives and customer needs in related areas.[1635] The only parties to contest a portion of the CSTP&S revenue request were ORA and Sierra Club/Union of Concerned Scientists (SC-UCS). Each of the contested areas will be discussed below. No party opposed the $1,500,000 shared services request for SoCalGas' Business Strategy and Development area,[1636] and the Commission should adopt this request as reasonable.

23.5.1 Non-Shared Costs

23.5.1.1 Research Development and Demonstration

The RD&D group conducts or sponsors technology assessments, technology development, and field demonstration projects that benefit customers by focusing on reducing emissions, improving performance, or reducing costs across the full range of natural gas applications and on improving the safety, reliability, and sustainability of utility operations. The TY 2019 funding request of $14,329,000 was developed using a zero-based forecast methodology based on an assessment of RD&D needs. This represents an increase of $3,686,000 relative to BY 2016.[1637] SoCalGas' RD&D program is funded through a one-way balancing account and is funded across each GRC cycle, with a true up at the end of each GRC cycle.[1638] At the end of the GRC cycle, SoCalGas will propose to return any unspent funds in rates to customers.[1639]

Public Utility RD&D programs are expressly recognized by California Pub. Util. Code Sections 740 and 740.1, which provide for the Commission to authorize utility RD&D activities that benefit customers through improved reliability and safety, environmental benefits and operational efficiencies provided that achieving those benefits is reasonably probable and the focus is not unnecessarily duplicative of efforts by other research organizations.[1640] In compliance, SoCalGas' RD&D program focuses on technologies that: (a) enhance public and

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[1635] *Id.*
[1636] *Id.* at 36.
[1637] *Id.* at 9.
[1638] *Id.*, *see also* Ex. 139 SCG/Tomkins at 7. SoCalGas also proposed continuing the sharing mechanism that provides ratepayers with 75% of royalty revenue and net proceeds from the sale of equity holdings as authorized by D.13-05-010. *See* Ex. 137 SCG/Alexander/Tomkins at 11.
[1639] Ex. 137 SCG/Alexander/Tomkins at 9.
[1640] California Public Utilities (P.U.) Code §§ 740 and 740.1.

employee safety, operating efficiency, and reliability; (b) cost-effectively improve the efficiency and reduce the environmental impacts of natural gas end-use applications; (c) develop high-efficiency, low-emissions systems for the commercial, industrial and residential market segments; (d) minimize the environmental impacts related to the use of natural gas as a transportation fuel and on reducing the cost of natural gas transportation; (e) improve and support biomethane and renewable gas (RG) production and use; and (f) develop new applications for clean technologies such as hydrogen fuel cells for electric vehicles, and residential, commercial and industrial sized fuel cell systems and microgrids.[1641]

SoCalGas' RD&D efforts have consistently been successful in creating well documented[1642] customer benefits through technologies that enhance safety and reliability of gas operations and by supporting cost-effective attainment of state environmental goals.[1643] This stems from the robust process SoCalGas undertakes to identify specific RD&D needs and activities as technologies progress and new public policies and goals are established. A Technology Needs Assessment is developed by subject matter experts within the RD&D team to assess technology needs or gaps in each program area based on the current state of technology compared to the performance required to meet safety and reliability enhancements, energy efficiency goals, criteria pollutant, GHG emissions, and other cost and performance goals.[1644] SoCalGas collaborates with various stakeholders, including regulatory agencies such as the California Energy Commission (CEC), the California Air Resources Board (CARB), local air districts, such as the South Coast Air Quality Management District (SCAQMD) and the San Joaquin Valley Air Pollution Control District (SQVAPCD), as well as the United States

[1641] Ex. 137 SCG/Alexander/Tomkins at 11-13 and 17-20, describing in depth the five main research domains supported by the RD&D program; Ex. 477 (SCG and SC-UCS), SC-UCS DR-005, Question 4 (identifying and describing specific RD&D projects and purpose).

[1642] *See, e.g.*, Ex. 475 SC-UCS/O'Dea/Golden at Attachment 4, DR-05, Question 1, PDF p. 77 SC-UCS provide a list of 15 Attachments at the end of Ex. 475 SC-UCS/O'Dea/Golden. However, it is unclear from the record which, if any, of the 15 attachments are in the record because SC-UCS did not attach any of their 15 attachments to their Prepared Testimony (Ex. 475). This chapter of the Opening Brief references certain of these attachments.

[1643] *See, e.g.*, Ex. 137 SCG/Alexander/Tomkins at Appendix D, D-2 (a RD&D summary of significant recent projects discussing, among others, development of "game-changing" Cummins Westport engine for medium truck and bus market segments).

[1644] Ex. 137 SCG/Alexander/Tomkins at 10 and Appendix B.

Department of Energy (DOE), leading universities and national laboratories,[1645] to determine the types of projects, and amount and form of funding that will be included in the RD&D program.[1646] The identified technology needs are combined with prior experience on project cost and co-funding requirements[1647] to develop target projects and funding requirements in each program area.[1648] Based upon SoCalGas research and stakeholder input, the TY 2019 forecast reflects increased RD&D activity in RG production, criteria pollutants reduction, carbon reduction, natural gas transportation, and gas transmission and distribution system safety and reliability, and the development of new renewable resources and supply technologies such as power-to-gas (P2G) to produce hydrogen for fuel cell electric vehicles and long-term energy storage needed to help the state meet its renewable energy goals.

Additional controls are in place to ensure that RD&D funding is appropriately awarded and used for its intended purposes. Each year SoCalGas publishes an Annual Report, which provides specific details on the projects funded through the RD&D program. That report is provided to the Commission and other stakeholders.[1649] Also, in each GRC proceeding, SoCalGas provides details of its RD&D program, including the Technology Needs Assessment and RD&D Summary of Significant Recent Projects,[1650] for stakeholder scrutiny and input. Moreover, the Commission receives quarterly and annual reports and has review and audit oversight of the RD&D program and memorandum accounts associated with that program.[1651] At the specific project level, SoCalGas serves on project advisory committees "that meet throughout the lifetime of the project to ensure that research is progressing in a timely manner and that the

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[1645] Notably: National Renewable Energy Laboratory, Pacific Northwest National Laboratory, Lawrence Livermore National Laboratory, Lawrence Berkeley National Laboratory, Pacifica Northwest National Laboratory, and Jet Propulsion Laboratory.

[1646] Ex. 137 SCG/Alexander/Tomkins at 15 and Tr. V17:1482:5 – 1483:21 (Tomkins). *See also* Ex. 477 (SCG and SC-UCS), SC-UCS DR-005, Question 4 (describing how funding is determined and oversight of RD&D projects).

[1647] Agency required co-funding mechanisms provide additional vetting of applicants, providing greater certainty that projects offer a benefit to customers and a reasonable probability of success. Ex. 139 SCG/Tomkins at 6; Ex. 477 (SCG and SC-UCS) SC-UCS DR-005, Question 4 (describing how funding is determined and oversight of RD&D projects).

[1648] Ex. 137 SCG/Alexander/Tomkins at 10 and Appendix B.

[1649] Tr. V17:1482:5 – 1483:21 (Tomkins); *see also* Ex. 475 SC-UCS/O'Dea/Golden at Attachment 4, DR-05, Question 1, PDF p. 77.

[1650] Ex. 137 SCG/Alexander/Tomkins at 10 and Appendices B, C, and D.

[1651] Tr. V17:1482:5-27 (Tomkins).

research focus area remains beneficial to ratepayers." Furthermore, RD&D project contracts have rigorous reporting requirements and tie project payments to specific milestones.[1652]

Only two parties oppose SoCalGas' RD&D funding request: ORA and SC-UCS. ORA recommended funding based on a five-year average (2012-2016) for its TY 2019 forecast for RD&D expenses and recommends a TY 2019 revenue requirement of $9,886,000; $4,443,000 less than the SoCalGas forecast.[1653] ORA's proposed reductions are not adequately supported and should not be adopted. ORA has not provided any testimony disputing the facts or accuracy of the RD&D analysis presented in Witness Tomkins' testimony and the "Technology Needs Assessment Summary,"[1654] upon which the SoCalGas TY 2019 forecast is based. And, ORA is silent on the growing need for technology development to address air emissions reductions, climate mitigation, system integrity, reliability, and new renewable energy sources. ORA's recommended forecast is inadequate to fund natural gas-based RD&D projects needed to support California's environmental policy goals and achieve greater natural gas reliability, lower costs, and increased safety. To address these needs, SoCalGas' forecast of $14,329,000 should be adopted as proposed.[1655]

ORA asserts that there is no need for SoCalGas to increase spending in its RD&D workgroup because there are other private and public entities, such as the CEC, that have a natural gas RD&D program.[1656] SC-UCS latches on to ORA's argument similarly claiming: "implementation of natural gas research and development ('R&D') is best left to the CEC, which already has a ratepayer-funded natural gas R&D program."[1657] SC-UCS attempts to support its position by arguing that (1) SoCalGas business interests and the projects it selects for funding may not align with state climate objectives or priorities, and the state's decarbonization objectives would be better administered by a state agency,[1658] and (2) "SoCalGas has been misleading in its public representations of ratepayer-funded R&D."[1659] Each of these claims lacks merit.

[1652] *See* Ex. 477 (SCG and SC-UCS), SC-UCS DR-005, Question 4 at 2-3.
[1653] Ex. 412 ORA/Yeh at 42.
[1654] Ex. 137 SCG/Alexander/Tomkins at 10 and Appendix B.
[1655] *Id.* at 9.
[1656] Ex. 412 ORA/Yeh at 42.
[1657] Ex. 475 SC-UCS/O'Dea/Golden at 2.
[1658] *Id.* at 40:21 – 41:10; 43:3 – 46:2.
[1659] *Id.* at 42:8-9.

23.5.1.1.1 SoCalGas' RD&D Program is not Redundant of Other Programs

Both ORA and SC-UCS miss the mark with their recommendation to decrease SoCalGas' RD&D funding because others, like the CEC, already have natural gas-related R&D programs.[1660] As SoCalGas demonstrated, Pub. Util. Code Section 740 expressly permits utility research and development programs,[1661] and SoCalGas' RD&D program adheres to P.U. Code Section 740.1 guidelines in the selection of appropriate research projects and in minimizing any redundancy with other RD&D programs.[1662]

SoCalGas' RD&D program is both complementary and supplementary to other R&D programs such as the CEC's natural gas R&D program. SoCalGas' RD&D program complements the CEC's R&D program in several ways through its team's collaboration with the CEC in developing solicitation guidelines, obtaining a robust pool of applicants for CEC solicitations, leveraging its relationships with customers to find optimal host sites for CEC demonstration projects, and supplying necessary in-state co-funding[1663] that would otherwise disqualify promising out of state research projects from the CEC R&D program. For example, SoCalGas often works with out of state technology providers to help them satisfy CEC's in-state spending requirements by adding co-funding, expertise, and facilities for testing and meetings.[1664] In addition, SoCalGas' RD&D program supplements the breadth and depth of the CEC's R&D program. The SoCalGas RD&D team has developed strong working relationships with the DOE,[1665] the two large air management districts in SoCalGas' territory (SCAQMD and

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[1660] It is unclear what relief SC-UCS seeks. In one instance it asks to have SoCalGas' funding decreased commensurate with any increase in funding the CEC may obtain at some undetermined date in the future (no proposal is currently pending). In another, it appears to seek the elimination of climate-related measures from the RD&D program, and in another it seeks to move administration of SoCalGas' RD&D program to the CEC. *See* Ex. 475 SC-UCS/O'Dea/Golden at 41:6-13, 42:15-2, 45:25 – 46:2. However characterized, SoCalGas' testimony clearly demonstrates that none of this relief is warranted.

[1661] P.U. Code § 740 ("For purposes of setting the rates to be charged by every electrical corporation, gas corporation, heat corporation or telephone corporation for the services or commodities furnished by it, the commission may allow the inclusion of expenses for research and development.").

[1662] Ex. 137 SCG/Alexander/Tomkins at 13: 26 – 16:5; Ex. 139 SCG/Tomkins at 5-6.

[1663] CEC solicitations prioritize projects that demonstrate at least 60% in-state spending. Ex. 139 SCG/Tomkins at 6, fn.17 (citing**,** FAQ sheet for the California Energy Commission's Natural Gas RD&D Program), *available at* http://www.energy.ca.gov/research/documents/naturalgas_faq.pdf at 8.

[1664] Ex. 139 SCG/Tomkins at 6.

[1665] *See, e.g., id*. at 5 (discussing recent commendation by DOE for SoCalGas' collaborative work with researchers on "the development and commercialization of a novel solar hydrogen production technology that 'can lower carbon emissions in natural gas applications.'").

SJVAPCD),[1666] and federal and university laboratories and research programs inside and outside of California. The SoCalGas RD&D program partners with these stakeholders and co-funds projects that meet SoCalGas' core focus to benefit SoCalGas customers through improved reliability and safety, environmental benefits, and operational efficiencies.[1667]

23.5.1.1.2 SoCalGas' RD&D Program is Sufficiently Transparent

Similarly, SC-UCS is simply incorrect that a transfer of SoCalGas' RD&D program administration to the CEC is necessary to ensure transparency in selection of projects that align with state policy objectives.[1668] The record on its long-standing RD&D program stewardship and testimony in this proceeding clearly demonstrate that SoCalGas has developed a robust RD&D program. The SoCalGas RD&D program is founded on a needs assessment created with input from key agency stakeholders – the CEC, CARB, DOE and local air districts who are establishing and implementing regulations to meet state mandates – and from public universities and research institutions with their fingers on the pulse of potential technological advancements to meet state and worldwide climate goals.[1669] The RD&D projects and associated funds are further vetted through co-funding protocols that focus on the viability and promise of the technology to be funded and the benefit to ratepayers in meeting state policy objectives, whether health, safety, or environmental.[1670] And, the Commission maintains and exercises ultimate oversight over the RD&D program and SoCalGas stewardship through its regular review (in GRC proceedings and Memorandum Account controls), and internal controls to ensure the program meets the criteria of Pub. Util. Code Section 740.1 and provides corresponding

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[1666] SCAQMD and SJVAPCD are the only two EPA air districts in the United States designated as extreme non-attainment areas for 8-hour ozone concentrations. These air districts have developed aggressive rules and regulations to address air criteria pollutants from the transportation sector and stationary sources in their respective districts. Ex. 139 SCG/Tomkins at 5.

[1667] Ex. 137 SCG/Alexander/Tomkins at 13:26 – 20:10; Ex. 139 SCG/Tomkins at 5-6.

[1668] *See* Ex. 475 SC-UCS/O'Dea/Golden at 44:21-25. SC-UCS attacks only those portions of SoCalGas' RD&D program that involve climate-focused technologies. This concerns only a small portion of SoCalGas' RD&D program, which also funds numerous projects related to public and pipeline safety, system reliability, and efficiencies.

[1669] *See, e.g.,* Ex. 137 SCG/Alexander/Tomkins at 13-19, Tables LLA-8 and LLA-9 and Appendices B and D; Ex. 139 SCG/Tomkins at 5-6, 9-13 and Appendices A and B; Ex. 477 (SCG and SC-UCS), SC-UCS DR-005, Question 4 (describing how funding is determined and oversight of RD&D projects).

[1670] *See, e.g.,* Ex. 137 SCG/Alexander/Tomkins at 9:10-14, 13:26 – 16:5 and Appendix B; Ex. 477 (SCG and SC-UCS), SC-UCS DR-005, Question 4 (describing how funding is determined and oversight of RD&D projects); Tr. V17:1482:5 – 1483:21 (Tomkins).

ratepayer benefits.[1671] Public input and education are core components of the SoCalGas RD&D program. Even SC-UCS acknowledges that SoCalGas actively participates in CEC workshops, where it provides not only comments on CEC proposals but discusses areas of its own RD&D focus and view on needs, adding further transparency on its program to CEC stakeholders, which included SC-UCS.[1672] And as Ms. Tomkins indicated in hearing testimony, this GRC proceeding provides yet another level of program transparency and a forum for comment.[1673]

23.5.1.1.3 SoCalGas Appropriately Administers its RD&D Program

SoCalGas also remains the appropriate administrator for its RD&D program. As SoCalGas further demonstrated, its program is broader than the CEC's, and encompasses technologies that address a variety of state climate priorities and health, safety, and system reliability objectives that are the focus of agencies other than the CEC.[1674] The CEC is also constrained by budget limitations for its natural gas R&D program. Although it held a workshop to solicit stakeholder feedback on its 2018-2019 budget, potentially seeking additional funding to expand its program to meet new legislation, mandates and targeted ways to address GHG reductions and other climate goals, it has not filed an application with the Commission requesting budget approval (larger or otherwise).[1675] Without an increased level of funding to meet critical needs for new technologies, the CEC already has solicitations that pass selection criteria, but fail to move forward due to solicitation funding limits.[1676] This leaves technology needs unfulfilled and requiring additional programs, such as SoCalGas' RD&D program, to help bridge this need.

1671 *See* Tr. V17:1482:5 – 1483:21 (Tomkins).
1672 *See e.g.*, Ex. 142 (SC-UCS), California Energy Commission Staff Report, Natural Gas Research and Development Program (March 2017) at Appendix C; Ex. 475 SC-UCS/O'Dea/Golden at 18, fn. 65 (citing O'Dea, et al., Union of Concerned Scientists Comments on Renewable Gas (July 14, 2017); Tr. V17:1478:1 – 1480:25 (Tomkins).
1673 Tr. V17:1480:26 – 1483:21 (Tomkins).
1674 Ex. 137 SCG/Alexander/Tomkins at 11-16 and Table LLA-8; Ex. 139 SCG/Tomkins at 5-6 and 8-9.
1675 *See* Ex. 139 SCG/Tomkins at 8.
1676 *Id.* and fn.25. *See also* Ex. 142 (SC-UCS) California Energy Commission Staff Report, Natural Gas Research and Development Program (March 2017) at 23-24 (noting also "the lower relative funding level has a noticeable reduction in the participation and diversity of entities in the competitive solicitations. When the funding amount is spread thin over such a broad range of areas needing research, the level of funding for each area and each project is typically very low when compared to other research funding entities like DOE, ARPA-E or EPIC.")

More importantly, and contrary to SC-UCS' assertions, SoCalGas uses its RD&D budget to fund projects in its ratepayers' (and the state's) interests – not its shareholders' interests, not as a public relations stunt, and not in contravention with state policy goals. SC-UCS argues at length throughout its testimony that the policy of the state is a move toward electrification and away from fossil fuels. It also argues that certain projects SoCalGas funds either do not give appropriate attribution to ratepayer contributions or are the wrong choice to fund.[1677]

Contrary to SC-UCS' assertion, California policy in support of renewable energy based electric generation, such as SB 100, will require more, not less, gas RD&D to provide zero carbon or carbon negative technologies and resources.[1678] California's aggressive goals will require the broadest, most imaginative array of technology solutions possible, not a narrow list of favorites chosen by special interest groups such as SC-UCS.

Multiple state laws, including those specific to transportation and climate targets, expressly recognize and encourage natural gas-fueled low emission vehicles and renewable gas as a solution to state environmental concerns.[1679] As witness Tomkins expressed, this GRC proceeding is not the forum to address policy arguments like those made by SC-UCS. That is for another time and another proceeding or forum.[1680] SoCalGas serves over 6 million customers using natural gas. Those customers have an interest in receiving reliable, affordable, and cost-effective energy for their needs. SoCalGas' RD&D program supports advances in technologies that show great promise in helping the state meet its climate goals and allow ratepayers to have diversity of supply as well as develop a new source of energy that meets their interests. It is not about picking winners and losers, as SC-UCS appears to advocate when it disputes P2G RD&D as an appropriate use of ratepayer funds. Not only is P2G recognized as a promising technology

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[1677] *See* Ex. 475 SC-UCS/O'Dea/Golden at 42:10-15, 43:5-11; 44:19-25.

[1678] *See* SB 100, Stats. 2017-2018, Ch. 312 (Cal. 2018) at § 454.53 (a). "It is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045." For example, P2G can serve as a long-term energy storage solution that will allow SB 100 to be implemented successfully, making the advancement of P2G all the more important.

[1679] *See, e.g.*, Ex. 137 SCG/Alexander/Tomkins at 2-3 and Appendices A and B; Ex. 139 SCG/Tomkins at 11:14-18. *See also* P.U. Code §§ 740.1(e)(4) (Development of new resources and processes, particularly renewable resources and processes which further supply technologies) and 740.3 (requiring Commission in cooperation with gas corporations and others to "evaluate and implement policies to promote the development of equipment and infrastructure needed to facilitate the use of electric power and natural gas to fuel low-emission vehicles).

[1680] Ex. 139 SCG/Tomkins at 2-3.

by the DOE and world-wide,[1681] but – in direct contravention to SC-UCS's assertion – the CEC indicated that P2G should be considered for funding in a future CEC natural gas R&D budget.[1682]

Similarly, SC-UCS's claim that SoCalGas is promoting itself and misleading the public by use of RD&D funds to make "gifts," falls flat.[1683] The record is clear, RD&D and shareholder funds were utilized to support California State University Los Angeles (CSULA) Combustion Engineering Research, to develop both emission reduction strategies and emissions measurements technologies.[1684] Although the funding was a mixture of ratepayer and shareholder funding, the University requested that SoCalGas refer to the funding as a gift so the University could utilize more of the monies for this specific research program.[1685]

Finally, SC-UCS' assertion that SoCalGas is biased against electrification efforts[1686] and cannot impartially administer ratepayer funds on RD&D efforts also lacks substance. SC-UCS claims that that "there is the potential for bias in SoCalGas['] evaluation of the merits of electrification over continued reliance on gas" due to a conflict SC-UCS believes exists between SoCalGas' purported "business interest in maintaining reliance on natural gas as a fuel source and the aggressive reductions in fossil fuel use needed to meet state greenhouse gas reduction requirements."[1687] As an initial matter, this purported conflict is entirely manufactured by SC-UCS. SoCalGas has demonstrated repeatedly in this GRC and in its communications and activities with stakeholders that it supports energy-neutral polices and solutions to meet the state's climate goals.[1688] In the RD&D area, projects funded by SoCalGas include P2G, which is

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1681 *See id*. at 10:21 – 13:8; Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 2-16.

1682 *See* Ex. 475 SC-UCS/O'Dea/Golden at 43:7-11 (suggesting that CEC rejected P2G as an appropriate R&D project but failing to cite contrary statements from Appendix B to CEC's proposed EPIC Plan, which states "The EPIC Program currently has no plans to address Power-to-Gas research or demonstrations in the *EPIC 2018 – 2020 Investment Plan*. The Energy Commission may consider adding this research category into the PIER Natural Gas research program in future budget plans where it can be better addressed."). *Id.* at 43, revised fn.217 (citing CEC EPIC Proposed 2018-2020 Triennial Investment Plan, Appendices A-D (April 2017) at B-13 – B-14 (added to corrected testimony). *See* Tr. V29:2718:10 – 2719:12 (Vespa).

1683 *See id.,* Ex. 475 SC-UCS/O'Dea/Golden at 42:8-15.

1684 Ex. 139 SCG/Tomkins at 9 and Appendix B; Tr. V17:1484:17 – 1486:25 (Tomkins).

1685 Ex. 139 SCG/Tomkins at 9; Tr. V17:1485:2-20 (Tomkins).

1686 SoCalGas will address at length the falsity of SC-UCS' claim that SoCalGas has been impeding or discouraging electrification in its discussion of the Policy & Environmental Solutions workgroup section 23.5.2.1 *et. seq*. *infra*.

1687 Ex. 475 SC-UCS/O'Dea/Golden at 44:26-45:2 and 45:25-27.

1688 *See, e.g.*, Ex. 139 SCG/Tomkins at 18; *infra* at section 23.5.2.1.3.

aimed at more efficiently utilizing excess and uneconomic electricity from renewable generation sources in a manner that permits it to be stored and later utilized as clean renewable gas or hydrogen.[1689] Other examples include research into distributed energy resources like fuel cells and combined heat and power (CHP) systems that can generate electricity cleanly and efficiently using renewable gas, reduce strain on the electric grid, and provide electrical supply resiliency to critical infrastructure facilities like hospitals and airports.

SC-UCS attempts to prove its point through a Zero Net Energy (ZNE) study that SoCalGas commissioned as a RD&D project. By providing an incomplete citation and selective use of quotation marks, SC-UCS attempts to infer an objective of the study not intended by SoCalGas or Navigant, the consultant that conducted the study on its behalf. It also fails to capture the correct project description. Rather than "commission a study to analyze the 'technical, economic and market outlook' of mixed-fuel (gas and electric) ZNE homes *over* electric-only homes,"[1690] the Project Description and Objectives were clearly identified as:

> "In preparation for the California building code deliberations, [SoCalGas] engaged Navigant Consulting, Inc. (Navigant) to undertake this study to evaluate the technical, economic and market outlook of Mixed-Fuel ZNE homes. In particular the study is focused on research of the potential for Mixed-Fuel ZNE homes 'in the field.' Additionally, in another study SoCalGas is exploring the potential for incorporating a promising new natural gas technology to support ZNE residential home construction."[1691]

and

> "The purpose of this project is to conduct a technical evaluation of the impact that upcoming [ZNE] regulations will have on single-family residential gas-fired equipment and **how to best incorporate gas equipment into ZNE new construction**. This study will assess various gas technologies and how they will be incorporated into home designs to achieve ZNE targets. Drawing on the work in the technical evaluation, the project will select several of the best equipment packages/technologies that will best meet the market needs for our service territory and to evaluate the capital, operating, and maintenance costs to design, install and operate ZNE homes within Southern California. Another objective of this assessment is **to identify areas to invest future RDD funding to best meet product needs in ZNE homes**."[1692]

1689 *Id.* at 10-11.
1690 Ex. 475 SC-UCS/O'Dea/Golden at 45:9-12 (emphasis added).
1691 *Id.* at Attachment 4, DR-05, Question 2 and Executive Summary, PDF p. 85.
1692 *Id.* at Attachment 4, DR-05, Question 1, PDF p. 79.

Consistent with the last GRC description,[1693] this project analyzed efficient natural gas technologies to support ZNE buildings. An important objective given that 90% of Southern California homes utilize natural gas.[1694]

Equally manufactured is SC-UCS' assertion that SoCalGas is biased and inappropriately skews the assumptions used in studies it commissions using ratepayer funding. In particular, SC-UCS expresses concern with the assumptions that Navigant used for its ZNE study on mixed-fuel homes,[1695] asserting that Navigant improperly neglected to include the cost of gas pipeline infrastructure when analyzing costs for a mixed-fuel versus all electric ZNE home. This is a red herring. Navigant, the highly respected consulting firm that prepared the report, excluded both gas and electric utility interconnection cost from its analysis. As even SC-UCS has admitted in its own comments on this subject to the CEC, the exclusion of gas infrastructure costs was appropriate as the governing Title 24 standard does not require inclusion of such costs. [1696]

The assertions made by SC-UCS fail to survive scrutiny and should be rejected. California's environmental goals and the increasing complexity of our energy delivery systems require more, not fewer, utility resources for policy support and technology advancement. A lauded and robust RD&D program[1697] administered by SoCalGas remains in its ratepayers' best interests. The Commission should accordingly adopt SoCalGas' zero-based TY 2019 RD&D program forecast totaling $14,329,000 as reasonable.

[1693] *Id.* at Attachment 14, JGR 12-13.

[1694] *See* Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 31.

[1695] *See* Ex. 475 SC-UCS/O'Dea/Golden at 45. SC-UCS also falsely asserts that SoCalGas argued to "the CEC that renewable natural gas should be used in residential buildings instead of electrification." *Id.*at 45:14-16 and fn.230. The SoCalGas letter SC-UCS cites as authority for this assertion, Attachment 6, neither states nor can be used to infer any such proposition. Instead, the letter asks the CEC to be mindful of cost and other impacts to consumers, commending establishment of a working group to "ensur[e] that electrification of natural gas end-uses does not preclude adoption of other lower carbon energy sources and decelerate achievement of the State's climate goals," and concludes "SoCalGas strongly believes that a diverse energy portfolio that includes multiple fuels and technologies is needed to meet California's energy needs and environmental policies in a cost-effective and feasible manner." *Id.* at Attachment 6, PDF pp. 85-86; *see also* Ex. 139 SCG/Tomkins at Appendix C, C-2, C-91, and C-98.

[1696] August 27, 2018, Southern California Gas Company's and San Diego Gas & Electric Company's Reply to Sierra Club and Union of Concerned Scientists' Opposition to the Evidentiary Objections to Exhibit 475 (Reply to SC-UCS Opposition) at 10 and Attachment A, at 10 ("Title 24 currently excludes gas infrastructure costs for new construction. . . .").

[1697] *See, e.g.*, Ex. 139 SCG/Tomkins at Appendix A, A-2 (DOE recognition for SoCalGas RD&D work with Pacific Northwest National Laboratory leading to a 2018 Award for Excellence in Technology Transfer by the Federal Laboratory Consortium).

23.5.1.2 Policy and Environmental Solutions

Policy and Environmental Solutions (P&ES) performs both non-shared and shared service functions. The PS&ES nonshared service group monitors, analyzes, and determines how the broad range of relevant policy and legislative issues will affect SoCalGas' customers and operations.[1698] The group helps protect the interests of natural gas customers on safety, reliability, and affordability issues by developing potential policy alternatives. In addition, the group leads analysis, strategy development, and implementation on local and regional planning initiatives.

Educating state, local, and regional governments on the needs of customers, the environmental benefits and cost-effectiveness of natural gas and renewable gas (RG) to meet those needs, allows these stakeholders to make informed decisions. Issues of import to SoCalGas customers include incorporating natural gas and RG into energy efficiency measures, clean transportation, distributed energy resources, and sustainability planning efforts that will help cost-effectively achieve emission reduction goals and increase the likelihood of system reliability using a mix of resources.[1699] Due to the increasing focus on climate change, SoCalGas anticipates expending significant resources engaging with local governments on climate, energy and sustainability planning issues, as approximately 50 jurisdictions in the SoCalGas service territory are now developing climate change policies and plans.[1700] Other types of policies and plans underway include vulnerability assessments, GHG emissions inventories, GHG reduction plans, energy action plans, adaptation or resilience plans, and local coastal programs. Additionally, SB 375[1701] requires metropolitan planning organizations to meet GHG emission reduction targets through integrated transportation, land use, and housing planning.[1702]

The group is further responsible for developing franchise strategies and leading timely negotiations of franchise agreements with municipalities within SoCalGas' service territory to help secure cost-effective outcomes for both customers and the company. During the TY 2019 GRC cycle, this workgroup will develop and implement franchise strategies, and lead complex and time-intensive negotiations with the city of Long Beach, Riverside County and the city and

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[1698] Ex. 137 SCG/Alexander/Tomkins at 21.
[1699] *Id.*
[1700] *Id.* at 22.
[1701] SB 375, Stats. 2007-2008, Ch. 728 (Cal. 2008).
[1702] Ex. 137 SCG/Alexander/Tomkins at 22-23.

county of Los Angeles well as franchise negotiations with the cities of La Canada-Flintridge, Pasadena, and Redondo Beach.[1703] The group also engages in negotiations with local governments to protect existing franchise rights necessary to deliver energy to SoCalGas customers, and to avoid new conditions that may drive up costs or adversely impact customers.[1704]

SoCalGas seeks TY 2019 funding of $897,000 for P&ES nonshared service O&M expenses (labor of $748,000 and non-labor of $149,000). This funding request represents a $130,000 increase relative to BY 2016 costs, which is driven by the increasing number and complexity of policy matters relevant to natural gas utilization and the increased level of engagement required on franchise and fees matters requiring this group's involvement.[1705] SC-UCS was the sole intervenor to contest the P&ES workgroup. It appears to challenge the nature of the activities performed by a portion of the P&ES nonshared services group and makes no alternative TY 2019 funding recommendation.[1706]

23.5.2 Shared Costs

23.5.2.1 Policy and Environmental Solutions

The shared service area of P&ES is a relatively new group, formed in 2013 and expanded in scope in 2015, that is comprised of the following key workgroups: Energy & Environmental Policy, Environmental Affairs, and Planning & Legislative Analysis.[1707] These shared service functions are responsible for policy analysis, engagement, outreach, and customer support related to existing and proposed state and federal policies, including laws and regulations related to natural gas and RG utilization and environmental policy, specifically focused on air quality and climate change policy.[1708] To represent the interests of SoCalGas and SDG&E's customers, the group incurs labor and non-labor costs related to policy analysis and engagement with local and state regulatory organizations as they develop rules and regulations on air quality, climate change

[1703] *Id.* at 23.
[1704] *Id.* at 21. Examples requiring increased engagement by P&ES include attempts to impose more stringent and costly engineered traffic control plans, additional paving requirements, increasing requests to remove instead of abandon pipelines, increasing requests to eliminate or minimize above-ground facilities, new trenching and paving standards, and sharply restricting working hours. *Id* at 23.
[1705] Ex. 137 SCG/Alexander/Tomkins at 22.
[1706] SoCalGas will address SC-UCS' assertions in the discussion of P&ES shared service requests to avoid repetition due to the cross-over of issues and themes.
[1707] Ex. 137 SCG/Alexander/Tomkins at 24.
[1708] *Id*. at 25.

and energy utilization. The state and local jurisdictions have numerous proceedings and hearings that could impact the utilities' operations and customers. Understanding the implications of these proceedings and providing analysis and evidence to support the efficient use of natural gas and low carbon alternative fuels benefits customers and state policy makers. Non-labor costs incurred by this group include employee-related costs and costs for external expert support on proposed policies, laws and regulations, and company and customer compliance impacts.

The P&ES group also provides policy guidance and analysis on proposed regulations and legislation to the Regulatory Affairs and State Government Affairs groups, which are responsible for management of proceedings before the Commission, state agencies and the legislature. P&ES has specific expertise with respect to air quality and climate change issues and working across agencies (including the local air districts, CARB, CEC, California Department of Food and Agriculture (CDFA), CalRecycle, and US EPA Region 9), which allows it to look across the multiple agencies and emissions reduction strategies. In this role, P&ES effectively identifies opportunities for advances in natural gas technologies and low carbon fuels to reduce emissions, while minimizing the impact on customers, and helps ensure environmental policies are promulgated in a reasoned and consistent manner.[1709] These services are critical for SoCalGas and SDG&E customers. While some large customers have environmental policy teams to address issues impacting their operations at these agencies, the majority of the utilities' residential and commercial customers would not be represented in these proceedings and planning efforts without the engagement of the P&ES group.[1710] Policies supporting the efficient use of natural gas and RG that advance state and Commission energy and environmental policy goals benefit customers through cleaner air, lower rates, and reduce customers' compliance costs.[1711]

To support the substantial increase in regulatory, policy, and compliance activities, SoCalGas proposes TY 2019 funding of $2,508,000 for P&ES shared service O&M expenses (labor of $1,335,000 and non-labor of $1,173,000).[1712] The TY 2019 funding request of $2,508,000 represents an increase of $482,000 relative to the BY 2016 costs incurred by

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[1709] *Id.*
[1710] *Id.* at 26.
[1711] *Id.*
[1712] *Id.* at 24 and Table LLA-12.

functions in this group, which is driven by the number and complexity of policy, regulatory, and legislative matters relevant to natural gas and RG.[1713]

Sierra Club is the sole party to contest the activities of the P&ES workgroups. It advances no funding recommendation of its own. SC-UCS' challenge to the P&ES funding can be loosely grouped into two assertions:

- SoCalGas' P&ES group has aggressively sought to block measures by state agencies and local governments that would reduce reliance on fossil fuels by replacing natural gas end uses with electric options.[1714]
- SoCalGas should not recover the costs of activities before state agencies and local governments related to the development of climate policy and greenhouse gas reduction measures.[1715]

The record in this GRC does not support either of SC-UCS' contentions. As demonstrated below, the P&ES group appropriately engages with stakeholders on behalf of SoCalGas ratepayers to protect their interests in a changing policy landscape, and the funding request (both nonshared and shared services) by P&ES should be adopted as proposed.

23.5.2.1.1 SoCalGas' Funding Request for P&ES is Appropriate.

SC-UCS contends that while SoCalGas is a provider of natural gas and related products and services to approximately 6 million customers in Southern California, California should be moving away from use of fossil fuels and adopting electrification as the policy of the State. SC-UCS asserts that "widespread electrification of end uses of energy. . . that currently use natural gas or other fossil fuels" is required for California to achieve its GHG reduction goals.[1716] As reflected throughout SC-UCS' testimony, these policy-related issues are within the purview of the CEC, CARB, and other state and local governmental bodies who have initiated proceedings focused precisely on addressing these policy issues, and both SC-UCS and SoCalGas are actively engaged in these proceedings.[1717] This GRC proceeding; however, is not an appropriate venue for SC-UCS to advance its electrification agenda. Ms. Tomkins made clear in written and oral testimony that, contrary to SC-UCS' views, natural gas and natural gas infrastructure will

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1713 *Id.* at 27.
1714 Ex. 475 SC-UCS/O'Dea/Golden at 11:2-6.
1715 *Id.* at 1:12-14 and 9:23-25.
1716 *Id*. at 5:2-4.
1717 *See, e.g.*, *id.* at 18, fn.65 (citing link to SC-UCS' comments in 2017 CEC IEPR proceeding on renewable gas); Ex.476 (SCG and SC-UCS) SC-UCS Information Piece on electric buses (August 2018).

continue to play a key role in supporting California's decarbonization policies by enabling increased integration of renewable energy, supporting significant GHG emission reductions in the transportation sector and facilitating the delivery of captured biomethane from organic sources for productive use.[1718]

Ms. Tomkins' testimony further reflects that the P&ES group's efforts play a critical role for SoCalGas customers "[g]iven the extensive utilization of natural gas and the embedded investment in the equipment and piping that consumers have made, [making] it [] unlikely that a rapid shift away from natural gas will occur in the foreseeable future. Before a large-scale shift away from natural gas could happen, much debate must occur to determine the costs to accomplish this, how it will be paid for, and whether the benefits are worth the investment. SoCalGas plays an important role in helping customers and other stakeholders understand how policy implementation will affect them."[1719]

Undeterred, SC-UCS makes a series of arguments to suggest that positions and activities SoCalGas has taken in proceedings involving climate policy and elsewhere are not an appropriate use of ratepayer funding and SoCalGas should be precluded from taking positions that could be construed as impeding the state's movement toward electrification. These arguments, pieced together by selective quotes and misconstruction of the evidence, lack merit. SC-UCS' attempt to preclude SoCalGas from effectively representing its customers' interests and from ensuring that state and local decision makers have information about viable alternatives and impacts to SoCalGas customers when making policy determinations should be rejected by the Commission.

23.5.2.1.2 SC-UCS Misapprehends SoCalGas' Business

SC-UCS asserts, as the underpinning for its arguments, that SoCalGas has a conflict of interest due to its "fundamental business interest in the sale of a fossil fuel—natural gas—and investment in the infrastructure supporting its delivery."[1720] Citing to the Risk Factors section of Sempra Energy's Form 10-K, its Annual Report to shareholders, SC-UCS further asserts that because the "increased use of renewable energy and electrification in lieu of the use of natural gas" has been identified as a potential risk for SoCalGas, it has a "shareholder interest in

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[1718] Ex. 139 SCG/Tomkins at 16.
[1719] *Id. See also id*. at 2:23-3:15.
[1720] Ex. 475 SC-UCS/O'Dea/Golden at 1:15-16.

obstructing fuel switching from gas to electric-end uses,"[1721] and therefore should not be using ratepayer funds to conduct "pro-gas advocacy."[1722] This assertion and SC-UCS' opinion is incorrect on multiple levels.

First, not only does SC-UCS mischaracterize the nature and import of the single page from the Form 10-K it provides, it also misleadingly cites to the language on that single page.[1723] The actual language SC-UCS refers to reads:

> "Furthermore, California legislators and stakeholder, advocacy and activist groups have expressed a desire to further limit or eliminate reliance on natural gas as an energy source by advocating increased use of renewable energy and electrification in lieu of the use of natural gas. A substantial reduction or elimination of natural gas as an energy source in California, could have a material adverse effect on SDG&E's SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations."[1724]

The isolated language that SC-UCS references falls within one of the numerous items listed in the thirty-page "Risk Factors" section of Sempra Energy's Form 10-K. The SEC's rules require issuers of securities to identify "significant factors that make the offering speculative or risky" in order to provide existing and potential shareholders with information that they should be aware of before making an investment decision.[1725] Sempra Energy is describing possible risks as it is required to do under SEC rules.[1726] The language (which references its applicability to SDG&E – an electric and gas utility – SoCalGas and Sempra Energy) should not be used as evidence of a purported "shareholder interest in obstructing fuel switching from gas to electric-

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[1721] August 21, 2018, Sierra Club and Union of Concerned Scientists Opposition Brief on Southern California Gas Company's and San Diego Gas & Electric Company's Evidentiary Objections to Exhibit 475, the Prepared Testimony of James O'Dea on Behalf of Union of Concerned Scientists and Rachel Golden on Behalf of Sierra Club at 6.
[1722] Ex. 475 SC-UCS/O'Dea/Golden at 1:12-31.
[1723] *See id.* at Attachment 5, PDF pp. 2-3.
[1724] *Id.* at PDF p. 3. SC-UCS provided only page 51 and the face page of Sempra Energy's 2017 Form 10-K. *See* id. at Attachment 5. That one page fails to provide context for the purpose of the disclosure. A link to the official, publicly available document filed with the Securities and Exchange Commission (SEC) is provided here to allow the Commission to take official notice of the context for the language SC-UCS cites. *See* United States Securities and Exchange Commission, Sempra Energy 2017 Form 10-K Item 1a Risk Factors (Sempra 2017 Form 10-K) at 37-68, *available at* https://www.sec.gov/Archives/edgar/data/86521/000008652118000019/sreform10k.htm.
[1725] 17 Code of Federal Regulations § 229.503 (Item 503) Prospectus summary, risk factors, and ratio of earnings to fixed charges at § 229.503(c).
[1726] *See id*. at § 229.503(c)(1) – (5).

end uses" as SC-UCS argues.[1727] When placed into context, Sempra Energy's Form 10- K is simply not relevant to the GRC.[1728]

Second, SC-UCS' opinion that SoCalGas is biased or serves interests that differ from its customers' is belied by the evidence in the record. SC-UCS opines that "achievement of California's climate objectives requires substantial reduction in natural gas consumption. Accordingly, there is conflict between SoCalGas' financial interest in maintaining reliance on natural gas as a fuel source and the aggressive reductions in fossil fuel use needed to meet state greenhouse gas reduction requirements."[1729] This opinion rests on a false premise. SoCalGas' activities are inextricably tied to its customers' interests.

[1727] Indeed, the introduction to the Risk Factor section informs the reader: "When evaluating our company and its subsidiaries, you should consider carefully the following risk factors and all other information contained in this report. These risk factors could materially adversely affect our actual results and cause such results to differ materially from those expressed in any forward-looking statements made by us or on our behalf. We may also be materially harmed by risks and uncertainties not currently known to us or that we currently deem to be immaterial. If any of the following occurs, our businesses, cash flows, results of operations, financial condition and/or prospects could be materially negatively impacted. In addition, the trading prices of our securities and those of our subsidiaries could substantially decline due to the occurrence of any of these risks. These risk factors should be read in conjunction with the other detailed information concerning our company set forth in, or attached as an exhibit to, this annual report on Form 10-K, including, without limitation, the information set forth in the Notes to Consolidated Financial Statements and in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations." Sempra 2017 Form 10-K at 37 (emphasis in original). Moreover, readers of the 10-K are informed at the outset that forward-looking statements in the 10-K report "are based upon assumptions with respect to the future, involve risks and uncertainties, and are not guarantees of performance. Future results may differ materially from those expressed in the forward-looking statements. These forward-looking statements represent our estimates and assumptions only as of the filing date of this report. We assume no obligation to update or revise any forward-looking statement as a result of new information, future events or other factors." Id. at 9-10.

[1728] SC-UCS also took liberties and editorialized the language of the 10-K in a misleading way to suggest that SoCalGas admits "'increased use of renewable energy and electrification in lieu of the use of natural gas,' **measures that are critical to achieving California's decarbonization objectives**, **would** have a 'material adverse effect on [its] cash flows, financial condition and results of operations.'" The bolded language neither exists nor can be inferred from the actual 10-K language SC-UCS quotes. Ex. 475 SC-UCS/O'Dea/Golden at 1:17-20 (emphasis added).

[1729] *Id.* at 10:9-13. As the Commission knows, SoCalGas' business is to transport energy, whether natural gas, RD, or other forms of qualifying alternative fuels. SC-UCS' fundamental assumption regarding SoCalGas' business model is incorrect.

Approximately 90% of ratepayers in Southern California use natural gas in their home or business.[1730] SoCalGas' activities support those ratepayers' interest in maintaining affordable, reliable sources of energy supply, products, and services consistent with the climate policy of the state and ensuring that decision makers are aware of potential impacts to those ratepayers when considering new policies or regulations.[1731] Moreover, SoCalGas activities support the policy of the state by helping to develop new technologies for the transportation, appliance and building sectors and then utilizing its existing infrastructure to decarbonize the pipeline by transporting biomethane, hydrogen and synthetic gas.[1732] These activities are firmly grounded in current state law and policy and for the benefit of SoCalGas' ratepayers.[1733] SC-UCS' opinion is unfounded and should be ignored.

23.5.2.1.3 P&ES Activities Do Not Impede State Policy Objectives or Mislead Stakeholders.

The bulk of SC-UCS' attack on the P&ES group relates to its claim that "SoCalGas' participation in state and local efforts to impede electrification and undermine progress on decarbonization should not be ratepayer-funded."[1734] SC-UCS then advances a number of examples through which it asserts SoCalGas has acted inappropriately to interfere with state climate goals or to mislead stakeholders.

After purporting to describe "California's climate trajectory and the declining role of natural gas,"[1735] SC-UCS initially asserts that SoCalGas is misleading stakeholders by failing to

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[1730] *See* Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 31; *see also* Reply to SC-UCS Opposition at 5, fn.9 and Attachment A, at 9 (admitting that 85% of homes in California have gas furnaces and water heaters).

[1731] *See, e.g.*, Ex. 137 SCG/Alexander/Tomkins at 22:8-22, 26:5-19, 28:10 – 35:10; Ex. 139 SCG/Tomkins at Appendix C, at C-4 – C-9 (SoCalGas letter to Southern California Association of Governments *re Draft 2016 RTP/SCS [2040 Regional Transportation Plan/Sustainable Communities Strategy] Comments* (dated February 1, 2016).

[1732] *See* Ex. 137 SCG/Alexander/Tomkins at Appendix D.

[1733] *Id.* at 22:8-22, 26:6-19, 28:10 – 35:10, and Appendix A. SC-UCS' assertion that SoCalGas activities in support of mixed fuel ZNE homes are for the benefit of shareholders and should not be subsidized by ratepayers fails for similar reasons. *See* Ex. 475 SC-UCS/O'Dea/Golden at 4-6. As discussed in detail *infra*, SoCalGas' activity related to mixed-fuel ZNE homes is to allow its customers to maintain their preferred reliable and affordable gas service using renewable gas.

[1734] Ex. 475 SC-UCS/O'Dea/Golden at 1:27-28.

[1735] *See id.* at 3:1-2. As noted previously, SoCalGas does not believe this GRC proceeding is the proper forum to debate the status or trajectory of California's environmental policy. *See supra* at section 23.5.2.1.1 and Ex. 139 SCG/Tomkins at 2-3. Numerous existing laws and regulations incentivize the development of RG as a strategy to reduce greenhouse gas generally and in the housing and transportation sectors (*see, e.g.*, SB 1383, Stats. 2015-2016, Ch. 395 (Cal. 2016), CARB Scoping Plan, CARB Short educate them that biomethane, a form of renewable gas, is limited in quantity. Specifically, SC-UCS argues: "SoCalGas often offers the promise of biomethane as a reason why electrification of various sectors is unnecessary to meet state climate goals."[1736] It then cites a variety of letters from SoCalGas to local governments and CARB, and concludes "in [its] opinion, SoCalGas' failure to disclose the limited biomethane potential in arguing against electrification in agency proceedings both misinforms policymakers and undermines the aggressive action needed to achieve state environmental goals."[1737] SC-UCS' position is manufactured and erroneous on multiple levels.

The materials SC-UCS cites do not support its claim that SoCalGas is arguing against electrification in agency proceedings. To the contrary, in letter after letter SoCalGas suggests that the stakeholder take a balanced approach in the area under consideration, indicating biomethane and the multiple forms of RG are tools in the climate solution toolbox.[1738] For example:

- The City of Redlands "should include consideration of renewable gas (*i.e*., biomethane) as a renewable energy resource in addition to those explicitly listed in the document [zero-emission technologies, 'such as hydroelectricity, geothermal, solar and wind power, to meet the community's needs'], and also convey a technology neutral mindset in the language of the supporting policies."[1739]
- "SoCalGas encourages the City of Pasadena to adopt a diverse energy portfolio that includes multiple fuels and technologies to meet California's energy needs and climate change targets in a cost-effective and timely manner."[1740]

Lived Climate Pollutant Plan), and require regular reporting on the continuing role of natural gas in the state (*see, e.g.*, SB 1389, Stats. 2015-2015, Ch. 791 (Cal. 2016), AB 1257, Stats. 2013-2014, Ch. 749 (Cal. 2013), and CEC IEPR and updates).

1736 Ex. 475 SC-UCS/O'Dea/Golden at 21:22-23.

1737 *Id.* at 22:10-13. *See also id.* at 22:16-20 (admitting biomethane can be used to replace current uses of natural gas but opining "there is nowhere near enough potential biomethane to justify forestalling electrification of the building and transportation sectors.").

1738 To be clear, and as its testimony reflects, "SoCalGas supports technology-neutral policies and regulations, and we work to ensure that the most economic and feasible pathways to achieving state goals will be considered by policy makers." Ex. 137 SCG/Alexander/Tomkins at 3:21-23. This is not about picking winners and losers or placing all of the state's energy eggs in one basket as SC-UCS advocates. "A diversified mix of energy resources, including natural gas and renewable gas, is crucial to achieving the state's policies and energy reliability." *Id.* at 3:29-30.

1739 Ex. 139 SCG/Tomkins at Appendix C, C-121 and C-123 (SoCalGas Letter to Troy Clark, General Plan Administrator, City of Redlands, *Re: City of Redlands draft Sustainable Community Element*) (Ex. 475 SC-UCS/O'Dea/Golden, Attachment 6(q)).

1740 *Id.* at C-102 (SoCalGas Letter to Anita Cerna, Senior Planner, City of Pasadena, *Re: City of Pasadena Draft Climate Action Plan*) (Ex. 475 SC-UCS/O'Dea/Golden, Attachment 6(n)) (addressing feasibility of renewable gas as an alternative fuel vehicle).

- "SoCalGas supports the pursuit of a performance-based standard, not a technology mandate, to address GHG and criteria pollutant emissions, thereby providing transit agencies with affordable technology choices and operational flexibility."[1741]
- "SoCalGas recommends that the City of Indio maintain *technology-neutral* both in mindset in the language of their updated General Plan to recommend **both** zero and near-zero emission technologies among their strategies and policies."[1742]

Nor can SoCalGas' comments be construed as suggesting that biomethane is a silver bullet that will replace all fossil fuel.[1743] SoCalGas has provided the CEC with analyses on the availability of renewable gas in California and the United States.[1744]

Not only did SoCalGas provide this data publicly to the relevant stakeholder agency, but it consistently disclosed that development and supply of renewable fuels would increase as demand and policy direction progressed.[1745] SC-UCS' assertion that SoCalGas failed to inform

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1741 *Id.* at C-53 – C-60 (SoCalGas Letter to Rajinder Sahota, California Air Resources Board *re SoCalGas Comments on the 2017 Climate Change Scoping Plan Update* (April 10, 2017)) and at C-60 (Concluding "SoCalGas strongly believes that a diverse energy portfolio that includes multiple fuels and technologies is needed to meet California's energy needs and climate change targets in a cost-effective and timely manner.") (Ex. 475 SC-UCS/O'Dea/Golden, Attachment 6(h)).

1742 *Id.* at C-118 (SoCalGas Letter to Leila Namvar, Assistant Planner, City of Indio, *Re: Indio General Plan Update*) (Ex. 475 SC-UCS/O'Dea/Golden, Attachment 6(p) (emphasis in original).

1743 *See, e.g.*, *id.* at 17 and Appendix C, at C-66 (SoCalGas letter to CEC regarding *Comments on the IEPR Staff Workshop on 2030 Energy Efficiency Targets, Docket number 17-IEPR-06-Doubling Energy Efficiency Savings* (June 30, 2017)), telling CEC that "[a] CARB/UC Davis study estimated that around 20% of California's residential natural gas can be supplied by renewable gas from organic sources such as dairy manure, landfills, organic municipal solid waste, and wastewater treatment facilities." (citing https://www.arb.ca.gov/research/apr/past/13-307-pdf).

1744 Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 20 and 36-54. For example, as part of the 2017 CEC IPER record, SoCalGas submitted an analysis prepared by ICF. This analysis reviewed the available studies of the DOE, University of California, Davis, the American Gas Foundation and the National Petroleum Council, and estimated a range of U.S. and California biogas potential far greater than the amount SC-UCS advocates through its own analysis. *See id.*; Ex. 475 SC-UCS/O'Dea/Golden at 18, fn.65 (citing link to 17-IEPR-10 July 14, 2017 Comments of UCS (O'Dea) on Renewable Gas, also attaching Ex. 475, SC-UCS/O'Dea-Golden Attachment 3, The Promises and Limits of Biomethane as a Transportation Fuel). These comments were submitted to the CEC the same day that SoCalGas provided its comments on the same topic.

1745 *See* Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 30-33 (discussing renewable gas potential to reduce GHG and NOx emissions stating, for example, "as the demand for renewable fuels in the transportation sector develops over time, more renewable gas will be developed and become available to decarbonize natural gas end-uses in residential and commercial uses, as well as generate electricity.") *Accord*, Ex. 137 SCG/Alexander/Tomkins at 5:5-7 ("As demand for RG as a transportation fuel increase, it will attract additional supplies to the region, which can then be used to decarbonize natural gas end uses in homes and businesses.").

policymakers about biomethane and other renewable gas potential and the claim that failure to do so misinforms such policymakers[1746] is simply incorrect.

As aptly put by Ms. Tomkins, "[a]gencies and local governments conduct workshops and issue draft documents seeking comments from all stakeholders to ensure they get a broad cross section of opinions to inform their decisions."[1747] That process is clearly working here.

23.5.2.1.4 SC-UCS Mischaracterizes P&ES Activities.

SC-UCS confuses participation in open regulatory proceedings with acts of aggression when it argues "[P&ES] has aggressively sought to block measures by state agencies and local governments that would reduce reliance on fossil fuels by replacing natural gas end uses with electric options."[1748] SC-UCS finds fault with SoCalGas' public comments to educate stakeholders about the benefits of energy diversity and retention of natural gas and RG end uses. As explained in testimony, the purpose of open regulatory proceedings is for regulators to hear multiple viewpoints, and then take those viewpoints into consideration in making informed and balanced decisions.[1749] With 90% of homes in SoCalGas' service territory utilizing natural gas,[1750] SC-UCS' "opinion [that] SoCalGas' participation in state and local efforts to reduce greenhouse gas pollution impedes progress on decarbonization, is not in ratepayers' interests, and should therefore not be ratepayer-funded,"[1751] is just that—merely its opinion and entitled to little weight.

An examination of the areas where SC-UCS claims SoCalGas has impeded or blocked electrification demonstrate that this is little more than an attempt by SC-UCS to deprive SoCalGas of its ability to engage and educate state and local entities about issues of concern to customers. Those topics include educating state and local government stakeholders on natural and renewable gas options and their viability to address state climate goals. As Ms. Tomkins

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[1746] *See* Ex. 475 SC-UCS/O'Dea/Golden at 22:10-13.

[1747] Ex. 139 SCG/Tomkins at 18:18-20. In fact, SC-UCS provided its own study on renewable gas in the same CEC proceeding. *See* Ex. 475 SC-UCS/O'Dea/Golden at 18, fn.65 (link to 17-IEPR-10 July 14, 2017 Comments of UCS (O'Dea) on Renewable Gas) and fn.66 also (attaching Attachment 3, *The Promises and Limits of Biomethane as a Transportation Fuel* (UCS 2017)).

[1748] Ex. 475 SC-UCS/O'Dea/Golden at 11:4-6. SC-UCS tries to draw a parallel here with conduct at issue in another proceeding (related to activities in the energy efficiency Codes and Standards Program at SoCalGas) that are not part of any request in this GRC. *See id.* at 10:14 – 11:6. There is no analogy to be drawn and SC-UCS' attempts to do so should be ignored.

[1749] Ex. 139 SCG/Tomkins at 16:22-25.

[1750] *See* Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 31.

[1751] Ex. 475 SC-UCS/O'Dea/Golden at 11:10-12.

testified, SoCalGas has done no more than "consistently offered comments on the importance of considering policies under existing law as the CEC [or other stakeholders] consider[] new means to meet GHG reduction goals."[1752] SC-UCS' claims should be ignored.

23.5.2.1.4.1 ZNE Building Examples are Unfounded

SC-UCS provides several examples where it asserts that SoCalGas is misusing ratepayer funding by "repeatedly argu[ing] against including electrification of building energy use in CEC policy recommendations or targets."[1753] Each of these examples is based on selective quotes from letters that SoCalGas submitted to state and local government agencies. When the letters are read in full, it is clear that SoCalGas' comments are not an attempt to mislead stakeholders or an improper use of ratepayer funding, as SC-UCS suggests.

23.5.2.1.4.2 Red Herring 1: Electrification of Final End-Uses Impediment

SC-UCS isolates select language from two SoCalGas letters to the CEC on SB 350 energy efficiency (EE) as proof that SoCalGas is acting for its own interest to frustrate progress toward electrification while using ratepayer funds.[1754] Not surprising, by plucking only a few words from each comment letter, SC-UCS has taken SoCalGas' comments completely out of context. Consistent with its approach elsewhere, SoCalGas' letters remind stakeholders about the importance of considering existing laws when shaping new regulations to meet GHG goals.

SC-UCS first focuses on a single heading from a SoCalGas post-EE Savings workshop comment letter to the CEC, which reads: "Electrification of Final End-Uses Impedes Implementation of Climate Goals."[1755] The five-page letter provides comments on the workshop's purpose "to discuss proposed methodologies for establishing 2030 [EE] savings targets called for by Senate Bill (SB) 350," and asks the CEC to consider other "recently enacted state policy goals, such as SB 1383 and CARB's Short-Lived Climate Pollutant (SLCP) Reduction Plan [which] require the increased use of renewable gas to reduce methane from

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[1752] Ex. 139 SCG/Tomkins at 17:1-14 (providing examples).
[1753] Ex. 475 SC-UCS/O'Dea/Golden at 11:18-20.
[1754] *See Id.* at 11:18-28 and Attachments 6(i) and (j).
[1755] Ex. 139 SCG/Tomkins at 17 and Appendix C, C-61 – C-67 (SoCalGas letter to CEC regarding *Comments on the IEPR Staff Workshop on 2030 Energy Efficiency Targets, Docket number 17-IEPR-06-Doubling Energy Efficiency Savings* (June 30, 2017)), referring to Ex. 475 SC-UCS/O'Dea/Golden at 11:18-28 and Attachment 6(i).

organic sources by 2030, including injection into natural gas pipelines and utilization in the transportation sector" while implementing the SB 350 objectives. [1756]

Similarly, the snippet of one sentence that SC-UCS excises from SoCalGas comments to CEC Staff's draft papers, reads in full: "SoCalGas cautions that including electrification of final end-uses as a strategy to reduce energy consumption may preclude adoption [of] other lower carbon energy sources and decelerate achievement of the state's climate goals." Once again, SoCalGas remarks that "the State recently adopted several policies that rely on the continued use of natural gas infrastructure to meet the State's decarbonization goals."[1757] The letter concludes "that a diverse energy portfolio which includes multiple fuels and technologies is needed to meet California's energy needs and environmental policies in a cost-effective manner."[1758] This language is a far cry from the SC-UCS' claim that SoCalGas is arguing against electrification in the state. SC-UCS' efforts to eliminate SoCalGas' ability to protect its customers' interest in balanced and even-handed regulation, by mischaracterizing SoCalGas' comments and intent, should be rejected.

23.5.2.1.4.3 Red Herring 2: The Duck Curve Impact

SC-UCS next claims "SoCalGas has also raised unsupported technical arguments to oppose building electrification," stating: "SoCalGas provides no support for its statement that building electrification will cause grid reliability issues or worsen the duck curve."[1759] This self-manufactured argument also fails. The full text of SoCalGas' comments puts things into perspective and highlights two things: (a) that the "unsupported technical assertion" claimed by SC-UCS, originated from three authorities discussing the challenges to the duck curve from

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[1756] *Id.* at 17 and Appendix C, at C-65 (Ex. 475 SC-UCS/O'Dea/Golden Attachment 6(i) at PDF, pp. 45-46) ("caution[ing the CEC] that including electrification of final end-uses as a strategy to reduce energy consumption may preclude implanting California's goals to increase the use of renewable gas in the transportation and building sectors."). SoCalGas also encouraged the CEC to "utilize the CPUC's established rules, referred to as the three-prong test, to determine if the substitution of EE technologies is eligible as a ratepayer-funded EE program/measure/project. [Stating] [t]hese rules, which align with SB 350, are intended to ensure that eligible fuel substitution projects are cost-effective, more efficient, and do not adversely affect the environment." Ex. 139 SCG/Tomkins at Appendix C, at C-63 – C-64.
[1757] Ex. 139 SCG/Tomkins at Appendix C at C-71 (Ex. 475 SC-UCS/O'Dea/Golden at 11:18-28 and Attachment 6 at PDF p. 69) (CEC Docket No. 17 IEPR-06, SoCalGas Comments on CEC Staff's Two Draft Papers on SB 350 Energy Efficiency Savings Doubling Targets (August 3, 2017).
[1758] *Id.* at Attachment 6, PDF p. 73.
[1759] Ex. 475 SC-UCS/O'Dea/Golden at 12:10-22.

increasing amounts of solar power and the need to balance supply and demand, and (b) that the CEC itself expressed concerns about solar PV electrification and grid harmonization in its April 20, 2017 ZNE strategy presentation:[1760]

"Balanced Energy Approach

With California's aggressive greenhouse gas reduction goals, many have asserted that the best path to achieve those goals is through widespread electrification. However, when appropriate analyses are conducted, it raises concerns around grid reliability and harmonization. This issue has been recognized through what is commonly known in California as "the duck curve," depicting net load over a 24-hour period. **A comparison of forecasted versus actual net load shows that this issue develops faster and more pronounced than anticipated, and requires assertive mitigation. 6,7,8 The CEC reiterates in its latest ZNE strategy presentation that these concerns are exacerbated due to solar photovoltaic (PV) over-generation from buildings. SoCalGas urges the CEC to continue on the path of balanced energy, allowing builders and designers to utilize all available resources, from higher efficient energy systems to multiple fuel sources, both for conventional use and renewable generation systems. This approach fosters innovation, competition and flexibility, while still advancing California's energy policies. SoCalGas participates in multiple research and demonstration projects that showcase the feasibility and success of a balanced energy approach, and will continue to support the CEC in defining and executing similar projects in the future."**

6 https://www.eia.gov/todayinenergy/detail.php?id=32172
7 http://www.scottmadden.com/wp-content/uploads/2016/10/Revisiting-the-Duck-Curve Article.pdf
8 http://www.nrel.gov/docs/fy16osti/65023.pdf

The letter, taken in full, shows that SoCalGas was lauding the CEC's extensive efforts "to present a balanced energy approach striving to minimize potential negative impacts to the electric grid while giving builders, local jurisdictions, and California utility customers the flexibility to identify and choose the most effective pathways to comply with California's ZNE goals."[1761] SC-UCS has misread SoCalGas' comments, and its arguments on electrification of heating are misplaced in this proceeding.

[1760] Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 18 and 24-25, citing *SoCalGas August 22, 2017 Proposed 2019 Building Energy Efficiency Standards ZNE Strategy Presentation Comment Letter* Sept. 6, 2017) (emphasis added to show underline (SC-UCS cite) and bold (balance of comments and attribution by SoCalGas)).

[1761] Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 24. (commenting further that the CEC should continue to be mindful of cost effectiveness—"allowing flexibility for consumers and builders to select from multiple compliance paths and energy options with comparatively small PV systems maximize the cost effectiveness potential in designing ZNE homes."). *See also id.* at 25.

23.5.2.1.4.4 Red Herring 3: The Cost Associated with ZNE Homes

SC-UCS next takes issue with SoCalGas' request for the CEC to take cost-effectiveness into account when considering ZNE homes. Using the CEC's electric heat pumps example, SoCalGas cautioned the CEC that any regulation should consider whether combined heat pump and water heating packages were cost effective in existing buildings.[1762]

Nevertheless, SC-UCS still proclaims SoCalGas mislead the CEC with comments that mixed-fuel ZNE homes are cost-effective with "'modest homeowner annual cost savings' for natural gas," when the study SoCalGas commissioned from Navigant purportedly says the opposite, namely, that homes using natural gas have 'higher annual utility costs' than all-electric homes."[1763] Not so. As SoCalGas made clear in its response to SC-UCS' data request on the subject: "SoCalGas did not state there would be <u>lower annual utility costs</u> in the IEPR comment letter, dated November 13, 2017."[1764] The text and related footnote from the letter, shown below, note there would be *comparable or lower costs* and specifically referenced lower upfront costs and modest homeowner annual cost savings for ZNE homes using RG for natural gas appliances:

> Pipeline access allows renewable gas to be flexibly delivered to decarbonize natural gas end-uses in both the residential and commercial sectors. As California implements additional programs to decarbonize the residential energy market, **directing renewable gas to residential appliances can provide similar benefits at a comparable or lower cost than all-electric homes utilizing solar photovoltaic (PV) systems**.[21] Using renewable gas in the home removes the need to electrify end uses, which would be costly to ratepayers and create feasibility challenges. As 90% of homes in Southern California use natural gas, decarbonizing existing pipeline infrastructure with renewable gas is a more feasible GHG-reduction strategy than electrification and promotes customer choice, energy diversity, and resilience.
>
> [21] Renewable gas in a mixed-fuel home would provide lower upfront costs (5-10%), smaller solar PV sizes (-.4-0.7 kW) and modest homeowner annual cost savings. Navigant Consulting, Inc. 2017. "Strategy and Impact Evaluation of

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[1762] *Id.* at 27-28 (*SoCalGas Comments on the Draft 2017 Integrated Energy Policy Report—17-IEPR-01-General/Scope* (November 13, 2017)) citing *the City of Palo Alto, TRC Energy Services, "Palo Alto Electrification Final Report"* (November 16, 2016).

[1763] Ex. 475 SC-UCS/O'Dea/Golden at 13:3-15.

[1764] Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 18 (emphasis in original) (*citing* SoCalGas Comments to CEC Draft 2017 IEPR at 27-35 (November 13, 2017).

Zero-Net-Energy Regulations on Gas-Fired Appliances." Report prepared for Southern California Gas Company. March 7, 2017. [1765]

Navigant's preliminary analysis on the direct use of renewable natural gas in ZNE homes and conclusions reflect "Under the Low and Medium RNG cost scenarios ($1.0-$1.2 per therm procurement cost), the RNG tariff would provide lower upfront costs, smaller solar PV sizes, and modest homeowner annual cost savings."[1766] SC-UCS' contentions, based on piecemeal and unsupported claims, are again not born out by a review of SoCalGas' full comments to the CEC.

23.5.2.1.4.5 Red Herring 4: The [Mis]Use of O&M Funding

Finally with respect to electrification of buildings, SC-UCS takes issue with an opinion letter submitted by SoCalGas and published by the Sacramento Bee, claiming that SoCalGas is wrongly using ratepayer funds to sway public opinion against pending legislation,[1767] as well as a 2015 study commissioned by SoCalGas to "examine[ ] the potential role of decarbonized pipeline gas fuels, and the existing gas pipeline infrastructure, to help meet California's long-term climate goals."[1768] Like SC-UCS' other claims that SoCalGas is improperly expending ratepayer dollars to oppose electrification, these examples fall far short.

First, the opinion letter submitted by the External Affairs group, and not the P&ES area of SoCalGas, called public attention to proposed legislation with a potential unintended consequence—raising costs to Californians if they were forced to switch their natural gas appliances out for electric appliances.[1769] In a state where the Legislature and the Commission have raised real affordability concerns for ratepayers, raising ratepayer awareness that new proposed legislation may increase their burden further and informing them that other options exist to combat climate change ensures that ratepayers are appropriately informed. Although SC-UCS' says it disagrees that electrification of home energy use would increase costs for the 90% of Southern California homeowners that currently use natural gas in their homes, it provides

[1765] *Id.*; Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 19 and 31(emphasis in original).
[1766] *See* Ex. 475 SC-CSU/O'Dea/Golden at Attachment 4, DR-05, Question 2 PDF pp. 114-116 (Navigant Study at 35).
[1767] *Id.* at 14, referring to Attachment 4, DR-08, Question 4 (George Minter, *Most of us can't afford to go all-electric. Here's a fairer way to curb climate change*, Sacramento Bee (April 20, 2018), PDF p. 173.
[1768] *See id.,* pointing to Attachment 4, SoCalGas response to Data Request Sierra Club-SCG-01, Q21 (E3 Study, Decarbonized Gas Report at 1).
[1769] *Id.* at 14, Attachment 4, DR-08, Question 4, PDF p. 173.

no support for its opposition,[1770] demonstrating once again that SC-UCS' sole purpose in this GRC is to prevent SoCalGas from educating and informing ratepayers and stakeholders on natural gas and other low emission alternatives that can help California meet its climate goals.

Likewise, SC-UCS' critique of the Decarbonized Gas study commissioned with TY 2016 GRC authorized funding, fails to demonstrate that SoCalGas is ill-advisably expending ratepayer funds. As SoCalGas explained in its testimony:

> Due to the complexity, ambitious scope and sheer number of plans, policies, and proceedings that affect natural gas customers, we require external support in order to contribute information that will advance the thinking and broaden the perspective of local, state and federal policymakers as they consider how to meet California's ambitious environmental goals and craft new proposed federal climate change-related regulations and policies. SoCalGas' objective is to provide information to relevant state and federal proceedings about natural gas technologies and best practices with respect to controlling methane emissions from natural gas facilities that will help meet environmental goals in the most efficient and cost-effective manner.[1771]

The E3 study was identified as a non-labor expense to "(2) assess the potential long-term role of natural gas in meeting California's GHG and air quality goals."[1772] There is nothing inappropriate about the company looking to explore ways to assist California in meeting its climate goals while at the same time benefiting the 90% of households utilizing natural gas for their daily needs.[1773] SoCalGas could not be more clear in its testimony:

> Consistent with the state's environmental goals and the context of the various proceedings described above, SoCalGas is looking at natural gas supply like California looks at electric supply. Over the past 30 years, the state has been increasing the use of renewable resources to make the electric supply more renewable and lower in carbon emissions.[1774] SoCalGas plans to do the same with gas supply. RG from a variety of sources can displace traditional natural gas – in fact, California's energy and climate change goals require us to do this. As discussed in more detail below, the state's goals require capture of 40% of

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[1770] Indeed, although SC-UCS claims SoCalGas' statement on the potential cost implications to homeowners is "without basis" and "not true." SC-UCS cites merely to SoCalGas' opinion letter as support for its comments. *See* Ex. 475 at 14:14-19 and fn. 51.

[1771] Ex. 137 SCG/Alexander (Tomkins) at 34:4-11.

[1772] *Id.* at 34:14-16.

[1773] *See* Ex. 145R (SCG and SC-UCS) SC-UCS DR-09, Questions 9 and 10 at 31

[1774] P.U. Code § 399.11(b) and § 399.11(b)(4) ("Achieving the renewables portfolio standard through the procurement of various electricity products from eligible renewable energy resources is intended to provide unique benefits to California, including all of the following, each of which independently justifies the program: . . . Meeting the state's climate change goals by reducing emissions of greenhouse gases associated with electrical generation.").

> methane emissions from primarily the state's waste streams.[1775] This methane can be put to beneficial use if it is stored in our pipeline system and delivered to customers, who will not need to change their end-use equipment. In doing this, our objective is to take the fossil out of the fuel supply and decarbonize the pipeline.
>
> The continued use of the gas pipeline delivery system to provide another form of renewable energy in addition to renewable electricity provides environmental, reliability, resiliency and economic benefits to all Californians.[1776]

The Commission should reject SC-UCS' opinions and adopt SoCalGas' request as reasonable.

23.5.2.1.4.6 Transportation Examples are Flawed

Like its arguments on ZNE building regulations and proceedings, SC-UCS' claim that SoCalGas is utilizing ratepayer funds inappropriately to interfere with the electrification of transportation, fails to hold water. Fundamentally SC-UCS disagrees with SoCalGas on the readiness today of heavy-duty zero emission electric vehicles to meet market demand and the need for low emission alternative fuel vehicles to help support climate goals. According to SC-UCS, zero emission buses and other heavy-duty vehicles have sufficiently advanced and provide a cost and environmental benefit that is superior to low emission vehicles that have the capacity to utilize renewable gas. Due to its view on heavy-duty zero emissions vehicle availability, SC-UCS then takes the position that SoCalGas communications to regional agencies or local government that suggest otherwise must be false and misleading and should be prohibited.[1777] Again, contrary opinions to those expressed by SC-UCS are not permitted. Fortunately, that is not the litmus test by which SoCalGas' activities and communications are judged.

As SoCalGas demonstrated in its testimony, SC-UCS again takes a piecemeal approach when it criticizes SoCalGas for engaging with cities[1778] on bus procurement in a purported effort to "push local governments to procure natural gas buses over electric options."[1779] Taking issue with fragments of SoCalGas communications on transportation fleet options, SC-UCS argues at

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[1775] SB 1383, Stats. 2015-2015, Ch. 395 (Cal. 2016).
[1776] Ex. 137 SCG/Alexander/Tomkins at 4:10-23.
[1777] *See, e.g.*, Ex. 475 SC-UCS/O'Dea/Golden at 15:12-19 and 20:5-14.
[1778] SC-UCS appears to question why SoCalGas engages with Regional Agencies and Local Governments. *See id.* at 21:16-19. As SoCalGas explained to SC-UCS in discovery, these entities are customers of SoCalGas, and entitled to understand the types of products and services available to them and the potential impacts of their decisions.
[1779] *Id.* at 21:4-5.

length about the studies its witness co-authored and erroneously claims that "SoCalGas' false statement that CNG buses fueled by biomethane have lower greenhouse gas emissions than electric buses is not based on a vehicle-to-vehicle comparison, but instead relies on an arbitrary selection of scenarios looking at cumulative emissions over the next 40 years. . . ."[1780] Far from arbitrary, SoCalGas' comments highlighted the findings contained in the independent study commissioned by the Los Angeles County Metropolitan Transportation Authority (LA Metro) from Ramboll Environ.[1781] As SoCalGas appropriately asked local governments and CARB to consider when they were evaluating climate-related plans:

> [T]ransit agencies including Los Angeles County Metropolitan Transportation Authority (LA Metro), San Diego Metropolitan Transit System, Orange County Transportation Authority, and Santa Monica' Big Blue Bus have thoroughly studied the use [of] near-zero emission natural gas buses running on renewable gas, and have found that they provide significant emissions benefits at an acceptable cost. LA Metro's recent study found the use of near-zero engines with renewable gas <u>is the most cost-effective strategy</u> by an order of magnitude for reducing NOx and GHGs as compared to using battery electric or fuel cell powered buses. Moreover, to effectively serve California citizens, transit agencies need flexibility to deploy advanced technologies in ways that are synergistic with their operations . . . SoCalGas supports the pursuit of a performance-based standard, not a technology mandate, to address GHG and criteria pollutant emissions, thereby providing transit agencies with affordable technology choices and operational flexibility.[1782]

[1780] *Id.* at 19:21-25.

[1781] *See, e.g.*, Ex. 139 SCG/Tomkins at Appendix C, at C-14 and fn. 3 and fn. 4(Letter to Ms. Rajinder Sahota, California Air Resources Board, *Written Comments by [SoCalGas and SDG&E] on the 2030 Target Scoping Plan Update Concept Paper* (July 8, 2016) discussing ARB Technology Assessment determination "that heavy-duty electric and fuel cell electric vehicles will not be widely available for the next several decades" and LA Metro finding "that the use of RNG and low NOx CNG engines is more effective at reducing GHGs than battery electric or fuel cell powered buses that are commercially available today."); Ex. 139 SCG/Tomkins at Appendix C, at C-57 and fn. 10 (Letter to Ms. Rajinder Sahota, California Air Resources Board, SoCalGas *Comments on the 2017Climate Change Scoping Plan Update* (April 10, 2017) citing "Zero Emissions Bus Options: Analysis of 2015-2055 Fleet Costs and Emissions, " Ramboll Environ (February 5, 2016 (prepared for LA Metro), available at https://media.metro.net/board/Items/2016/09_september/20160914atvcitem4.pdf.
SC-UCS also chides SoCalGas for misinterpreting the update to LA Metro's Ramboll Environ study in the "fact sheets" purportedly created to dissuade LA Metro from committing to phase out natural gas buses. *See* Ex. 475 SC-UCS/O'Dea/Golden at 19:27 – 20:71. Those materials cited an update to the Ramboll Environ study and provided a "fact check" on SC-UCS' claims to stakeholders. *See* Ex. 476, Sierra Club Information Piece on electric buses. LA Metro could certainly evaluate those "fact sheets" itself as the entity that commissioned the Ramboll Environ study.

[1782] Ex. 139 SCG/Tomkins at Appendix C, at C-57 – C-58 (Letter to Ms. Rajinder Sahota, California Air Resources Board, SoCalGas *Comments on the 2017 Climate Change Scoping Plan Update* (April 10, 2017) (citations omitted). (emphasis in original). *Accord*, *Id.,* at Appendix C, at C-101 – C-102

Mysteriously absent from SC-UCS' argument is an acknowledgement that technology and fuel neutrality remain a theme in SoCalGas' climate action-related comments as well, which conclude:

- "SoCalGas encourages the [local government] to adopt a diverse energy portfolio that includes multiple fuels and technologies to meet California's energy needs and climate change targets in a cost-effective and timely manner;"[1783]
- "for Cities seeking to draft and implement Climate Action Plans: Aim to create technology-neutral goals and policies; Cities should not pick technology winners and losers, and rather should strive to create performance standards vs mandates; Advocate for cost-effective solutions to reduce carbon emissions; Consider full-life-cycle emissions vs simplified environmental metrics;"[1784] and
- "SoCalGas recommends that the City of Indio maintain *technology-neutral* both in mindset in the language of their updated General Plan to recommend **both** zero and near zero emission technologies among their strategies and policies."[1785]

SoCalGas' communications on these topics are appropriate, aiding in the development of climate policy and GHG reduction measures and ensuring ratepayers are informed on the technology options available to meet their needs. SC-UCS' arguments to the contrary should be disregarded. The Commission should adopt the TY 2019 request for these programs, activities and costs as proposed.

24. Supply Management & Logistics and Supplier Diversity

24.1 Introduction

24.1.1 Summary of Costs

Exhibits 291-294[1786] support SoCalGas' and SDG&E's TY 2019 forecasts for O&M costs for both non-shared and shared services associated with the Supply Management & Logistics department, which includes supplier diversity. Table DW-1, adopted from SoCalGas'

(SoCalGas Letter to Anita Cerna, Senior Planner, City of Pasadena – Planning Division re City of Pasadena Draft Climate Action Plan) (January 23, 2018).

[1783] *Id.* at Attachment C, at C-102 (SoCalGas Letter to Anita Cerna, Senior Planner, City of Pasadena – Planning Division re City of Pasadena Draft Climate Action Plan) (Jan. 23, 2018).

[1784] Ex. 139 SCG/Tomkins at Appendix E, at E-2 (Letter to Kelsey Brewer, Policy Analyst, Association of California Cities – Orange County (undated)).

[1785] Ex. 139 SCG/Tomkins at Appendix C, at C-118 (Letter to Leila Namvar Assistant Planner, City of Indio, Re Indio General Plan Update (undated)) (emphasis in original).

[1786] Ex. 291 SCG/SDG&E/Willoughby (adopted by Chow/Furbush); Ex. 292 SCG/Willoughby (adopted by Chow/Furbush); Ex. 293 SDG&E/Willoughby (adopted by Chow/Furbush); Ex. 294 SCG/SDG&E/Chow/Furbush.

and SDG&E's direct testimony, Ex. 291 SCG/SDG&E/Willoughby/Chow/Furbush, summarizes the sponsored costs.

TABLE DW-1
Test Year 2019 Summary of Total Costs

Total (In 2016 $)	2016 Adjusted-Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
SDG&E	13,930	13,769	-161
SoCalGas	17,551	16,723	-828
Total O&M	31,481	30,492	-989

Supply Management & Logistics is responsible for identifying, purchasing and managing the procurement contracts of products and services needed to run our business. The department delivers value to our business clients by leveraging market and spend intelligence to meet their purchasing needs, developing and executing strategies to reduce costs, and managing contract performance. Supply Management & Logistics engages internal departments and external suppliers to optimize the value that the Companies receive from its sourcing dollars. This is accomplished by managing each major category of spend in a proactive and strategic manner.

24.1.2 Summary of Activities

The Supply Management & Logistics department includes the following groups:

- Procurement/Category Management
- Inventory Management
- Supplier Diversity
- Policy & Integration
- Office Services

Supply Management & Logistics manages the overall purchase, distribution, receipt, delivery, inventory, and management of materials and services for the Companies. These goods and services include gas and electric transmission and distribution equipment (*e.g.*, transformers, piping, cable, and meters), construction services, electric generation maintenance materials/services, operations support materials/services (*e.g.*, fleet vehicles and services, facility equipment and services), IT and telecommunications products/ services, engineering services, environmental, and other professional/technical services. In addition, a portion of Supply Management & Logistics involves administrative functions associated with general office support services, such as phone service, office supplies, travel services, and document management. Supply Management & Logistics is also responsible for the development and execution of the Companies' overall procurement strategies. Various procurement strategies are needed to meet business requirements while efficiently managing the total cost of ownership. These strategies enable procurement professionals to focus on high-value, strategic expenditures (*e.g.*, transformer, construction, and professional services) that are critical to the business.

24.1.3 Forecast Methodology

Supply Management & Logistics' TY 2019 forecast was developed using a five-year historical average methodology. A five-year historical average represents a reasonable basis to estimate operational needs for TY 2019 because Supply Management & Logistics' costs are generally prone to fluctuations due to changes in work activities, which impact staffing levels, purchased service costs, and other factors (*e.g.*, fire prevention, capital projects, etc.). As such, Supply Management & Logistics uses a five-year historical average, which reflects the variances in costs from year-to-year and represents a reasonable basis to estimate operational needs for TY 2019. The exceptions to the five-year average methodology are the Policy & Integration and VP Supply Management & Logistics cost centers at SoCalGas, which use a base-year forecasting method because they are new functions that do not have a sufficient history for a five-year average.

24.1.4 Summary of Differences Between SoCalGas and SDG&E and Other Parties

The following table – from SoCalGas and SDG&E's rebuttal testimony, Ex. 294 SCG/SDG&E/Chow/Furbush – summarizes the differences between SoCalGas' and SDG&E's TY 2019 forecasted costs and other parties' recommendations.

SUMMARY OF DIFFERENCES

TOTAL O&M (SoCalGas) - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SOCALGAS	**17,551**	**16,723**	**-828**
ORA	**17,551**	**15,456**	**-2,095**
NDC	**17,551**	**16,301**	**-1,250**
CFC	**17,551**	**15,533**	**-2,018**

TOTAL O&M (SDG&E) - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**13,930**	**13,769**	**-161**
ORA	**13,930**	**13,769**	**-161**
NDC	**13,930**	**13,481**	**-449**
SBUA	**13,930**	**12,543**	**-1,387**

For the reasons set forth below, SoCalGas and SDG&E disagree with these other recommendations and urge the Commission to reject them. In the section below, SoCalGas and SDG&E will address each party's recommendations one at a time, starting with ORA.

24.2 Response To Other Parties' Supply Management And Supplier Diversity Recommendations

24.2.1 SoCalGas Response to ORA

24.2.1.1 SoCalGas' Proposed Logistics Warehouse

ORA opposes SoCalGas' proposal for a Logistics Warehouse.[1787] ORA argues that the current facility, "although antiquated, appeared adequate and functional" during an ORA tour of the current facility.[1788] ORA also argues that the current facility satisfies existing requirements and that SoCalGas' estimates of $2 million in annual savings from a new facility are speculative.[1789]

For the reasons set forth in SoCalGas' rebuttal testimony, Ex. 294 SCG/SDG&E/Chow/Furbush at 4-6, and summarized below, SoCalGas opposes ORA's proposal.

24.2.1.1.1 Although SoCalGas' Existing Facilities Meet Current Requirements, They Are Not Optimized for Logistics

Although SoCalGas' Logistics Warehouse operations are currently meeting regulatory requirements, the current documentation process lacks automation and centralized integration. SoCalGas believes a centralized data and inventory management system will create efficiencies and reduce supply chain risks. As SoCalGas explained in its direct testimony, Material Traceability is required to improve inventory management and keep up with new regulations.

[1787] Ex. 414 ORA/Waterworth at 7-8 and 26-29.
[1788] *Id*. at 29.
[1789] *Id*.

Material Traceability is a scalable, end-to-end solution for tracking high pressure (HP) pipes, values, fittings, and equipment to improve compliance with new and upcoming regulations mandating the maintenance of "traceable, verifiable, and complete records [that are] readily available."[1790]

24.2.1.1.2 The Current Facility Is Inadequate for Materials Above 12 Inches in Diameter and the Pico Facility Is at Capacity

Although the current warehouse facility is adequate for materials under 12 inches in diameter, the Pico facility is currently at capacity for processing materials over 12 inches in diameter. Materials that are 12 inches in diameter and above should flow through the inventory management system in addition to current materials already in inventory. Centralizing inventory in fewer locations is required to effectively manage inventory and strengthen business controls. SoCalGas has had to contract with a third-party warehouse firm to manage inventory above 12 inches in diameter. The agreement with this third party is in place as a temporary remediation effort to allow time to build the warehouse described in direct testimony.

24.2.1.1.3 SoCalGas' Future Inventory Management Will Increase

Contrary to ORA's understanding, SoCalGas' total inventory managed in a centralized facility will increase beyond the capacity of the current Pico warehouse.

24.2.1.1.4 A Capital Investment Will Be Cheaper for Ratepayers in the Long Run

ORA asserts that SoCalGas' estimate of savings from a new Logistics Warehouse is speculative because SoCalGas may choose to forego this project for another.[1791] SoCalGas disagrees. Notwithstanding ORA's assertion, SoCalGas plans to construct the Logistics Warehouse if the Commission approves it in this GRC proceeding. Once the warehouse is operational, SoCalGas will realize savings of approximately $2 million per year by eliminating the need to continue with the third-party contracted storage solution.

In summary, for the reasons set forth above, SoCalGas believes that additional warehousing storage space (and the personnel to operate it) is needed to accommodate large diameter materials. Materials are currently physically located at other SoCalGas facilities, third-

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[1790] Ex. 291 SCG/SDG&E/Willoughby/Chow/Furbush at 13.
[1791] Ex. 414 ORA/Waterworth at 29.

party logistics provider warehouses, and various lay down yards across our service territory with no systematic visibility. Currently those facilities are at full capacity; therefore, new space is required. Thus, the Commission should approve the O&M request set forth in this testimony (totaling $0.783 million) and the capital forecast of $18.75 million identified in the Fleet and Facilities testimony of Carmen Herrera.[1792]

24.2.1.2 SoCalGas' Office Services

ORA proposes a reduction of $484,000 of SoCalGas' Office Services forecast, from $2.910 million to $2.486 million. ORA asserts there has been a downward trend in spending in Office Services, so the Commission should use SoCalGas' 2016 recorded costs as the basis for the 2019 forecast, not the five-year average SoCalGas employed.[1793]

SoCalGas opposes ORA's proposal. As SoCalGas summarized in its rebuttal testimony, SoCalGas' Office Services funding request is needed to maintain the group's operational functions, specifically for third-party service contractors that provide document services such as: (1) operating and maintaining three copy centers and distributed multifunctional copier/fax/printer machines; (2) distributing U.S. Mail, other document/package delivery services and interoffice mail; (3) conducting courier services; and (4) facilitating mass mailings. Office Services also manages the third-party service provider that handles archives and records management, offsite storage of records, retention policy, retention schedules, data management and shared services. Office Services also manages the Companies' third-party travel services provider that handles travel reservations and bookings, onsite travel agent services, airline contracts, hotel contracts, and car rental agreements. Lastly, Office Services manages contracts for onsite food service providers for employee dining services.[1794]

In summary, the Commission should reject ORA's proposal to reduce SoCalGas' reasonable forecast for Office Services.

24.2.2 SoCalGas Response to CFC

CFC also proposes that the Commission reduce SoCalGas' 2019 forecast for Office Services (by $1.19 million, from $2.91 million to $1.72 million).[1795] CFC argues that its

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1792 *See, e.g.*, Ex. 188 SCG/Herrera at 45.
1793 Ex. 414 ORA/Waterworth at 8.
1794 Ex. 294 SCG/SDG&E/Chow/Furbush at 6-7.
1795 Ex. 486 CFC/Roberts at 4.

proposed reduction better reflects a slight downward trend in Office Services expenditures and anticipated reductions in spending for paper copies.[1796]

For the same reasons set forth above in response to ORA, SoCalGas' disagrees with CFC's proposal. In addition, SoCalGas disagrees with CFC's underlying assumptions, particularly that efficiencies in printing costs would result in a significant reduction of Office Services as a whole. As SoCalGas explained in its rebuttal testimony, Ex. 294 SCG/SDG&E/Chow/Furbush at 8-9, printing and copy services account for less than 5% of the overall Office Services budget. Any assumed efficiencies presented by the CFC would apply only to this small portion of the budget.[1797] Approximately 90% of Office Services funds are spent on courier and mail services, which continue to see upward pressures in significant part due to fuel charges, tied to the U.S. Energy Information Administration, which have increased year over year by 21.4%. In addition, Office Services continues to experience upward pressures of 3% per year in contracted labor, impacting service costs. These upward pressures greatly outweigh any small efficiencies in copy and print costs. In summary, the Commission should reject CFC's proposal and adopt SoCalGas' $2.9 million Office Services forecast, which more reasonably reflects a five-year average of expenditures.

24.2.3 SoCalGas and SDG&E Response to NDC

NDC proposes reductions to both SoCalGas' and SDG&E's supplier diversity departments. In particular, NDC proposes to reduce SoCalGas' 2019 forecast by $.421 million, from $1.151 million to .730 million.[1798] NDC proposes to reduce SDG&E's 2019 forecast by $.288 million, from $1.142 million to $.854 million.[1799] NDC argues that the Companies' 2019 forecasts should largely be based on 2016 recorded costs.[1800]

SoCalGas and SDG&E oppose NDC's proposed reductions. As SoCalGas and SDG&E explained in their rebuttal testimony, Ex. 294 SCG/SDG&E/Chow/Furbush at 7-8, SoCalGas and SDG&E are very concerned that use of 2016 recorded costs would not adequately fund the

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[1796] *Id*. at 3-4.

[1797] SoCalGas also notes that since late 2016, costs associated with multi-function printers have been pushed out to director and department-level cost centers. This decentralization resulted in a 20% decrease in Office Services multi-function printer spend, but merely shifted the costs to other areas of the company, providing no overall company-wide reduction. Ex. 294 SCG/SDG&E/Chow/Furbush at 8, fn. 20.

[1798] Ex. 437 NDC/Bautista at 32.

[1799] *Id.* at 30.

[1800] *Id*. at 30 and 32.

important technical assistance, supplier outreach, supplier development, and mentoring programs needed to sustain the growth of existing suppliers and the recruitment of new suppliers. SoCalGas' and SDG&E's use of a five-year average of their 2012 through 2016 costs more reasonably reflects the funding required. SoCalGas and SDG&E respectfully request that the Commission approve their 2019 forecast amounts, less a $.100 million adjustment that the Companies identified during the course of discovery. As such, SoCalGas is now requesting $1.051 million for the 2019 test year and SDG&E is now requesting $1.042 million for the 2019 test year.

Alternatively, NDC argues that if the Commission adopts SoCalGas' and SDG&E's 2019 forecasts, the Commission should condition its approval on increases in the Companies' GO 156 diverse business enterprises spending goals.[1801]

As the Companies explained in direct testimony, we are very proud of the fact that after 25 years of concerted effort, we are nearing parity between majority and diverse suppliers in our supply chains.[1802] Notwithstanding this achievement, our mission is to continue to improve the effectiveness and quality of the technical assistance and supplier outreach programs to ensure suppliers have the financial acumen and skills needed to be competitive.

24.2.4 SoCalGas and SDG&E Response to SBUA

24.2.4.1 SoCalGas and SDG&E Response to SBUA's Recommendation to Have Them Track and Report on Their Spending on Non-Diverse Small Businesses

SBUA argues that the Commission should order SoCalGas and SDG&E to track and report on their spending on non-diverse "small businesses," just like the Companies track and report on their spending on diverse business enterprises pursuant to GO 156 and the Public Utilities Code.[1803] GO 156 is titled "Rules Governing the Development of Programs to Increase Participation of Women, Minority, Disabled Veteran and Lesbian, Gay, Bisexual and Transgender (LGBT) Business Enterprises in Procurement of Contracts from Utilities As Required by Public Utilities Code Sections 8281-8286."

SBUA acknowledges that SDG&E's diverse business enterprises procurement program pursuant to GO 156 already benefits many small businesses. For example, SBUA states:

[1801] *Id*. at 28.
[1802] Ex. 291 SCG/SDG&E/Willoughby/Chow/Furbush at 14.
[1803] Ex. 439 SBUA/Rafii at 17.

> GO 156 *does* include many types of businesses which may be small businesses (Women-owned business, Minority-owned business, Disabled veteran-owned business, LGBT-owned business).[1804]

Notwithstanding the above, SBUA argues that GO 156 should be revised to do more, specifically for small businesses:

> GO 156 does not encourage or mandate contracting with the small business community as a whole, which includes non-diverse businesses.[1805]

SoCalGas and SDG&E appreciate the concerns SBUA has raised, but SBUA itself appears to acknowledge that its proposals are outside the scope of this GRC proceeding. For example, SBUA argues that "the Commission [should] incentivize Sempra to increase the small business receiving contracts from its tier 1 suppliers" but goes on to concede that "[t]he most appropriate venue for this change would be a change to GO 156."[1806] For these reasons, the Commission should reject SBUA's tracking and reporting proposal.

24.2.4.2 SDG&E Response to SBUA's Proposed Funding Reductions

SBUA also proposes to reduce SDG&E's 2019 test year supply management forecast by $1.225 million, which consists of a $.238 million reduction to SDG&E's Non-Shared Services request and a $.987 million reduction to SDG&E's Shared Services request.[1807] SBUA argues that these reductions are necessary to "delay or prevent Sempra from enacting policies which further harm the contracting opportunities for local small businesses by reducing the diversity of Sempra's supplier base."[1808] SBUA also alleges that SDG&E's contracting practices "discriminate" against small businesses and that new incentives should be put in place to encourage different practices.[1809]

SDG&E strongly disagrees with these allegations, which have no basis. As SDG&E explained in its rebuttal testimony, Ex. 294 SCG/SDG&E/Chow/Furbush at 10-11, as with

[1804] Ex. 438 SBUA/Brown at 18 (emphasis added).
[1805] *Id*.
[1806] *Id*. at 16.
[1807] *Id.* at 8. SBUA also asserts that there is a discrepancy between SDG&E's 2019 forecast for non-shared services shown in SDG&E's testimony ($9.978 million) and the amount shown in SDG&E's workpapers ($9.080 million), but the $.897 million difference simply reflects the amount of Company-wide Fueling Our Future savings that Supply Management is sponsoring. *See* Table DW-3 in Ex. 291 SCG/SDG&E/Willoughby/Chow/Furbush at 6.
[1808] Ex. 438 SBUA/Brown at 9.
[1809] *Id*. at 15.

SBUA's proposal to track and report on spending on small businesses, SDG&E's understands SBUA's assertion that "GO 156 does not encourage or mandate contracting with the small business community as a whole,"[1810] but, again, SDG&E believes this GRC proceeding is not the proceeding in which to address SBUA's broader concerns.

In terms of the bases for SBUA's more specific proposed disallowances, SDG&E addresses these as follows.

For example, with respect to SBUA's proposal to reduce SDG&E's funding of Inventory Management from $5,038,000 to $4,800,000 (a reduction of $.238 million), SBUA argues that a decrease is warranted because of the installation of smart meters[1811] However, the request for an increase in funding for Inventory Management is not tied to the installation of Smart Meters but required to support improvements in material traceability. As identified in our direct testimony,[1812] the request for an increase in funding is required to support Material Traceability. As described in detail above, Material Traceability is a scalable, end-to-end solution for tracking high pressure (HP) pipes, valves, fitting, and equipment to improve compliance with new and upcoming regulations mandating the maintenance of traceable, verifiable, and complete records. Additionally, one supervisor is needed to meet the increasing demands in inventory management as requested and supported in our direct testimony.

With respect to SBUA's proposal to reduce SDG&E's funding of Category Management from $2,688,000 to $1,900,000 (a reduction of $.788 million), SBUA argues that the goals of Category Management are contrary to the goals of small businesses trying to do business with SDG&E. Contrary to this assertion, SDG&E continues to utilize a diverse base of suppliers - including small businesses - thus increasing vendor competition, which lowers overall costs for ratepayer benefit. The forecasted and requested funding also will be used to obtain analytical systems that will allow our procurement professionals to better assess market conditions and obtain competitive pricing data, thus lowering our overall costs.

Finally, with respect to SBUA's proposal to reduce SDG&E's funding of Policy Management (which SBUA calls Supply Chain) from $.719 million to $.500 (a reduction of $.219 million), SBUA argues that the Commission should disallow these costs because "this

[1810] *Id*. at 18.
[1811] *Id*. at 15.
[1812] Ex. 291 SCG/SDG&E/Willoughby/Chow/Furbush at 12-13.

group is partially responsible for implementing policies that have the impact of excluding small businesses from contracting."[1813] However, as set forth above, and contrary to SBUA's assertions, there are no policies in place to exclude small businesses. The Policy Management group provides important supplier intelligence, department compliance, and our enterprise wide procurement system, all of which warrant funding at the levels requested.

In summary, for the reasons set forth above, the Commission should reject SBUA proposed reductions in SDG&E's supply management department.

25. Fleet Services (& SoCalGas Facility Operations)

25.1 Common Issues (SoCalGas / SDG&E) – Non-Shared Services

SoCalGas and SDG&E's Fleet Services, and SoCalGas Facility Operations) testimony and workpapers, supported by witness Carmen Herrera, describes and justifies SoCalGas and SDG&E's forecasted activities from 2017-19.[1814] Applicants forecast a level of O&M costs in the test year necessary to plan, manage and operate a fleet that is both service-ready and in compliance with applicable laws and regulations governing alternative-fuel vehicles, including specifically California's Airborne Toxic Control Measures (ATCM) requirements, and garage related requirements.

- SoCalGas is requesting the Commission adopt SoCalGas' TY 2019 O&M forecast of
  - $90.084[1815] million for Non-Shared Services O&M; which consists of $45.561 million in Fleet Ownership Costs; $25.846 million in Maintenance Operations; $1.100 million for Fleet Management costs; and $17.578[1816] million for Facility Operations.
  - $6.345 million for Shared Services O&M, which consists of $2.500 million for Shared Fleet Management and $3.845 million for Shared Facility Operations.
- SDG&E is requesting the Commission adopt SDG&E's TY 2019 O&M forecast of
  - $43.839 million for Non-Shared Services O&M; which consists of $24.489 million in Ownership Costs; $18.802 million in Maintenance Operations; and $0.548 million for Fleet Management costs.
  - $1.616 million in Shared Services O&M, which consists of Shared Fleet Management.

[1813] Ex. 438 SBUA/Brown at 15-16.

[1814] Exs. 188-192C, SCG/Herrera and Exs. 193-196C, SDG&E/Herrera.

[1815] The Original SoCalGas forecast was $90.751 million, however SoCalGas reduced this forecast in rebuttal testimony. See Ex.192, SCG/Herrera at 39:3-11.

[1816] The Original SoCalGas forecast was $18.245 million, however SoCalGas reduced this forecast in rebuttal testimony. See Ex.192, SCG/Herrera at 39:3-11.

SoCalGas and SDG&E's Rebuttal Testimony addressed Fleet Services cost-related testimony by ORA and TURN,[1817] whose cost positions are compared to SoCalGas and SDG&E's costs in the tables below. Sierra Club and Union of Concerned Scientists ("Sierra Club/UCS") also made recommendations concerning SoCalGas' Fleet Services O&M request but did not specify any changes to SoCalGas' costs. Accordingly, there are no specific cost changes reflected in the table below:

Table 25.A
SoCalGas Fleet Services and Facility Operations

NON-SHARED O&M - Constant 2016 ($000)[1818]			
	Base Year 2016	**Test Year 2019**	**Change**
SOCALGAS	**$57,124**	**$90,084**[1819]	**$32,960**
ORA	**$57,124**	**$62,890**	**$5,766**
TURN	**$57,124**	**$62,285**	**$5,161**
TURN ALT	**$57,124**	**$66,046**	**$8,922**
SIERRA CLUB/UCS	**Unspecified**		

Table 25.B
SDG&E Fleet Services

NON-SHARED O&M - Constant 2016 ($000)[1820]			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**$26,587**	**$43,839**	**$17,252**
ORA	**$26,587**	**$28,739**	**$2,152**
TURN	**$26,587**	**$28,987**	**$2,400**
TURN ALT	**$26,587**	**$33,965**	**$7,378**

[1817] TURN generally agreed with ORA's recommendation with regard to Ownership Costs (while also offering an alternative). *See* Ex. 498, TURN/Jones & Marcus at 32-33. Accordingly, SoCalGas and SDG&E will address ORA and TURN jointly as if they made the same assertions concerning Ownership Costs for the purposes of this brief. As appropriate, SoCalGas and SDG&E will separately address TURN's assertions when they diverge or supplement ORA's position. This treatment of ORA and TURN's arguments is intended only to maximize efficiency and minimize duplication. SoCalGas and SDG&E reserve all rights to address each individual argument at any appropriate time, and no waiver of such rights is intended.

[1818] Ex. 192, SCG/Herrera at 5, Table CLH-1.

[1819] *See* fn. 2.

[1820] Ex. 196, SDG&E/Herrera at 4, Table CLH-1.

SoCalGas and SD&GE respond to the assertions raised by ORA, TURN, and Sierra Club/UCS below.

25.1.1 Non-Shared Services O&M

25.1.1.1 Ownership Costs

Fleet Services lease finances its fleet of vehicles so for each vehicle over the term of each lease, Fleet Services incurs (1) annual repayment of principal (amortization); (2) interest; and (3) license fees and use sales tax, less the amounts recovered from (4) salvage.[1821] Because the Ownership Costs are incurred for individual vehicles with varying lease terms and payments, Fleet Services uses a cash-flow forecasting model.[1822] This model best enables Fleet Services to account for the lease payments, interest rates, and license fees over a lease term net of salvage.[1823]

In contesting the Fleet Services' forecast of Ownership Costs, ORA and TURN assert that the Commission should use "2017 actual recorded ownership costs" because the 2017 recorded costs are putatively closest to "actual" costs.[1824] In other words, ORA and TURN ask the Commission to consider one *narrow* slice of time – here, 2017 – as the basis for forecasting SoCalGas and SDG&E's Ownership Costs. SoCalGas and SDG&E disagree with this approach because it does not account for or consider the actual business and operational realities that Fleet Services must address in 2019. There are several problems with their approach:

First, the reliance upon 2017 recorded costs implies an artificial level of precision that is unwarranted and *does not properly consider context*, like existing leases, compliance with state and federal regulations, replacements on order, increased costs of replacement vehicles, increased fees, etc.[1825] SoCalGas and SDG&E have demonstrated that their forecast more accurately accounts for the Ownership Costs that SoCalGas and SDG&E are likely to incur in TY2019 because the forecast considers the *actual* business context, including current and future

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[1821] Ex. 188, SCG/Herrera at 18-19; Ex. 193, SDGE/Herrera at 6-7.
[1822] *Id* at 18; *Id.* at 6.
[1823] Ex. 192, SCG/Herrera at 9 ("uses straight line amortization (equal monthly payments of principal and applicable interest over each accounting period) to forecast costs from the purchase year through the lease term for each vehicle"); Ex. 196, SDGE/Herrera at 10.
[1824] Ex. 413, ORA/Waterworth at 10; Ex. 414, ORA/Waterworth at 8; Ex. 498, TURN/Jones & Marcus at 32.
[1825] *See, e.g.,* Ex. 414, ORA/Waterworth at 10. ORA's support for using 2017 "actuals" relies on historical data; *cf* Ex. 192, SCG/Herrera at 6-12; Ex. 196, SDG&E/Herrera at 5-13.

commitments and obligations, state and federal requirements (such as CARB mandated ATCM replacements and greening of the fleet goals with EPAct compliant Alternative-Fuel Vehicle (AFV)), incremental vehicles to meet business needs, vehicle replacements, sales tax, increased state fees for vehicle registrations, and salvage value.[1826] SoCalGas and SDG&E's forecast also allows each of them to mitigate against potential future costs, like costs for rental vehicles.[1827]

Second, the current and future obligations and projected vehicle replacements are more realistic because it better reflects current operations and its parameters. SoCalGas and SDG&E have shown that 37% of SoCalGas' fleet and 45% of SDG&E's fleet are 8 years of age or older.[1828] These vehicles are past the end of their useful life and deferral of replacements are neither prudent, practical, nor cost effective.[1829] Ms. Herrera further explained the operational reality of replacement need,

> "What I'm trying to project in this replacement forecast is that we are within industry standards. However, if I go back to TURN Data Request 072, Question 4, if you look at the year 2011, **we had a large surge of vehicles that were replaced that year. Those same vehicles are needing to be replaced will be eight years old by test year 2019. Those are the units that will need to be replaced within that time frame**."[1830] (Emphasis added.)

Replacement vehicles are on average 30% more expensive than the vehicles being replaced.[1831] ATCM vehicles – vehicles that SoCalGas and SDG&E are required to purchase – are "51% more expensive than the vehicles they are replacing which leads to increased amortization costs."[1832] This further demonstrates why 2017 recorded costs cannot be the foundation for forecasting Fleet Services costs in TY2019.

Third, 2017 recorded costs are not a more reliable measure of Ownership Costs because they do not account for vehicles that are fully amortized ($0 Amortization, $0 Interest, $0 sales tax recorded) in 2017.[1833] Because many of these fully-amortized vehicles need to be replaced, the 2017 recorded costs would artificially depress the actual funds needed to replace the current

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1826 Ex. 192, 192C, SCG/Herrera at 6-8, 15-19; Ex. 196, 196-C, SDGE/Herrera at 5-9.
1827 Ex. 192, 192C, SCG/Herrera at 9; Ex. 196, 196-C, SDGE/Herrera at 10.
1828 *Id.*
1829 Exh. 192, 192C, SCG/Herrera at 9; Exh. 196, 196-C, SDGE/Herrera at 10; Exh. 197, SCG response to TURN DR 72/72A, Response to Q2a.
1830 Tr, Vol. 20, July 23, 2018, 1867:11-20 (Herrera); Exh. 197, SCG response to TURN DR 72/72A, Response to Q2a.
1831 Ex. 192, 192C, SCG/Herrera at 11; Ex. 196, 196C, SDG&E/Herrera at 12.
1832 *Id.*
1833 Ex. 192, 192C, SCG/Herrera at 10; Ex. 196, 196C, SDG&E/Herrera at 11.

vehicles and to pay for the replacement vehicles throughout the lease term.[1834] The use of 2017 recorded costs also does not account for costs that business units have incurred from use of rental vehicles.[1835]

Fourth, the use of 2017 recorded costs presume all related ownership expenses like interest, license fees, sales tax and salvage will remain at constant 2017 levels. The evidence presented by SoCalGas and SDG&E demonstrates these costs will increase, not remain constant.[1836] For example, ORA's and TURN's methodology assumes that interest rates will remain constant at 2017 levels. Table CLH-11 from Ms. Herrera's rebuttal testimony shows that interest rates have risen over the past several years and have nearly doubled from the beginning of 2017.

Table CLH-11
USD Libor Interest Rates[1837]

USD Libor- First Rate per Month	
5/1/2018	2.76598%
4/1/2018	2.67000%
3/1/2018	2.50750%
2/1/2018	2.29278%
1/1/2018	2.10933%
12/1/2017	1.96044%
11/1/2017	1.85594%
10/1/2017	1.79067%
9/1/2017	1.71178%
8/1/2017	1.72567%
7/1/2017	1.78440%
6/1/2017	1.72650%

In contrast to ORA's and TURN's unrealistic methodology, SoCalGas applies Global Insights forecasted rates which accounts for the anticipated fluctuations of the interest rate.[1838]

1834 *Id.*
1835 Ex. 192, 192C, SCG/Herrera at 11; Ex. 196, 196-C, SDGE/Herrera at 12; Ex. 197, Response to Q2a.
1836 Ex. 192, 192C, SCG/Herrera at 12-15; Ex. 196, 196-C, SDGE/Herrera at 13-17.
1837 Ex. 192/192C, SCG/Herrera at 13, fn 21; Ex. 196/196C, SDGE/Herrera at 15, fn 24.
1838 Ex. 189, SCG/Herrera at 13; Ex. 192/192C, SCG/Herrera at 12-13 & Appendix A, TURN_DR-026 Q14 LIBOR CONFIDENTIAL; Ex. 194, SDGE/Herrera at 14; Ex. 196/196C at 14-15 & Appendix A, TURN_DR-026 Q14 LIBOR CONFIDENTIAL.

Furthermore, ORA and TURN's methodology of using 2017 recorded costs would effectively disregard new DMV vehicle registration fee increases which became effective January 1, 2018.[1839] The transportation improvement fee will increase SoCalGas and SDG&E's registration fees in 2019 by $0.400 million and by $0.700 million, respectively, compared to 2017 licensing fees.[1840] SoCalGas and SDG&E's forecasts incorporates these known increased fees.[1841] Therefore, SoCalGas' and SDG&E's methodology for Ownership Costs are more appropriate here.

Finally, a foundational issue with ORA and TURN's position is their disregard of Fleet Services' cash-flow forecasting model – a model based on the operational reality of the way Fleet Services' incurs Ownership Costs.[1842] Instead, ORA and TURN contend that SoCalGas and SDG&E compounds its 2017 forecast to arrive at TY2019 Ownership Costs forecast.[1843] SoCalGas and SDG&E do not compound 2017 costs, rather they use straight line amortization (equal monthly payments of principal and applicable interest over each accounting period) to forecast costs from the purchase year through the lease term for each vehicle.[1844] SoCalGas' forecasted ownership expenses have no compounding effect.[1845] Each year of ownership expense (historical or forecast) represents the straight-line amortization value of the vehicle's remaining economic life.[1846]

25.1.1.2 TURN'S PROPOSED ALTERNATIVE

As an alternative, TURN requests the Commission use the 2017 recorded Ownership Costs but add $3,761 million and $4,797 million to ORA's recommendation for SoCalGas and SDG&E respectively, to fund the mandatory costs associated with meeting California's ATCM requirements.[1847] SoCalGas and SDG&E disagree with TURN's alternative recommendation in that it does not meet SoCalGas and SDG&E's forecasted costs for its operations in TY2019.[1848] In particular, TURN's alternative recommendation does not account for 1) vehicles that need to

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1839 Ex. 192/192C, SCG/Herrera at 14-15, fn. 23; Ex. 196/196C, SDGE/Herrera at 16-17, fn. 27.
1840 *Id.*
1841 Ex. 189, SCG/Herrera at 33; Ex. 194, SDG&E/Herrera at 34
1842 Ex. 188, SCG/Herrera at 18; Ex. 193, SDG&E/Herrera at 6-7.
1843 Ex. 413, ORA/Waterworth at 10; Ex. 414, ORA Waterworth at 8.
1844 Ex. 189, SCG/Herrera at 5.
1845 Ex. 192/192C, SCG/Herrera at 8-9; Ex. 196/196C, SDG&E/Herrera at 9-10.
1846 *Id.*
1847 Ex. 498, TURN/Jones & Marcus at 33.
1848 Ex. 192/192C, SCG/Herrera at 15-19; Ex. 196/196C, SDGE/Herrera at 19-21.

be replaced due to age; 2) new vehicles for incremental business need; 3) the EPAct mandate for AFV and the premium cost for AFVs.[1849] TURN's proposal that SoCalGas and SDG&E receive only 2017 actuals, plus the balance proposed for 2018 and 2019 for ATCM vehicles ignores SoCalGas and SDG&E TY 2019 vehicle ownership cost commitments and obligations.[1850] It is illogical that TURN would recommend SoCalGas and SDG&E solely replace vehicles requiring ATCM compliance when the evidence proves a large number of vehicles are already past their optimal total cost of ownership (TCO) curve, must be replaced to lower overall costs to the utilities, and ignores the fact that SoCalGas and SDG&E have already purchased new replacement vehicles in 2017 and 2018.[1851]

TURN questions whether SoCalGas and SDG&E will replace the vehicles as forecast.[1852] SoCalGas and SDG&E have demonstrated that circumstances in TY2019 make the level of past replacements unsustainable and the replacement forecasts for TY2019 are consistent with industry practices as outlined by a third party, Utilimarc study, and included in Appendix A of Ms. Herrera's rebuttal testimony.[1853] Further, SoCalGas and SDG&E's TY2019 request is in line with minimizing total cost of ownership (TCO) by replacing vehicles past the optimal TCO curve.[1854] Importantly, Ms. Herrera also testified that replacement forecasts for TY2019 are consistent with industry standards, are based on operating conditions, and are credible.

> However, if I go back to TURN Data Request 072, Question 4, **if you look at the year 2011, we had a large surge of vehicles that were replaced that year. Those same vehicles are needing to be replaced will be eight years old by test year 2019. Those are the units that will need to be replaced within that time frame**."[1855]

TURN also asserts that SoCalGas and SDG&E failed to justify their respective forecasts of incremental vehicles to support incremental activities and staff.[1856] SoCalGas and SDG&E's operating witnesses propose incremental O&M, whether they are FTEs, programs and projects (O&M request). In some instances, an operating unit's FTEs, programs and projects request are

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1849 Ex. 192/192C, SCG/Herrera at 16; Ex. 196/196C, SDGE/Herrera at 18.
1850 Ex. 498, TURN/Jones & Marcus at 44.
1851 Ex. 192/192C, SCG/Herrera at 16-18; Ex 196/196/C, SDGE/Herrera at 18-20
1852 Ex. 498, TURN/Jones & Marcus at 35-40
1853 Ex. 192/192C, SCG/Herrera at 17-18; Ex. 196/196C, SDGE/Herrera at 19-20.
1854 *Id.; Id.*
1855 Tr, Vol. 20, July 23, 2018, 1867:11-20 (Herrera)(emphasis added); Exh. 197, SCG response to TURN DR 72/72A, Response to Q2a.
1856 Ex. 498, TURN/Jones & Marcus at 40:9-10.

tied to an incremental vehicle request.[1857] These incremental vehicle requests are not always visible because Fleet Services represents the aggregate of additional vehicles associated with incremental FTEs forecasted by organizations and reflected in testimony of other respective witnesses. For example, Fleet Services incremental vehicle O&M expenses include incremental costs associated with vehicles needed for incremental FTEs requested from Customer Services Field (CSF) that are undisputed by ORA. Specifically, CSF witness (Ms. Gwen Marelli, Ex. 119-124) justifies the direct labor and non-labor costs associated with incremental FTEs for SoCalGas and SDG&E CSF. The undisputed incremental CSF FTEs are then translated into incremental vehicle needs as reflected in Table CLH-3 (column g) in Ms. Herrera's rebuttal testimony.[1858] The same is true in SoCalGas Gas Distribution where Ms. Orozco-Mejia testified that in order for Gas Distribution to perform its required incremental work, incremental vehicles are required.[1859] TURN argues that because there is no break out, the cost is not justified. However, SoCalGas's Table CLH-3 in Ex. 192/192C reflects the vehicle needs resulting from undisputed incremental FTEs requested, documented and justified in other witness testimonies. TURN further asserts that the utilities provided "no analysis of the basis for such [incremental vehicle] increases, such as an analysis of the ratio of vehicles-to-employees for a given business unit or employee category."[1860] TURN is effectively demanding a *clear and convincing* level of proof. This is not the standard of proof required.[1861] The standard is *preponderance of the evidence* and the utilities have met their respective burdens.[1862]

In addition, TURN "augments" ORA's comparison of past forecasts of vehicle replacements, ATCM, and incremental business counts against the vehicles acquired in the historic period by forecasted and recorded AFV-premium counts from the TY2016.[1863] As support, TURN states that 1,032 were forecast to be acquired by the end of 2016 in the 2016 GRC but 494 leases were acquired by the end of 2017, which according to TURN means SoCalGas over-forecast its lease-service costs for 2016 and 2017.[1864] Similarly, TURN states

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[1857] Ex. 189, SCG/Herrera at 12; Ex. 194, SDGE/Herrera at 12.
[1858] Ex. 192/192C SCG/Herrera at 7, Table CLH-3.
[1859] Ex. 07 [GOM p. 12, line 25 to p.13 at 4]
[1860] Ex. 498, TURN/Jones & Marcus at 40:3-5.
[1861] D.14-12-025 at 20-21 ("It is clear from a review of D.12-11-051, D.11-05-018, and D.09-03-025 that the standard of proof that a utility has to meet in a GRC is one of preponderance of the evidence.")
[1862] *Id.* Ex. 189, SCG/Herrera at 12.
[1863] Ex. 498, TURN/Jones & Marcus at 41-42.
[1864] Ex. 498, TURN/Jones & Marcus at 42.

that SDG&E forecasted 137 leases to be in service by the end of 2016 in the 2016 GRC but 64 leases had been acquired by the end of 2017.[1865] SoCalGas and SDG&E disagree with TURN regarding its assessment of 2016 total ownership cost reflected in this forecast (2019 GRC) is based on actual 2016 spend.[1866]

In comparing the AFV counts, TURN seems to minimize the imperative to acquire AFVs.[1867] SoCalGas and SDG&E is governed by EPAct and as an EPAct Alternative Fuel Provider Fleet, 90% of SoCalGas' and SDG&E's annual light duty vehicle purchases are required to be approved AFVs and 21% of SoCalGas' Fleet vehicles and 24% of SDG&E's Fleet vehicles fall under this requirement.[1868] To achieve the 90% annual requirement, SoCalGas and SDG&E plan to continue buying AFVs which must be purchased at a premium.[1869]

25.1.2 Maintenance Operations

SoCalGas and SDG&E's TY O&M forecast for Maintenance Operations are separated into two categories: (i) Maintenance Operations and (ii) Automotive Fuels.[1870] SoCalGas forecast a total of $25.845 million---- and SDG&E forecast a total of $18.802 million---- for SoCalGas and SDG&E to plan, manage, and operate their respective fleets in compliance with applicable laws and regulations.[1871]

ORA and TURN submitted testimony in response to SoCalGas and SDG&E's Maintenance Operations forecast.[1872] The table below summarizes ORA and TURN's positions.

1865 *Id* at 41-42.
1866 Ex. 192/192C, SCG/Herrera at 19; Ex. 196/196C, SDGE/Herrera at 21.
1867 Ex. 498, TURN/Jones & Marcus at 41-42.
1868 Ex. 188, SCG/Herrera at 19 (sum of automobiles and compact trucks divided by OTR total); Ex. 193, SDGE/Herrera at 21(sum of automobiles and compact trucks divided by OTR total).
1869 Ex. 192/192C, SCG/Herrera at 19; Ex. 196/196C, SDGE/Herrera at 21.
1870 Ex. 188, SCG/Herrera at 26-28; Ex. 193, SDGE/Herrera at 13-14.
1871 *Id.*
1872 TURN generally agreed with ORA's recommendation with regard to Maintenance Operations. *See* Ex. 498, TURN/Jones & Marcus at 46-50. Accordingly, SoCalGas and SDG&E will address ORA and TURN jointly as if they made the same assertions concerning Maintenance Operations for the purposes of this brief. As appropriate, SoCalGas and SDG&E will separately address TURN's assertions when they diverge or supplement ORA's position. This treatment of ORA and TURN's arguments is intended only to maximize efficiency and minimize duplication. SoCalGas and SDG&E reserve all rights to address each individual argument at any appropriate time, and no waiver of such rights is intended.

Table CLH-21[1873]
Comparison of Non-Shared Services Maintenance Operation Cost ($000)

Maintenance Operations	SoCalGas Request	ORA	TURN
Maintenance Operations	$13,342	$11,599	$11,599
Automotive Fuels	$12,504	$11,030	$10,717
Total	$25,845	$22,629	$22,316

Table CLH-19[1874]
Comparison of Non-Shared Maintenance Operation Cost ($000)

Maintenance Operations	SDG&E Request	ORA	TURN
Maintenance Operations	$12,062	$11,179	$11,179
Automotive Fuels	$6,740	$6,003	$6,251
Total	$18,802	$17,182	$17,430

SoCalGas and SDG&E respond to ORA and TURN's assertions, below.

25.1.2.1 Maintenance Operations: Maintenance Operations

ORA and TURN propose to lower SoCalGas' forecast by $1,743 million to $11,599 million and to lower SDG&E's forecast by $882,000 to $11,179 million.[1875] To support their recommendations, ORA and TURN propose to use a 3-year average (2014-2016) because expenses are trending downwards and the last 3 years of expense are purportedly more current

[1873] In addition to agreeing with ORA's forecast for Automotive Fuels which would lead to a forecast amount of $11,030 million, TURN recommends an additional reduction to SoCalGas and SDG&E's Automotive Fuel forecast to remove the cost of fuel that will no longer be charged under base rates using GRC funds. Ex. 498, TURN/Jones & Marcus at 48. Since TURN's recommended fuel savings reduction results in a lower amount than ORA's proposed 3-year average, SoCalGas assumes TURN's recommended forecast to be $10,717 million for Automotive fuels for SoCalGas and $6.251 million for SDG&E. Ex. 192/192C, SCG/Herrera at 37; Ex. 196/196C, SDGE/Herrera at 29.

[1874] In addition to agreeing with ORA's forecast for Automotive Fuels which would lead to a forecast amount of $11,030 million, TURN recommends an additional reduction to SoCalGas and SDG&E's Automotive Fuel forecast to remove the cost of fuel that will no longer be charged under base rates using GRC funds. Ex. 498, TURN/Jones & Marcus at 48. Since TURN's recommended fuel savings reduction results in a lower amount than ORA's proposed 3-year average, SoCalGas assumes TURN's recommended forecast to be $10,717 million for Automotive fuels for SoCalGas and $6.251 million for SDG&E. Ex. 192/192C, SCG/Herrera at 37; Ex. 196/196C, SDGE/Herrera at 29.

[1875] Ex. 498, TURN/Jones & Marcus at 46-48.

and consistent.[1876] This narrow view of the last 3 years – *the years which conveniently contain the lowest two in the past six* – does not accommodate SoCalGas' and SDG&E's forecasted activities. The narrow 3-year view fails to add a sufficient buffer against market volatility, to accommodate economic trends, and to meet and comply with regulatory requirements (such as compliance with California Highway Patrol's BIT program).[1877] For example, because SoCalGas cannot predict changes in commodity prices, such as tires, vehicle parts, and lubricants, SoCalGas must rely on a 5-year average to arrive at a reasonable cost estimate.[1878] Further, repair and parts costs continue to increase, especially to repair their aging fleet; and SoCalGas has seen a 29% rise in repairs and services compared to 2017 and SDG&E a 19% rise.[1879] SoCalGas and SDG&E forecast Maintenance Operations using a 5-year average and maintain that it is more appropriate.

ORA opposes SoCalGas' request for 10.5 FTEs (7 FTEs net of Fueling our Future), or \$0.863 million (\$0.618 million net of Fueling our Future) because ORA contends that there is an inconsistency between a Data Request response and a workpaper concerning FTE versus positions.[1880] "Outside of any explanation as to the inconsistency," ORA opposes SoCalGas request for 10.5 FTEs (7 FTEs net of Fueling our Future), or \$0.863 million (\$0.618 million net of Fueling our Future).[1881] There is no inconsistency. This is simply a misunderstanding of impact based on different terminology with the same effect of adding incremental FTEs from base year 2016.[1882] Further, SoCalGas's need is based on required work to meet requirements of the revised BIT program and SMOG inspections, and to repair an aging Fleet.[1883] In fact, from

[1876] Ex. 498, TURN/Jones & Marcus at 47.
[1877] Ex. 192/192C, SCG/Herrera at 30-31; Ex. 196/196C, SDGE/Herrera at 22.
[1878] *Id*. ORA and TURN may argue that a 3-year average is more appropriate because SoCalGas and SDG&E used a 3-year average in TY2016 GRC. SoCalGas and SDG&E acknowledge that they selected a 3-year average in TY2016 but the selection of the 3-year average must be viewed in context. For TY2016, a three-year average was selected because SoCalGas and SDG&E determined that the costs in 2009 were an anomaly as the nation recovered from a recession. *See* Ex. 192/192C, SCG/Herrera at 31; Ex. 196/196C, SDGE/Herrera at 21. This is not the case for TY2019. Accordingly, a 3-year average is not appropriate.
[1879] Ex. 192/192C, SCG/Herrera at 30; Ex. 196/196C, SDGE/Herrera at 21-23.
[1880] Ex. 414, ORA/Waterworth (SCG) at 14.
[1881] Ex. 414, ORA/Waterworth (SCG) at 14.
[1882] Ex. 192/192C, SCG/Herrera at 32 & ORA-SCG-33-LMW, Q.2b attached to Appendix A.
[1883] *Id.*

2017 to approximately June 2018, SoCalGas has hired 8 FTEs, consistent with the forecasted seven FTE adjustment net of Fueling our Future savings.[1884]

Similarly, ORA and TURN oppose SDG&E's request for 1.7 FTEs or $0.148 million because ORA and TURN contend that SDG&E has operated for the last five years at current staffing levels so SDG&E does need the incremental FTEs.[1885] SDG&E's request for incremental FTE is based on the level of work SDG&E will need to perform, including, work due to the revised BIT program, and an aging Fleet requiring more repairs.[1886]

ORA and TURN also state the incremental increase related to adding new fleet vehicles is highly discretionary and opposes non-labor maintenance costs associated with the vehicle incremental fleet request.[1887] SoCalGas and SDG&E disagree because these costs are expected to be incurred for incremental vehicles (213 incremental vehicles for SoCalGas and 40 incremental vehicles for SDG&E) that ORA did not contest in other witness areas.[1888]

ORA and TURN agree with SoCalGas' "adjustments for Training and Fuel[ing] Our Future, which results in a $0 net impact to the forecast."[1889] ORA and TURN also agree with SDG&E's "adjustments for training, technology, and compliance" for $0.156 million in TY 2019.[1890]

SoCalGas and SDG&E request that the Commission approve their respective forecasts for Maintenance Operations as originally presented.

25.1.2.2 Maintenance Operations: Automotive Fuels

ORA and TURN, again, recommend using a narrow three-year average to calculate its SoCalGas forecast of $11,030 million, which is $1,474 million or 12% less than SoCalGas' forecast of $12,504 million; and SDG&E forecast of $6,003 million, which is $0.737 million or

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1884 *Id.*
1885 Ex. 413, ORA/Waterworth (SDGE) at 11. Ex. 498 TURN/Jones & Marcus at 46-48.
1886 Ex. 196/196C, SDGE/Herrera at 24.
1887 Ex. 414, ORA/Waterworth (SCG) at 14; Ex. 413, ORA/Waterworth (SDGE) at 8.
1888 Ex. 192/192C, SCG/Herrera at 18-19; Ex. 196/196C, SDGE/Herrera at 20-21; *see also,* Ex. 414, ORA/Waterworth (SCG) at 9-15; Ex. 413, ORA/Waterworth (SDGE) at 7-13. In its Ownership Cost discussion, TURN states that SoCalGas and SDG&E failed to provide sufficient justification of incremental vehicles. Ex. 498, TURN/Jones at 40:9-10. SoCalGas and SDG&E addressed that discussion, above.
1889 Ex. 414, ORA/Waterworth (SCG) at 13:15-16. Ex. 498 TURN/Jones & Marcus at 46-47.
1890 Ex. 413, ORA/Waterworth (SDGE) at 11. Ex. 498 TURN/Jones & Marcus at 47.

11% less than SDG&E' forecast of $6,740 million.[1891] SoCalGas disagrees with ORA's and TURN's methodology of a 3-year forecast to calculate automotive fuel expense because it does not account for fuel price fluctuations over the last six years.[1892] There are a variety of factors that affect retail gasoline prices, from national and international supply and demand and political, social, and economic issues to state refinery capacity and local retail refueling station competition.[1893] Brent crude oil spot prices show the scope of the volatility.[1894] In April 2018, Brent crude oil spot prices averaged $72 per barrel (b), an increase of $6/b from the March 2018 level, and the first time monthly Brent crude oil prices have averaged more than $70/b since November 2014.[1895] As described in the Table below, the cost of diesel has fluctuated by as much as of 26% year-to-year 2014-2015 and gasoline has fluctuated by as much as 18% year-to-year 2014-2015.[1896] The 3-year average methodology sponsored by ORA and TURN could not account for these types of fluctuations that occur over a 4-5 year period. Therefore, SoCalGas' and SDG&E's five-year historical average is the most appropriate methodology.

6 Year Gasoline and Diesel Retail Price Fluctuations[1897]

Fuel Type	2012	2013	2014	2015	2016	2017	2018 YTD (Jan-Apr)
Diesel PPG	$4.16	$4.05	$3.93	$2.90	$2.56	$2.95	$3.26
Unleaded PPG	$3.93	$3.78	$3.65	$2.98	$2.58	$2.96	$3.45

While ORA and TURN accept SoCalGas' and SDG&E's incremental increase in fuel costs to account for the new fuel tax,[1898] ORA and TURN do not agree with the increase in fuel due to incremental vehicles.[1899] As discussed above, ORA and TURN did not contest the 213

1891 Ex. 414, ORA/Waterworth (SCG) at 34; Ex. 413, ORA/Waterworth (SDGE) at 11. Ex. 498 TURN/Jones & Marcus at 48.
1892 Ex. 192/192C, SCG/Herrera at 34-35; Ex. 196/196c, SDGE/Herrera at 25-27.
1893 *Id.*
1894 Ex. 192/192C, SCG/Herrera at 34, fn. 90; Ex. 196/196c, SDGE/Herrera at 26, fn. 53. *See Short-Term Energy Outlook*, U.S. Energy Information Administration, *available at* https://www.eia.gov/outlooks/steo/
1895 *Id.*
1896 Ex. 192/192C, SCG/Herrera at 35, fn 91; Ex. 196/196c, SDGE/Herrera at 26, fn. 54. See *Weekly Retail Gasoline and Diesel Prices*, U.S. Energy Information Administration, Petroleum & Other Liquids (Sept. 18, 2017), *available at* http://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_r50_a.htm
1897 *Id.*
1898 Ex. 414, ORA/Waterworth (SCG) at 15; Ex. 413, ORA/Waterworth (SDGE) at 12. Ex. 498 TURN/Jones & Marcus at 48.
1899 *Id.*

incremental vehicles requested by SoCalGas at the respective operating witness level and the 40 incremental vehicles requested by SDG&E at the respective operating witness level.[1900] Therefore, ORA and TURN should accept the associated fuel costs of the uncontested incremental vehicles. As such, SoCalGas request that the Commission approve SoCalGas' TY 2019 forecast of fuel costs of $12,504 million and SDG&E request that the Commission approve SDG&E' TY 2019 forecast of fuel costs of $6,740 million.

25.1.3 Uncontested Items

ORA and TURN did not contest SDG&E's Non-Shared Fleet Management request of $548,000. SDG&E's forecast should be adopted.

25.2 Shared Services O&M

25.1.1 Uncontested Items

SoCalGas presented costs for Shared Fleet Management Services in the amount of $2,500 million for TY2019.[1901] SDG&E presented costs for Shared Fleet Management Services in the amount of 1,616 million.[1902] ORA and TURN did not contest costs for these amounts.[1903] Therefore, SoCalGas and SDG&E request that the Commission approve the amounts requested by SoCalGas and SDG&E.

25.3 SoCalGas Issues

25.3.1 Non-Shared O&M Fleet Management

Table 25.C
Comparison of Non-Shared Services Fleet Management Costs ($000)

Fleet Management	SoCalGas Request	ORA
Fleet Management	$1,100	$755

For TY 2019, SoCalGas requests $1.100 million for Fleet Management. Only ORA contests SoCalGas' Non-Shared Fleet Management request and asks to reduce the request by $0.345 million for a total of $0.755 million.[1904] ORA disagrees with SoCalGas' incremental

[1900] Ex. 192/192C, SCG/Herrera at 18-19; Ex. 196/196c, SDGE/Herrera at 20-21,
[1901] Ex. 188, SCG/Herrera at 35-39.
[1902] Ex. 193, SDGE/Herrera at 18-19.
[1903] Ex. 192/192C SCG/Herrera (Rebuttal) at 42-43; *see, also,* Ex. 414, ORA/Waterworth (SCG) at 3 & Ex. 498, TURN/Jones & Marcus at 32-50.
[1904] Ex. 414, ORA/Waterworth (SCG) at 15.

request for 4 FTEs ($0.411 million) for similar reasons identified in Maintenance Operations in Section 23.1.1.2, above.[1905] SoCalGas addressed those arguments in that section, above.

25.3.2 Sierra Club/UCS – Ownership Costs

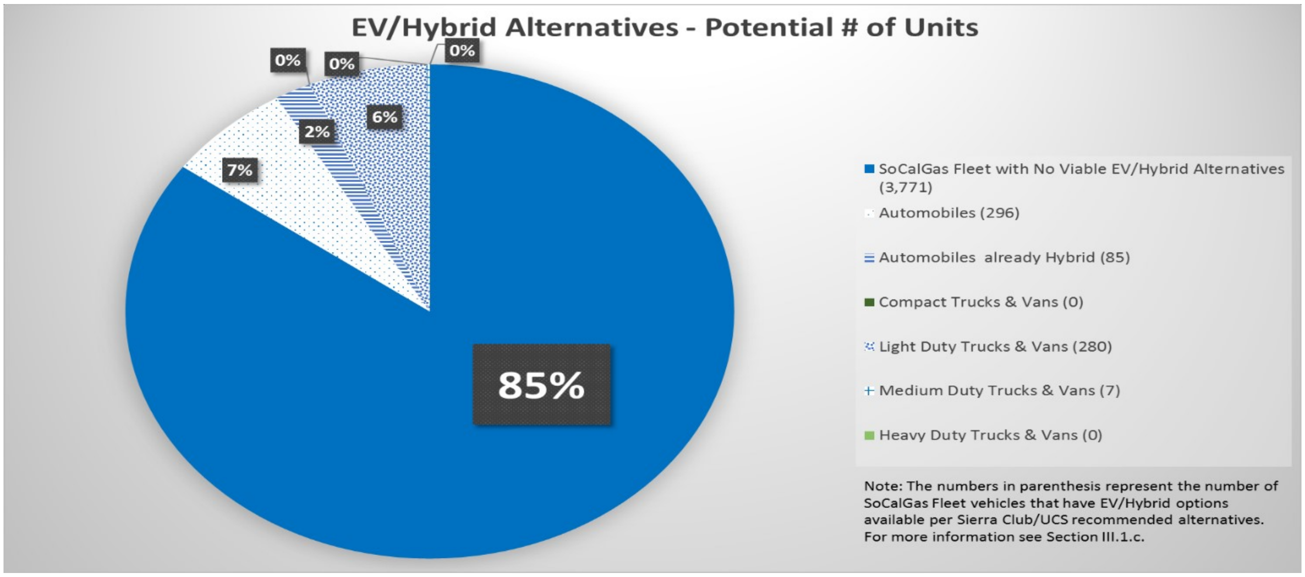
With regard to Ownership Costs, Sierra Club/UCS takes issue with SoCalGas' procurement of NGVs that are powered by Compressed Natural Gas ("CNG").[1906] Sierra Club/UCS presents various arguments and comparisons between NGVs, electric vehicles, diesel vehicles, and gasoline powered vehicles and makes the assertion that SoCalGas can currently procure electric or electric hybrid vehicles that meet the work requirements of SoCalGas operations.[1907] Sierra Club/UCS's assertions are meritless.

Sierra Club/UCS's assertions do not consider SoCalGas approach to fleet procurement which is "to target the categories [of vehicles] by replacing non-AFV (unleaded gasoline and diesel fueled vehicles) currently in the fleet with AFV, taking into consideration the availability of AFV infrastructure (for fueling), payload capacity requirements, and job functions of each workgroup."[1908] Further, Sierra Club/UCS have not shown whether their recommended electric or electric hybrid vehicles "meet daily availability requirements for operations to provide swift response to any issues with the gas infrastructure as well as new business demands. This requires that vehicles be available for use 24 hours a day, 7 days a week."[1909]

In contrast, SoCalGas presented <u>ample</u> evidence demonstrating that Sierra Club/UCS' suggested electric or electric hybrid vehicle options are not available in the marketplace or do not meet SoCalGas' operations.[1910] Specifically, Figure CLH-21 below demonstrates the stark impact of Sierra Club/UCS' assertions.[1911] There is an utter lack of viable electric & electric hybrid options to replace non-AFVs in SoCalGas' Fleet and only 15% of the Fleet have any electric or hybrid options available in the marketplace.[1912] This is all before SoCalGas has even determined whether the vehicles within the 15% of electric or hybrid options meet SoCalGas operational requirements.

1905 *Id.*
1906 Ex. 475, SC/UCS/O'Dea & Golden at 24.
1907 *Id* at 24-25.
1908 Ex. 192/192C, SCG/Herrera at 20.
1909 Ex. 188, SCG/Herrera at 3:1-4.
1910 Ex. 192/192C, SCG/Herrera at 20-29.
1911 *Id at* 29.
1912 *Id.*

Figure CLH-28
Sierra Club/UCS Electric & Hybrid Alternatives – Potential Number of SoCalGas OTR Units



If taken to their logical conclusion, Sierra Club/UCS' recommendation may have a negative impact on ratepayers. Electric vehicles range limitations (driving distance without recharging) reduces the vehicles functional usefulness. Ms. Herrera testified,

> "Let me provide an example. So at San Diego Gas & Electric, we purchased 12 Nissan Leafs. And they are not utilized more than 2,700 miles a year. **That's a significant under utilization compared to the average annual miles traveled.** That was piloted and the average range per charge is about 84 miles per charge."[1913]

Sierra Club/UCS also make various arguments concerning climate, public health, and ratepayer benefits of NGVs.[1914] Sierra Club/UCS fail to demonstrate the relevant scope of the climate and public health issues for this GRC, and with regard to the ratepayer benefit argument,[1915] apply a higher standard of proof than a preponderance of the evidence. In every instance, Sierra Club/UCS' arguments fail. SoCalGas requests that Sierra Club/UCS' arguments be rejected.

[1913] Tr. V20:1944:4-11 (Herrera).
[1914] Ex. 475, Sierra Club/UCS/O'Dea & Golden at 24-26.
[1915] Ex. 475, Sierra Club/UCS/O'Dea & Golden at 24-26 (Sierra Club/UCS assert that SoCalGas failed to "assess the comparative costs of providing or accessing electric vehicle refueling infrastructure to avoid these costs, diversify its fleet, and take advantage of the superior environmental benefits of electric vehicles.")

25.3.3 Non-Shared O&M Facility Operations

SoCalGas' Facilities Operations' request is $18.245 million, an increase of $3.075 million above 2016 adjusted-recorded costs. ORA and TURN contested certain aspects of this request.[1916] However, ORA agrees with SoCalGas use of a 5-year average, agrees with the incremental increase for RAMP security costs and agrees with SoCalGas FOF reduction.[1917] And TURN does not contest the director and support staff cost of $0.115 million (workpaper 2R F001.000).[1918] The table below summarizes their positions.

Table CLH-28
Comparison of Non-Shared Services Facility Operation Costs[1919]

Facility Operations	SoCalGas Request	ORA	TURN
Facility Operations	18,245[1920]	16,187	15,434[1921]

SoCalGas disagrees with ORA and TURN on the following positions, and except for cost areas where SoCalGas has agreed to revise, contends that its Facilities Operations request is reasonable and justified for the following reasons.

First, SoCalGas has shown that the Real Estate Planning study[1922] is reasonable but acknowledged that 2/3^{rds} of the original 2019 forecasted should be removed so that the forecasted 2019 cost of the study would be recovered over the test year and post-test years.[1923]

[1916] ORA does not contest the director and support staff cost of $0.115 million. Ex. 414, ORA/Waterworth (SCG) at 17; TURN did not oppose the funding request for Facilities Director. Ex. 498, TURN/Jones & Marcus at 12.
[1917] Ex. 414, ORA/Waterworth (SCG) at 17.
[1918] Ex, 498, TURN/Jones & Marcus at 12.
[1919] Ex. 192, at 38, Table CLH-28.
[1920] Facility Operations' workpaper includes the Facilities Director workpaper. See Ex. 189, SCG/Herrera at 64-67. Ex. 498, TURN/Jones & Marcus at Table 3 (TURN's testimony did not include the Facilities Director workpaper).
[1921] SoCalGas includes this amount to TURN's funding recommendation for consistency.
[1922] In data requests, SoCalGas sometimes refers to the "real estate planning study" as "holistic view," "holistic study," or "planning study." These terms all mean the same thing and are meant to denote the "real estate planning study" referenced in Exhibit 189, SCG/Herrera at 68-81.
[1923] Ex. 192/192C, SCG/Herrera at 39.

Second, SoCalGas explained that the incremental request under Facilities Operations are not just for utility costs related to NGV stations.[1924] In fact, the expenses related to NGV Refueling Stations constitute only $0.500 million of the total $1.574 million.[1925]

Third, SoCalGas established that its 5-year average forecasting methodology in this GRC is justified and appropriate.[1926] SoCalGas used a 3-year average in the TY2016 GRC because 2009 was an anomaly as the nation recovered from the recession.[1927] Significantly, ORA agreed with SoCalGas' use of a 5-year average.[1928]

Fourth, SoCalGas showed the Facility Operations request includes $0.604 million in labor for backfilling retirements and three new resources; and $1.574 million includes upgrades on lighting, electrical panels and equipment replacement and two planning resources.[1929] The request is much more than "deferred" projects.[1930]

Fifth, SoCalGas showed the capital Facility Renovations (discussed below) are reasonable and justified and that aging infrastructure needs to be maintained.[1931] Accordingly, any "savings" resulting from a reduction in Facility Renovations are unjustified.

Except for the costs that are revised, SoCalGas' request for Facility Operations is reasonable and justified. Therefore, SoCalGas requests that the Commission fund its request.

25.3.4 Shared O&M Facility Operations

SoCalGas presented costs for Shared Facility Operations Services in the amount of $3,845 million for TY2019.[1932] ORA and TURN did not contest costs for these amounts.[1933] Therefore, SoCalGas requests the Commission approve the Shared Facility Operations amounts requested by SoCalGas.

[1924] Ex. 192/192C, SCG/Herrera at 39-40.
[1925] *Id.*
[1926] *Id.* at 41.
[1927] *Id.* at 41, fn. 112.
[1928] Ex. 414, ORA/Waterworth (SCG) at 17 ("ORA agrees with the use of a 5-year average as costs 6 fluctuate…")
[1929] Ex. 192/192C, SCG/Herrera at 41.
[1930] *Id.*
[1931] *Id.*
[1932] Ex. 188, SCG/Herrera at 37.
[1933] Ex. 192/192C, SCG/Herrera (Rebuttal) at 42; *see, also,* Ex. 414, ORA/Waterworth at 3 & Ex. 498, TURN/Jones & Marcus at 11-50.

25.4 Capital – Fleet and Facilities

All capital for fleet and facilities is SoCalGas only. ORA accepts SoCalGas' forecasts for 2018 and 2019 for the Capital Fleet Projects but ORA proposes to use SoCalGas actual 2017 expenditures of $0.363 million, which is $0.185 million less than SoCalGas' original 2017 forecast of $0.548 million.[1934] SoCalGas does not oppose ORA's recommendation.[1935] TURN does not contest SoCalGas' shared Fleet Projects forecast. SoCalGas requests the Commission adopt SoCalGas forecast of $4.392 million.

25.4.1 NGV Refueling Stations

SoCalGas' NGV Refueling Station request is $7,175 million in 2017, $15,937 million in 2018, and $18.799 million in 2019, as summarized on Table CLH 43 below, to upgrade existing NGV stations and plan, design, and build eight new NGV refueling stations.[1936] ORA, TURN, and Sierra Club/UCS contested the NGV Refueling Stations request. The table below summaries their positions, if specified.

Table CLH 43[1937]
Comparison of Capital Project Costs - NGV Refueling Stations- ORA ($000)

NGV Refueling Station	2017	2018	2019	Total	Variance
SoCalGas	$7,175	$15,937	$18,799	$41,911	0
ORA	$7,542	$7,542	$7,542	$22,626	$ (19,285)
TURN	$7,542	$7,542	$7,542	$22,626	$ (19,285)
Sierra Club/UCS	Unspecified				

SoCalGas disagrees with ORA, TURN, and Sierra Club/UCS on each of their positions and contends that its NGV Refueling Station request is reasonable and justified for the following reasons.

First, SoCalGas established cost-effectiveness[1938] of the NGV Refueling Station request by showing the need for the NGV Refueling Stations across a territory that is approximately 20,000 square miles in diverse terrain throughout Central and Southern California, from Visalia

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1934 Ex. 414, ORA/Waterworth (SCG) at 19.
1935 Ex. 192/192C, SCG/Herrera at 55.
1936 Ex. 188, SCG/Herrera at 53-54.
1937 Ex. 192 SCG/Herrera at 55.
1938 SoCalGas interprets cost-effectiveness to be the equivalent of reasonable and justified.

to the Mexican border.[1939] SoCalGas also showed that fueling with its proposed NGV Refueling Stations is more efficient due to less labor hours needed to travel to refuel offsite and less costly due to a decrease in cost per gallon.[1940] (*See also*, fourth argument below.)

Further, in terms of evaluating the cost-effectives of NGV Refueling versus EV refueling infrastructure, SoCalGas demonstrated that a new, utility owned, Fleet-public access NGV station is designed to serve thousands of vehicles every year and can fuel a heavy-duty vehicle within several minutes.[1941]

<u>Second</u>, SoCalGas demonstrated that NGV Refueling is not discretionary because SoCalGas is committed to AFVs (*i.e.*, NGVs) and has already increased its proportion of NGV fleet, from 23% in 2015 to 27% in 2017.[1942]

<u>Third</u>, SoCalGas justified its forecasted number of NGV Refueling Stations and explained why an increase in the number of hoses to the NGV Refueling Stations is insufficient. Hoses are insufficient because SoCalGas will continue to grow its AFV Fleet beyond 1300 vehicles and with only 28 bases with NGV refueling capability, the infrastructure is not sufficient to meet NGV refueling need.[1943] Hoses are also insufficient because adding more hoses to NGV stations would require increased footprint where space is constrained with no room to expand.[1944] There are a variety of factors that could affect capacity at an existing site, including but not limited to: existing natural gas pipelines within the site, compressor size, dryer equipment, electrical panels, parking space requirements, parking layout, etc.[1945] These hoses will also incur costs for refueling equipment (*i.e.* compressors, dryers, piping, fueling-posts, hoses, etc.), electrical panel upgrades, trenching, parking layout re-design and repaving.[1946]

<u>Fourth</u>, SoCalGas demonstrated that onsite fueling is more cost-effective and efficient.[1947] SoCalGas has bulk fuel contracts for diesel and gasoline and onsite refueling occurs 94% of the time due to the economic benefits of these fuel contracts.[1948] Similarly, NGV

[1939] Ex. 192/192C, SCG/Herrera at 56.
[1940] *Id.* at 57.
[1941] *Id.* at 61.
[1942] *Id.* at 57
[1943] *Id.* at 58-59.
[1944] *Id.*
[1945] *Id.*
[1946] *Id.*
[1947] *Id.* at 59-60.
[1948] *Id.* at 59.

refueling onsite utilizing a time-fill station is much more cost effective than fueling offsite due to the higher cost of retail CNG.[1949]

Fifth, SoCalGas showed that Fleet-Public NGV Refueling Stations are necessary. SoCalGas has experienced an increase in 3rd party public natural gas fuel use by over 21% from 2016 to 2017 and expects usage to increase by almost 24% from 2017 to 2018 based on year to date fuel use trends as demonstrated in Exhibit 192/192C.[1950] Furthermore, Cummins Westport introduced a new natural gas engine to meet the demands of the natural gas heavy-duty vehicle market.[1951] Additionally, in 2017, SoCalGas' internal data showed that utility owned Fleet-public NGV stations fueled 162,033 vehicles, an average of 55 vehicles per stations per day (30 public vehicles and 25 Fleet vehicles).[1952]

Sixth, SoCalGas demonstrated these assets will not become stranded given SoCalGas 1,300 AFV goal, SoCalGas' current purchase orders for new NGVs and increasing third-party demand (referenced above).[1953]

Given the foregoing, SoCalGas' request for NGV Refueling Stations is reasonable and fully justified. Therefore, SoCalGas requests the Commission fund its request in its entirety.

25.4.2 Facilities Capital

SoCalGas broke out its Facilities Capital expenditures costs into the following categories: (1) Infrastructure & Improvements; (2) Safety & Environmental; (3) Bakersfield Multi-Use facility; (4) Facility Energy Management Systems.[1954] SoCalGas addresses each below.

25.4.2.1 Infrastructure and Improvements

SoCalGas TY 2019 capital expenditures request for Infrastructure and Improvements subcategory in the amount of $24.243 million in 2017, $45.863 million in 2018, and $59.923 million in 2019.[1955] SoCalGas further separated Infrastructure and Improvement costs into the following cost subcategories: (1) Infrastructure & Improvements; (2) Facility Renovations; (3)

1949 *Id.*
1950 Ex. 192/192C, SCG/Herrera at 60.
1951 *Id.*
1952 *Id.* at 61.
1953 *Id.* at 60-62.
1954 Ex. 188, SCG/Herrera at 39.
1955 Ex. 188, SCG/Herrera at 40.

Sustainability Projects; and (4) Physical Security Infrastructure Enhancements (*i.e.*, RAMP).[1956] A summary of those costs is provided in the table below.

TABLE CLH-20[1957]
Southern California Gas Company
Summary of Capital Infrastructure & Improvements
(Thousands of 2016 dollars)

A. Infrastructure & Improvement	**2016 Adjusted-Recorded**	**Estimated 2017(000s)**	**Estimated 2018(000s)**	**Estimated 2019(000s)**
1. Infrastructure & Improvements	24,066	18,914	20,649	18,935
2.Facility Renovations	0	3,880	21,514	37,138
3. Sustainability Projects	0	1,449	3,100	3,250
4. Physical Security Infrastructure Enhancements (RAMP)	0	0	600	600
Total	**24,066**	**24,243**	**45,863**	**59,923**

ORA and TURN submitted testimony regarding the Infrastructure and Improvements area. ORA submitted a response to all four subcategories[1958] while TURN submitted a response only on the Facility Renovations category.[1959]

<u>Infrastructure and Improvements</u>

SoCalGas presented an Infrastructure and Improvements subcategory forecast in the amount of $18,914 million in 2017, $20,649 million in 2018, and $18,935 million in 2019.[1960] ORA accepted SoCalGas 2018 and 2019 forecast but recommended using SoCalGas' 2017 recorded capital expenditures in place of SoCalGas' 2017 forecast.[1961] Given the specific context of SoCalGas' Infrastructure and Improvements TY2019 capital request, SoCalGas accepts ORA's recommendation.[1962]

[1956] *Id.*
[1957] Ex. 188, SCG/Herrera at 40.
[1958] Ex. 414, ORA/Waterworth (SCG) at 19.
[1959] Ex. 498, TURN/Jones & Marcus at 17-18.
[1960] Ex. 188, SCG/Herrera at 40.
[1961] Ex. 414, ORA/Waterworth (SCG) at 21.
[1962] Ex. 192/192C, SCG/Herrera at 45.

Facility Renovations

SoCalGas presented a Facility Renovations forecast in the amount of $3,880 million in 2017, $21,514 million in 2018, and $37,138 million in 2019 for renovations to SoCalGas' aging facilities.[1963] These renovations are intended to support SoCalGas' changing workplace requirements and to improve the functionality of buildings and/or sites, which support the work patterns of SoCalGas employees.[1964] SoCalGas' original request included improvements for Pico Rivera, Anaheim, Chatsworth, and Compton.[1965] SoCalGas' original request also included a real estate study, referenced above.[1966] SoCalGas moved forward with this real estate study and this resulted in a delay to the Compton and Chatsworth renovations.[1967] Throughout the discovery process and in rebuttal, SoCalGas remained transparent about the real estate study, the status of the study, potential impacts of the study results, and the related delays to Compton and Chatsworth.[1968] As a result of a real estate study,[1969] SoCalGas refocused its facility renovations to upgrading and expanding the multi-building campuses at Pico Rivera and Monterey Park.[1970]

ORA and TURN submitted testimony contesting SoCalGas' request and recommending changes.[1971] ORA recommends $12.441 million for facility renovations for TY 2019 which is $50.091 million, or 80% less than SoCalGas' forecast and equates to $0 for 2017, and 50% of SoCalGas' forecast for 2018 and 2019.[1972] ORA makes this recommendation despite the fact that "ORA toured the Chatsworth, Pico Rivera and Anaheim locations and observed the facilities **noting the justification for the project remodels**."[1973] TURN recommends $0 funding for Pico Rivera, Anaheim, Chatsworth, and Compton or in the alternative, recommends that the Commission adopt ORA's funding recommendation.[1974]

The Facility Renovations arguments raised by ORA and TURN are similar and in making these arguments ORA and TURN relied, in part, on SoCalGas' transparency and data

[1963] Ex. 190, SCG/Herrera at 41.
[1964] *Id.*
[1965] *Id.*
[1966] Ex. 189, SCG/Herrera at 69-72; *see* FN. 110.
[1967] Ex. 414, ORA/Waterworth at 23-24; *see also,* ORA-SCG-122-LMW Q1.a and Q1.f.
[1968] *Id.*
[1969] Ex. 192/192C, SCG/Herrera at 47.
[1970] *Id.*
[1971] *See,* Ex. 414, ORA/Waterworth; Ex. 498, TURN/Jones & Marcus 18.
[1972] Ex. 414, ORA/Waterworth at 24.
[1973] Ex. 414, ORA/Waterworth at 23:1-2 (emphasis added).
[1974] Ex. 498, TURN/Jones & Marcus at 18.

responses.[1975] SoCalGas disputes ORA and TURN's recommendations because they are not supported by the evidence.

First, ORA and TURN argue that SoCalGas requested the same funding in the prior GRC, did not conduct the renovations, and that this demonstrates that Facility Renovations are not a priority.[1976] SoCalGas has shown that Facility Renovations are a priority for SoCalGas.[1977] SoCalGas explained that in 2017, SoCalGas accelerated a real estate planning study so that SoCalGas could understand how best to optimize and integrate its facilities; that in February 2018, SoCalGas received the final draft of the phase one results of the real estate planning study which provided SoCalGas an optimized and integrated facilities renovation plan; and that concurrent and consistent with phase one of the study, SoCalGas refocused its proposal for Compton, Anaheim and Chatsworth to instead prioritize developing and renovating its multi-building campuses at Pico Rivera and Monterey Park.[1978] SoCalGas has proceeded with implementation of phase one of real estate planning study and has already reallocated funding and resources that were planned for Compton, Anaheim and Chatsworth to the redesign, renovations and development of Pico Rivera and Monterey Park multi-building and multi-use campuses. SoCalGas has been transparent about its efforts.[1979]

Second, SoCalGas has shown that even though funding for Compton, Anaheim and Chatsworth have been refocused and reallocated into the multi-building campuses at Pico Rivera and Monterey Park and that these renovations will exceed the amount forecast for Facility Renovations, SoCalGas is only seeking its original capital forecast.[1980]

[1975] TURN generally agreed with ORA's recommendation with regard to the Facility Renovations for Compton, Chatsworth, Anaheim, and Pico Rivera (while also offering an alternative). *See* Ex. 498, TURN/Jones & Marcus at 18. Accordingly, SoCalGas and SDG&E will address ORA and TURN jointly as if they made the same assertions concerning these specific Facility Renovations costs for the purposes of this brief. As appropriate, SoCalGas and SDG&E will separately address TURN's assertions when they diverge or supplement ORA's position. This treatment of ORA and TURN's arguments is intended only to maximize efficiency and minimize duplication. SoCalGas and SDG&E reserve all rights to address each individual argument at any appropriate time, and no waiver of such rights is intended.
[1976] Ex. 414, ORA/Waterworth at 21; Ex. 498, TURN/Jones & Marcus at 17
[1977] Ex. 192/192C, SCG/Herrera at 44-50.
[1978] Ex. 192/192C, SCG/Herrera at 47-48.
[1979] Ex. 414, ORA/Waterworth at 37.
[1980] Ex. 192/192C, SCG/Herrera at 44-50; Tr. V20:1887:12-17 (Herrera).

Third, ORA and TURN argue that the renovation projects are delayed.[1981] However, SoCalGas established that the renovation projects are, in fact, accelerated.[1982] SoCalGas provided evidence that shows that work is underway and that SoCalGas' forecast is now less a "forecast" than a reality and committed renovations that will be completed in 2018 and 2019.[1983]

SoCalGas has demonstrated that its capital funding forecast was carefully developed, supported by a comprehensive study, and the requested funding is essential for the continuation of SoCalGas' commitment to public and employee safety. SoCalGas has also established that the forecast is reasonable and justified given the work that is already underway. Therefore, SoCalGas requests that the Commission adopt its forecast in its entirety.

Logistics Warehouse

ORA excludes SoCalGas' forecast for a renovated Logistics Warehouse.[1984] SoCalGas disputes ORA's exclusion and addresses ORA's argument in full in Section 24.[1985]

Gas Control

ORA opposes the estimated completion date for the physical relocation of the Gas Control Facility and has eliminated funding for the project in 2019.[1986] ORA states, "ORA is not contesting the justification for the project, but does not agree with the estimated date."[1987] SoCalGas opposes ORA's position. SoCalGas has shown that the timing for the development of the Gas Control Facility has been accelerated due to its critical need – a need that ORA does not contest.[1988] Further, SoCalGas has established that work is underway; *i.e.*, the location has been finalized (Pico Rivera); site visits conducted; an architect hired for the initial analysis / scoping in September 2017; a project management firm hired in May 2018; and in process of finalizing a site-specific architect.[1989] SoCalGas also showed that the initial requirements and needs assessment are also in progress, including proposals for a geotechnical study.[1990] SoCalGas

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[1981] Ex. 414, ORA/Waterworth at 24; Ex. 498, TURN/Jones & Marcus at 17.
[1982] Ex. 192/192C, SCG/Herrera at 48.
[1983] *Id* at Appendix A, Bakersfield Project Work Order Authorization and Project Timeline; Monterey Park Work Order Authorization and Timeline.
[1984] Ex. 414, ORA/Waterworth at 8
[1985] Ex. 294, SCG/SDGE/Chow at 4-6.
[1986] Ex. 414, ORA/Waterworth at 25.
[1987] *Id*. at 25.
[1988] Ex. 192/192C, SCG/Herrera at 50.
[1989] *Id.*
[1990] Ex. 192/192C, SCG/Herrera at 50 & Appendix A, Pico Rivera Site / Gas Control – Geotechnical Study Proposal.

anticipates a similar ground up construction schedule as the Bakersfield project (11 months).[1991] Based on the foregoing, SoCalGas requests that the Commission adopt SoCalGas' Gas Control request in its entirety.

Collaborative Training Center

ORA excludes the collaborative training facility from its forecast with no justification or explanation for the disallowance.[1992] ORA states, "ORA excludes the Collaborative Training facility from its forecast. See Ex. ORA-13 for the analysis."[1993] Despite a follow-up request and review of multiple volumes of ORA testimony, SoCalGas was unable to locate ORA's rationale.[1994] ORA has failed to establish the basis for its recommendation. Therefore, ORA's recommendation should be disregarded and SoCalGas' forecast for the Collaborative Training Facility should be adopted.

Sustainability Projects

SoCalGas requested $7.799 million for sustainability projects in order to improve energy conservation and to reduce SoCalGas carbon footprint.[1995] ORA recommended a total of $9.116 million for SoCalGas sustainability projects.[1996] ORA's recommendation is based on using 2017 actual recorded capital expenditures and adoption of SoCalGas' 2018 and 2019 forecasts. SoCalGas does not oppose ORA's recommendation.

25.4.2.2 Physical Security Infrastructure Enhancements (RAMP)

SoCalGas requested $0 in 2017, $0.600 million in 2018 and $0.600 million in 2019 to support its Physical Security Infrastructure Enhancement request.[1997] ORA was the only party to submit testimony on this request and ORA did not dispute SoCalGas' forecast for this cost category.[1998] Therefore, SoCalGas requests the Commission adopt SoCalGas forecast in its entirety.

[1991] Ex. 192/192C, SCG/Herrera at 50 & Appendix A, Bakersfield Project Work Order Authorization and Timeline.
[1992] Ex. 414, ORA/Waterworth at 29.
[1993] *Id.*
[1994] Ex. 192/192C, SCG/Herrera at 45.
[1995] Ex. 188, SCG/Herrera at 40.
[1996] Ex. 414, ORA/Waterworth at 30.
[1997] Ex. 188, SCG/Herrera at 40.
[1998] Ex. 414, ORA/Waterworth at 17.

25.4.2.3 Safety and Environmental

SoCalGas forecast $6,525 million for safety and environmental projects to improve safety and comply with environmental regulations.[1999] Only ORA submitted testimony recommending adjustments to SoCalGas' request.[2000] ORA recommended a total of $7,533 million for SoCalGas' safety and environmental projects and stated that "ORA accepts SCG's forecast for 2018 and 2019, and uses SCG's actual 2017 capital expenditures for Safety and Environmental."[2001] Given the context of this specific request, SoCalGas does not oppose ORA's recommendation.[2002]

25.4.2.4 Bakersfield Multi-Use Facility

SoCalGas requests $7 million in 2017, $7 million in 2018 and $0 in 2019 for the planning, permitting, construction, and commissioning of a new multi-use facility in Bakersfield.[2003] ORA was the only party to recommend changes to SoCalGas' forecast.[2004] ORA recommended an in-service date of December 31, 2019 for SoCalGas' Bakersfield facility and moving most of SoCalGas' proposed 2017 forecasted funding ($7.000 million) to 2018 and SoCalGas' proposed 2018 funding ($7.000 million) to 2019.[2005] SoCalGas disagrees with ORA's recommended in-service date for the Bakersfield facility. Groundbreaking has already taken place for the new Bakersfield facility (April 2018), and SoCalGas is projecting to complete the project in February 2019.[2006]

ORA's recommended in-service date is misplaced. SoCalGas demonstrated that the projected completion date for Bakersfield is February 2019. In support of its position, SoCalGas provided evidence of the groundbreaking at Bakersfield (April 2018).[2007] SoCalGas also provided renovation plans, facility studies and updated timeline to support the in-service date of February 2019.[2008] Therefore, SoCalGas' original forecast should be approved in its entirety.

[1999] Ex. 188, SCG/Herrera at 47.
[2000] *See* Ex. 414, ORA/Waterworth at 31. TURN did not contest SoCalGas' Safety and Environmental forecast.
[2001] Ex. 414, ORA/Waterworth at 31.
[2002] Ex. 192/192C, SCG/Herrera at 53.
[2003] Ex. 188, SCG/Herrera at 48.
[2004] Ex. 414, ORA/Waterworth (SCG) at 32.
[2005] *Id*. at 33.
[2006] Bakersfield Project Work Order Authorization and Timeline attached in Appendix A.
[2007] Ex. 192/192C, SCG/Herrera at 53, & Appendix A, Bakersfield Project Work Order Authorization and Timeline.
[2008] Ex. 192/192C, SCG/Herrera at 53 & Appendix A.

25.4.2.5 Facility Energy Management System

SoCalGas forecast for its Facility Energy Management System capital request $1 million in 2017, $0.5 million in 2018 and $0 for 2019.[2009] SoCalGas' request is to upgrade existing or install new systems to improve energy management of lighting and HVAC systems.[2010]

ORA is the only party that submitted testimony regarding this cost category.[2011] ORA accepted SoCalGas' forecasts for 2018 and 2019 for Facility Energy Management System but ORA proposed $0 for 2017 based on actual expenditures.[2012] SoCalGas does not oppose ORA's recommendation.[2013]

25.5 SDG&E Issues

25.5.1 Fleet Management

Neither ORA nor TURN contested SDG&E's Shared Fleet Management forecast. Aside from the Fleet Management forecast, all of SDG&E's Fleet issues are incorporated into the "Common Issues" section above.

26. Real Estate, Land Services, and Facilities

SoCalGas' Real Estate and SDG&E's Real Estate, Land Services, and Facilities (REL&F) testimony and workpapers, supported by witness Dale Tattersall, describe and justify the utilities' Operations and Maintenance (O&M) and capital expenditure forecasts,[2014] which in turn form the basis for the Test Year 2019 (TY 2019) revenue requirement request for this area. REL&F is a shared services organization, responsible for real estate, facilities, capital construction and land services administration. REL&F plans, acquires, builds, and maintains the real estate and facility assets in support of the delivery of gas and electric energy and services.

The Joint Comparison Exhibits (JCE) for SoCalGas and SDG&E summarize each utility's request and corresponding Intervenor proposals in this area.[2015] While SoCalGas and

[2009] Ex. 188, SCG/Herrera at 50.
[2010] *Id.*
[2011] Ex. 414, ORA/Waterworth (SCG) at 33-34.
[2012] *Id.*
[2013] Ex. 192/192C, SCG/Herrera at 54.
[2014] Exhibits (Ex.) 166, 167, 168 SoCalGas/Tattersall, and Exs. 169, 170, 171, 172 SDG&E/Tattersall. The description and justification for SoCalGas Facility Operations costs and Land costs are addressed in the testimony and workpapers of Ms. Herrera and Ms. Haines, respectively. *See* Sections 13 and 25, *supra*.
[2015] Ex. 516 SCG/JCE at 173-175 (comparison between SoCalGas and ORA); Ex. 517 SDG&E/JCE at 153-177 (comparison between SDG&E and ORA), 368-392 (comparison between SDG&E and TURN).

SDG&E do not specifically address each subcomponent of their request here, the Companies submit that unaddressed items were fully supported in the direct testimony and workpapers and should be adopted by the Commission.

26.1 SoCalGas Issues

26.1.1 Operations and Maintenance

The below table summarizes the current positions of SoCalGas and ORA with respect to SoCalGas Real Estate O&M:

TABLE 26.1.1 – SoCalGas Real Estate O&M

TOTAL O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SOCALGAS	**$14,069**[2016]	**$21,510**	**$7,441**
ORA	**$14,069**	**$20,067**	**$5,998**

SoCalGas originally requested approval for $23.450 million in O&M Real Estate funding for TY 2019.[2017] ORA did not oppose SoCalGas' original forecast, except for $3.383 million in the shared services category for TY 2019 Gas Company Tower (GCT) rents.[2018] ORA's proposed rent reduction would not adequately fund the estimated costs for contractual rents, operation expenses, parking, property taxes, storage, and janitorial services.[2019] However, after identifying the inadvertent omission of certain rent and parking credits in the GCT original forecast, SoCalGas developed a revised, zero-based forecast for GCT rents for years 2018-2021.[2020] The revised TY 2019 forecast, which is $1.94 million less than the original forecast – $17.599 million for GCT rents and $19.110 million for shared services in total[2021] – is reasonable and should be adopted, along with the uncontested $2.4 million in non-shared services O&M.

[2016] Table 26.1.1 reflects both shared and non-shared O&M costs. In SoCalGas' rebuttal testimony, the Summary of Differences Table incorrectly reflected base year 2016 O&M costs of $11.659 million – that figure inadvertently did not include non-shared costs. Ex. 168 SoCalGas/Tattersall at 2. By including non-shared costs, the correct amount is $14.069 million. Table 26.1.1 also reflects SoCalGas' revised, zero-based Gas Company Tower rents forecast described in SoCalGas' rebuttal testimony.

[2017] Ex. 168 SoCalGas/Tattersall at 2:13-15.

[2018] Ex. 414 ORA/Waterworth at 2, Table 19-1, and 39. No party other than ORA contested SoCalGas' O&M Real Estate request.

[2019] Ex. 168 SoCalGas/Tattersall at 2:18-20.

[2020] *Id*. at 4:19-20 and Appendix A.

[2021] *Id*. at 5-6 and Appendix A.

26.2 SDG&E Issues

26.2.1 O&M

The below table summarizes the current positions of SDG&E, ORA, and TURN with respect to SDG&E REL&F O&M:

TABLE 26.2.1 – SDG&E REL&F O&M

TOTAL O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	**$ 32,776**	**$ 32,871**[2022]	**$ 95**
ORA	**$ 32,776**	**$ 34,169**[2023]	**$ 1,393**
TURN	**$ 32,776**	**$ 33,368**[2024]	**$ 592**

SDG&E requests $32.871 million in O&M REL&F funding for TY 2019. ORA and TURN do not dispute SDG&E's non-shared services O&M forecast.[2025] ORA also does not dispute SDG&E's shared services O&M forecast.[2026]

TURN disputes the shared services O&M cost relates to RB Data Center & Annex (Cost Center 2100-3610).[2027] TURN recommends an arbitrary 50% (or $379,000) reduction to the $758,000 forecast, mistakenly asserting that the decommissioning of the RB Annex facility warrants it.[2028] The routine operations costs for the RB Annex facility are not contained in cost center 2100-3610, but are contained in workpaper group 1RE003.000 – SDGE Rents, which SDG&E already adjusted to reflect that the RB Annex facility will be decommissioned at the end of 2017.[2029] That the 2017 RB Data Center & Annex forecast of $758,000 was $21,000 higher

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[2022] At the time of rebuttal testimony and evidentiary hearings, SDG&E was requesting $34.169 million for this area. Ex. 172 SDG&E/Tattersall at 1. As explained in Mr. Tattersall's update testimony, SDG&E made a $1.298 million downward adjustment in light of the recently issued D.18-08-008 granting SDG&E's Application (A.) 17-04-027) for authority to implement its Customer Information System (CIS) Replacement Program. Ex. 514 SCG/SDG&E/Tattersall Update Testimony (UT) (August 2018) at 23-24 and Attachment I at I-2.

[2023] ORA's proposal does not include the $1.298 million downward adjustment included in SDG&E's update testimony. *See id.*

[2024] TURN's proposal does not include the $1.298 million downward adjustment included in SDG&E's update testimony. *See id.*

[2025] Ex. 413 ORA/Waterworth at 3:24-25 and Table 18-5; Ex. 498 TURN/Jones at 3 (making no recommendations to revise non-shared services O&M forecast).

[2026] Ex. 413 ORA/Waterworth at 3:24-25 and Table 18-5.

[2027] Ex. 498 TURN/Jones at 2-3.

[2028] *Id.* at 2:22-3:6.

[2029] Ex. 172 SDG&E/Tattersall at 7:14-20.

than actual 2017 costs[2030] evidences that SDG&E's forecast is conservative and should be adopted.

26.2.2 Capital

The below table summarizes the current positions of SDG&E, ORA, and TURN with respect to SDG&E REL&F Capital:

TABLE 26.2.2 – SDG&E REL&F CAPITAL

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E[2031]	**$54,195**	**$65,333**	**$ 74,356**	**$ 193,884**	**$ (9,566)**
ORA	**$ 51,600[2032]**	**$ 47,646**	**$ 47,017**	**$ 146,263**	**$ (57,817)**
TURN	**$ 51,600[2033]**	**$ 47,646**	**$ 41,960**	**$ 141,206**	**$ (62,244)**

SDG&E requests adoption of its 2017-2019 capital REL&F forecasts, including $54.159 million for 2017, $65,333 million for 2018, and $74,356 million for TY 2019.

1. Blanket Budget Codes

ORA accepts SDG&E's forecasts for numerous blanket budgets, except that it (1) disputes forecasted costs for emergent and as-yet specified projects,[2034] and (2) argues that SDG&E's use of a three-year average methodology, capturing both planned and unplanned

2030 *Id*. at 8:1-2.
2031 SDG&E originally requested $54.699 million for 2017, $68.502 million for 2018, and $80.249 million for TY 2019. *Id*. at 1. Table 26.2.2 reflects a reduction of $161,000 in 2018 in the forecast for Budget Code 701, *id*. at 10, 24, and the removal of costs related to Kearny Master Plan Phase 1, MCFC&E, and Ramona C&O from the 2017, 2018, and 2019 forecasts, *id*. at 19. *See also* Ex. 171 SDG&E/Tattersall at 67 (forecasts for MCFC&E of $1.496 million and $3,540 million for 2018 and 2019, respectively), *id*. at 68 (forecast for Ramona C&O of $378,000 for 2019), and *id*. at 69 (forecasts for Kearny Master Plan Phase 1 of $504,000, $1.512 million, and $1.975 million in 2017, 2018, and 2019 respectively).
2032 ORA and TURN recommend the 2017 actual recorded capital expenditures for SDG&E Real Estate and Facilities be adopted as the 2017 authorized forecast. The 2012-2017 historical recorded capital expenditures provided to ORA/TURN for this witness area were understated, because SDG&E inadvertently removed the electric transmission (FERC) component when providing historical capital data to ORA. The 2017 SDG&E Real Estate and Facilities actual recorded capital expenditure level inclusive of FERC costs is $59,501,000. SDG&E assumes that this would be the intended ORA/TURN recommendation for 2017 Real Estate and Facilities authorized capital expenditures. Ex. 172 SDG&E/Tattersall at 1, n.1.
2033 *See id*.
2034 Ex. 413 ORA/Waterworth at 17-21; 26-27.

projects, "creates a greater degree of risk that the capital budget will be higher than actual."[2035] This two-prong attack on blanket budgets is belied by the record.

As ORA agrees, it is a reasonable and prudent for forecasts to consider unforeseen capital projects that may arise between rate cases.[2036] Indeed, the Commission has previously approved such blanket budgets for SDG&E Real Estate and Facilities.[2037] Moreover, SDG&E has thoroughly supported its blanket budget forecasts with (1) specific rationales for including (or not including) annual allowances for unplanned, unspecified projects in disputed blanket budget codes, and (2) the primary drivers of increased costs in each disputed blanket budget code.[2038]

ORA also acknowledges that using a historical average of costs "is a reasonable basis to forecast unknown/unplanned projects."[2039] ORA's concern that SDG&E's forecasts, using three-year instead of five-year averages, will be higher than actuals is unsubstantiated. SDG&E's Real Estate and Facilities capital expenditures have historically met or exceeded GRC forecasts.[2040] SDG&E has a record of accurately assessing its facility capital improvement needs and closely managing its spending to those assessments and delivering upon those needs.[2041] SDG&E's blanket budget requests should not be reduced across the board as ORA suggests.

2. Network Operations Center and Emergency Operations Center

The Network Operations Center (NOC) and Emergency Operations Center (EOC) are critical to SDG&E's operations and support the safe and reliable delivery of electricity and gas utilities to customers.[2042] The facilities need improvements for numerous reasons.[2043] TURN's opposition to the NOC and EOC improvements is based solely on the flawed assumption that the Mission Critical Facility Consolidation and Expansion (MCFC&E) project will replace the NOC and EOC and negate the need to invest in them.[2044]

[2035] *Id.* at 18:10-13. TURN agrees with ORA's proposed reductions to the blanket budgets and proposes further capital reductions. Ex. 498 TURN/Jones at 4:10-12.
[2036] Ex. 413 ORA/Waterworth at 18:7-9.
[2037] *See, e.g.*, Decision (D.) 13-05-010 at 710-719.
[2038] Ex. 172 SDG&E/Tattersall at 8-11 (Land/Structures and Improvement Blankets); *id.* at 11-12 (Safety and Environmental Blanket); *id.* at 12 (Miscellaneous Equipment Blanket); *id.* at 13 (Security Systems Blanket); *id.* at 14 (Infrastructure & Reliability Blanket); and *id.* at 18-19 (Business Unit Expansions).
[2039] Ex. 413 ORA/Waterworth at 18:7-9.
[2040] Ex. 172 SDG&E/Tattersall at 9:6-7 and Table RDT-1.
[2041] *Id*. at 9:11-13.
[2042] Ex. 172 SDG&E/Tattersall at 15:9-11.
[2043] *Id.*, Appendix A at A-8-11, A-27-29.
[2044] Ex. 498 TURN/Jones at 5-6.

The MCFC&E facility is not intended to replace the existing NOC and EOC.[2045] The proposed improvements to the NOC and EOC are for those stand-alone, existing spaces – regardless of whether they function in a primary or back-up capacity.[2046] If approved, the MCFC&E facility will be the primary location for mission critical activities during events such as red flag warnings, fires, earthquakes, natural disasters, and other emergency situations, with the NOC and EOC serving as back-up locations.[2047] Therefore, SDG&E must plan for contingencies if such an event causes its systems to fail, prevents access to other sites, creates unsafe conditions for employees to work at other sites, or causes interruptions to services for our customers. SDG&E's proposed requests for the NOC and EOC improvements should be approved so that these facilities can continue to serve safely as primary locations until the MCFC&E is operational (currently not planned until the next rate case cycle).[2048]

3. CP-4 and CP-5 refresh projects

SDG&E documented multiple, valid reasons for the CP-4 and CP-5 refresh projects, as outlined in Mr. Tattersall's testimony and capital workpapers.[2049] ORA recommends to eliminate both projects (found within the Remodels and Reconfiguration budget) based on: (1) the purported lack of "detailed plans" to substantiate the overall intent/scope and specific costs, and (2) the fact that the current facilities are American with Disabilities Act (ADA) compliant and provide a safe and healthy employee environment.[2050] ORA also argues that because certain projects were completed in the last GRC cycle, "even though not proposed in the 2016 GRC," the proposed CP-4 and CP-5 projects can be funded as part of the overall enterprise capital authorized allocation.[2051] SDG&E disagrees with all of these points.

The CP-4 and CP-5 refresh projects are significant in size and impact; they are neither discretionary nor capable of being absorbed without specific funding allocation.[2052] While the CP-4 and CP-5 remodel and refresh projects were not included in forecasts to eliminate an ADA compliance issue and/or to correct any employee safety or health deficiencies, these projects are

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[2045] Ex. 172 SDG&E/Tattersall at 15.
[2046] *Id*. at 15:16-17.
[2047] *Id*. at 15:17-20.
[2048] *Id*. at 16:4-5.
[2049] Ex. 169 SDG&E/Tattersall at 34-35; Ex. 172 SDG&E/Tattersall at 16-18; Ex. 171 SDG&E/Tattersall at 52, 57.
[2050] Ex. 413 ORA/Waterworth at 24:3-11.
[2051] *Id*. at 24:12-16.
[2052] Ex. 172 SDG&E/Tattersall at 16:16-18.

supported by many other substantial benefits, such as: (1) increased densification for employees and capacity, (2) more usable square footage, (3) flexible furniture systems that will reduce future costs and time required to reconfigure spaces, (4) improved employee retention and recruiting, (5) increased energy efficiency and sustainable building materials, (6) improved adjacencies, and (7) more conference, project, and focus rooms to accommodate a collaborative work environment.[2053] It is not prudent to wait for an ADA compliance issue or a safety issue to arise before seeking to implement these important benefits.[2054]

The absence of specific, detailed plans for the renovations is also not a reason to deny project funding. Indeed, the capital forecasts for these projects specifically include funding to a) perform the planning and design work required to develop plans for the temporary relocation of employees, b) develop the drawings and specifications necessary to define the scope, c) refine the budgets and d) implement the projects.[2055]

The GRC forecasted costs for CP-4 and CP-5 are reasonably based on historical metrics gathered from similar projects,[2056] and should be approved.

4. Kearny Master Plan Phase I, MCFC&E and Ramona C&O Expansion

TURN and ORA oppose SDG&E's proposed Kearny Master Plan Phase I and MCFC&E projects because they are "premature" or may not be "used and useful" in an individual GRC rate case cycle (2017-2019).[2057] Large projects of this type (in terms of the capital investment, scope, or complexity) take more than three (3) years from start to finish to complete.[2058] SDG&E's original cost forecasts for these three projects were limited to the portion needed to accomplish specific tasks (planning, design, permitting, environmental assessments and pre-construction activities) in this GRC cycle to ensure completion in the next cycle.[2059] However, recognizing

2053 *Id*. at 17:21-22.
2054 *Id*. at 17:12-21.
2055 *Id*. at 17:23-27.
2056 *Id*. at 18:1-2.
2057 Ex. 413 ORA/Waterworth at 25-26; Ex. 498 TURN/Jones at 6-7; TURN also objects to the Ramona C&O Expansion for the same reason. Ex. 498 TURN/Jones at 6-7.
2058 Ex. 172 SDG&E/Tattersall at 19-22.
2059 *Id*. at 19:11-14.

TURN's and ORA's position that forecasted in-service dates do not warrant rate base recovery, SDG&E has removed these costs from its request.[2060]

Nonetheless, SDG&E respectfully requests Commission recognition that SDG&E will be spending capital on these three projects in this rate case cycle as required to progress these key initiatives through TY 2019 and beyond.

5. Alternative Energy Systems Blanket

The purpose of the Alternative Energy Systems blanket is to implement installations of electric vehicle chargers and hybrid plug-in receptacles at occupied facilities across the SDG&E territory for charging of both fleet and employee electric and hybrid vehicles.[2061] ORA characterizes the addition of fleet as a "discretionary item" and employee EV ownership as difficult to project; thus, ORA seeks to reduce this budget based on 2017 actuals.[2062]

SDG&E's projected increases are not "a discretionary item" – rather, they are necessary to comply with applicable laws and regulations.[2063] For example, AB 32, the California Global Warming Solutions Act of 2006, requires that California reduce greenhouse gas (GHG) emissions to 1990 levels by 2020.[2064] This can only be accomplished with significant contributions from the transportation sector, which contributes forty to fifty percent of all GHG emissions.[2065] SDG&E's investments to bolster AFV ownership and usage by customers and employees supports that effort.[2066] Additionally, SDG&E's investments in AFVs as part of its vehicle fleet meets the requirement under federal law (the Energy Policy Act of 1992) to take older diesel vehicles off the road, and supports Governor Brown's state initiative to have 5,000,000 clean vehicles in California by 2030.[2067] The capital investment in this budget helps fulfill larger societal and environmental objectives that benefit all ratepayers.[2068]

[2060] *Id*. at 19:16-19; Ex. 514 Tattersall UT, Attachment I at I-2 (moving project in-service date for budget codes 00710A.004 (MCFC&E), 00710A.006 (Ramona C&O Expansion), and 00710A.007 (Kearny Master Plan Phase 1).

[2061] Ex. 169 SDG&E/Tattersall at 37:11-14.

[2062] Ex. 413 ORA/Waterworth at 23.

[2063] Ex. 172 SDG&E/Tattersall at 22-23.

[2064] *Id*. at 22:22-24.

[2065] *Id.*at 23:4-5.

[2066] *Id*. at 23.

[2067] *Id*.

[2068] *Id*. at 23:9-10.

Moreover, employee EV ownership is not difficult to project. SDG&E actively tracks and manages data regarding employee electric vehicle ownership.[2069] SDG&E has provided internal data concerning both anticipated employee vehicle growth and its AFV conversion program to demonstrate how its forecast was derived.[2070] ORA's recommendation to use 2017 actuals as the basis for the 2018 and 2019 forecasts is inadequate in light of this data and the annual program growth necessary to support the State's goals.[2071]

27. Environmental Services

SoCalGas' and SDG&E's Environmental Services testimony and workpapers, supported by witnesses Darrell Johnson and Nancy Clancy, respectively, describe and justify SoCalGas' and SDG&E's Operations and Maintenance (O&M) forecasts, which in turn form the basis for the Test Year 2019 (TY 2019) revenue requirement request for this area. SoCalGas and SDG&E's Environmental Services organizations provide guidance on compliance in the areas of cultural resources, natural resources, water quality, hazardous materials and waste (HazMat), air quality and land planning. Environmental Services assists in their respective utility's efforts to comply with federal, state, regional and local environmental laws, rules, regulations and ordinances, as well as internal company policies and procedures. A full description of SoCalGas and SDG&E's Environmental Services requests and forecasts are set forth in Exhibits 295 and 298, respectively.

Except for SoCalGas' forecast for the New Environmental Regulatory Balancing Account (NERBA) LDAR Impact Program for TY2019, no Intervenors contested SoCalGas' and SDG&E's O&M or Capital expenditure forecasts. While SoCalGas and SDG&E do not specifically address the uncontested forecasts here, the items were fully supported in the direct testimony and workpapers and should be adopted by the Commission.

27.1 SoCalGas Issues

ORA recommends that the SoCalGas' forecast for the NERBA LDAR Impact Program for TY2019 be reduced by 50%, from 4.258 million to $2.129 million.[2072] ORA asserts that there

[2069] *Id*. at 23:12-13.
[2070] *Id*. at 23:18-20 and Appendix A at A-35-38.
[2071] *Id*. at 23:20-22.
[2072] Exhibit 414/Waterworth at 41.

is "uncertainty regarding when and what amount of costs will be incurred by SoCalGas" for Leak Detection and Repair activities.[2073] SoCalGas disagrees with ORA's recommendation.

First, ORA's assertions regarding uncertainty about when and what LDAR Impact Program related costs will be incurred are accounted for within the overall framework and intent of NERBA. SoCalGas' forecast considered a myriad of factors to derive a reasonable and appropriate estimate of expected costs. Further, ORA does not challenge the underlaying assumptions or methodology of SoCalGas' forecast. Instead, ORA simply cites to uncertainty (which is already accounted for in the NERBA two-way balancing account framework), and arbitrarily slashes 50% of SoCalGas' NERBA LDAR Impact Program-related forecasts. No other rationale is expressed or given. ORA, argues that "as the account is a two-way balancing account, this will not unduly impact SCG should the utility incur costs higher than ORA's forecast."[2074] SoCalGas disagrees with this assertion. Indeed, underfunding the NERBA can leave SoCalGas exposed to uncertainties in the swings of new regulatory costs, and potentially with insufficient funding to complete the necessary efforts to provide safe and reliable service. Ratepayers may thus be exposed to delayed or cancelled work elsewhere as SoCalGas reallocates funding to meet the requirements of NERBA-related regulations. In addition, ratepayers may also be exposed to large accumulated under-collection balances that may result in rate volatility when under-collection balances are recovered in the following year's rates. In the event that the NERBA over-collects funds, the ratepayer is protected by the two-way mechanism such that any overcollection is returned.

Because ORA's forecast is unsubstantiated by reduction method or rationale, and SoCalGas' forecast is based on supported cost estimates and business assumptions, ORA's forecasts should be rejected and SoCalGas' forecast should be adopted.

[2073] *Id.*
[2074] *Id.*

28. Information Technology

28.1 Introduction

28.1.1 Summary of IT Costs and Activities

Exhibits 300-307[2075] describe SoCalGas' and SDG&E's O&M forecasts for the 2019 TY and capital estimates for 2017, 2018 and 2019 associated with the IT area. SoCalGas' IT activities and forecasts are set forth in Exhibits 300-303 and SDG&E's IT activities and forecasts are set forth in Exhibits 304-307.

The IT Division is responsible for many of the technology-related services and activities for SoCalGas, SDG&E, and the Corporate Center. The services include supporting applications, hardware, and software, some of which are used for risk assessment and management across the enterprise. Our business clients rely on IT to provide support for numerous areas to deliver safe and reliable service to our customers. The areas include, but are not limited to, asset management, work management and measurement, fuel and power, outage management, gas and electric facilities, transportation, procurement and settlement, financial management, accounting, customer field operations, meter reading, customer energy management, smart meter data management, routing, scheduling, dispatching, revenue cycle, customer assistance, and customer contact functions. This is accomplished through the IT Division's operation of company data centers that store and manage data, including those used for risk assessments and development of related mitigation plans, as well as foundational information security services to ensure security and privacy.

28.1.2 Summary of Safety and Risk-Related Costs

SoCalGas' and SDG&E's proposed IT capital projects include projects driven by activities described in SoCalGas and SDG&E's November 30, 2016 RAMP Report. The RAMP Report presented an assessment of the key safety risks of SoCalGas and SDG&E and proposed plans for mitigating those risks.

The tables below – from SoCalGas' and SDG&E's direct testimony - provide a summary of the RAMP-related costs supported by Exhibits 300-307.

[2075] Ex. 300 SCG/Olmsted; Ex. 301 SCG/Olmsted; Ex. 302 SCG/Olmsted; Ex. 303 SCG/Olmsted; Ex. 304 SDG&E/Olmsted; Ex. 305 SDG&E/Olmsted; Ex. 306 SDG&E/Olmsted; Ex. 307 SDG&E/Olmsted.

TABLE CRO-3
SoCalGas Summary of Incremental RAMP-Related Costs[2076]

INFORMATION TECHNOLOGY (In 2016 $)			
RAMP Report Risk Chapter	**2017 Estimated Incremental (000s)**	**2018 Estimated Incremental (000s)**	**TY 2019 Estimated Incremental (000s)**
SCG-2 Employee, Contractor, Customer and Public Safety	0	533	92
SCG-8 Records Management	34,970	39,549	36,223
Total	**34,970**	**40,082**	**36,315**

TABLE CRO-3
SDG&E Summary of Incremental RAMP-Related Costs[2077]

INFORMATION TECHNOLOGY (In 2016 $)			
RAMP Report Risk Chapter	**2017 Estimated Incremental (000s)**	**2018 Estimated Incremental (000s)**	**TY 2019 Estimated Incremental (000s)**
SDG&E-13 Records Management	20,422	26,129	21,657
Total	**20,422**	**26,129**	**21,657**

The Commission should approve these RAMP-related IT costs as reasonable.

28.1.3 Summary of Differences with Other Parties

The tables below – adopted from SoCalGas' and SDG&E's rebuttal testimony – summarize the differences between SoCalGas' and SDG&E's IT forecasts versus other parties' recommendations.

SoCalGas Summary of Differences Tables[2078]

TOTAL O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**2019 Variance**
SoCalGas	24,588	32,927	N/A
ORA	24,588	25,791	(7,136)

[2076] Ex. 300 SCG/Olmsted at 3.
[2077] Ex. 304 SDG&E/Olmsted at 3.
[2078] Ex. 303 SCG/Olmsted at 1.

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SoCalGas	122,653	148,498	176,169	447,320	N/A
ORA	120,118	132,204	142,629	394,951	(52,369)
					2019 Variance
CFC	No Recommendation	No Recommendation	162,269	162,269	(13,900)

SDG&E Summary of Differences Tables[2079]

TOTAL O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**2019 Variance**
SDG&E	73,378	88,449	N/A
ORA	73,378	76,398	(12,051)
UCAN	73,378	75,182[2080]	(13,267)

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	119,566	130,371	139,777	389,714	N/A
ORA	121,072	105,724	121,756	348,552	(41,162)
					2019 Variance
UCAN	No Recommendation	No Recommendation	127,638[2081]	127,638	(12,139)
CFC	No Recommendation	No Recommendation	109,577	109,577	(30,200)

For the reasons set forth in the sections below, the Commission should reject other parties' IT recommendations and adopt SoCalGas' and SDG&E's reasonable forecasts as proposed. In the following sections, SoCalGas and SDG&E further summarize their IT O&M and capital proposals and respond to other parties' recommendations with respect to these issues.

28.2 IT O&M

28.2.1 Introduction

SoCalGas' and SDG&E's detailed discussion of its IT O&M proposals is set forth in the following exhibits. For SoCalGas, see Sections III and IV of Ex. 300 SCG/Olmsted at 12-17,

[2079] Ex. 307 SDG&E/Olmsted at 1.
[2080] Utility Consumers' Action Network (UCAN) did not provide a TY 2019 O&M amount in testimony; figure is derived based on 15% reduction recommendation.
[2081] UCAN did not provide a TY 2019 Capital amount in testimony; figure is derived based on 15% reduction recommendation.

Ex. 301 SCG/Olmsted, and Section III of Ex. 303 SCG/Olmsted at 2-6. For SDG&E, see Sections III and IV of Ex. 304 SDG&E/Olmsted at 10-15, Ex. 305 SDG&E/Olmsted, and Section III of Ex. 307 SDG&E/Olmsted at 3-8.

Some of the costs SoCalGas and SDG&E have forecasted are incurred for the benefit of one utility only and are called "non-shared" costs. In contrast, "shared" costs can serve SoCalGas as well as SDG&E and/or the Corporate Center.

The IT Division is responsible for a variety of technology-related services and activities for SoCalGas, SDG&E, and Corporate Center. The O&M costs presented have been categorized into three areas:

- Applications – Applications support the development, implementation, and maintenance of computer software utilized by customers, employees, and/or vendor partners.
- Infrastructure – IT Infrastructure supports the design, implementation, and operation of the Company's computing infrastructure, includes both hardware (ranging from desktop computing systems and servers to storage systems) and software (including middleware, production control, operating systems, and other low-level software systems).
- IT Support – This category of costs includes labor and non-labor for cost centers that are not specifically aligned with the other IT areas described above. Examples would include officer costs, budget and planning activities, and our intern/associate program.

28.2.2 Forecast Methodology for IT O&M Costs

The forecast methodology developed for IT O&M costs is the base year (2016) recorded, plus adjustments. The primary reason for this approach is that history is not necessarily a good predictor of future needs. The pace of change in the technology industry continues to accelerate when compared to prior years. This is evidenced by growth in computing power at the hardware level as well as the number and diversity of applications at the software level. Factoring in emerging computing trends, such as cloud computing and the increasing commercialization of IT capabilities, required us to use current data and adjustments rather than relying on historical averages that do not include these types of trends in our computing environment. In addition, the level of support provided by the IT Division continues to grow as capital projects are implemented because projects that drive benefits and efficiencies within business units often create increased workload within the IT Division that would not have been reflected in our historical costs.

Another consideration for using a base year costs plus adjustments methodology is the fact that disruptive events have the potential to change planning assumptions dramatically. For example, in 2017, several significant system-wide IT outages impacted business operations. The frequency and duration of these events resulted in forecasts in 2018 and 2019 based in part on the events occurring in 2017, rather than historical patterns.

28.2.3 SoCalGas' and SDG&E's General Response to ORA's Recommendations

SoCalGas and SDG&E provided in-depth background on their base year plus adjustments forecasting methodology, which was used consistently throughout testimony. ORA's testimony did not directly dispute SoCalGas' and SDG&E's approach, yet ORA bases its IT O&M recommendations exclusively on SoCalGas' and SDG&E's 2017 adjusted recorded IT O&M expenses. The Commission should reject ORA's flawed approach, as SoCalGas and SDG&E explain in greater detail below.

28.2.3.1 ORA Lacks any Basis for Rejecting SoCalGas' and SDG&E's Consistently Used Base Year Plus Adjustments Forecast Methodology

As summarized above, the use of base year 2016 adjusted recorded O&M labor expenses plus adjustments for TY 2019 incremental resource requirements is appropriate and justified due to the nature of IT-related costs:

- The pace of change in the technology industry continues to accelerate when compared to prior years;
- The growth in computing power at the hardware level;
- The number and diversity of applications at the software level;
- Emerging computing trends, such as cloud computing and the increasing commercialization of IT capabilities; and
- "Black swan" events like the IT outages encountered in 2017.[2082]

SoCalGas and SDG&E consistently apply this methodology across their entire forecasts because these themes do not change when considering the various IT cost categories. ORA chooses to base their recommendation on a single year's results – 2017 adjusted recorded – without challenging any of SoCalGas' and SDG&E's arguments against using historical information or trends to predict future needs.

[2082] Ex. 303 SCG/Olmsted at 3 and Ex. 307 SDG&E/Olmsted at 4. A black swan event is a random event or occurrence that deviates beyond what is normally expected of a situation and is extremely difficult to predict.

28.2.3.2 ORA Wrongly Contends SoCalGas' and SDG&E's Forecasts Do Not Include Sufficient Supporting Material

ORA contends that SoCalGas' and SDG&E's 2017 adjusted, recorded expenses should be used as the basis for their forecasts. Their premise is that SoCalGas' and SDG&E's "supporting workpapers are too weak in quantitative support to be reliable for ratesetting purposes."[2083]

SoCalGas and SDG&E provide appropriate detail and analysis in support of their requests of incremental TY 2019 expenses. ORA does not question any particular incremental expense. Contrary to ORA's assertion, SoCalGas' and SDG&E's direct testimony, O&M workpapers and discovery responses provide narrative and analytical support for their requests.

SoCalGas' and SDG&E's workpapers provide details of their O&M expense forecasts as summarized in direct testimony. Forecasted costs are categorized into IT functional groupings (*i.e.*, Applications, Infrastructure and IT Support). Workpapers include additional details, such as cost center and activity descriptions, forecast methodology explanations, 2012 through 2016 recorded costs (labor and non-labor), year to year (2017 – 2019) line item incremental activities for each cost center, and explanations for incremental changes for each of the forecast years.

The content of workpapers is consistent with the level of detail that has been provided in past rate cases and deemed acceptable. In addition, SoCalGas and SDG&E provided all of the information in workpapers to ORA in a more analysis-friendly Excel format. In some cases, quantitative information such as number of resources, annual rates and historical O&M percentages were included. In others, the forecasts are based on the judgment and experience of professionals in the IT division. In fact, SoCalGas' and SDG&E's use of professional judgment and management experience is an acceptable forecasting methodology in a GRC, according to the guidelines governing these proceedings.[2084]

ORA's use of a single year's results – 2017 adjusted recorded – is unwarranted and less reliable than the approach taken by SoCalGas and SDG&E.

[2083] Ex. 415 ORA/Loy at 10:5-6 and 16:3-4.

[2084] D.07-07-004, at Appendix A, A-31 (stating that "Where judgment is involved in setting an estimate level, [the applicant must] explain why that particular level was adopted.").

28.2.3.3 ORA Does Not Challenge Any of SoCalGas' or SDG&E's Incremental Proposals

SoCalGas and SDG&E identified non-shared and shared O&M increases in direct testimony. These were further detailed in O&M workpapers and addressed in response to ORA's discovery requests. At no point during discovery or in their testimony did ORA refute any of the incremental proposals that make up the overall increase. Instead, ORA bases their recommendations on the 2017 adjusted, recorded amounts as compared to SoCalGas' and SDG&E's 2017 forecasts. ORA does not support their position for lower spending levels with any specific recommendations as to which SoCalGas or SDG&E increases, if any, are inappropriate or unwarranted. Without this level of detail, ORA cannot reliably provide an accurate spending level for SoCalGas and SDG&E to provide the necessary level of support for its business operations and customers.

28.2.4 SoCalGas-Specific Response to ORA's O&M Recommendations

28.2.4.1 ORA's Disputed Non-Shared Cost

ORA recommends a non-shared O&M forecast of $14.491 million, which is $6.586 million lower than [SoCalGas'] forecast of $21.077 million.[2085] The basis for the reduction is [SoCalGas'] "2017 forecast exceeding the 2017 adjusted, recorded."[2086] ORA "reduced SCG's 2018 and 2019 forecast dollars by 68.75%, the 2017 adjusted, recorded expense divided by SCG's 2017 forecast" to develop their recommendation.[2087]

Non-Shared Services O&M – SoCalGas vs. ORA

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SoCalGas	13,962	21,077	7,115
ORA	13,962	14,491	529

28.2.4.2 ORA's Disputed Shared Cost

ORA recommends a shared services O&M forecast of $11.300 million, which is $550,000 lower than [SoCalGas'] forecast of $11.850 million.[2088] The basis for the reduction is

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[2085] Ex. 415 ORA/Loy at 14:3-4 (SoCalGas assumes the mention of "SDG&E's Shared O&M" was meant to read "SoCalGas' Non-Shared O&M.").
[2086] *Id.* at 14:5-6 (SoCalGas assumes the mention of "SDG&E's" here was meant to read "SoCalGas'").
[2087] *Id.* at 16:9-10.
[2088] *Id.* at 16:12-13.

[SoCalGas'] "2017 forecast exceeding the 2017 adjusted."[2089] ORA "derived its forecast by multiplying SCG's 2018 and 2019 forecast dollars by 95.36%, its 2017 adjusted, recorded expense divided by its 2017 forecast" to develop their recommendation.[2090]

Shared Services O&M – SoCalGas vs. ORA

SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SoCalGas	10,626	11,850	1,224
ORA	10,626	11,300	674

28.2.4.3 SoCalGas' IT O&M Recommendations

ORA states "the inaccuracy of SCG's 2017 forecast" supports their position.[2091] The fallacy in ORA's argument is that SoCalGas' forecasts for 2017, 2018 and 2019 are based on IT leadership's view of the necessary levels of funding to adequately support the business operations and customers of SoCalGas. The difference between forecasts and adjusted, recorded in 2017 will only be exacerbated in TY 2019 if a single percentage based on one year's results is applied per ORA recommendations. SoCalGas again emphasizes that the merits of the individual components of the proposed increases were not challenged, just the overall amount. In summary, SoCalGas provides appropriate detail and analysis in support of its request of TY 2019 non-shared expenses of $21.077 million and shared expenses of $11.85 million.

28.2.5 SDG&E-Specific Response to ORA and UCAN

28.2.5.1 ORA's Disputed Non-Shared Cost

ORA recommends a forecast of $19.235 million which is $10.506 million lower than SDG&E's forecast of $29.741 million.[2092] The basis for the reduction is "the inaccuracy of SDG&E's 2017 forecast."[2093] ORA "developed its 2019 forecast by multiplying SDG&E's 2019 forecast by 64.67%, its 2017 adjusted, recorded expense divided by its 2017 forecast."[2094]

[2089] *Id.* at 16:14-15 (SoCalGas assumes the mention of "SDG&E's" was meant to read "SoCalGas'.").
[2090] *Id.* at 18:7-8.
[2091] *Id.* at 16:4-5.
[2092] *Id.* at 8:3-4.
[2093] *Id.* at 8:5.
[2094] *Id.* at 10:12-14.

28.2.5.2 UCAN's Disputed Non-Shared Cost

UCAN does not provide a specific amount related to non-shared O&M expenses. Instead, they apply a 15% reduction across all SDG&E's forecasts. As documented above, SDG&E has based forecasts on a reliable methodology and backs each forecast up with detailed information in workpapers. UCAN also uses 2017 operating results to attempt to establish that SDG&E is unable to accurately forecast expenses.

Non-Shared Services O&M – SDG&E vs. ORA and UCAN[2095]

NON-SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	17,762	29,741	11,979
ORA	17,762	19,235	1,473
UCAN	17,762	25,280[2096]	7,518

28.2.5.3 ORA's Disputed Shared Cost

ORA takes issue with the Test Year O&M forecast for shared services. ORA recommends a forecast of $57.163 million which is $1.555 million lower than SDG&E's forecast of $58.718 million.[2097] The basis for the reduction is SDG&E's "2017 forecast exceeding the 2017 adjusted."[2098] ORA "developed its 2019 forecast by multiplying SDG&E's 2019 forecast down by 97.35%, its 2017 adjusted, recorded expense divided by its 2017 forecast."[2099]

28.2.5.4 UCAN's Disputed Shared Cost

UCAN does not provide a specific amount related to O&M expenses. Instead, they apply a 15% reduction across all SDG&E's forecasts. SDG&E has based forecasts on a reliable methodology and backs each forecast up with detailed information in workpapers. UCAN also uses 2017 operating results to attempt to establish that SDG&E is unable to accurately forecast expenses.

2095 Ex. 307 SDG&E/Olmsted at 6.
2096 UCAN did not provide a TY 2019 non-shared O&M amount in testimony; figure is derived based on 15% reduction recommendation.
2097 Ex. 415 ORA/Loy at 10:17-18.
2098 *Id.* at 10:19-20.
2099 *Id.* at 12:11-13.

Shared Services O&M – SDG&E vs. ORA and UCAN[2100]

SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	55,616	58,708	3,092
ORA	55,616	57,163	1,547
UCAN	55,616	49,902[2101]	(5,714)

28.2.5.5 SDG&E's IT O&M Recommendations

ORA and UCAN base their recommendations on SDG&E's 2017 adjusted recorded comparison to the 2017 forecast. The fallacy in ORA's and UCAN's arguments is that SDG&E's forecasts for 2017, 2018 and 2019 are based on IT leadership's view for the necessary levels of funding to adequately support the business operations and customers of SDG&E. The difference between forecasts and adjusted, recorded in 2017 will only be exacerbated in TY 2019 if a single percentage based on one year's results is applied per ORA's and UCAN's recommendations. SDG&E again emphasizes that the merits of the individual components of the proposed increases were not challenged, just the overall amount. In summary, SDG&E provides appropriate detail and analysis in support of its request of incremental TY 2019 non-shared expenses of $29.741 million and shared expenses of $58.708 million.

28.3 IT CAPITAL

28.3.1 Introduction

SoCalGas' and SDG&E's detailed discussion of its IT capital proposals is set forth in the following exhibits. For SoCalGas, see Section V of Ex. 300 SCG/Olmsted at 17-39, Ex. 302 SCG/Olmsted, and Section IV of Ex. 303 SCG/Olmsted at 6-9. For SDG&E, see Section V of Ex. 304 SDG&E/Olmsted at 16-31, Ex. 306 SDG&E/Olmsted, and Section IV of Ex. 307 SDG&E/Olmsted at 8-11.

28.3.2 Forecast Methodology for IT Capital Projects

The forecast methodology developed for IT capital costs is zero-based, which reflects the accelerating pace of change in the technology industry, as discussed in the IT O&M section of this brief. The capital forecasts developed for SCG and SDG&E are based upon the

2100 Ex. 307 SDG&E/Olmsted at 7.

2101 UCAN did not provide a TY2019 shared O&M amount in testimony, figure is derived based on 15% reduction recommendation.

accumulation of individual projects that start as concepts and will eventually move through a rigorous approval process, which is documented below. Each project estimate is formulated from the ground up and will use various methods based on applicability (*e.g.*, RFPs, vendor quotes, existing contracts, internal subject matter judgment and expertise, prior implementations).

Before an IT capital project is funded and moves into development, it must go through SoCalGas' and SDG&E's capital project approval process, which has several distinct stages, as described below.

28.3.2.1 IT Division Capital Plan Development

The IT Division first prepares a capital plan, which is the sum of proposed plans of IT and business sponsored projects that utilize the IT capital budget. The capital plan includes both ongoing projects and anticipated needs and is usually developed in the fourth quarter of a fiscal year in preparation for upcoming years. At this stage, the composite capital plan consists of a long list of viable capital projects, each with the potential to beneficially impact IT capability and services. Supporting documentation is developed by way of concept documents and business cases to be utilized as part of the prioritization and approval process.

28.3.2.2 Concept Documents

Concept documents are high-level assessments developed for review during the capital planning process. The concept document contains typical project elements, such as cost estimates, business benefits and project schedules. It also provides project teams the opportunity to document alternative options considered, as well as business risks and implications of not proceeding with the project. These elements are available for consideration during project prioritization and approval. The Central Business Planning group then decides whether to approve funding as part of its prioritization and approval process.

28.3.2.3 Project Prioritization and Approval

The concept documents provided by project teams are utilized for prioritization purposes. Rankings are determined based on various factors including, but not limited to, regulatory requirements, critical service maintenance needs, and/or cost benefit analyses. The projects in the narrowed capital plan list are then prioritized by likely impact on IT capability and services. The annual capital budget allocation processes for SoCalGas is administered by the Central Business Planning group on behalf of the Executive Finance Committee (EFC). Details of the capital planning process are presented in the testimony of SoCalGas' and SDG&E's Rate Base witnesses.

28.3.2.4 Business Cases

Once funding is approved by the Central Business Planning group for a concept, a complete business case must be prepared and approved before work begins. Business cases are developed jointly by representative(s) from the sponsoring IT department, the sponsoring business department (when applicable), and the IT Project Management Office (IT PMO). Others may be added to the team as required.

- The sponsoring IT department is primarily responsible for defining the project scope, identifying the technical approach, and generating the basis of the estimate for the capital costs and ongoing O&M support costs.
- The business representatives are primarily responsible for confirming the business requirements, calculating the business benefits, and ensuring that the proposed solution meets the business objectives.
- The IT PMO ensures that the templates are completed correctly, that the budgets are calculated and characterized correctly, and that the proposed scope is consistent with policy.

A near final draft of the business case is provided to Information Security for review and comment.

28.3.2.5 Cost Sharing Mechanisms

A cost sharing mechanism must be determined for any project that will be utilized across SoCalGas, SDG&E, and/or Corporate Center. As part of the business case development, a project team will include a recommendation of how costs will be shared for consideration during the capital approval process based on its assessment of project scope.

28.3.3 SoCalGas' Response to Parties' IT Capital Recommendations

The following table,[2102] from SoCalGas' rebuttal testimony, summarizes the differences between SoCalGas' IT capital proposals and ORA's and Consumer Federation of California Foundation's (CFC) IT capital recommendations.

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SoCalGas	122,653	148,498	176,169	447,320	N/A
ORA	120,118	132,204	142,629	394,951	(52,369)
CFC	No recommendation	No recommendation	162,269	433,420	(13,900)

[2102] Ex. 303 SCG/Olmsted at 6.

For the reasons set forth below, the Commission should reject ORA's and CFC recommendations and adopt SoCalGas' reasonable proposal.

28.3.3.1 ORA and CFC Failed to Address or Challenge Any of SoCalGas' Individual IT Capital Projects

Neither ORA nor CFC provide any support for their recommendations based on the individual merits or details of any particular IT capital project proposed by SoCalGas.

SoCalGas' 2017-2019 IT capital request is well-supported by project-by-project information.[2103] SoCalGas has provided approximately 900 pages of detailed capital workpapers, representing 127 projects. SoCalGas' capital workpapers specifically identify the types of investments needed for the forecast period.[2104] SoCalGas also forecasted in-service dates for each project listed in the SoCalGas IT 2017-2019 capital forecasts. In addition, SoCalGas' direct testimony includes narratives in support of the SoCalGas IT-sponsored capital projects.[2105]

28.3.3.2 ORA's Proposed Forecasting Methodology is Flawed

ORA recommends reduced capital expenditures for SoCalGas in all three years forecasted. For 2017, ORA recommends using 2017 recorded adjusted capital expenditure costs. For 2018 and 2019, ORA applied an "ordinary least squares, time-trend regression" approach,[2106] which SoCalGas understands to be a multi-year historical trend analysis.

28.3.3.2.1 ORA's "Ordinary Least Squares, Time-Trend Regression" Approach Fails to Properly Take into Account the Rapidly Changing Nature of the IT Environment

In its testimony, ORA rejects SoCalGas' (and SDG&E's) use of zero-based forecasts for IT capital. ORA appears to base its argument on the fact that SoCalGas' 2017 IT capital forecast exceeded its 2017 IT capital budget and expenditures.[2107] However, the fact that SoCalGas's

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2103 Ex. 300 SCG/Olmsted at 17:19 – 39:28.
2104 Ex. 302 SCG/Olmsted.
2105 Ex. 300 SCG/Olmsted at 21:1 – 39:28.
2106 Ex. 415 ORA/Loy at 20:17-18.
2107 *Id.* at 20:9-16, "SCG's GRC 2017 forecast for IT and Cybersecurity combined is 10.6% higher than 2017 adjusted, recorded and 15.2 percent higher than the 2017 capital budget. SCG's GRC 2017 forecast is comprised of 13 Budget Codes compared to 23 for the 2017 capital budget and 19 for 2017 adjusted, recorded. Because the approved capital budget, or plan, was a better indicator of the 2017 adjusted, recorded expenditures than SCG's GRC forecast, ORA concluded SCG's bottoms-up forecast method

2017 forecast slightly exceeded 2017 actuals (as explained below) says little about SoCalGas' 2018 and 2019 IT capital forecasts. Moreover, ORA's reliance on historical data fails to properly take into account the rapidly changing IT environment SoCalGas (and SDG&E) face. The pace of change in the technology industry continues to accelerate when compared to prior years. Factoring in emerging trends required us to use current data rather than relying on historical averages that do not include these types of trends in our environment. The Commission should reject ORA's flawed approach.

28.3.3.2.2 ORA Inappropriately Combines IT and Cybersecurity Spend to Justify its Flawed Ordinary Least Squares, Time-Trend Regression Approach

As explained above, ORA's decision to employ a "least squares, time-trend regression" approach to forecasting IT capital expenditures – instead of SoCalGas' zero-based approach - appears to be based on differences between SoCalGas' 2017 IT capital forecast and SoCalGas' 2017 IT capital spend.[2108] But these differences in the 2017 numbers are largely based on ORA's decision to *combine* SoCalGas' IT and cybersecurity data to support their argument that SoCalGas' "GRC 2017 forecast for IT and Cybersecurity *combined* is 10.6% higher than 2017 adjusted, recorded."[2109]

When the cybersecurity capital portfolio is removed from the argument, SoCalGas' 2017 adjusted, recorded IT capital was $120.118 million compared to SoCalGas' 2017 GRC forecast of $122.653 million, a much lower difference of 2.07% than the 10.6% proposed by ORA. It is unclear why ORA bundled cybersecurity data with IT data other than to justify its flawed approach to forecasting SoCalGas' IT capital. ORA's approach should be rejected.

28.3.3.3 CFC's Proposed IT Capital Adjustments for SoCalGas

CFC recommends that SoCalGas' capital forecast for IT-related projects be reduced by $13.9 million "due to the absence of guidance on the actual returns Sempra realizes on IT capital spending."[2110] The reductions are "based on limiting the 2019 IT Division capital spending to a

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was not necessary (or sufficient) and that trends in adjusted, recorded total capital expenditures would be more efficient and accurate." (internal footnotes omitted).

[2108] *Id.* at 20:17-18.

[2109] *Id.* at 20:9-10 (emphasis added) (internal citations omitted).

[2110] Ex. 483 CFC/Roberts at 1.

15% annual growth rate,"[2111] which CFC contends is an "observed IT capital investment growth generally reported by other large corporations."[2112] However, due to events documented in SoCalGas' testimony related to 2017 data center outages, significant investments are planned in 2018 and 2019 to stabilize and modernize our data center operations to prevent similar events from occurring again.[2113] A majority of these improvements are included in the Business Continuity Enhancement project, which is forecasted to spend $23.795 million in 2018 and $33.609 million in 2019.[2114] Removing this IT capital project, and other projects in the IT portfolio, would put IT's ability to provide safe, reliable service to our employees and customers at risk.

28.3.3.4 SoCalGas' IT Capital Recommendations

In summary, SoCalGas agrees with ORA's recommendation for capital expenses of $120.118 million in 2017, but contests ORA's and CFC's capital proposals for the remaining years. SoCalGas' capital proposals of $148.498 million in 2018 and $176.169 million in 2019 are reasonable, well-supported by the record and should be approved.

28.3.4 SDG&E's Response to Parties' IT Capital Recommendations

The following table,[2115] from SDG&E's rebuttal testimony, summarizes the differences between SDG&E's IT capital proposal and ORA's, CFC's and UCAN's recommendations.

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	119,566	130,371	139,777	389,714	N/A
ORA	121,072	105,724	121,756	348,552	(41,162)
					2019 Variance
UCAN	No Recommendation	No Recommendation	127,638	127,638	(12,139)
CFC	No Recommendation	No Recommendation	109,577	109,577	(30,200)

For the reasons set forth below, the Commission should reject other parties' IT capital recommendations and adopt SDG&E's reasonable proposals.

2111 *Id.* at 2.
2112 *Id.*
2113 Ex. 300 SCG/Olmsted at 7:1-16.
2114 *Id.* at 35:18-19.
2115 Ex. 307 SDG&E/Olmsted at 1.

28.3.4.1 CFC and UCAN Failed to Address or Challenge Any of SDG&E's Individual IT Capital Projects

CFC's IT testimony did not provide any support for their recommendations based on the individual merits or details of any particular IT capital project proposed by SDG&E. UCAN's only project-specific recommendation is for LTE project forecasts to "be levelized over the entire rate case cycle so that SDG&E's incremental additions to its rate base would be limited to $34.1 million for the 2019 TY and 2020."[2116]

Contrary to ORA's and UCAN's assertions, SDG&E's 2017-2019 IT capital request is well-supported by project-by-project information.[2117] SDG&E has provided over 500 pages of detailed capital workpapers, representing 82 projects. SDG&E's capital workpapers specifically identify the types of investments needed for the forecast period.[2118] SDG&E also forecasted in-service dates for each project listed in the SDG&E IT 2017-2019 capital forecasts. In addition, SDG&E's revised direct testimony includes narratives in support of the SDG&E IT-sponsored capital projects.[2119]

28.3.4.2 ORA's Proposed Adjustments to SDG&E's IT Capital Costs

For 2017, ORA recommends using 2017 recorded adjusted data. For 2018 and 2019, ORA's proposed reductions to SDG&E's IT capital forecasts set forth in Ex. 415 ORA/Loy are based on the recommendations of ORA's Electric Distribution witness (Ex. 401 ORA/Roberts). For the reasons set forth in the rebuttal testimony of SDG&E's Electric Distribution capital witness[2120] and SDG&E's Distributed Energy Resources (DER) policy witness,[2121] SDG&E strongly disagrees with ORA's proposed reductions, which should be rejected.

28.3.4.3 UCAN's Proposed Adjustments to SDG&E's IT Capital Costs

UCAN recommends that "capital expenditures associated with SDG&E's IT LTE project be levelized over the entire rate case cycle so that SDG&E's incremental additions to its rate base would be limited to $34.1 million for the 2019 TY and 2020."[2122] UCAN asserts that

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2116 Ex. 510 UCAN/Zeller at 2.
2117 Ex. 304 SDG&E/Olmsted at 16:1 – 31:24.
2118 Ex. 306 SDG&E/Olmsted.
2119 Ex. 304 SDG&E/Olmsted at 19:3 – 31:24.
2120 Ex. 76 SDG&E/Colton.
2121 Ex. 93 SDG&E/Reguly.
2122 Ex. 510 UCAN/Zeller at 2.

"SDG&E's showing is notably lacking in specifics such as what criteria were used to select the option chosen, whether a competitive bidding process was used to select the firms that would be used to complete the network, to what extent alternative methods of providing comparable communications services were considered, and the specific deficiencies of its existing communications systems and whether less expensive alternatives were considered instead of developing a dedicated LTE network."[2123]

Contrary to UCAN's assertion – and as explained in more detail in SDG&E's IT rebuttal testimony (Ex. 307 SDG&E/Olmsted at 9-10) - SDG&E went through a robust process to scope and price this initiative. Requests of this size are highly scrutinized when seeking internal approval. SDG&E has thoroughly vetted this solution and it warrants being funded at the requested levels rather than the reductions proposed by UCAN.

With respect to SDG&E's plans to deploy a privately owned and operated, licensed, LTE network, SDG&E has deployed a number of wireless networks. As technology has advanced, it now gives SDG&E the opportunity to consolidate many of these networks into a single network with standards recognized worldwide. Using this network provides efficiencies in terms of deployment and management and offers more security. Using an industry standard, such as LTE, provides significant benefits to SDG&E and its customers. The broader telecommunications market has provided more alternatives, which in turn has driven prices down for equipment and engineering resources.

28.3.4.4 CFC's Proposed Adjustments to SDG&E's IT Capital Costs

CFC recommends that SDG&E's capital forecast for IT related projects be reduced by $30.2 million due to "the absence of guidance on the actual returns Sempra realizes on IT capital spending."[2124] The reductions are "based on limiting the 2019 IT Division capital spending to a 15% annual growth rate,"[2125] which is consistent with an "observed IT capital investment growth generally reported by other large corporations."[2126]

The Commission should reject CFC's recommendation because SDG&E's forecast appropriately reflects its particular circumstances, not necessarily what is "generally reported by

[2123] *Id.* at 6.
[2124] Ex. 483 CFC/Roberts at 1.
[2125] *Id.* at 2.
[2126] *Id.*

other large corporations." In addition, SDG&E's forecast includes $50.262 million for the LTE project described above. That project alone accounts for over 60% of the planned spending in 2019. Reducing spending to CFC recommended levels will limit SDG&E's ability to deliver on this and other IT capital projects listed in testimony, putting IT's ability to provide safe, reliable service to our employees and customers at risk.

28.3.4.5 SDG&E Capital Recommendations

In summary, SDG&E agrees with ORA's recommendation for capital expenses of $121.072 million in 2017, but contests ORA's, UCAN's, and CFC's capital proposals for the remaining years. SDG&E's capital proposals of $130.371 million in 2018 and $139.777 million in 2019 are reasonable, well-supported by the record and should be approved.

29. Cybersecurity

29.1 Introduction

29.1.1 Summary of Cybersecurity Costs and Activities

Exhibits 308-314[2127] describe the Test Year (TY) 2019 forecasts for O&M and capital costs for the forecast years 2017, 2018, and 2019 associated with the Cybersecurity area. SoCalGas' cybersecurity activities and forecasts are addressed in Exhibits 308-310 and 314 and SDG&E's cybersecurity activities and forecasts are addressed in Exhibits 311-314.

The Cybersecurity Department (formerly the Information Security Department) is responsible for cybersecurity risk management of the information and operational technologies for SoCalGas, SDG&E, and the Corporate Center. Cybersecurity risk management is performed using technical controls built upon the National Institute of Standards and Technology's Cybersecurity Framework (NIST CSF) five core Functions of Identify, Protect, Detect, Respond, and Recover. The services provided by the Cybersecurity Department are focused on maintaining and improving the Companies' security posture in an environment of increasing threat capabilities. The Cybersecurity Department supports technology innovations and enhancements within the business by reducing both the likelihood and potential impact of cybersecurity incidents to all business areas within SoCalGas, SDG&E, and Corporate Center, while balancing costs and applying prioritized risk management. Additionally, the Cybersecurity Department's activities support enterprise cybersecurity capabilities and provide cybersecurity

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[2127] Ex. 308 SCG/Worden; Ex. 309 SCG/Worden; Ex. 310 SCG/Worden; Ex. 311 SDG&E/Worden; Ex. 312 SDG&E/Worden; Ex. 313 SDG&E/Worden; Ex. 314 SCG/SDG&E/Worden.

technical support and training to other business and IT groups so that they can perform their functions safely, reliably, and securely.

The Companies' testimony describes the cybersecurity risks, our approach for managing these risks, and the Cybersecurity Department's activities and costs associated with cybersecurity risk management. Per Commission Decision (D.), 14-12-025 the California utilities were ordered to "incorporate a risk-based decision-making framework" into the Rate Case Plan (RCP) for the energy utilities' General Rate Cases (GRC).[2128] The Companies filed the Risk Assessment and Mitigation Plan (RAMP) on November 30, 2016 identifying "SoCalGas and SDG&E's baseline assessment of safety risks to the public, their employees and their systems, and what potential mitigation measures have been considered."[2129] Other business areas may also have costs related to their cybersecurity risk management responsibilities and activities.

Cybersecurity is a shared service for SoCalGas, SDG&E, and Corporate Center, and the costs set forth in the testimony are allocated between the Companies based on the mechanisms described in SoCalGas' and SDG&E's IT testimony.[2130] The primary cybersecurity cost drivers in this GRC are the addition of on-site staff for project implementation and development, replacing aging or obsolete cybersecurity control technology, addressing evolving threat capabilities and innovative technologies implemented by other business units, and continuing maintenance and support of cybersecurity technologies.

29.1.2 Summary of Differences with ORA

ORA was the only party to address SoCalGas' and SDG&E's GRC cybersecurity requests. The tables below[2131] summarize the differences between SoCalGas' and SDG&E's proposals and ORA's recommendations.

TABLE GW- 1- SoCalGas Total Shared O&M

TOTAL SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SoCalGas	239	708[2132]	469
ORA	239	588	349

[2128] D.14-12-025 at 2.
[2129] Investigation 16-10-015, Risk Assessment Mitigation Phase, Risk Mitigation Plan, Overview and Approach (RAMP – A) (RAMP Report) (Filed November 30, 2016) at 1.
[2130] *See e.g.*, Ex. 300 SCG/Olmsted and Ex. 304 SDG&E/Olmsted.
[2131] Ex. 314 SCG/SDG&E/Worden at 1.
[2132] This amount is incorrectly stated in ORA's cybersecurity testimony, Ex. 415 ORA/Loy at 24:4-10.

TABLE GW- 2- SDG&E Total Shared O&M

TOTAL SHARED O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change**
SDG&E	6,568	7,906	1,338
ORA	6,568	7,906	1,338

TABLE GW- 3- SoCalGas Total Capital

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SoCalGas	17,844	19,476	22,731	60,051	
ORA	6,882	7,201	7,896	21,979	38,072

TABLE GW- 4- SDG&E Total Capital

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	6,146	7,232	5,618	18,996	
ORA	1,631	1,815	1,887	5,333	13,663

SoCalGas and SDG&E summarize their response to ORA's cybersecurity O&M and capital recommendations in the sections below, after first describing how SoCalGas' and SDG&E's cybersecurity GRC proposals represent the Companies' best efforts to address key cybersecurity safety risks identified during the RAMP process.

29.2 RAMP

As described in SoCalGas' and SDG&E's direct testimony (Ex. 308 SCG/Worden at 2-3 and 4-18 and Ex. 311 SDG&E/Worden at 2-3 and 4-18), the costs sponsored by SoCalGas and SDG&E in their cybersecurity testimony are for managing cybersecurity risk, which is a top safety risk that was identified in the RAMP Report and is further described in the table below:

TABLE GW-4[2133]
RAMP Risks Associated with this Testimony

RAMP Risk	**Description**
Cybersecurity	This risk is a major cybersecurity incident that causes disruptions to electric or gas operations (*e.g.*, SCADA system) or results in damage or disruption to company operations, reputation, or disclosure of sensitive data.

[2133] Ex. 308 SCG/Worden at 4.

In developing SoCalGas' and SDG&E's cybersecurity GRC request, priority was given to this key safety risk to determine which currently established risk control measures were important to continue and what incremental efforts were needed to further mitigate these risks. The Cybersecurity Program continually reassesses current mitigating control activities versus best practices and threats created by continually evolving threat actor capabilities and increasing use of innovative technologies within the business. In addition to safety risks, the Cybersecurity Program addresses other risk area impacts such as operations, compliance, and financial with cybersecurity risk management controls and activities. The cybersecurity risk mitigations are designed to address as many business services and systems as possible.

29.2.1 Cybersecurity Risk

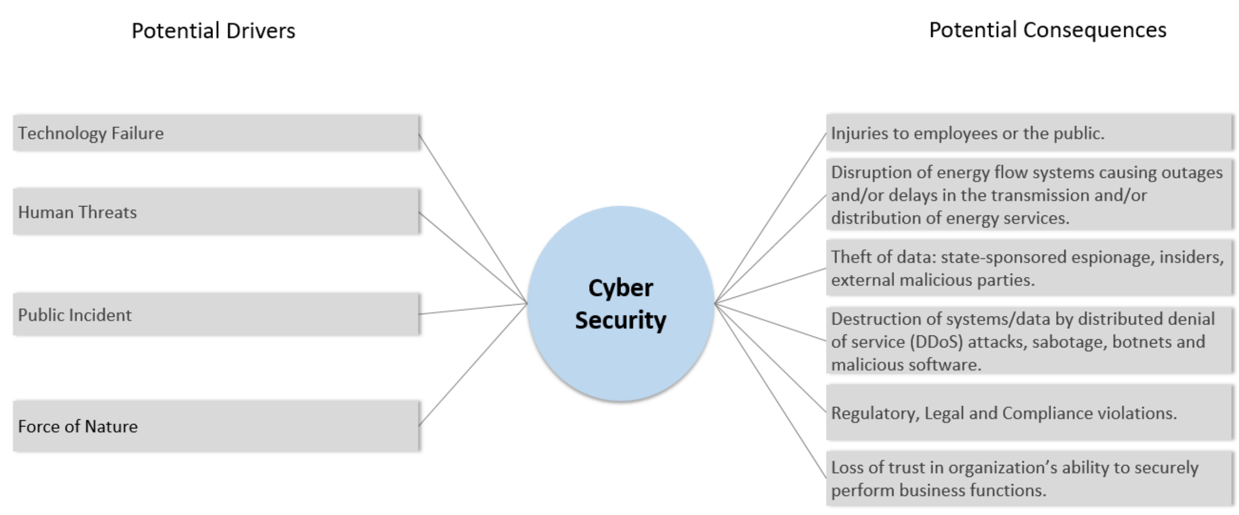
Cybersecurity risk involves a major cybersecurity incident that causes disruptions to electric or gas operations (*e.g.*, SCADA system) or results in damage or disruption to company operations, reputation, or disclosure of sensitive data.

Electric and gas operations, safety systems, information processing, and other utility functions are increasingly reliant on technology, automation, and integration with other systems. The complex interoperation of these systems and the rapid changes that occur in the industry in response to climate, cost, and other drivers create a risk situation where inadvertent actions or maliciously motivated events can potentially disrupt core operations or disclose sensitive data, among other serious consequences. In addition, the functioning of society relies on safe and reliable energy delivery. The magnitude and likelihood of the cybersecurity risk is a documented concern at the national and international level.

<u>Potential Drivers and Consequences</u>

When performing its cybersecurity risk assessment, the Companies relied on the risk "bow tie," shown in the figure below, which is a commonly-used tool for risk analysis.[2134] The left side of the bow tie illustrates potential drivers that lead to a risk event and the right side shows the potential consequences of a risk event. The Companies applied this framework to identify and summarize the potential cybersecurity drivers and consequences described below.

[2134] *Id.* at 7.



Cybersecurity threats are dynamic and new adversarial techniques may evade current cybersecurity controls, rendering them obsolete and ineffective. Technology innovations and adoption thereof continually increase the exposure of infrastructure and business services to a risk impact.

29.2.2 Cybersecurity Program

The Cybersecurity Department is responsible for the identification and management of cybersecurity risks for SoCalGas, SDG&E, and Corporate Center. Cybersecurity is a cross-cutting risk because an incident could potentially impact several areas throughout the Companies in many different ways.

The Cybersecurity Program focuses on responding to and mitigating potential drivers, and the potential resulting events of which the company is aware. The Company also strives to implement mitigations to address those instances (drivers and/or events) that may be unknown to the Company. The mitigation approach leverages a framework of cybersecurity controls across the enterprise, with an emphasis on key systems and data in order to address evolving threats and vulnerabilities.[2135] This approach considers potential weak points, which may provide an attacker a foothold within the enterprise or, through an error, create a situation to disrupt energy delivery, expose sensitive information, or cause other potential adverse events.

[2135] *Id.* at 10.

29.3 Cybersecurity O&M Costs

29.3.1 Summary of SoCalGas' and SDG&E's Cybersecurity O&M Requests

29.3.1.1 SoCalGas O&M Request

Table GW-9 below, from SoCalGas' direct testimony (Ex. 308 SCG/Worden at 22), summarizes SoCalGas' 2019 cybersecurity O&M request.

TABLE GW-9
Shared O&M Summary of Costs

(In 2016 $) Incurred Costs (100% Level)			
Categories of Management	**2016 Adjusted-Recorded (000s)**	**TY 2019 Estimated (000s)**	**Change (000s)**
A. ACCESS MANAGEMENT (SECURITY ENGINEERING)	**238**	**708**	**470**
Total Shared Services (Incurred)	**238**	**708**	**470**

The Access Management (Security Engineering) group has three teams: Information Security and Consulting, Production Support, and Security Operations. The group's primary focus is on supporting projects and ensuring the security of applications and the system before the projects are placed in production. In addition, the group regularly implements, administers, and manages cybersecurity technologies. These activities include a combination of labor and non-labor costs.

The Security Engineering group was established within the Cybersecurity Program to provide security architecture, establish security controls (which are combinations of people, process, and/or technology elements that are designed to protect systems and data from harm), support the security operation capability, and consult with the business units on initiatives implementing new technology and business systems to evaluate any risks these new technologies or business systems may pose. The group also oversees the controls necessary to mitigate those potential risks.

The Security Engineering group is responsible for:[2136]

- Information Security (IS) Engineering & Consulting – Provides cybersecurity consulting services to SoCalGas, SDG&E, and Corporate Center with the objective of reducing cybersecurity risks associated with projects prior to deployment.

[2136] *Id.* at 23.

- Production Support – Manages security technologies including firewall rule submission, approval and implementation process, web content filter, SPAM management, and intrusion prevention and detection systems.
- Security Operations – Support enhanced access controls, public key infrastructure, data loss prevention, and endpoint security.

The cost drivers behind this forecast are the continuing need to address increasing exposure to cybersecurity risk to the business and our customers, filling vacant infrastructure technology positions, the utilization of contracted firewall administrative support, and the addition of on-site staff to provide cybersecurity support to other departments during project development and implementation to ensure the deployment of secure solutions. SoCalGas describes its cybersecurity O&M request in further detail in Section III of Ex. 308 SCG/Worden at 21-25 and Ex. 309 SCG/Worden.

29.3.1.2 SDG&E O&M Request

Table GW-8 below, from SDG&E's direct testimony (Ex. 311 SDG&E/Worden at 22), summarizes SDG&E's 2019 cybersecurity O&M request.

TABLE GW-8
Shared O&M Summary of Costs

CYBERSECURITY (In 2016 $)			
(In 2016 $) Incurred Costs (100% Level)			
Categories of Management	**2016 Adjusted-Recorded (000s)**	**TY 2019 Estimated (000s)**	**Change (000s)**
A. SECURITY POLICY & AWARENESS	957	957	0
B. DIRECTOR - INFORMATION SECURITY	367	367	0
C. SECURITY ENGINEERING	992	1,434	442
D. SECURITY OPERATIONS	1,642	1,757	115
E. SECURITY CONTRACTS	2,587	3,370	783
G. INFORMATION SECURITY PROGRAMS	22	22	0
Total Shared Services (Incurred)	**6,567**	**7,907**	**1,340**

SDG&E describes its cybersecurity O&M request in detail in Section IV of Ex. 311 SDG&E/Worden at 21-37 and Ex. 312 SDG&E/Worden. As explained in those exhibits, the cost drivers behind this request include the continuing need to mitigate increasing exposure to cybersecurity risk to the business and our customers, escalating costs associated with supporting capital projects after their implementation, and increasing maintenance and licensing costs related to historical and planned capital projects.

29.3.2 ORA's Proposed O&M Adjustments

29.3.2.1 ORA's O&M Recommendations Regarding SoCalGas

ORA disputes SoCalGas' proposed cybersecurity O&M request. ORA argues that because SoCalGas' 2017 forecast exceeded SoCalGas' 2017 adjusted, recorded expense by 20.5%, the 2018 and 2019 forecasts should be reduced to equal the 2017 adjusted, recorded expense.[2137] Put another way, ORA asserts that because SoCalGas only spent $588,000 in 2017 O&M, the Commission should only authorize $588,000 for 2019 O&M versus the $708,000 requested.

For the reasons set forth below, SoCalGas disagrees with ORA's recommendation.

29.3.2.1.1 ORA's Forecasting Method is Flawed

SoCalGas disagrees with ORA's assessment that because SoCalGas spent less than it had forecasted in 2017, the Commission should reduce SoCalGas' forecast for 2019 to the exact same amount as 2017 actuals. As explained in Exhibit 308,[2138] the forecast methodology utilized by SoCalGas is derived from base year (BY) 2016 recorded costs, plus adjustments. ORA's recommendation to use a single year as the basis for its forecast does not make sense in the context of the cybersecurity operational environment, which does not remain static between fiscal years. The funding requirements relate directly to the number of systems and activities requiring support. When the operational environment has an increase in the number of supported systems and processes, there needs to be a corresponding increase in the number of personnel to support these systems and processes. ORA's recommendation also does not consider the fact that prior capital projects require O&M funding to support ongoing operations. Finally, the increase of O&M is in support of risk mitigation activities addressed in the RAMP, as described in more detail below.

[2137] Ex. 415 ORA/Loy at 24:12-14.

[2138] Ex. 308 SCG/Worden at 25:2-4.

29.3.2.1.2 ORA's Recommendation Fails to Accord Proper Deference to the Cybersecurity Safety Risks SoCalGas is Attempting to Mitigate

Starting in 2017, SoCalGas added new personnel and addressed new contract requirements to directly support SoCalGas' RAMP mitigation efforts. However, due to the limited supply of qualified cybersecurity personnel, SoCalGas was not able to fill some of its vacant positions until midway through 2017; as such, SoCalGas did not utilize all funding forecasted for 2017, which is why there was a gap between targets and actuals. ORA's recommendation to use the 2017 adjusted recorded expense does not provide sufficient funds to staff the fully functional cybersecurity team required in 2019 and subsequent attrition years to mitigate and address the risks identified within the RAMP report. The Commission should approve SoCalGas' cybersecurity O&M request without change.

29.3.2.2 ORA's O&M Recommendation Regarding SDG&E

ORA does not propose any adjustments to SDG&E's 2019 cybersecurity O&M request. ORA's recommendation appears to be based on the fact that SDG&E's 2017 adjusted recorded cybersecurity O&M expenses ($8.329 million) *exceeded* SDG&E's 2017 forecast ($7.120 million).[2139] The Commission should approve SDG&E's cybersecurity O&M request as reasonable.

29.4 Cybersecurity Capital Costs

29.4.1 Summary of SoCalGas' and SDG&E's Cybersecurity Capital Requests

Planning for cybersecurity risk mitigation is particularly challenging because of the wide range of potential risk drivers, including rapid changes in technology, innovations in business capabilities, evolving threats in terms of sophistication, automation, and aggressiveness, and increasing system interdependencies. Cybersecurity risk cannot be completely mitigated or avoided; however, the Companies can manage it by following well understood principles, recommending best practices, and striving to keep pace with changing threats.

Historical mitigation activities will continue to be performed. However, due to the evolving nature of the threats associated with this risk, if only the current mitigation activity was to be maintained, the risk would likely grow. Accordingly, the Companies are looking to new

[2139] Ex. 415 ORA/Loy at 21, Table 20-15.

capital projects to improve or replace existing security capabilities to address the ever-changing threats and/or supported technologies. While it is possible to plan for technology refresh costs based on the useful lifetime of a solution, it is more difficult to predict reactive technology costs in response to changes in threat capabilities that prematurely make a technology obsolete or require the use of a new technical control.[2140]

The Cybersecurity Program continually reassesses planned capital projects to maintain project priorities to balance current project and resource activities based on current cybersecurity risks. A side effect of the risk management adjustments is that project plans are continually reprioritized and restructured. For example, projects defined beyond a 12- to 18-month planning horizon are less likely to be implemented and may be replaced by a higher priority project.[2141] Also, projects may happen in different years due to changes in priority and resource availability as a result of the continuous reassessment of threats, known risks, and prioritization.

Table GW-13 below, from SoCalGas' direct testimony (Ex. 308 SCG/Worden at 29), summarizes SoCalGas' cybersecurity capital forecasts for 2017, 2018, and 2019, broken down by mitigation type. SoCalGas describes each of these proposed cybersecurity capital projects in detail in Section IV of Ex. 308 SCG/Worden at 25-62 and Ex. 310 SCG/Worden.

[2140] Ex. 311 SDG&E/Worden at 37.
[2141] *Id.* at 38.

TABLE GW-13
SoCalGas Capital Expenditures Summary of Costs
(Thousands of Dollars)

Mitgation Type	Project Name	2017	2018	2019
Identify	Enterprise Threat Intelligence	1,474	-	-
Identify	Threat Identification systems	-	-	4,731
Identify Total		**1,474**	**-**	**4,731**
Protect	PKI Rebuild	58	-	-
Protect	Firewall Security	308	-	-
Protect	Converged Perimeter Security (FOF Idea # 760)	2,516	1,270	-
Protect	Host Based Protection (FOF Idea # 790)	2,267	23	-
Protect	Email Spam Protection	1,086	-	-
Protect	IS Zone Rebuild	901	-	-
Protect	Critical Gas Infrastructure Protection	1,674	2,291	4,232
Protect	CASB (cloud data use)	-	2,893	-
Protect	Web Applications and Database Firewalls	-	2,228	-
Protect	Enterprise Source Code Security	-	1,180	36
Protect	Wired Network Preventative Controls	-	3,375	60
Protect	Multi Factor Authentication Refresh	-	2,640	-
Protect	My Account Multi Factor Authentication	-	-	170
Protect Total		**8,810**	**15,900**	**4,498**
Detect	SCG Network Anomaly Detection Phase 1	1,744	-	-
Detect	Insider Threat Detection / Prevention	1,843	-	-
Detect	SSL Decryption	296	-	-
Detect	Network Security Monitoring	1,770	146	-
Detect	Perimeter Tab infrastructure Redesign	-	1,331	-
Detect	Threat Detection systems	-	-	5,041
Detect Total		**5,653**	**1,477**	**5,041**
Respond	Threat Response systems	-	-	4,231
Respond	Forensics System Rebuild	202	-	-
Respond	Security Orchestration	1,705	185	-
Respond	Incident Response Secure Collaboration	-	1,914	-
Respond Total		**1,907**	**2,099**	**4,231**
Recover	Threat Recovery systems	-	-	4,230
Recover Total		**-**	**-**	**4,230**
Grand Total		**17,844**	**19,476**	**22,731**

Table GW-20 below, from SDG&E’s direct testimony (Ex. 311 SDG&E/Worden at 40), summarizes SDG&E’s cybersecurity capital forecasts for 2017, 2018, and 2019, broken down by mitigation type. SDG&E describes each of these proposed cybersecurity capital projects in detail in Section V of Ex. 311 SDG&E/Worden at 37-54 and Ex. 313 SDG&E/Worden.[2142]

TABLE GW-20
SDG&E Capital Expenditures Summary of Costs
(Thousands of Dollars)

Project Type	Project Name	2017	2018	2019
Identify	Compliance Records Management	876	-	-
Identify Total		**876**	**-**	**-**
Protect	Critical Infrastructure Protection	1,428	1,842	2,270
Protect	Smart Grid Substation Gateway Security Phase 2	1,068	1,332	1,416
Protect	Distribution Operations Multifactor Authentication	580	580	
Protect	Distribution RTU Password and Configuration Mgmt		387	386
Protect	Privilege Access Manager		772	772
Protect	EDO Network Security Architecture Redesign	772	772	
Protect	Active Directory Domain Controllers for Distribution	386	386	
Protect	Field Area Network Security		775	774
Protect Total		**4,234**	**6,846**	**5,618**
Detect	Network Anomaly Detection Phase 3	110	-	-
Detect	Distribution End Point Protection	926	386	
Detect Total		**1,036**	**386**	**-**
Cyber Security Total		**6,146**	**7,232**	**5,618**

29.4.2 ORA'S Proposed Capital Adjustments

As summarized in the tables below, ORA recommends adopting the adjusted, recorded 2017 costs as the capital forecast for 2017. ORA also disputes SoCalGas' and SDG&E's capital forecasts for 2018 and TY 2019. ORA states that because the Companies' 2017 estimates were higher than the 2017 adjusted recorded amount, the 2018 and 2019 forecasts should be adjusted utilizing "an ordinary least squares time trend," which the Companies understand to be a multi-year trend analysis.[2143]

TABLE GW- 8 - SoCalGas GRC Capital Proposals[2144]

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SoCalGas	17,844	19,476	22,731	60,051	
ORA	6,882	7,201	7,896	21,979	38,072

[2142] Grid Modernization Projects that are focused on improving the cybersecurity of SDG&E's electric distribution system also are discussed in Ex. 74 SDG&E/Colton.
[2143] Ex. 415 ORA/Loy at 25:1-3 and at 21:15-16.
[2144] Ex. 314 SCG/SDG&E/Worden at 5.

TABLE GW- 9 – SDG&E GRC Capital Proposals[2145]

TOTAL CAPITAL - Constant 2016 ($000)					
	2017	**2018**	**2019**	**Total**	**Variance**
SDG&E	6,146	7,232	5,618	18,996	[redacted]
ORA	1,631	1,815	1,887	5,333	13,663

For the reasons set forth below, the Commission should reject ORA's recommendations to drastically cut the funding for SoCalGas' and SDG&E's proposed cybersecurity capital projects, which are needed to address key safety risks.

29.4.2.1 ORA's Forecasting Methodology is Flawed

The Companies disagree with the methodology employed by ORA in determining forecast years based upon actuals from a single budget year, or from trending across multiple previous budget years. The Companies utilize a zero-based forecast methodology for Cybersecurity capital costs.[2146] Due to the rapidly changing cybersecurity threat environment, this method is most appropriate as these estimates are based upon specific projects, assets, and tasks needed for cybersecurity risk management and mitigation.

ORA's use of a multi-year trend analysis to determine capital expenses is not a logical approach to funding cybersecurity capital projects, especially as it relates to necessary expenditures to directly address cybersecurity risks that have been identified via RAMP and on-going risk assessments. Specifically, historical expenditures are not sufficient to address increasing cybersecurity threats, which are constantly emerging in a dynamic environment. ORA did not challenge the merits of any one of SoCalGas' or SDG&E's specific proposed projects but stated that because the Companies did not meet its target for one single year (2017), a multi-year trend analysis based forecast should be used instead. ORA's recommendations to significantly reduce SoCalGas' and SDG&E's Cybersecurity planned capital expenditures make no sense in an environment of increasing cyber threats and risks.

29.4.2.2 ORA's Recommendations Fail to Accord Proper Deference to the Cybersecurity Safety Risks SoCalGas and SDG&E Are Attempting to Mitigate

ORA's recommendations are not consistent with the Commission's directive to incorporate a risk-based framework into the current GRC request. As identified within the

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[2145] *Id.*

[2146] *Id.*

RAMP[2147] report, cybersecurity risk is a top safety risk for the Companies. The RAMP report was the starting point for consideration of the cybersecurity risk mitigation efforts identified in this GRC. The RAMP report presented an assessment of the key safety risks of SoCalGas and SDG&E and proposed plans for mitigating those risks. As stated in the RAMP report, company subject matter experts used empirical data to the extent available and/or their expertise to determine the likelihood and impact of a cybersecurity incident. The likelihood score was determined as being at least a 4 (Occasional), which is defined in the Risk Evaluation Framework as the possibility of a cybersecurity-related event occurring.[2148] The impact scores of the Companies' cybersecurity risks, however, were determined to be even higher at a 5 (Extensive) to a 6 (Severe) depending on the RAMP area.[2149] Those assigning this score considered reports in open media, security research, information-sharing entities, contracted information services, and threat intelligence sources. The findings are shown below.

TABLE GW- 10 - RAMP Findings[2150]

RAMP Area	Findings
Operational and Reliability	A score of 6 (Severe) was given to this risk. A cyber security incident impacting transmission and/or distribution of energy would directly impact the reliable delivery of energy.
Regulatory, Legal, and Compliance	Cyber Security was scored a 5 (Extensive) in the Regulatory, Legal, and Compliance impact area. This is reasonable because a severe impact to operations would likely result in an extended and in-depth review of the incident, as well as the existing mitigations and activities related to Cyber Security at the time of the event.
Financial	The Financial impact of a cyber security incident was also scored as a 5 (Extensive). A variety of cyber incidents could potentially result in this level of financial impact due to the high visibility of this kind of incident in our industry. A customer information breach may potentially result in reparations, security investigation and improvement costs, and a loss of customer confidence. An energy outage could result in financial impacts, loss of confidence, and/or increased insurance costs. The possibility of an incident destroying assets or data, such as an Advanced Meter Infrastructure (AMI) solution, could also be severe.

[2147] RAMP Report at 1.
[2148] Ex. 314 SCG/SDG&E/Worden at 6.
[2149] *Id.*
[2150] *Id.* at 7.

29.4.2.3 ORA Fails to Consider Increasing Cybersecurity Risks

The increasing complexity and frequency of cybersecurity-related attacks require companies to increase their cybersecurity capabilities. There have been multiple large-scale cybersecurity attacks across various industries, including the energy industry, that have caused disruption of service and loss of company and customer data. Examples include:[2151]

- 2012 virus attack on Saudi Aramco which infected 30,000 systems and deleted data from computer hard drives;
- 2015 attack on the Ukrainian Power Grid (UPG) in which power system components were maliciously operated and automation systems were disabled resulting in disruption of power delivery to customers;
- 2015 attack on the United States Office of Personnel Management (OPM) that released sensitive information associated with 21.5 million people;
- 2016 Yahoo password breach which affected 500 million accounts; and
- 2016 Lansing Board of Water and Light ransomware attack that impacted significant numbers of corporate computers.

As SoCalGas and SDG&E explained in their testimony, the United States Computer Emergency Readiness Team (US-CERT) has recently released alerts (TA17-293A, and TA-18-074A) identifying an "Advanced Persistent threat activity targeting Energy and other critical infrastructure sectors."[2152] These alerts, coupled with the previously mentioned attacks, show that cybersecurity risk is significant and increasing, potentially impacting the operational integrity of energy delivery systems and sensitive customer and company information. Combatting these threats requires an investment in cybersecurity services, technology, and personnel and the consequences of not treating these threats seriously will put the Companies, the industry, and customers at risk.

In summary, the Commission should adopt SoCalGas' and SDG&E's cybersecurity capital forecasts as reasonable.

[2151] *Id.* at 7-8.

[2152] *Id.* at 8, citing United States Computer Emergency Readiness Team (US-CERT), *Alert (TA17-293A) Advanced Persistent Threat Activity Targeting Energy and Other Critical Infrastructure Sectors* (October 20, 2017), *available at* https://www.us-cert.gov/ncas/alerts/TA17-293A.

30. Corporate Center – General Administration

30.1 Introduction

30.1.1 Summary of Corporate Center General Administrative Costs and Activities

Exhibits 315, 316 and 317 describe the TY 2019 forecasts for allocations of Shared General Administration costs from Sempra Energy's Corporate Center to SDG&E and SoCalGas.[2153]

The CPUC in Decision (D.) 98-03-073 approved the application to merge Enova Corporation and Pacific Enterprises, the former parent companies of SDG&E and SoCalGas, respectively (collectively, Companies), and form Sempra Energy. Sempra Energy then formed a centralized Corporate Center that combined many shared services of both Companies and served our other businesses (referred to as Global).

The Corporate Center provides corporate governance, policy direction, and critical control functions, as well as services that are still performed most effectively as a centralized operation. They are services that would otherwise require additional staffing and O&M at SDG&E and SoCalGas, if not performed and allocated by the Corporate Center.

Table MLD-1A below, from Ex. 315, represents a summary of these costs.

TABLE MLD-1A
Test Year 2019 Summary of Total Costs

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
A Finance	90,913	(31,356)	59,556	32,161	(3,590)	28,571
B Legal, Compliance and Governance	50,929	11,414	62,344	25,162	(1,634)	23,528
C Human Resources & Administration	18,030	6,668	24,698	15,413	6,287	21,700
D Corporate Strategy & External Affairs	8,110	6,310	14,420	3,542	349	3,890
E Facilities and Assets	25,379	4,547	29,926	12,533	3,354	15,886
F Pension & Benefits	87,431	6,618	94,048	30,662	4,748	35,409
Total	$280,792	$4,201	$284,992	$119,472	$9,512	$128,984
						Escalated 2019
Allocations						
SDG&E	59,202	(1,120)	58,082			60,922
So Cal Gas	60,270	10,632	70,902			74,446
Total Utility	119,472	9,512	128,984			$135,368
Global / Retained	161,320	(5,311)	156,008			
Total	$280,792	$4,201	$284,992			

[2153] *See* Exs. 315, 316 and 317 SCG/SDG&E/DeMontigny.

Exhibits 315 through 317 presented costs on an incurred basis: the recorded costs for 2016; forecasted costs for 2019; and the allocation of those costs to SDG&E, SoCalGas, and Global/Retained. For TY 2019, 45% of all forecasted, un-escalated Corporate Center shared service costs are allocated to SDG&E and SoCalGas. Corporate Center shared service costs not allocated to SDG&E and SoCalGas are not included in this request.

The expenses requested are required so that both SDG&E and SoCalGas can continue to comply and be in good standing with existing and potentially new governmental, legal, and regulatory requirements. Compliance is a basic requirement of corporate governance. The expenses requested are also necessary for basic corporate support functions and services, such as payroll and benefits administration, tax services, and internal audit, among others. These are provided to the operating areas of the Companies in an efficient, effective, and timely manner. SDG&E and SoCalGas infrastructure programs are also growing and evolving in response to customer preferences and the changing energy, regulatory, and policy environment. This growth creates pressure on services at Corporate Center that support capital investment, primarily within the Legal and Finance functions, both of which assist in activities to obtain the financing necessary for construction. While the cost of capital is not at issue in this proceeding, financing-related expenses such as short-term credit, banking, and rating agency fees are included.

30.1.2 Summary of Risk Assessment Mitigation Phase-Related Costs

Certain of the costs supported in Exhibits 315 and 316 are driven by activities described in SoCalGas and SDG&E's November 30, 2016 RAMP Report. The RAMP Report presented an assessment of the key safety risks of SoCalGas and SDG&E and proposed plans for mitigating those risks.

Table MLD-1B, from Ex. 315, provides a summary of the RAMP-related costs supported by Exhibits 315 and 316 by RAMP risk:

TABLE MLD-1B
Corporate General Administration RAMP-Related Costs

	2016 Embedded Base Costs (000s)	TY 2019 Estimated Incremental (000s)	Total (000s)
SDG&E – Records Management	$107	$(4)	$103
SDG&E – Workplace Violence	145	196	341
SoCalGas – Records Management	116	2	118
SoCalGas – Workplace Violence	328	304	632
Total O&M	**$696**	**$498**	**$1,194**

No party contested the above RAMP costs, which are described in greater detail in Exhibit 315.[2154] The Commission should approve these costs as reasonable.

30.1.3 Summary of Differences with Other Parties

ORA and TURN submitted testimony addressing several corporate center general administration issues. The table below, taken from SDG&E and SoCalGas' rebuttal testimony (Exhibit 317) and based on Table 21-1 from ORA's testimony (Ex. 416), summarizes the differences between SDG&E and SoCalGas' request versus ORA's recommendations. SDG&E and SoCalGas discuss these differences in greater detail below.

[2154] *Id.,* Section II at 5-10.

TABLE MLD-1
Test Year 2019 Sempra Energy Corporate Center Expenses[2155]
(in Thousands of 2016 Dollars)

	ORA Recommended				Sempra Energy Proposed		
Division	**Total Corporate Center**	**Utility Allocation w/o Oncor**	**Utility Allocation w/ Oncor**	**Total**	**Total Corporate Center**	**Utility Allocation**	**Total**
Finance	**$59,114**	**$28,127**	**$21,714**		**$59,556**	**$28,571**	
Legal, Compliance, & Governance	**$62,344**	**$23,528**	**$18,164**		**$62,344**	**$23,528**	
Human Resources & Administration	**$24,611**	**$21,612**	**$16,681**		**$24,698**	**$21,700**	
Corporate Strategy & External Affairs	**$14,420**	**$3,890**	**$3,004**		**$14,420**	**$3,890**	
Facilities & Assets	**$30,155**	**$16,031**	**$12,376**		**$30,155**	**$16,031**	
Pensions & Benefits	**$26,202**	**$16,080**	**$12,413**		**$94,048**	**$35,409**	
Total	**$216,839**	**$109,265**	**$84,351**		**$285,222**	**$129,129**	
SDG&E Allocation w/o Oncor				**$49,209**			**$58,146**
SCG Allocation w/o Oncor				**$60,054**			**$70,983**
Total w/o Oncor				**$109,263**			**$129,129**
SDG&E Allocation with Oncor				**$37,990**			
SCG Allocation with Oncor				**$46,362**			
Total with Oncor				**$84,351**			

30.2 Overview of Corporate Center and Response To Other Parties' Recommendations

As explained in Exs. 315 - 317, the Corporate Center is made up of the following divisions: Finance; Legal, Compliance and Governance; Human Resources and Administration;

[2155] Ex. 416 ORA/Laserson at 3. ORA's Table 21-1 appears to be based on the original October 6, 2017 version of SoCalGas' and SDG&E's Corporate Center General Administration testimony, not the revised version that was submitted in December 2017 (which ultimately was entered into the record as Ex. 315). ORA's Table 21-1 does not reflect a reduction in SoCalGas' and SDG&E's Facilities & Assets from $16.031 million to $15.886 million, which also reduced SoCalGas' and SDG&E's overall request from $129.129 million to $128.984 million.

Corporate Strategy and External Affairs; Facilities/Assets (including Depreciation); and Pensions & Benefits.

SoCalGas and SDG&E provide an overview of each of these divisions below and address issues raised by other parties (except for issues related to the acquisition of Oncor, which are discussed in Section 30.3 below).

Within each division section, a table presents the related division's total costs, broken down first to departments within the division, and then to the lowest organizational level, referred to as "cost centers." For each cost center, 2016 adjusted-recorded costs are presented, with the TY 2019 forecast and incremental change from base year (BY) 2016. Of these total amounts, the portion applicable only to SDG&E and SoCalGas (combined) is shown in the columns to the right. The lower half of each table, for each department, shows the amounts allocated to each of SDG&E and SoCalGas, with all remaining costs, not requested, summarized as Global/Retained.

30.2.1 Finance

The Finance division is responsible for maintaining the financial integrity of the Sempra Energy companies, including raising and managing capital. The Finance division is discussed in detail in Exhibit 315[2156] and includes the major functions highlighted in the table below.

TABLE MLD-4A
Finance Summary of Costs

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
A-1 CFO	1,205	(236)	970	506	101	607
A-2 Accounting Services	35,961	(26,781)	9,180	10,388	(4,858)	5,530
A-3 Tax Services	12,262	(659)	11,603	6,491	259	6,750
A-4 Treasury	29,561	(5,007)	24,554	7,432	305	7,737
A-5 Investor Relations	2,218	(4)	2,214	1,668	23	1,691
A-6 Internal Audit and Risk Management	8,497	1,125	9,622	4,970	487	5,457
A-7 Financial Leadership Program	1,208	206	1,414	706	93	799
Total	$90,913	($31,356)	$59,556	$32,161	($3,590)	$28,571
						Escalated
Allocations						2019
SDG&E	16,171	(2,206)	13,965			14,840
So Cal Gas	15,989	(1,384)	14,605			15,478
Total Utility	32,161	(3,590)	28,571			$30,317
Global / Retained	58,752	(27,766)	30,986			
Total	$90,913	($31,356)	$59,556			

2156 Ex. 315 SCG/SDG&E/DeMontigny, Section IV.A at 17-30.

As noted in the table above, the Finance division costs allocated to SDG&E and SoCalGas are projected to decrease by $3.6 million from BY 2016 to TY 2019. The primary drivers are:

$	(3.0)	Fueling Our Future staffing savings
	(2.9)	Fueling Our Future contracting/procurement savings
	(0.5)	Lower external audit fees
	1.8	Higher consulting & contract labor
	0.8	Higher training, travel, and recruiting
	0.2	Other - primarily IT systems expense and staffing
$	(3.6)	

With the exception of the audit issue discussed immediately below, no party contested the Finance costs proposed to be allocated to SDG&E and SoCalGas. The Commission should approve these costs as reasonable.

ORA's Proposed Audit Services Adjustment

In its testimony, ORA recommends the removal of certain audit costs allocated to SDG&E and SoCalGas. For SDG&E, ORA recommends the removal of $511,000 in 2014, $338,000 in 2015, and $119,000 in 2016[2157] and for SoCalGas, ORA recommends the removal of $55,000 in 2014, $462,000 in 2015, and $153,000 in 2016.[2158]

As the Companies explained in rebuttal testimony (Ex. 317 SCG/SDG&E DeMontigny at 10-11), ORA makes no claim that the expenses incurred were incorrect or imprudent, but that because ORA was not granted access to 20 audit reports, those corresponding expenses should be removed. These audit reports, however, are marked confidential and privileged, since they are protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Because these reports are protected from disclosure does not mean that they are not legitimate expenses or that they should not be considered in this GRC as part of the history of these accounts. The CPUC has long recognized the validity of these privileges and there should be no automatic penalty to a regulated entity simply for exercising its legal rights. Otherwise, this could result in SDG&E and SoCalGas waiving their attorney-client privilege for these documents.

[2157] Ex. 428 ORA/Chia/Lee/Stannik at 4:6-7.
[2158] *Id.* at 4:10-11.

In addition, it should be noted that when ORA calculated the reduction, it did not use the actual costs of those audits, but instead used a three-year (2014-2016) average of historical costs, net of those costs to perform attorney-client privilege internal audits. In addition, ORA states that Sempra Energy used a forecast methodology which relied on a weighted average. This statement is incorrect in that the only cost center within Audit Services and Risk Management to use a weighted average was the VP of Audit and Risk Management.[2159] The costs to perform these audits were included in the Audit Services cost center and the allocation of these costs is based on the annual Audit Plan.[2160]

The average of historical costs approach is flawed because performing these audits did not amount to an incremental expense, as one would conclude by removing the implied and calculated costs of these audits. Accordingly, SDG&E and SoCalGas dispute ORA's argument that these costs should be removed.

30.2.2 Legal, Compliance, and Governance

This division includes the office of the Executive Vice President and General Counsel, the Corporate Center Law Department (CCLD), and Governance, including Compliance, Corporate Secretary, Board of Directors, and the Sempra Energy Executives. The division provides legal, compliance, and governance services to all Sempra Energy companies and coordinates the retention and oversight of outside law firms, including the negotiation of outside legal fee arrangements. This division is discussed in detail in Exhibit 315[2161] and includes the major functions highlighted in the table below.

[2159] Ex. 315 SCG/SDG&E/DeMontigny at 28.
[2160] *Id*. at 29.
[2161] *Id*., Section IV.B at 31-38.

TABLE MLD-4B
Legal, Compliance, and Governance Summary of Costs

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
B-1 Legal Services	40,929	10,299	51,228	21,149	(2,985)	18,163
B-2 Compliance and Governance	5,806	1,230	7,036	4,014	1,351	5,365
B-3 Executive	4,194	(115)	4,079	-	-	-
Total	$50,929	$11,414	$62,344	$25,162	($1,634)	$23,528
Allocations						Escalated 2019
SDG&E	14,842	(3,928)	10,914			11,282
So Cal Gas	10,321	2,294	12,614			13,072
Total Utility	25,162	(1,634)	23,528			$24,354
Global / Retained	25,767	13,049	38,816			
Total	$50,929	$11,414	$62,344			

As noted in the table above, Legal, Compliance, and Governance costs assigned to SDG&E and SoCalGas overall are forecasted to decrease by $1.1 million from BY 2016 to TY 2019. This decrease is primarily due to overall lower outside legal fees and services, taking into account the realized trend for the last five years and excluding outside legal fees for matters for SoCalGas (Aliso Canyon, Sesnon, and Pengzuan Diao) and SDG&E (SONGS, Sunrise, Wildfires, and Rim Rock) not requested in this GRC application.

Shareholder activism continues to increase, however, resulting in higher costs for services related to the Sempra Energy Board of Directors, which partially offsets the lower outside legal costs.

$ - millions	
$ (1.8)	Non-recurring legal fees & services
(0.7)	Outside Legal
0.6	Board of Director fees & services
0.3	Other - primarily consulting fees
$ (1.6)	

No party contested the Legal, Compliance and Governance costs proposed to be allocated to SDG&E and SoCalGas. The Commission should approve these costs as reasonable.

30.2.3 Human Resources and Administration

The Human Resources and Administration division at Corporate Center develops corporate-wide policies, procedures and programs that apply to the entire Sempra Energy companies' workforce. It also provides services not found in Sempra Energy's subsidiary organizations, related to the support and maintenance of Sempra Energy's employees, which Sempra Energy considers its most important asset. This division also oversees Sempra Energy's information technology activities, including corporate systems, physical security, and cybersecurity. This division is discussed in detail in Exhibit 315[2162] and includes the major functions highlighted in the table below.

TABLE MLD-4C
Human Resources and Administration Summary of Costs

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
C-1 Senior VP Chief Human Resources & Administration	1,295	217	1,512	1,161	140	1,301
C-2 Compensation & Benefits	4,611	506	5,116	3,984	503	4,487
C-3 Corporate Human Resources Staffing & Development	1,439	299	1,738	1,079	239	1,318
C-4 CIO, Corporate Systems & Security	10,685	5,646	16,331	9,188	5,406	14,594
Total	$18,030	$6,668	$24,698	$15,413	$6,287	$21,700
Allocations						Escalated 2019
SDG&E	5,742	2,263	8,005			8,537
So Cal Gas	9,671	4,024	13,694			14,603
Total Utility	15,413	6,287	21,700			$23,140
Global / Retained	2,618	381	2,998			
Total	$18,030	$6,668	$24,698			

As noted in the table above, the costs for Human Resources and Administration assigned to SDG&E and SoCalGas are forecasted to increase by $6.3 million from BY 2016 to TY 2019. The increase is primarily due to higher consulting and contract labor fees related to the implementation of our new Human Capital Management system and higher payroll processing fees.

[2162] *Id.*, Section IV.C at 38-49.

$ - millions		
$	2.2	Information Security Staffing
	1.7	Higher consulting fees & contract labor
	0.7	Computer hardware and software
	0.6	Training and travel
	0.5	ADP processing fees
	0.4	Security & Disaster Recovery
	0.2	Other
$	6.3	

With the exception of the issue discussed below, no party contested the Human Resources and Administration's costs proposed to be allocated to SDG&E and SoCalGas. The Commission should approve these costs as reasonable.

ORA's Proposed HR Adjustment

In its testimony, ORA opposes Sempra Energy's request for one proposed new position, the Learning Module Advisor position to assist with the MyInfo Human Resources online learning and certification programs (MyInfo Services is part of the CIO, Corporate Systems and Security department within the Human Resources and Administration division).[2163] As the Companies explained in rebuttal testimony (SCG/SDG&E 317 DeMontigny at 11), this position was added because there are additional learning and certification programs that have been, or will need to be, added that require an additional FTE to appropriately manage these programs and the additional data generated from them. This includes the evaluation, design, and implementation of new programs and enhancements to existing programs. Accordingly, SDG&E and SoCalGas dispute ORA's claim that these costs should be removed.

30.2.4 Corporate Strategy and External Affairs

Sempra Energy companies conduct business in multiple communities, states, and countries. Corporate Strategy and External Affairs provides overall policy guidance for the Sempra Energy companies' interactions with external constituents, in support of individual business objectives, and to ensure compliance with enterprise-wide objectives, laws, and

[2163] Ex. 416 ORA Laserson at 24.

regulations. This division is discussed in detail in Exhibit 315[2164] and includes the major functions highlighted in the table below.

TABLE MLD-4D
Corporate Strategy and External Affairs Summary of Costs

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
D-1 Executive VP Corporate Strategy & External Affairs	925	(126)	799	392	(41)	351
D-2 Corporate Strategy	258	349	606	69	393	462
D-3 Corporate Communications	1,985	220	2,205	1,369	131	1,501
D-4 Issues Management	973	166	1,139	729	(185)	544
D-5 Corporate Responsibility	1,110	(42)	1,068	673	(47)	626
D-6 Government Affairs	1,968	1,421	3,388	126	4	130
D-7 Employee Programs	891	4,323	5,214	182	93	276
Total	$8,110	$6,310	$14,420	$3,542	$349	$3,890
						Escalated
Allocations						2019
SDG&E	1,674	93	1,768			1,921
So Cal Gas	1,867	255	2,123			2,303
Total Utility	3,542	349	3,890			$4,224
Global / Retained	4,569	5,962	10,530			
Total	$8,110	$6,310	$14,420			

As noted in the table above, the costs for Corporate Strategy and External Affairs that are assigned to SDG&E and SoCalGas are forecast to increase by $0.3 million from BY 2016 to TY 2019. This is primarily due to a slight increase in overall staffing costs.

No party contested the Corporate Strategy and External Affairs costs proposed to be allocated to SDG&E and SoCalGas. The Commission should approve these costs as reasonable.

30.2.5 Facilities and Assets

Certain cost centers are grouped together as they relate to the physical environment and tools used in the conduct of corporate shared services. This includes the depreciation expense of corporate capital assets and annual property taxes paid on them. The Facilities and Assets division is discussed in detail in Exhibit 315[2165] and includes the major functions highlighted in the table below.

2164 Ex. 315 SCG/SDG&E DeMontigny, Section IV.D at 49-57.
2165 *Id.*, Section IV.E at 57-64.

TABLE MLD-4E
Facilities and Assets Summary of Costs

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
E-1 Depreciation/Rate of Return	10,423	2,917	13,340	5,805	2,534	8,340
E-2 Property Taxes	3,169	(223)	2,946	1,445	16	1,462
E-3 Facilities and Other Assets	11,787	1,853	13,640	5,282	803	6,085
Total	$25,379	$4,547	$29,926	$12,533	$3,354	$15,886
Allocations						Escalated 2019
SDG&E	5,796	1,596	7,392			7,429
So Cal Gas	6,736	1,758	8,495			8,535
Total Utility	12,533	3,354	15,886			$15,964
Global / Retained	12,846	1,193	14,040			
Total	$25,379	$4,547	$29,926			

As noted in the table above, the costs for Facilities and Assets assigned to SDG&E and SoCalGas are forecast to increase by $3.3 million from BY 2016 to TY 2019. The primary factors for the increase are:

Facilities

$ - millions

$	2.5	Depreciation & RoR (Shared systems replacements - Vantage HCM, Project Analysis, Security)
	1.1	HQ rent and maintenance
	(0.3)	Other - primarily IT Help-Desk support and consulting
$	3.3	

No party contested the Facilities and Assets costs proposed to be allocated to SDG&E and SoCalGas. The Commission should approve these costs as reasonable.

30.2.6 Pension & Benefits

Pension & Benefits (P&B) costs are allocated using average rates representing such costs as a percentage of direct labor dollars. The resulting costs are referred to as "labor overheads," which then can be allocated in the same manner as the direct labor in each cost center. The labor overheads were removed from the operational cost centers presented in sections IV.A through IV.E of Exhibit 315 and consolidated as depicted in the following table. In addition to pension and other post-retirement benefits and payroll taxes, Incentive Compensation Plan (ICP), Long-Term Incentive Plan (LTIP), and the Supplemental Executive Retirement Plan (SERP) costs are included in this group of costs. This division is discussed in more detail in Exhibit 315[2166] and includes the major functions highlighted in the table below.

TABLE MLD-4F
Pension & Benefits Summary of Costs

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
F-1 Employee Benefits	11,833	1,514	13,347	6,904	1,533	8,438
F-2 Payroll Taxes	5,016	501	5,517	2,905	590	3,496
F-3 Incentive Compensation	17,417	2,364	19,782	10,780	545	11,325
F-4 Long-Term Incentives	38,622	3,680	42,303	6,650	2,107	8,757
F-5 Supplemental Retirement	14,541	(1,441)	13,100	3,422	(28)	3,394
Total	$87,431	$6,618	$94,048	$30,662	$4,748	$35,409
Allocations						Escalated 2019
SDG&E	14,976	1,062	16,038			16,912
So Cal Gas	15,685	3,686	19,371			20,456
Total Utility	30,662	4,748	35,409			$37,368
Global / Retained	56,769	1,870	58,639			
Total	$87,431	$6,618	$94,048			

As noted in the table above, the forecasted requested costs for P&B assigned to SDG&E and SoCalGas in TY 2019 is $4.7 million higher than adjusted-recorded costs in BY 2016. The increases are primarily related to long-term incentive executive benefits and an increase in pension and benefits expenses.

$ - millions	
$ 2.7	Employee Benefits (P&B, ICP, Payroll Tax), net
2.1	Increase in long-term incentive plan issuances
(0.1)	Other - primarily SERP & Life insurance
$ 4.7	

With the exception of the issue below, no party contested the Pension and Benefits costs proposed to be allocated from the Corporate Center to SDG&E and SoCalGas. The Commission should approve these costs as reasonable.

ORA Proposed Pension and Benefits Adjustment

ORA forecasts total ratepayer funded costs of $26.2 million (in 2016 Dollars) for Test Year 2019, with $7.2 million allocated to SDG&E, $8.9 million allocated to SoCalGas, and

[2166] *Id.*, Section IV.F at 64-49.

$10.1 million allocated to Global Retained.[2167] This proposal compares to Sempra Energy's forecast of $94.0 million, of which $16.0 million is allocated to SDG&E and $19.4 million is allocated to SoCalGas, and $58.6 million is allocated to Global/Retained. ORA's recommended adjustments in this area are based upon recommendations contained in Exhibit 417.[2168] SDG&E and SoCalGas oppose ORA's proposed disallowance of these pension and benefits costs for the reasons set forth in the rebuttal testimony of Debbie Robinson in Exhibit 211[2169] and summarized in Sections 32 and 33 of this brief.

30.3 Corporate Center Cost Allocation Issues Related To Oncor

30.3.1 Shared Services in General

The Corporate Center incurs costs for the functions and services discussed above. As discussed in Ex. 315, these costs are charged out using direct assignment and allocation to SDG&E, SoCalGas, Global, or are retained at the Corporate Center.

Additionally, each utility may not only charge shared A&G costs (Utility Shared Services) between each other, they may also charge costs to the Corporate Center for shared services that are located at each utility. These services are referred to as Corporate Shared Services (CSS). They are primarily Rent and Facilities Maintenance, Real Estate Services, Information Technology (IT), Document and Supply Management Services, and some Accounting Services (*e.g.*, Accounts Payable). Rather than duplicate these business functions across the organization, Corporate Center benefits from the structure that already exists at SDG&E and SoCalGas. This results in more cost-effective Corporate Center overhead. Since SDG&E and SoCalGas calculate and retain their share of CSS charges using the Corporate Center's overall allocation rate, known as the "Corporate Re-Allocation" method, any remaining charges to the Corporate Center are retained and not re-allocated to business units.

30.3.2 Cost Allocation Methodology

As discussed in Exs. 315 and 317, the goal in Corporate Center allocation practices is to reasonably and equitably bill its costs to business units, associating the costs as closely as possible to the level of service being provided to each business unit. To achieve this, the Corporate Center uses a hierarchy to allocate its costs to SDG&E, SoCalGas, and Global:

[2167] Ex. 416 ORA/Laserson at 36:11-13.
[2168] Ex. 417 ORA/Hunter.
[2169] Ex. 211 SCG/SDG&E/Robinson.

1. Direct Assignment
2. Causal/Beneficial
3. Multi-Factor

As further described in Ex. 317 (at 4-5), all cost centers will use direct assignment when possible and any remaining costs are allocated using an appropriate Causal/Beneficial or Multi-Factor method as applicable. All costs that relate to a specific business unit are directly assigned to that business unit, for example, outside legal costs associated with a specific case.

When costs cannot be directly assigned, they are then first allocated using a Causal/Beneficial method, if applicable, which is based on drivers that would be comparable for all business units and that would indicate the level of benefit received by each.

When direct assignment or Causal/Beneficial methods are not applicable, the Multi-Factor method is used. The Multi-Factor method is a four-factor allocation method that is used for functions that serve all business units but for which there is not a causal relationship, such as Investor Relations, or Financial Reporting. The Multi-Factor weighs four factors from all business units:

a. Revenues;
b. Operating Expenses;
c. Gross Plant Assets and Investments; and
d. Full-Time Employees or Equivalents.

This cost allocation methodology is consistent with previous CPUC decisions, such as the Merger Decision (D.) 98-03-073, the 2004 Cost of Service Decision D.04-12-015, and prior GRC Decisions in 2008 D.08-07-046, 2012, D.13-05-010, and 2016 D.16-06-054. These four factors are compiled at the beginning of each year, using the prior year data as the basis for the following year's actual allocations.

30.3.3 ORA's Proposed Oncor Adjustment

ORA proposes an adjustment to Utility Allocations to recognize and incorporate Sempra Energy's acquisition of its indirect interest in Oncor Electric Delivery Company LLC (Oncor). Including other adjustments described below, ORA forecasts total Utility Allocations of $84.4 million, with $38.0 million allocated to SDG&E and $46.4 million allocated to SoCalGas, compared to Sempra Energy's forecast of $58.1 million for SDG&E and $71.0 million for SoCalGas.[2170]

As SoCalGas and SDG&E explained in rebuttal testimony (Ex. 317 SCG/SDG&E DeMontigny at 3-9), and as discussed in more detail below, ORA's proposed adjustments, shown in the summary of differences table in the Introduction section above) are based on assumptions and a methodology that are inconsistent with Sempra Energy's longstanding and demonstrated approach to allocating corporate costs, adopted in the CPUC Merger Decision (D.) 98-03-073 and used in subsequent CPUC GRC Decisions.

The Oncor Transaction

On March 9, 2018, Sempra Energy completed the acquisition of an indirect, 80.25% interest in Oncor by way of a merger with Energy Future Holdings Corp. (EFH). EFH holds a 100% indirect interest in Oncor Electric Delivery Holdings Company LLC (Oncor Holdings), which, subsequent to the merger, holds a direct, 80.25% interest in Oncor.

Certain existing governance mechanisms and restrictions are in place around Oncor Holdings and Oncor, that limit Sempra Energy's ability to direct the management, policies and operations of Oncor Holdings and Oncor, including the deployment or disposition of their assets, declarations of dividends, strategic planning and other important corporate issues and actions. These limitations include limited representation on the Oncor Holdings and Oncor Boards of Directors, as such Boards have a majority of independent directors. Oncor Holdings and Oncor have been and will continue to be managed independently. The resulting independence and separateness of Oncor from its owners results in an expectation of limited sharing of any operational or financial resources and support by and between Sempra Energy and Oncor, and, accordingly, Sempra Energy does not control Oncor Holdings or Oncor. Given these limitations and Sempra Energy's lack of control over Oncor Holdings and Oncor, under accounting principles generally accepted in the United States (GAAP), Sempra Energy does not consolidate its investment in Oncor Holdings, but accounts for it using the equity method of accounting. Under the equity method of accounting, Sempra Energy records its investment in Oncor Holdings in its consolidated balance sheet, but does not include Oncor Holdings or Oncor's balance sheet balances. Similarly, Sempra Energy records 80.25% (representing its ownership

[2170] Ex. 416 ORA/Laserson at 41-42.

share) of Oncor Holdings' earnings in its consolidated statement of operations, but does not include Oncor Holdings' or Oncor's income statement balances. Thus, Oncor Holdings and Oncor are not consolidated by Sempra Energy.

<u>Impact to Corporate Center Allocations Resulting from the Oncor Transaction</u>

As discussed in our rebuttal testimony (Ex. 317 SCG/SDG&E DeMontigny at 6-9), to the extent that Sempra Energy provides any specific services to Oncor, it will directly assign and bill Oncor the associated costs. Because Oncor operates independently (*e.g.*, it has its own finance, accounting, and human resource functions), allocations under the Causal/Beneficial methods are not currently anticipated. However, there are certain activities of Sempra Energy that may have an indirect benefit to Oncor, in particular, corporate oversight by Sempra Energy to monitor and account for its investment.

Because Oncor is not consolidated by Sempra Energy, as described above, and given its independent operations and separateness, Oncor's revenues, operating expenses and employees are not included in the Multi-Factor calculation. However, the investment in Oncor recorded on Sempra Energy's consolidated balance sheet will be included in the Gross Plant Assets and Investments component of the calculation, resulting in a reduced allocation of Corporate Center costs to all of Sempra Energy's business units, including SoCalGas and SDG&E, and an increase in costs retained by the Corporate Center. This exclusion of revenues, operating expenses and employees from the Multi-Factor calculation is consistent with Sempra Energy's approach for all its equity method investments.

ORA's recommended adjustment to Utility Allocations resulting from Sempra Energy's acquisition of its interest in Oncor has been prepared by computing the ratio of Sempra Energy's acquisition cost to a total amount of assets comprising those of SDG&E, SoCalGas, and the Sempra Energy acquisition cost (note that ORA used an acquisition cost of $9.45[2171] billion, however the final purchase price was $9.566[2172] billion). This approach, which results in a proposed reduction to Utility Allocations of 22.8% of ORA's adjusted Corporate Center costs, is inconsistent with the Multi-Factor Methodology in that it does not include total Sempra Energy assets, nor does it incorporate all factors used in the Multi-Factor Methodology as applicable for

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[2171] Ex. 416 ORA/Laserson at 41.

[2172] March 31, 2018, Sempra Energy Form 10-Q filed May 7, 2018 at 56-57, *available at* http://investor.sempra.com/sec-filings/sec-filing/10-q/0000086521-18-000041.

Sempra Energy's business units. In addition, ORA's approach does not address the fact that Oncor is operationally separate and independent from Sempra Energy. Functions that the Corporate Center shares with Sempra Energy business units (*e.g.*, Financial Reporting and Payroll Services) are not performed for Oncor, but rather Oncor performs these types of activities for itself.

The following describes the relatively minor impacts to the 2019 Corporate Center Multi-Factor allocations, in the event the CPUC were to order Sempra Energy to update its 2019 forecast to reflect the investment in Oncor under its allocation practice. To appropriately account for the investment in Oncor in the Multi-Factor Methodology, $9.566 billion would be included in the total Gross Plant Assets and Investments (as described above) resulting in a reduction in Utility Allocations of $2.4 million. Please refer to the tables below for the hypothetical changes to the 2019 Summary of Total Costs. Table MLD-2A, from Ex. 317 at 8, reflects the updated figures after including Oncor which can be compared with Table MLD-1A above.

TABLE MLD-2A
Hypothetical Test Year 2019 Summary of Total Costs With Oncor

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
A Finance	90,913	(31,356)	59,556	32,161	(4,271)	27,890
B Legal, Compliance and Governance	50,929	11,414	62,344	25,162	(1,976)	23,187
C Human Resources & Administration	18,030	6,668	24,698	15,413	6,205	21,617
D Corporate Strategy & External Affairs	8,110	6,310	14,420	3,542	203	3,744
E Facilities and Assets	25,379	4,547	29,926	12,533	2,768	15,300
F Pension & Benefits	87,431	6,618	94,048	30,662	4,134	34,795
Total	$280,792	$4,201	$284,992	$119,472	$7,063	$126,534
Allocations						Escalated 2019
SDG&E	59,202	(2,725)	56,477			59,252
So Cal Gas	60,270	9,787	70,057			73,551
Total Utility	119,472	7,063	126,534			$132,803
Global / Retained	161,320	(2,862)	158,458			
Total	$280,792	$4,201	$284,992			

As SDG&E and SoCalGas explained in Exhibit 317[2173], incorporating Oncor would result in a reduction in allocations to SDG&E and SoCalGas by $1.6 million and $0.8 million, respectively. For 2019, these changes would result in a 2.0% lower Multi-Factor allocation for

[2173] Ex. 317 SCG/SDG&E/DeMontigny.

SDG&E and a 1.6% lower Multi-Factor allocation for SoCalGas, with a corresponding increase of 3.6% in the Multi-Factor allocation for Global/Retained.

30.3.4 TURN'S Allocation Issues

While TURN does not oppose the Multi-Factor allocation methodology, it notes that there is a lack of trend from 2014-2017.[2174] To forecast 2019, TURN recommends starting with 2017 actuals, adding the known and measurable change related to Oncor, and removing assets related to SONGS from SDG&E and Aliso Canyon from SoCalGas.[2175]

As SDG&E explained in Exhibit 317 (at 11-12), the SONGS regulatory asset was $0 at the end of 2017. In 2017, the regulatory asset was written off and replaced by a receivable from Southern California Edison totaling $152 million, $32 million classified as current and $120 million classified as noncurrent. The $606 million long-term receivable for insurance recovery for the Aliso Canyon incident was included in the calculation of the 2017 Multi-Factor cost allocation that was used to forecast the allocation factor for 2019. Based on the amount of these assets in relation to total gross plant assets and investments and that allocations from the Multi-Factor are limited, the impact of excluding both assets from the Multi-Factor calculation would be insignificant (approximately 0.1%).

With the addition of Oncor and the adjustments for SONGS and Aliso Canyon, TURN recommends a 1.46% lower multifactor adjustment for SDG&E, a lower adjustment for SoCalGas by 1.96%, and an increase of 3.42% for unregulated activities. TURN expects that these adjustments would result in a reduction in Corporate Center allocations to SoCalGas and SDG&E of several million dollars. As noted above in Table MLD-2A, SDG&E and SoCalGas calculated a 2.0% lower Multi-Factor allocation for SDG&E and a 1.6% lower Multi-Factor allocation for SoCalGas, with a corresponding increase of 3.6% in the Multi-Factor allocation for Global/Retained. These adjusted allocation factors would result in a reduced allocation to the Companies of $2.4 million.

30.4 Conclusion

Through the centralized Corporate Center, Sempra Energy is able to deliver efficient service and professional oversight to its business units, using fair allocation policies. SDG&E and SoCalGas benefit from this approach by avoiding the need for staffing duplicative functions

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[2174] Ex. 494 TURN/Marcus at 67.

[2175] *Id.* at 68.

in their own organizations and by sharing the costs with other Sempra Energy affiliates. Overall, 45% of Corporate Center's total forecasted costs are being requested in this GRC.

The following is a summary of all forecast allocations to SDG&E and SoCalGas, on an escalated basis, as shown in Ex.315 (at 69). The Summary of Earnings Direct Testimony of Khai Nguyen,[2176] show these allocations as non-standard charges under A&G Combined (Non-Shared Services).

Escalated ($ - thousands)	**Test Year 2019 Utility Allocations**		
Services Provided	**SDG&E**	**SoCalGas**	**Total Utilities**
A Finance	14,840	15,478	30,317
B Legal, Compliance and Governance	11,282	13,072	24,354
C Human Resources & Administration	8,537	14,603	23,140
D Corporate Strategy & External Affairs	1,921	2,303	4,224
E Facilities and Assets	7,494	8,615	16,109
F Pension & Benefits	16,912	20,456	37,368
Total	60,986	74,526	135,512

Services by FERC Account	**SDG&E**	**SoCalGas**	**Total Utilities**
F923.1 Outside Services Employed	57,211	69,817	127,028
F923.4 Depreciation & ROR	3,775	4,709	8,484
Total	60,986	74,526	135,512

31. Insurance

31.1 Introduction

31.1.1 Summary of Proposals

Exhibits 238-240[2177] set forth SoCalGas' and SDG&E's TY 2019 forecast for insurance costs. Table NKC-1 below, from the Companies' direct testimony, Ex. 238 SCG/SDG&E/Cayabyab at 1, summarizes these costs.

[2176] Exs. 344 SCG/Nguyen and 346 SDG&E/Nguyen (adopted by Hom).
[2177] Ex. 238 SCG/SDG&E/Cayabyab, Ex. 239 SCG/SDG&E/Cayabyab, Ex. 240 SCG/SDG&E/Cayabyab.

TABLE NKC-1
Insurance
Test Year 2019 General Rate Case
Testimony Table

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
A Property	12,160	8,144	20,304	10,117	5,959	16,076
B Liability	151,148	15,817	166,965	133,330	15,232	148,562
C Surety Bonds	199	120	319	98	93	192
Total	$163,506	$24,082	$187,588	$143,545	$21,285	$164,830
Allocations						
SDG&E	107,362	18,908	126,270			
So Cal Gas	36,183	2,377	38,560			
Total Utility	143,545	21,285	164,830			
Global / Retained	19,961	2,797	22,758			
Total	$163,506	$24,082	$187,588			

As the Companies' explained in their rebuttal testimony, Ex. 240 SCG/SDG&E/Cayabyab at 2-3, forecasting insurance premiums – particularly liability insurance premiums – has become extremely challenging in California, especially after the 2017 California wildfires, which occurred after SoCalGas and SDG&E submitted their direct testimony. Given current insurance market conditions, the insurance department expects increasing insurance cost volatility, particularly with respect to liability insurance. Insurance premiums are calculated using several factors, many of which are not within our control. Examples of factors outside of our control are worldwide catastrophic losses including wildfires, hurricanes, and floods that bring with them significant global insured losses that can negatively impact our insurance premiums.

By way of an example, the Companies had forecasted 2017, 2018, and 2019 wildfire liability premiums to be approximately $80 million, $85 million, and $89 million, respectively,[2178] but in light of the 2017 California wildfires, which occurred after SoCalGas and SDG&E submitted their direct testimony, our 2018 wildfire liability premiums increased by approximately 30% in relation to 2017 forecasted.[2179]

[2178] *See* Ex. 238 SCG/SDG&E/Cayabyab at 17, Table NKC-17.

[2179] *See* Ex. 240 SCG/SDG&E/Cayabyab at 6 ("As noted above, the Companies' general excess/wildfire liability insurance premiums renew on June 26, 2018. At this point, the insurance department is finalizing its renewal discussions/negotiations with retail and reinsurance insurers, but the feedback we have received from insurers is that they have been re-evaulating their positions due to the overall financial landscape in California and in particular loss concerns related to the 2017 California wildfires. Based on this feedback, the Companies are expecting liability insurance costs to exceed the forecasted amounts.

In light of the new challenges in forecasting insurance premiums and the cost volatility, SoCalGas and SDG&E have proposed the adoption of a Liability Insurance Premium Balancing Account (LIPBA) to help address these concerns. SoCalGas and SDG&E discuss the proposed LIPBA in more detail below.

31.1.2 Summary of Differences

The following table, from the Companies' rebuttal testimony, Ex. 240 SCG/SDG&E/Cayabya at 1, summarizes the differences between the Companies' TY 2019 forecasted insurance costs and other parties' recommendations.

TOTAL O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change from SCG/SDG&E Test Year Request**
SOCALGAS/SDG&E	143,545	164,830	-
ORA	143,545	164,830	-
TURN	143,545	162,100	(2,730)
CFC	143,545	163,050	(1,780)
UCAN	143,545	155,845	(8,985)
FEA	143,545	128,640	(36,190)

TOTAL SoCalGas O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change from SCG Test Year Request**
SOCALGAS	36,183	38,560	-
ORA	36,183	38,560	-
TURN	36,183	36,995	(1,565)
CFC	36,183	36,780	(1,780)
UCAN	36,183	38,560	-
FEA	36,183	26,961	(11,598)

TOTAL SDG&E O&M - Constant 2016 ($000)			
	Base Year 2016	**Test Year 2019**	**Change from SDG&E Test Year Request**
SDG&E	107,362	126,270	-
ORA	107,362	126,270	-

For example, we anticipate SDG&E's 2018 wildfire liability insurance premiums to increase by approximately 30% to 35%, which may also impact SDG&E's future 2019 wildfire liability insurance premiums." *See also* Tr. V23:2299:5-7 (Cayabyab), in which the Companies' witness, Mr. Cayabyab, confirmed that the amount of the 2018 wildfire liability premium increase from the June 26, 2018 renewal was a "30 percent increase from our 2017 forecasts . . ."

TURN	107,362	125,105	(1,165)
CFC	107,362	126,270	-
UCAN	107,362	117,285	(8,985)
FEA	107,362	101,678	(24,592)

For the reasons set forth in the Companies' testimony and summarized below, the Companies urge the Commission to adopt their forecasts and proposals.

31.2 Description of SoCalGas' and SDG&E's Insurance Coverage Needs

SoCalGas' and SDG&E's insurance needs are generally grouped into three categories, each of which is discussed in more detail below:

- Property – Provides coverage for losses or damage to company assets;
- Liability – Provides coverage for legal liability resulting from third-party claims; and
- Surety Bonds – Backstops contractual performance obligations the Companies have to other parties.

31.2.1 Property

Table NKC-2 below, from the Companies' direct testimony, Ex. 238 SCG/SDG&E/Cayabyab at 3, provides a summary of SoCalGas' and SDG&E's TY 2019 forecasted property insurance costs.

TABLE NKC-2
Property Insurance

Test Year 2019 General Rate Case
Testimony Table

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
A-1 Primary	6,082	3,075	9,157	4,796	1,612	6,409
A-2 Excess	4,941	5,253	10,194	4,359	4,549	8,908
A-3 Other Property	1,136	(184)	953	961	(202)	759
Total	$12,160	$8,144	$20,304	$10,117	$5,959	$16,076
Allocations						
SDG&E	6,199	3,710	9,910			
So Cal Gas	3,918	2,249	6,166			
Total Utility	10,117	5,959	16,076			
Global / Retained	2,043	2,185	4,228			
Total	$12,160	$8,144	$20,304			

31.2.1.1 Activity Descriptions

31.2.1.1.1 Primary Property

Our primary property program (also known as the Oil Insurance Limited or OIL "wrap" program)[2180] provides coverage for direct physical damage to property owned by SDG&E, SoCalGas, and other Sempra business units. Covered perils include machinery breakdown, earthquake, flood, and terrorism. Significant exclusions include electric and gas distribution and transmission lines. Property is valued at full replacement cost.

31.2.1.1.2 Excess Property

The Excess Property Insurance program provided by OIL includes coverage for physical damage, earthquake, flood, excess pollution liability, control of well, and does not exclude losses from terrorism. Major exclusions include business interruption, extra expense, and electric transmission and distribution systems.

31.2.1.1.3 Other Property

As explained in the Companies' direct testimony, Ex. 238 SCG/SDG&E/Cayabyab at 4-5, "Other Property" insurance includes such things as Control of Well, Crime, and San Onofre Nuclear Generating Station (SONGS) property insurance.

31.2.1.2 Forecast Approach

As explained in the Companies' direct testimony, Ex. 238 SCG/SDG&E/Cayabyab at 6, a forecast was developed for each individual type of property insurance policy. Each of our individual insurance programs are subject to specific market conditions. Worldwide losses such as earthquakes, floods, or hurricanes, as well as business unit losses, can negatively impact future premiums.

Due to the unexpected nature of perils covered by our commercial insurance policies, it is difficult to forecast future premiums with reasonable certainty. As such, our premiums are primarily based on forecasts provided by our primary insurance broker, Marsh, a forecast received from our Excess Property insurer (OIL), as well as our loss history and projected increase in total insurable values. OIL's base premium is calculated using a post-loss funding

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[2180] Referred to as the OIL "wrap" program because it is designed to supplement the excess property program coverage provided by OIL, our insurance mutual. The supplemental coverage includes the lowering of excess property's minimum deductible level, the addition of business interruption insurance (excluding SDG&E and SoCalGas), and additional limits in excess of OIL's maximum limits.

mechanism such that incurred losses are paid back over a period of five years. The base premium is then adjusted depending on deductible, limits, assets, and industry segment.

<u>Specific Factors Influencing the Property Marketplace:</u>

- <u>Program Structure</u> – Our current property program, utilizing a mutual insurance company (OIL) and a commercially purchased insurance program (OIL "wrap") that supplements OIL's coverage, is somewhat unique within the power and utility space as there are a limited number of insurance carriers willing to provide this type of coverage. However, this arrangement results in lower costs and enhanced coverage, such as control of well and excess pollution liability coverage, which generally is not included under most property policies.
- <u>Catastrophe Exposure</u> – SDG&E's and SoCalGas' assets are located in California and subject to potential earthquake risk. Generally, insurance capacity available for catastrophic risks is limited and if offered, is typically available at a higher cost and reduced coverage when compared to OIL.

31.2.1.3 Program Marketing Approach

As explained in our direct testimony, Ex. 238 SCG/SDG&E/Cayabyab at 7, our primary property program is comprised of several insurance companies located in the United States (US), United Kingdom (UK)/Europe, and Bermuda. We access global capacity as a means to diversify and potentially increase the amount of capacity available. This strategy helps to reduce our credit risk and increases competition. For example, in 2014 our property program consisted of approximately 74% UK/Europe and 26% US market participation. As of 2016, our property program consists of approximately 50% UK/Europe, 44% US, and 6% Bermuda participation. We meet with existing and potential new insurance markets annually. During those meetings, we typically review our assets, property risk mitigation strategies, and risk controls in place for each business unit covered by our property program. This strategy helped reduce our property premiums from 2013 to 2016. In addition, as discussed above, our excess property program insurance is provided by OIL.

31.2.2 Liability

Table NKC-6 below, from the Companies' direct testimony, Ex. 238 SCG/SDG&E/Cayabyab at 8, provides a summary of SoCalGas' and SDG&E's TY 2019 forecasted liability insurance costs.

Table NKC-6
Liability Insurance

Test Year 2019 General Rate Case
Testimony Table

(2016 $ - 000's)	Corporate Center			Utility Allocations		
Services Provided	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019	Base Year 2016	2016-2019 Incr/(Decr)	Forecast 2019
B-1 General Excess	69,714	(490)	69,224	53,893	(1,110)	52,783
B-2 Fire	74,599	14,667	89,266	74,546	14,644	89,190
B-3 D&O	1,374	173	1,547	687	87	774
B-4 Fiduciary	616	97	713	471	73	544
B-5 Workers Comp	2,689	1,537	4,226	2,357	1,529	3,887
B-6 Other Liability	2,155	(167)	1,988	1,375	10	1,385
Total	$151,148	$15,817	$166,965	$133,330	$15,232	$148,562
Allocations						
SDG&E	101,115	15,115	116,231			
So Cal Gas	32,214	117	32,331			
Total Utility	133,330	15,232	148,562			
Global / Retained	17,818	585	18,403			
Total	$151,148	$15,817	$166,965			

31.2.2.1 Activity Descriptions

31.2.2.1.1 General Excess Liability

General excess liability provides coverage against Sempra business units for their legal liability resulting from third-party property damage, bodily injury, or personal injury. Coverage includes operational pollution liability, auto liability, and employer's liability. Major exclusions include property damage to property owned by the insured, injury to the insured's employees, and pollution liability subsequent to disposal.

31.2.2.1.2 Wildfire Liability

31.2.2.1.2.1 Wildfire Liability

Wildfire liability provides coverage for third-party liability for bodily injury, property damage, or personal injury arising from wildfires. Major exclusions include property damage to property owned by the insured, injury to the insured's employees, and intentional losses.

31.2.2.1.2.2 Wildfire Property Damage Reinsurance

Wildfire property damage reinsurance also provides coverage for third-party legal liability for property damage arising out of wildfires. Major exclusions include bodily injury and fire following earthquake.

31.2.2.1.3 D&O Liability

Directors and officers (D&O) liability provides coverage for corporate directors and officers against claims alleging financial loss arising from mismanagement. Major exclusions include fraudulent or criminal acts, and claims covered under other liability policies.

31.2.2.1.4 Fiduciary Liability

Fiduciary liability provides coverage for liability arising from wrongful acts committed by employee benefit program fiduciaries.

31.2.2.1.5 Worker's Compensation

Worker's compensation provides coverage for employee job-related injuries or diseases.

31.2.2.1.6 Other Liability

As explained in the direct testimony, Ex. 238 SCG/SDG&E/Cayabyab at 12-13, "Other Liability" insurance includes such things as cybersecurity, auto, and railroad protective insurance.

31.2.2.2 Forecast Approach

A forecast was developed for each individual type of liability insurance policy. Our premiums are primarily based on forecasts provided by our primary insurance broker Marsh, as well as our loss history and growing insurer concerns with California's legal environment. However, due to the unexpected nature of perils covered by our commercial insurance policies, it is difficult to forecast future premiums with reasonable certainty.

<u>Specific Factors Influencing the Liability Marketplace:</u>

- <u>Wildfire</u> – Insurers providing wildfire capacity have experienced significant losses within California, the United States, and worldwide. These losses have impacted the Companies' ability to obtain liability insurance and the cost of this insurance. For example, the September 2015 Butte wildfire in Pacific Gas and Electric Company (PG&E's) service territory increased our fire insurance costs in 2016 and caused several of our existing insurers to reduce their renewed capacity. More recently, as noted above, the 2017 California wildfires increased our 2018 wildfire liability premiums by approximately 30%.
- <u>California Legal Environment Relating to Strict Liability and Inverse Condemnation</u> – This California doctrine assigns strict liability to the utility through inverse condemnation, such that options for a utility's defense are extremely limited in certain circumstances. Because of California's inverse condemnation doctrine, insurers require a higher premium than in other States with similar exposures, or they may refuse to provide insurance coverage at all.

- Lack of Competition in the Insurance Market – Insurer liability losses in California have caused many insurers to reduce the amount of capacity available or to leave the market altogether.

31.2.2.3 Program Marketing Approach

Our Excess Liability, Excess Fire, and Wildfire Damage Reinsurance programs are comprised of insurance carriers based in the United States, the United Kingdom, and Bermuda. We have meetings with these insurance markets annually to review our risk reduction measures and address any concerns and/or questions underwriters may have for each policy. We believe the risk reduction measures SDG&E has implemented, and some of the alternative insurance procurement strategies our insurance department has pursued, have mitigated the cost increases we would otherwise have seen, but the 2017 California wildfires will result in adverse impacts for some period of time.

31.2.2.4 Liability Insurance Premium Balancing Account (LIPBA)

In light of the challenges the Companies are facing in procuring liability insurance and because of the market fluctuations in the cost of this insurance, SoCalGas and SDG&E are proposing a new two-way balancing account for liability insurance premiums. The Companies describe their LIPBA proposal in more detail in both their insurance[2181] and regulatory accounts testimony.[2182] In addition, the Companies' respond to other parties' recommendations with respect to the LIPBA in the section below.

31.2.3 Surety Bonds

Surety bonds guarantee the contractual performance obligations the Companies have to other parties. Bonds are usually required by city, state or federal governmental agencies. The types of bonds typically required are franchise bonds, tax bonds, license and permit bonds, and appeals bonds. Bond premiums are paid either as a one-time premium for the life of the bond or as an annual premium and are procured on an as-required basis. Costs are directly assigned to the business unit requiring the bond.

[2181] Ex. 238 SCG/SDG&E/Cayabyab at 16-17; Ex. 240 SCG/SDG&E/Cayabyab at 5-12.

[2182] Ex. 184 SDG&E/Jasso at 13-14; Ex. 186 SDG&E/Jasso at 6-7; Ex. 181 SCG/Yu at 19.

31.3 SDG&E and SoCalGas Response to Other Parties' Recommendations

31.3.1 Liability Insurance Cost Forecasts and the Proposed Liability Insurance Premium Balancing Account (LIPBA)

31.3.1.1 ORA

ORA does not oppose SDG&E's and SoCalGas' insurance forecast costs or the Companies' proposed LIPBA but recommends that the Companies file a new application if additional levels of coverage are needed.[2183] As explained in rebuttal testimony, Ex. 240 SCG/SDG&E/Cayabyab at 5-6, our concern with ORA's recommendation is that the Companies would be exposed to increased risk during the significant period of time it could take to pursue Commission approval of additional coverage through a new application, which can take 12 – 18 months to process. The Companies need to have the flexibility and agility to actively participate in the insurance markets.

31.3.1.2 UCAN

31.3.1.2.1 UCAN – Sulpizio

In his testimony, UCAN witness Sulpizio states that "I agree in principle with SDG&E that the [LIBPA] may be an appropriate cost recovery mechanism given the unique challenge of unpredictable insurance market conditions created by the Fall 2017 California wildfires."[2184] Mr. Sulpizo also states that "the proposed LIPBA appears to be the best available tool" to address wildfire liability insurance market uncertainties."[2185] However, because "the actual impact of the 2017 wildfires on insurance market conditions remains unknown *until [the Companies] June, 2018 renewal* . . . it would seem reasonable to start with a known expenditure as the base from which to make subsequent annual adjustments."[2186] As such, Mr. Sulpizio recommends using a five-year average of SDG&E's 2012-2016 wildfire liability and property reinsurance costs (approximately $80 million) as the starting point.[2187] UCAN also recommends that in any future reasonableness review of the LIPBA, SDG&E make a showing of the alternatives considered to conventional insurance.[2188]

[2183] Ex. 416 ORA/Laserson at 2:13-21.
[2184] Ex. 509 UCAN/Sulpizio at 1-2.
[2185] *Id.* at 14-15.
[2186] *Id.* (emphasis added).
[2187] *Id.* at 14-15.
[2188] *Id*. at 15.

SDG&E disagrees with UCAN's proposal to use as the baseline amount for the LIPBA a five-year historical average of our wildfire liability and reinsurance costs. Mr. Sulpizio admits that "[t]he probability that Wildfire Liability costs will rise (if coverage is available) is *beyond dispute* in light of 2017 Northern California wildfires."[2189] And, as discussed above, this has been confirmed by the Companies' testimony in this proceeding. Therefore, using a historical average would not be reasonable because it would understate the current and future costs. In addition, now that the Companies have the results from their 2018 wildfire liability renewals – an approximate 30% increase over 2017 forecasted – there is no basis for UCAN's proposal to use an unrealistic historical average for going-forward purposes.

UCAN also recommends that in any future reasonableness review of the LIPBA, SDG&E make a showing of the alternatives considered to conventional insurance. This is something our corporate center insurance department has been pursuing for several years now. As such, this requirement is not necessary. However, we agree with UCAN that alternatives to conventional insurance options have the potential to become economical as insurance premiums continue to rise. In rebuttal testimony, Ex. 240 SCG/SDG&E/Cayabyab at 9-12, the Companies summarized some of the activities our insurance department has pursued over the last several years in an effort to lower our premiums, such as blind bid pricing strategy, alternative risk transfer mechanisms, and use of multi-year insurance products.

31.3.1.2.2 UCAN - Charles

In his testimony, UCAN witness Charles explains that "[t]o the extent that SDG&E is exposed to excess costs related to liability insurance premium increases . . . that are outside of the utility's control, I agree that it has raised legitimate concerns regarding the need for a mechanism to address these costs."[2190] However, UCAN would restructure the proposed LIPBA such that:[2191]

- It would apply only to SDG&E (but not to SoCalGas);
- It would apply only to wildfire liability insurance costs;
- Balances between 0-25% greater than authorized revenue requirement would be subject to a Tier 3 advice letter; and
- Balances greater than 25% of authorized revenue requirement would be subject to an application.

[2189] *Id.* at 4 (emphasis added).
[2190] Ex. 511 UCAN/Charles at 91.
[2191] *Id.* at 107.

SDG&E and SoCalGas disagree with UCAN's recommendations. As the Companies' explained in the rebuttal testimony, Ex. 240 SCG/SDG&E/Cayabyab at 8, limiting the LIPBA to just SDG&E and wildfires fails to recognize that the liability insurance premiums affect both companies. Such a limitation also ignores the fact that liability insurance premiums are subject to uncontrollable factors and are therefore difficult to forecast with a reasonable amount of certainty for reasons previously stated. SoCalGas and SDG&E also oppose UCAN's proposed tiered review process for the reasons set forth in the rebuttal testimony of SDG&E's regulatory accounts witness, Norma Jasso.[2192]

31.3.1.3 FEA

31.3.1.3.1 The Commission Should Reject FEA's Proposal to *Reduce* the Companies' TY 2019 Forecasted Liability Costs to 2017 Recorded Amounts

FEA recommends reducing the Companies' 2019 test year forecasts for liability insurance, including wildfire insurance, to the 2017 recorded amounts. FEA asserts that such an approach is appropriate because the 2017 recorded amounts are "the most current" or "the more recent known and measurable amount[s]."[2193]

SoCalGas and SDG&E strongly disagree with FEA's forecasting recommendation. In this instance, adoption of such an approach would be punitive. As discussed above, we already have confirmed that SDG&E's 2018 wildfire liability premiums *exceeded* our 2017 forecast by approximately 30% due to the devastating fires in California that took place after we submitted our application and testimony on October 6, 2017. As such, FEA's recommendation for the Commission to adopt a revenue requirement significantly *below* forecasted is very problematic, particularly when, to use FEA's words, the "most current," "more recent" and "known and measurable amount" is what the Companies paid for their 2018 wildfire liability insurance premiums.

31.3.1.3.2 The Commission Also Should Reject FEA's LIPBA Proposal

FEA recommends rejection of SDG&E's and SoCalGas' proposed LIPBA. FEA contends that liability insurance costs are "a normal cost of a regulated utility and are not totally beyond the utility's control [and that] [t]he Company has the ability to shop around each year to

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[2192] Ex. 186 SDG&E/Jasso at 6-7.
[2193] Ex. 366 FEA/Smith at 97 and 100.

obtain the most economical price and options."[2194] FEA argues that "[t]he company experienced increases in insurance due to wildfires in the past and was able to manage its expenses without a balancing account."[2195] FEA also asserts that SDG&E has not demonstrated a unique problem with regulatory lag that requires singling out these expenses from the overall revenue requirement.

We strongly disagree with FEA's recommendation. As the Companies explained in their testimony, and as noted above, there is nothing "normal" about the environment in which we currently operate with prolonged drought, climate change, an increasingly longer fire season and insurers reducing coverage, increasing costs and/or getting out of the market entirely.[2196]

In addition, as evidenced by the increase in our 2018 premiums, it is reasonable to assume that our insurance premiums and needed levels of coverage will continue to be impacted due to factors beyond our control, which supports our request for a LIPBA. Finally, the unanticipated increase in our 2018 premiums – after the Companies already had submitted their forecasts in their direct testimony – also demonstrates the problem of regulatory lag, contrary to FEA's assertions. The LIPBA represents a reasonable solution to address such problems. The Commission should reject FEA's proposal.

31.3.2 Response to TURN'S and CFC's Insurance Recommendations

31.3.2.1 TURN

31.3.2.1.1 Allocation of D&O Insurance Premiums

TURN claims that the Sempra corporate center did not calculate the allocation of D&O insurance premiums correctly. TURN contends that the correct methodology is to allocate 50% of the insurance costs first to Global/Retained, and then allocate the remaining 50% of costs using the multi-factor basic methodology.[2197]

As explained in the Companies' rebuttal testimony, Ex. 240 SCG/SDG&E/Cayabyab at 12, contrary to TURN's assertion, our current methodology *does* accurately assign 50% of the D&O costs to the shareholders (non-regulated businesses and retained), and 50% to the utilities. TURN has provided no rationale as to why further allocation is necessary. Under TURN's

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[2194] *Id.* at 31:10-13.
[2195] *Id.* at 31:13-15.
[2196] *See, e.g.,* Ex. 240 SCG/SDG&E/Cayayab at 6-8 and Appendices A, B, C and D.
[2197] Ex. 494 TURN/Marcus at 70-71.

approach, 62% would be allocated to shareholders, not 50%. The Commission should reject TURN's proposed D&O insurance reallocation. D&O insurance is a standard cost of doing business, is reasonable, and should be recovered in revenue requirement. There is no convincing evidence to suggest any further reduction.

31.3.2.1.2 Modification of Insurance Allocation Factors

TURN proposes to reduce SDG&E's test year insurance costs from $126,270,000 to $125,105,000 and SoCalGas' test year insurance costs from $38,560,000 to $36,994,000. In Table 53 of its testimony,[2198] TURN outlines its proposed adjustment based on revised allocation methods for Excess liability insurance, D&O Insurance, and All Other Insurance.

As the Companies' explained in rebuttal testimony, Ex. 240 SCG/SDG&E/Cayabyab at 12-13, TURN's proposed revised multi-factor basic allocation appears to be based on the addition of Oncor. TURN incorrectly assumes Sempra's excess liability insurance program provides coverage for Oncor. This is not accurate as our policy explicitly excludes coverage for Oncor. TURN also proposes a $50,000 reduced allocation to SDG&E and $69,000 reduction to SoCal Gas for "All Other Insurance." TURN offers no explanation as to the basis for the reduced allocation to the "All Other Insurance" or how they calculated those allocation adjustments. Based on the above, SoCalGas and SDG&E recommend that the Commission reject TURN's premium reallocation proposal.

31.3.2.2 CFC

CFC recommends decreasing the Companies' excess property insurance forecast by $1.78 million, from $8.905 million to $7.128 million.[2199] The Commission should reject CFC's flawed recommendation, which has no basis.

First, CFC suggests that the Companies' request for excess property insurance is somehow related to SDG&E's request to recover costs associated with the 2007 wildfires in A.15-09-010, which the Commission denied in D.17-11-033. As the Companies explained in rebuttal testimony, Ex. 240 SCG/SDG&E/Cayabyab at 13-14, contrary to CFC's allegation, the Companies' request in this GRC proceeding for approval of a 2019 test year forecast for excess property insurance has nothing to do with the types of costs at issue in A.15-09-010. In fact, our

[2198] *Id.* at 72.
[2199] Ex. 487 CFC/Roberts at 1.

excess property insurance – from our insurance carrier, OIL - does not provide *any* coverage for wildfire liability. As such, there is no basis for CFC's recommendation.

Second, CFC argues that the Companies' excess property insurance forecast is partially driven by the Aliso Canyon incident. In particular, CFC suggests that OIL's change in its "experience modification factor" designation for the Companies (from 1.0 to 1.25) somehow translated into a 25% increase in premiums.[2200] This is not an accurate assumption.

As explained in the Companies' rebuttal testimony (Ex. 240 SCG/SDG&E Cayabyab at 13-14), OIL is a mutual insurance company providing coverage for members engaged in energy operations. The scope of operations for each member ranges from oil and gas to utility companies located in various countries. OIL uses a formula to calculate individual member premiums that includes a variety of factors (in addition to the experience modification factor) such as business sector assets, deductible levels, insurance program structure, and overall OIL membership losses. Many of these factors are dependent on overall OIL membership performance, in addition to Company performance. Interestingly, our 2016 insurance premiums decreased slightly despite an increase in both gross assets and experience modifier. Conversely, our premiums increased in 2017 despite no change in experience modifier from 2016 to 2017. Below is the table, from the Companies' rebuttal testimony, Ex. 240 SCG/SDG&E/Cayabyab at 14, outlining our OIL premiums going back to 2012 with corresponding gross assets and experience modifier.

OIL Premiums						
Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
OIL Premium	6,077,241	5,725,598	5,762,447	5,005,070	4,940,933	6,192,269
Gross Assets	30,563,236	32,707,574	34,993,146	36,906,924	39,683,816	45,318,438
Experience Modifier	1.0	1.0	1.0	1.0	1.25	1.25

In summary, as set forth above, SoCalGas and SDG&E recommend that the Commission reject CFC's proposed disallowance. SDG&E's 2007 wildfire losses from 2007 have no connection to the Companies' 2019 excess property insurance request and CFC incorrectly

[2200] *Id.* at 4.

assumes that OIL's experience modifier of 1.25 directly translated to a 25% increase in premiums.

32. Compensation and Benefits

The direct testimony of Debbie Robinson on Compensation and Benefits provides an overview of the total compensation and benefits program at SoCalGas and SDG&E.[2201] It also includes the results of the total compensation study (TCS) conducted by Willis Towers Watson (WTW),[2202] a nationally recognized compensation and benefits consulting firm.

As Ms. Robinson describes in further detail throughout her testimony, SoCalGas' and SDG&E's compensation and benefits programs include the following components: base pay; short-term incentives (also referred to as "ICP" or "variable pay"); long-term incentives; special recognition awards; health and welfare benefits; retirement benefits; and other benefit programs. A summary of the projected TY 2019 compensation and benefit program costs (excluding base pay and benefits covered in other witness areas) is provided in Tables 1 and 2 in Ms. Robinson's direct testimony.[2203]

SoCalGas' and SDG&E's employees are critical to providing safe, efficient and reliable service to their customers. The Companies' total rewards programs are structured to attract, motivate and retain a high-performing workforce and reflect the impacts of the marketplace, collective bargaining and government regulation. Compensation programs are designed to focus employees on the Companies' key priorities, the most important of which is safety. Safety is a core value of SoCalGas and SDG&E, and a strong safety culture directly influences the safety performance of an organization.[2204] Ms. Robinson demonstrates SoCalGas' and SDG&E's strong safety culture in her testimony presentation, through the Companies' use of compensation metrics and key performance indicators to drive improved safety performance. Both SoCalGas and SDG&E have increased the weighting of their safety measures in variable pay plans over the past two years, such that safety measures now comprise 70% of the company performance component of the non-executive ICP plans.[2205] Benefit programs that promote employee health and welfare also contribute to SoCalGas' and SDG&E's safety performance and culture.

[2201] Ex. 208 SCG/SDG&E/Robinson.
[2202] *Id.* at Appendix A (SoCalGas), Appendix B (SDG&E).
[2203] *Id.* at 3-4, Tables 1 and 2.
[2204] *See, e.g.,* Ex. 3 SCG/SDG&E/Day/Flores/York at 28.
[2205] Ex. 208 SCG/SDG&E/Robinson at 5.

This holistic and competitive approach to total rewards has allowed SoCalGas and SDG&E to maintain an experienced, productive workforce while maintaining a labor cost structure that is in line with the market.[2206] The same approach to total rewards extends to the Sempra Energy Corporate Center (Corporate Center), ensuring that total compensation costs for the services provided to SoCalGas and SDG&E by the Corporate Center are reasonable and competitive.

Activities and programs within each component of SoCalGas' and SDG&E's Compensation and Benefits forecast are outlined in detail throughout Ms. Robinson's direct testimony.[2207] ORA, TURN, NDC, and OSA submitted direct testimony on SoCalGas and SDG&E's proposals.[2208] Tables 32.A and 32.B compare ORA's and TURN's positions on each component of SoCalGas' and SDG&E's Compensation and Benefits TY 2019 forecasts:[2209]

Table 32.A

Component	TY2019				
	SoCalGas Request ($M)	ORA Recommendation ($M)	Difference	TURN Recommendation	Difference - TURN vs. SCG
Non-Executive ICP	$ 75.7	$ 32.2	$ (43.5)	$ 51.8	$ (23.9)
Executive ICP	$ 3.4	$ 0.9	$ (2.5)	$ 1.7	$ (1.7)
Total ICP	$ 79.1	$ 33.1	$ (46.0)	$ 53.5	$ (25.6)
LTIP	$ 10.0	$ -	$ (10.0)	$ -	$ (10.0)
Spot Cash	$ 1.0	$ 0.4	$ (0.5)	$ 1.0	$ -
Employee Recognition	$ 0.6	$ 0.1	$ (0.5)	$ 0.1	$ (0.5)
Compensation	**$ 90.7**	**$ 33.6**	**$ (57.1)**	**$ 54.5**	**$ (36.2)**
Health Benefits	$ 105.1	$ 98.5	$ (6.6)	$ 102.4	$ (2.7)
Welfare Benefits	$ 1.9	$ 1.9	$ -	$ 1.9	$ -
Retirement Savings Plan	$ 25.4	$ 25.4	$ -	$ 25.4	$ -
NQ Savings Plan	$ 0.3	$ -	$ (0.3)	$ 0.2	$ (0.2)
Supplemental Pension	$ 1.9	$ -	$ (1.9)	$ 1.0	$ (1.0)
Other programs/fees	$ 4.5	$ 3.3	$ (1.2)	$ 3.9	$ (0.6)
Benefits	**$ 139.1**	**$ 129.1**	**$ (10.0)**	**$ 134.7**	**$ (4.4)**
Total Comp & Benefits	**$ 229.8**	**$ 162.7**	**$ (67.1)**	**$ 189.2**	**$ (40.6)**

[2206] *Id.*

[2207] Ex. 208 SCG/SDG&E/Robinson, *passim.*

[2208] Ex. 417 ORA/Hunter; Ex. 426 ORA/Tang; Ex. 416 ORA/Laserson; Ex. 494 TURN/Marcus; Ex. 437 NDC/Bautista; Ex. 442 OSA/Contreras/Au.

[2209] Ex. 211 SCG/SDG&E/Robinson, Tables DSR-1 and DSR-2.

Table 32.B

Component	TY2019				
	SDG&E Request ($M)	ORA Recommendation ($M)	Difference - ORA vs. SDG&E	TURN Recommendation	Difference - TURN vs. SDG&E
Non-Executive ICP	$ 66.7	$ 28.4	$ (38.4)	$ 48.0	$ (18.7)
Executive ICP	$ 4.0	$ 1.1	$ (2.9)	$ 2.2	$ (1.8)
Total ICP	$ 70.7	$ 29.5	$ (41.3)	$ 50.2	$ (20.5)
LTIP	$ 8.6	$ -	$ (8.6)	$ -	$ (8.6)
Spot Cash	$ 1.0	$ 0.4	$ (0.6)	$ 1.0	$ -
Employee Recognition	$ 0.3	$ 0.1	$ (0.3)	$ 0.1	$ (0.2)
Compensation	**$ 80.6**	**$ 30.0**	**$ (50.7)**	**$ 51.3**	**$ (29.3)**
Health Benefits	$ 63.9	$ 59.3	$ (4.6)	$ 62.3	$ (1.5)
Welfare Benefits	$ 0.8	$ 0.8	$ -	$ 0.8	$ -
Retirement Savings Plan	$ 17.4	$ 17.4	$ -	$ 17.4	$ -
NQ Savings Plan	$ 0.2	$ -	$ (0.2)	$ 0.1	$ (0.1)
Supplemental Pension	$ 2.4	$ -	$ (2.4)	$ 1.2	$ (1.2)
Other programs/fees	$ 1.6	$ 1.3	$ (0.3)	$ 1.4	$ (0.2)
Benefits	**$ 86.3**	**$ 78.8**	**$ (7.4)**	**$ 83.3**	**$ (3.0)**
Total Comp & Benefits	**$ 166.9**	**$ 108.8**	**$ (58.1)**	**$ 134.6**	**$ (32.3)**

Table 32.C

Component	TY2019			TY2019		
	SoCalGas Request ($M)	NDC Recommendation ($M)	Difference - NDC vs. SoCalGas	SDG&E Request ($M)	NDC Recommendati on ($M)	Difference - NDC vs. SDG&E
Executive ICP	$ 3.4	$ -	$ (3.4)	$ 4.0	$ -	$ (4.0)
LTIP	$ 10.0	$ -	$ (10.0)	$ 8.6	$ -	$ (8.6)
Non-Executive ICP	$ 75.7	No Recommendation	N/A	$ 66.7	$ 63.5	$ (3.2)

TURN submitted testimony covering most elements of compensation and benefits costs; for the remaining components of compensation and benefits that are not discussed in TURN's testimony, Tables 32.A and 32.B assume that TURN does not take issue with the Companies' forecasts.

NDC submitted testimony relating to executive compensation (Executive Incentive Compensation Program (ICP) and Long-Term Incentive Program (LTIP)) and, for SDG&E only, the Non-Executive ICP. Table 32.C compares NDC's position on these components.[2210] NDC did not propose any changes to other components of compensation and benefits costs. OSA submitted testimony related to certain performance measures used in the ICP but did not recommend funding amounts.

Ms. Robinson's testimony presentation, including the WTW TCS, demonstrates that SoCalGas' and SDG&E's request for compensation and benefits cost recovery is reasonable,

[2210] *Id.* at 8, Table DSR-3.

consistent with past CPUC decisions, will benefit customers, and should be approved.[2211] The compensation and benefits programs provided to SoCalGas and SDG&E employees, retirees and their dependents reflect the impacts of the marketplace, collective bargaining and government regulation. Compensation programs are designed to focus employees on the Companies' key priorities, the most important of which are safety and customer service. Benefits include health and welfare programs and retirement plans. SoCalGas' and SDG&E's compensation and benefits programs are critical to attracting, motivating and retaining a skilled, high-performing workforce. The TCS found SoCalGas' and SDG&E's total compensation to be in line with the competitive market, and is therefore reasonable.[2212]

32.1 Total Compensation Study

SoCalGas and SDG&E included a total compensation study as part of their TY 2019 General Rate Case submission, in compliance with Commission Decisions D.87-12-066, D.89-12-057, and D.96-01-011. For over 20 years, SoCalGas and SDG&E have submitted total compensation studies in connection with their GRCs, with ORA jointly sponsoring and participating in the studies.[2213] The Companies requested ORA's participation in the total compensation study for the TY 2019 GRC as well, but ORA declined to participate.

The TCS evaluated SoCalGas' and SDG&E's total compensation relative to the external labor market, including a detailed analysis of "total compensation," which is defined as the aggregate value of annualized base pay, incentive compensation (short-term and long-term) and benefits programs.[2214] For short-term incentive compensation, both actual and target data were analyzed. WTW was selected to conduct the study based on their relative experience, proposed timelines and fees, in comparison with two other firms. Although ORA did not participate in the TY 2019 TCS, SoCalGas and SDG&E applied a consistent methodology with the TY 2016 total compensation study, in which ORA participated.

SDG&E's total compensation (defined as base salaries, short-term incentives, long-term incentives and benefits) is within 0.4% of market based on actual total compensation (using actual ICP) and target total compensation (using target ICP) is within 1.5% of market. SoCalGas' actual total compensation is within 0.7% of market and target total compensation is

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[2211] *Id.* at 3.
[2212] Ex. 208 SCG/SDG&E/Robinson at 5-8, Appendix A (SoCalGas) and Appendix B (SDG&E).
[2213] *Id.* at 5-6.
[2214] *Id.* at 6.

within 1.2% of market. Compensation professionals, including WTW, typically consider a range of plus or minus 10 percent of the average of the external market data to be competitive and broader ranges are common and expected for long-term incentive plans and benefits.[2215]

In D.95-12-055, the Commission affirmatively stated that compensation levels that fall between plus or minus five percent of the relevant market are considered to be "at market" and reasonable.[2216] As shown in Ms. Robinson's direct testimony, for both SoCalGas and SDG&E, actual total compensation and target total compensation fall within both the competitive range of plus or minus ten percent that is widely used by compensation professionals and the range of plus or minus five percent cited by the Commission in D.95-12-055.[2217]

No party presented testimony disputing SoCalGas and SDG&E's TY 2019 total compensation study.

32.2 Short-Term Incentive Compensation (ICP)

ICP is an essential component of a competitive total compensation package, for a number of reasons. Short-term incentive compensation creates focus on and accountability for desired results, improves performance, and facilitates ideas and operational improvements. Variable pay plans are a prevalent market practice and are a key component of a competitive compensation package.[2218]

SoCalGas' and SDG&E's short-term ICP have been a longstanding part of the Companies' total compensation strategies, for all of their non-represented workforce. ICP places a portion of employee compensation at-risk, subject to achievement of the plan's performance measures, motivating employees to meet or exceed important safety, customer service, supplier diversity, reliability, and financial goals. Performance measures are reviewed and updated annually. ICP performance results are reviewed by the Sempra Energy Audit Services department prior to board approval.[2219]

The SoCalGas and SDG&E ICP plans for non-executive employees include a company performance component, which trains employee focus on the achievement of company goals related to safety, reliability, customer satisfaction, and financial health.[2220] In addition, the plans

[2215] *Id.*
[2216] D.95-12-055, 1995 Cal. PUC LEXIS 965, *29-31.
[2217] Ex. 211 SDG&E/Robinson at 7-8.
[2218] *Id.* at 9.
[2219] *Id.* at 9.
[2220] *Id.* at 10.

include an individual performance component, which is based on the employee's contributions toward these company goals and their achievement of their individual performance objectives. The company performance component and individual performance component each are weighted at 50% of employees' target ICP award. Ms. Robinson testified that, over the past two years, both SoCalGas and SDG&E have increased the emphasis on employee and operational safety measures in their ICP plans.[2221] Safety is the top priority for SoCalGas and SDG&E and this is now reflected in the weighting of the ICP safety measures.

Responses to ORA, TURN, and NDC testimony on executive and non-executive ICP are addressed within the same section (combining 32.2.1 and 32.2.2) below.

32.2.1 Executive ICP

ORA, TURN, and NDC essentially ignore the Commission's guidance considering compensation that falls between plus or minus five percent of the relevant market to be "at market" and reasonable.[2222] Instead, their recommendations are based on varying opinions of whether the specific ICP performance measures benefit ratepayers. SDG&E and SoCalGas dispute this unreliable approach, as well as ORA's, TURN's, and NDC's subjective contentions that certain measures do not benefit ratepayers.

ORA's Position on Non-Executive ICP and Executive ICP

ORA takes issue with the TY 2019 Non-Executive ICP forecast of $75.7 million for SoCalGas and $66.7 million for SDG&E, as well as the Executive ICP forecast of $3.4 million for SoCalGas[2223] and $4.0 million for SDG&E.[2224] ORA argues that some of the ICP metrics do not benefit and should not be funded by ratepayers. ORA proposes that measures which, in its view, benefit ratepayers should be funded 50% by ratepayers and 50% by shareholders. ORA recommends funding of $28.4 million for SoCalGas' non-executive ICP and $32.2 million for SDG&E's non-executive ICP. ORA recommends $0.9 million for SoCalGas' executive ICP and $1.1 million for SDG&E's executive ICP.[2225]

[2221] *Id.*
[2222] *See* D.95-12-055.
[2223] *See* Ex. 417 ORA/Hunter at 11, Table 22-7. The amounts shown in Table 22-7 "SDG&E Variable Pay/ICP – Executives" actually pertain to SoCalGas' Executive ICP.
[2224] *See Id.* at Table 22-6. The amounts shown in Table 22-6 "SoCalGas Variable Pay/ICP – Executives" actually pertain to SDG&E's Executive ICP.
[2225] Ex. 211 SCG/SDG&E/Robinson at 8 (summarizing Ex. 417 ORA/Hunter).

TURN's Position on Non-Executive ICP and Executive ICP

TURN takes issue with the TY 2019 Non-executive ICP forecast of $75.7 million for SoCalGas and $66.7 million for SDG&E, as well as the Executive ICP forecast of $3.4 million for SoCalGas and $4.0 million for SDG&E.[2226] TURN states that some of the ICP metrics do not benefit and should not be funded by ratepayers. TURN proposes that measures which, in its view, benefit ratepayers be funded 90% by ratepayers and 10% by shareholders. TURN recommends funding of $51.8 million for SoCalGas' non-executive ICP and $48.0 million for SDG&E's non-executive ICP. TURN recommends $1.6 million for SoCalGas' executive ICP and $2.2 million for SDG&E's executive ICP. In addition, TURN proposes funding of $0.4 million for Corporate Center ICP costs allocated to SoCalGas and $0.1 million for Corporate Center ICP costs allocated to SDG&E, while SoCalGas and SDG&E proposed $6.3 million for Corporate Center ICP costs allocated to SoCalGas and $5.0 million for Corporate Center ICP costs allocated to SDG&E. Corporate Center ICP allocations are covered in the revised direct testimony of Mia DeMontigny.[2227]

NDC's Position on Non-Executive ICP (SDG&E Only) and Executive ICP

NDC takes issue with the Executive ICP and LTIP and recommends no funding. NDC disputes the safety goals included in the Executive ICP, asserting that these goals primarily benefit financial performance by reducing costs.[2228] NDC takes issue with the number and weighting of the safety and financial goals. The 2017 Executive ICP of both SoCalGas and SDG&E is weighted at 50% for safety measures, 10% for customer service measures, 35% for financial measures, and 5% for strategic measures. NDC points out that the safety component of the Executive ICP includes several safety measures (12 for SoCalGas and 10 for SDG&E) while the financial component includes only three measures, and for the most part, specific individual safety measures have a lesser weight than specific individual financial measures.

NDC also takes issue with the headcount forecast used for SDG&E's Non-Executive ICP and with the methodology used to forecast ICP for union employees performing non-represented duties. In responding to a data request from NDC (NDC-SEU-009, Question 7), SDG&E and NDC noted that the 2013 headcount, which was included in the five-year average used to

2226 *Id.* at 9.
2227 Ex. 315 SCG/SDG&E/DeMontigny.
2228 Ex. 211 SCG/SDG&E/Robinson at 9 (summarizing Ex. 437 NDC/Bautista).

develop the forecast of TY 2019 ICP, was understated by 575 administrative employees. With the correction of this error, TY 2019 non-executive ICP would be $64.5, or $2.2 lower than the $66.7 million in SDG&E's application. NDC developed an alternative forecast of TY 2019 ICP that included the correction of the error, a change in the 2019 headcount assumption and a change in the methodology for forecasting ICP for union employees who receive ICP for temporary non-represented job assignments. NDC's TY 2019 forecast is $63.5 million.[2229]

<u>OSA's Position on Non-Executive ICP and Executive ICP Safety Measures</u>

OSA contends that certain ICP performance measures classified as safety measures are either not primarily representative of, or related to, safety.[2230] OSA disputes SDG&E's inclusion of System Average Duration Interruption Index (SAIDI), and Worst Circuit (SAIDI and SAIFI) because such measures primarily promote reliability rather than safety. In addition, OSA cites SoCalGas' Advanced Meter Installations and Incomplete Orders Reduction as measures that do not primarily benefit safety performance.

32.2.1.1 SoCalGas and SDG&E Rebuttal to ORA, TURN and OSA

In response to ORA's, TURN's, and OSA's direct testimony arguments summarized above, Ms. Robinson presented rebuttal testimony demonstrating the following points, which are described in more detail in her testimony and below:

- Incentive compensation programs are part of a reasonable, at-market compensation package.
- A compensation package that includes a combination of base pay and incentive compensation provides a greater benefit to ratepayers than providing the same level of compensation solely through base pay.
- Ratepayers benefit from incentive compensation programs because incentive programs are an integral part of a competitive total compensation package.
- ICP performance goals benefit customers and the community.
    - Safety performance measures,
    - Customer and supplier diversity performance measures,
    - Financial performance measures.
- Corporate Center allocations should be evaluated based on whether the amount allocated to the Companies is reasonable.[2231]

[2229] *Id.* at 10.
[2230] *Id.* (summarizing Ex. 442 OSA/Contreras/Au).
[2231] *Id.*

<u>Incentive compensation programs are part of a reasonable, at-market compensation package.</u>

Incentive compensation programs are an integral part of a reasonable and competitive total compensation package and, as such, should be treated no differently than base salary for cost recovery purposes. The WTW TCS found that SoCalGas' actual total compensation (defined as base salaries, short-term incentives, long-term incentives and benefits) is within 0.7% of market based on actual total compensation (using actual ICP) and target total compensation (using target ICP) is within 1.2% of market, and SDG&E's total compensation is within 0.4% of market based on actual total compensation (using actual ICP) and target total compensation (using target ICP) is within 1.5% of market.[2232] In D.95-12-055,[2233] the Commission affirmatively stated that compensation levels that fall between plus or minus five percent of the relevant market are considered to be "at market" and reasonable. Under this standard, both SoCalGas' and SDG&E's compensation is reasonable.[2234] In D.15-11-021, the Commission acknowledged the importance of evaluating incentive compensation in the context of whether total compensation is reasonable:

> However, we do place weight on the results of the TCS and decline to adopt the deep cuts proposed by TURN and the ORA.[2235]

The Commission has declined to micromanage utilities' variable compensation programs, saying that "as long as [a utility's] *total compensation levels* are appropriate [they] will not dictate how [the utility] distributes compensation among various types of employment benefits."[2236] The Commission also noted:

> …it would be within [a utility's] managerial discretion to offer all cash compensation to employees in the form of base pay instead of a mix of base pay and incentive pay. In the event [the utility] were to do so, we would not take issue with ratepayer funding of the resulting compensation as long as total compensation is reasonable. If total compensation does not exceed market levels, a disallowance of reasonable expenses for the [incentive compensation] program

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[2232] *Id.* (citing Ex. 208 SCG/SDG&E/Robinson at 5-8, Appendix A (SoCalGas) and Appendix B (SDG&E)).
[2233] D.95-12-055, 1995 Cal. PUC LEXIS 965, *29-31.
[2234] Ex. 211 SCG/SDG&E/Robinson at 11.
[2235] D.15-11-021 at 265.
[2236] D.97-07-054 at 68 (emphasis added). *See also*, *e.g.*, D.13-05-010 at 882 (declining to micromanage SDG&E and SoCalGas' variable compensation metrics).

> would in effect be a substitution of our judgment for that of [utility] managers regarding the appropriate mix of base and incentive pay.[2237]

In their respective testimonies, ORA, TURN and NDC inappropriately attempt to substitute their judgment for that of SoCalGas and SDG&E in determining the appropriate individual components that make up its incentive compensation program. It should also be noted that ORA, TURN, and NDC each have different views of which measures benefit ratepayers, which underscores the inherent subjectivity of this approach.[2238] It would be unworkable and unwise for the utilities to manage ICP plans for their employees based on the wavering subjectivity of collective third-party opinions. A Commission order along such lines would be inconsistent with the well-settled regulatory principle that regulators set standards but do not manage the utility's business.[2239]

ORA, TURN and NDC's arguments fail to recognize that SoCalGas' and SDG&E's total compensation is at market and, as such, is reasonable and should be subject to full recovery based on cost of service principles.[2240]

<u>A compensation package that includes a combination of base pay and incentive compensation provides a greater benefit to ratepayers than providing the same level of compensation solely through base pay.</u>

ORA and TURN's arguments may have the unintended consequence of encouraging SoCalGas and SDG&E to provide higher base salaries in lieu of incentive compensation, while continuing to provide at-market aggregate total compensation.[2241] D.04-07-022 for Southern California Edison acknowledges that incentive compensation could be discontinued and offset with higher base salaries:

> We also note that it would be within SCE's managerial discretion to offer all cash compensation to employees in the form of base pay instead of a mix of base pay and incentive pay. In the event SCE were to do so, we would not take issue with

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[2237] D.04-07-022 at 217.
[2238] Ex. 211 SCG/SDG&E/Robinson at 12.
[2239] *See, e.g., W. Ohio Gas Co. v. Pub. Utils. Comm'n of Ohio*, 294 U.S. at *72 ("Good faith is to be presumed on the part of the managers of a business. [citations omitted] In the absence of a showing of inefficiency or improvidence, a court will not substitute its judgment for theirs as to the measure of a prudent outlay."); *accord* D.13-05-010 at 882 (declining to micromanage SDG&E and SoCalGas' variable compensation metrics).
[2240] *See* D.03-02-035 at 6; *see also* D.14-08-011, at 31 ("[T]he basic principle [of ratemaking] is to establish a rate which will permit the utility to recover its cost and expenses plus a reasonable return on the value of the property devoted to public use[.]").
[2241] Ex. 211 SCG/SDG&E/Robinson at 12.

> ratepayer funding of the resulting total compensation as long as total compensation is reasonable.[2242]

Such an approach would not be beneficial to ratepayers, as these incentive programs encourage employees to continue to find opportunities to improve performance and operate efficiently.[2243] The ICP focuses employees on safety, reliability and customer service goals and provides accountability for results. It can also be a useful tool for management in building and maintaining a strong safety culture, as the Commission stated in D.16-06-054:

> One of the leading indicators of a safety culture is whether the governance of a company utilizes any compensation, benefits or incentive to promote safety and hold employees accountable for the company's safety record.[2244]

In contrast, base salary is fixed and does not provide the same level of focus on key goals. Therefore, a regulatory path that encourages movement toward replacing incentive compensation with base pay is misguided.

Ratepayers benefit from incentive compensation programs because they are an integral part of a competitive total compensation package.

Ratepayers benefit from incentive compensation programs because they are critical to SoCalGas' and SDG&E's ability to attract, retain, and motivate a highly-skilled, experienced workforce.[2245] In PG&E's TY 2014 GRC decision, the Commission stated:

> We conclude that offering employee compensation in the form of incentive payments is useful for recruiting and retaining skilled professionals and improving work performance. Conditioning a portion of management employees' compensation on achievement of specific company goals is a generally accepted compensation practice.[2246]

Along these lines, the Commission has recognized that "short term incentive compensation is a valuable tool for attracting and retaining skilled professionals to run and manage the companies, and to carry out and meet safety, diversity, and customer service goals."[2247]

In addition, as discussed below, the performance measures in SoCalGas' and SDG&E's incentive compensation programs, including financial measures, benefit ratepayers.

2242 D.04-07-022 at 217.
2243 Ex. 211 SCG/SDG&E/Robinson at 12.
2244 D.16-06-054 at 153.
2245 Ex. 211 SCG/SDG&E/Robinson at 12.
2246 D.14-08-032 at 520.
2247 D.13-05-010 at 882.

ICP Performance Goals Benefit Customers and the Community

The SoCalGas and SDG&E Non-Executive ICP plans include a company performance component, which trains employee focus on the achievement of company goals related to safety, reliability, customer satisfaction and financial health.[2248] In addition, the plans include an individual performance component, which is based on the employee's contributions toward these company goals and their achievement of their individual performance objectives. The company performance component and individual performance component each are weighted at 50% of employees' target ICP award. SoCalGas' and SDG&E's 2017 Executive ICP plans also include company performance goals related to safety, reliability, customer satisfaction, and financial health. The SoCalGas and SDG&E boards of directors may adjust individual executive ICP awards in consideration of individual performance.

The 2017 non-executive ICP and executive ICP performance measures for SoCalGas and SDG&E are shown in Ms. Robinson's rebuttal testimony.[2249] ORA's and TURN's proposals for funding of SoCalGas' and SDG&E's Non-Executive ICP and Executive ICP, based on performance measures, are summarized below.

Table 3.2.1.1.A – ORA and TURN Proposals for SoCalGas Non-Executive ICP

2017 SoCalGas Non-Executive ICP Performance Measures	Weight as a % of Target	SoCalGas Proposed	ORA Proposed Funding %	ORA Proposed Weighted Funding %	ORA Proposed Funding $	TURN Proposed Funding %	TURN Proposed Weighted Funding %	TURN Proposed Funding $
Safety & Operations	35%	$ 26,488	50%	17.5%	$ 13,244	85%	29.7%	$ 22,477
Customer Service/Supplier Diversity	5%	$ 3,784	0%	0.0%	$ -	90%	4.5%	$ 3,406
Financial Goals	10%	$ 7,568	0%	0.0%	$ -	0%	0.0%	$ -
Individual Performance	50%	$ 37,840	50%	25.0%	$ 18,920	68%	34.2%	$ 25,883
Total	100%	$ 75,680		42.5%	$ 32,164		68.4%	$ 51,765

Table 3.2.1.1.B - ORA and TURN Proposals for SDG&E Non-Executive ICP

2017 SDG&E Non-Executive ICP Performance Measures	Weight as a % of Target	SDG&E Proposed	ORA Proposed Funding %	ORA Proposed Weighted Funding %	ORA Proposed Funding $	TURN Proposed Funding %	TURN Proposed Weighted Funding %	TURN Proposed Funding $
Safety & Operations	35%	$ 23,351	50%	17.5%	$ 11,676	90%	31.5%	$ 21,016
Customer Service/Supplier Diversity	5%	$ 3,336	0%	0.0%	$ -	90%	4.5%	$ 3,002
Financial Goals	10%	$ 6,672	0%	0.0%	$ -	0%	0.0%	$ -
Individual Performance	50%	$ 33,359	50%	25.0%	$ 16,680	72%	36.0%	$ 24,018
Total	100%	$ 66,718		42.5%	$ 28,355		72.0%	$ 48,037

[2248] Ex. 211 SCG/SDG&E/Robinson at 13.

[2249] Ex. 211 SCG/SDG&E/Robinson at 14-15, Tables DSR-6 and DSR-7.

Table 3.2.1.1.C – ORA and TURN Proposals for SoCalGas Executive ICP

2017 SoCalGas Executive ICP Performance Measures	Weight as a % of Target	SDG&E Proposed	ORA Proposed			TURN Proposed		
			Funding %	Weighted Funding %	Funding $	Funding %	Weighted Funding %	Funding $
Safety & Operations	50%	$ 1,705	50%	25.0%	$ 853	81%	40.5%	$ 1,381
Customer Service/Supplier Diversity	10%	$ 341	0%	0.0%	$ -	90%	9.0%	$ 307
Financial Goals	35%	$ 1,194	0%	0.0%	$ -	0%	0.0%	$ -
Strategic Goals	5%	$ 171	50%	2.5%	$ 85	0%	0.0%	$ -
Total	100%	$ 3,410		27.5%	$ 938		49.5%	$ 1,688

Table 3.2.1.1.D – ORA and TURN Proposals for SoCalGas Executive ICP

2017 SDG&E Executive ICP Performance Measures	Weight as a % of Target	SDG&E Proposed	ORA Proposed			TURN Proposed		
			Funding %	Weighted Funding %	Funding $	Funding %	Weighted Funding %	Funding $
Safety & Operations	50%	$ 2,010	50%	25.0%	$ 1,005	90%	45.0%	$ 1,809
Customer Service/Supplier Diversity	10%	$ 402	0%	0.0%	$ -	90%	9.0%	$ 362
Financial Goals	35%	$ 1,407	0%	0.0%	$ -	0%	0.0%	$ -
Strategic Goals	5%	$ 201	50%	2.5%	$ 101	20%	1.0%	$ 40
Total	100%	$ 4,020		27.5%	$ 1,106		55.0%	$ 2,211

Safety performance measures

ORA and TURN do not dispute that ICP measures related to safety benefit ratepayers. ORA and TURN contend, however, that strong safety performance also benefits shareholders and, therefore, shareholders should fund a portion of ICP.[2250] ORA recommends that ratepayers and shareholders each fund 50% of the portion of ICP-related to safety goals. TURN recommends that ratepayers fund 90% and shareholders fund 10%. ORA explains the rationale for its 50% funding recommendation for SoCalGas' and SDG&E's ICP safety goals:

> …because both ratepayers and shareholders may both benefit from employees being motivated to meet safety, operational and strategic business goals, the remaining portion of ICP should be shared equally.[2251]

There is no basis for ORA's and TURN's suggestion that reasonable safety-related business expenses should be divided between shareholders and ratepayers. In fact, it is inconsistent with basic ratemaking principles, as stated by the Commission:

> [T]he basic principle [of ratemaking] is to establish a rate which will permit the utility to recover its cost and expenses plus a reasonable return on the value of the property devoted to public use[.][2252]

[2250] *Id.* at 17 (summarizing Ex. 417 ORA/Hunter and Ex. 494 TURN/Marcus).
[2251] Ex. 417 ORA/Hunter at 10.
[2252] D.14-08-011 at 31; *see also* D.03-02-035 at 6.

Because ICP is part of a competitive and reasonable total compensation package, it is a reasonable cost of service and should be fully recoverable. The fact that the interests of ratepayers and shareholders are aligned should not trigger a reduction in ratepayer funding.[2253] The differences between ORA, TURN and NDC, as well as differences in ORA's own recommendations from one GRC to the next, demonstrate that attempting to allocate incentive compensation funding based on the perceived benefits to ratepayers and shareholders is also unreasonable and subjective.[2254] ORA's recommendation of 50% funding for safety measures is a departure from its recommendation of 100% funding for safety measures in SCE's short-term incentive plan in SCE's 2018 GRC:[2255]

> ORA recommends ratepayers fund the portions of STIP associated with safety, customer relationships and operational excellence, and "Grid of the future" because these goals have the ability to benefit ratepayers.[2256]

In addition, conditioning the funding for incentive programs on ORA's and the intervenors' retroactive and subjective assessment of the merits of each individual ICP performance measure constitutes micromanagement of the incentive plan design.[2257] The Commission has declined to manage the performance goals in incentive plans. In SoCalGas' and SDG&E's 2012 GRC decision, the Commission concluded:

> With respect to the argument of TURN and UCAN that the metrics for the ICPs of SDG&E and SoCalGas should be revised, we do not adopt that suggestion. SDG&E and SoCalGas are in the best position to decide what metrics to use to measure the performance of its employees, and to revise the metrics as UCAN has suggested would result in the Commission's micromanaging of the Applicants' variable compensation.[2258]

NDC recommends zero funding for SoCalGas' and SDG&E's Executive ICP. NDC takes issue with the weighting of the safety measures compared to the weighting of the financial measures.[2259] Although employee safety and public safety-related operational measures are weighted at 50% of the total Executive ICP and financial measures are weighted at 35%, because

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[2253] Ex. 211 SCG/SDG&E/Robinson at 17-18.
[2254] *Id.* at 17.
[2255] A.16-09-001, Prepared Direct Testimony of Stacey Hunter, Report on the Results of Operations for Southern California Edison Company General Rate Case Test Year 2018, Human Resources Expenses, Benefits and Other Compensation (April 7, 2017), Ex. ORA-15 at 9, Table 15-5.
[2256] A.16-09-001, Opening Brief of The Office of Ratepayer Advocates (September 8, 2017) at 195.
[2257] Ex. 211 SCG/SDG&E/Robinson at 18.
[2258] D.13-05-010 at 882.
[2259] Ex. 211 SCG/SDG&E/Robinson at 18 (summarizing Ex. 437 NDC/Bautista).

there are more safety measures than financial measures, the weight of specific, individual safety measures is, in some instances, greater than the weight of specific, individual financial measures. NDC also contends that certain measures provide more of a financial benefit than a safety benefit.

SoCalGas and SDG&E strongly disagree with NDC. SoCalGas and SDG&E include several safety measures in the ICP in order to focus employees on multiple aspects of employee safety and public safety-related operational performance. To achieve a full payout, SoCalGas and SDG&E must deliver strong performance on all fronts. Safety measures are the largest component of the Company Performance component of the Non-Executive ICP and Executive ICP. The overall weighing of the safety measures in the Non-Executive ICP is more than triple the overall weighting of the financial measures.

NDC and OSA argue that some safety measures are not primarily related to safety. SoCalGas and SDG&E disagree with this view. All of the safety measures of ICP are designed to promote safe operations.[2260] Some of these measures also confer benefits such as promoting reliability, reducing operating costs or improving customer service.

For example, one of the measures criticized by NDC and OSA is SoCalGas' Incomplete Orders Reduction measure.[2261] This measure focuses on reducing the number of repeat visits by Customer Service Field (CS-F) employees by reducing incomplete orders. NDC's and OSA's arguments appear not to recognize that CS-F technicians are trained to always check for unsafe or hazardous conditions in all the work they do. CS-F technicians perform various customer and company generated work at customer premises. The most common reason a field technician is unable to complete the work (*i.e.*, incomplete order) is due to access issues, e.g., customers are not home, locked gates, and unrestrained dogs. This impacts safety because CS-F technicians perform safety-related work at customers' premises. For example, CS-F technicians need access to the meter set assembly (MSA) to perform work necessary to maintain company facilities such as remediating corrosion and correcting abnormal operating conditions at the MSA. Additionally, CS-F technicians provide appliance service for customers, and part of this process includes performing safety checks for unsafe or unsatisfactory conditions. CS-F technicians check for gas leaks, proper venting operation and other safety-related items to ensure

[2260] *Id.* at 18-19.
[2261] *Id.* at 19.

the appliance is safe to use. When necessary, CS-F technicians will issue safety notices and remove unsafe appliances from service. The incomplete order reduction measure is focused on completing the work on the first visit, and as demonstrated in the examples above, thereby promotes safety.

Evaluating each individual safety measure in isolation ignores the fact that the mix of ICP performance measures are designed to provide balance in promoting the provision of safe, reliable, cost-effective service to SoCalGas and SDG&E customers.[2262] OSA contends that goals such as SAIDI and Worst Circuit do not promote safe operations and may actually be in conflict with safety performance. SDG&E disagrees with OSA's view. Minimizing the frequency and duration of outages helps to promote operational safety. Areas of direct overlap between public safety and reliability include tracking around employee and customer contacts, wire down tracking, vehicle contacts, dig-ins, heavy equipment contacts, and foreign object contacts. There are real impacts to critical infrastructure when power is lost. Emergency services infrastructure may be knocked out. Additionally, outages may be associated with power loss at hospitals, loss of water pressure and sewage backup, and loss of traffic controls. On an individual customer level, customers may lose the ability to power medical equipment, communication tools, and charging infrastructure for electric vehicles.[2263]

OSA's argument that such goals may negatively impact safety could be valid if SAIDI and Worst Circuit were the only performance measures. However, this is not the case. As discussed above, the mix of ICP goals provides balance and discourages focus on one goal to the detriment of other aspects of safety.[2264] SDG&E's ICP also includes employee safety goals such as Lost Time Incident and Zero Employee Electric Contacts. The benefit of capturing ICP goals such as these is to ensure accountability associated with employee safety at all levels. These goals also help measure our efforts toward continuous improvement. This mix of goals helps to ensure we have a holistic approach to safety, which includes not only our employees, but also the customers who live in the communities that we serve. No one component comes at the detriment of employee or public safety.

[2262] *Id.*
[2263] *Id.* at 20.
[2264] *Id.*

Customer and supplier diversity performance measures

ORA opposes ratepayer funding for both SoCalGas' and SDG&E's customer service and supplier diversity metrics because ORA does not believe the measures benefit ratepayers. The 2017 SoCalGas and SDG&E ICP customer service and supplier diversity ICP performance measures and an overview of the ratepayer benefits are discussed below:[2265]

- Customer Connection Survey (SDG&E only): Measures quality of service for customers who have transacted with SDG&E during the year.
  - SDG&E disagrees with ORA's assertion that the metric that measures quality of service to customers does not provide benefit to ratepayers. The Customer Connections Survey is not a measurement of overall perceptions of the Company, which may be influenced by advertising. Rather, it measures Company employees' performance in providing direct service or transactional interactions with customers, such as customer impressions with calls with Energy Service Specialists and onsite visits by field employees. Customers are asked to rate the overall quality of service they received during their most recent experience with the Company. This is an important measure to encourage employees to continue to strive toward excellence in their engagement with customers and work to positively impact the customer's experience.
- Overall self-service (SDG&E only): Measures the percentage of customers who are able to complete their service request using the web or Interactive Voice Response (IVR) system.[2266]
  - SDG&E strongly disagrees with ORA's statement that the Customer Service metric for self-service does not provide "actual benefit to ratepayers." Increasing the self-service benefits SDG&E's customers in several ways:

  1. Self-service improves customer satisfaction by providing them with automated, 24/7 service when they want it, with no wait time and faster service.
  2. Self-service provides customers with more options for service and through multiple channels including phone, mobile, and web.
  3. Self-service reduces the overall cost of service by reducing the staffing needed to perform the same function. An example of this financial benefit to ratepayers can be found in the Direct Testimony of Jerry Stewart.[2267] Labor savings are passed on to ratepayers during the GRC proceeding.

[2265] *Id.*
[2266] *Id.* at 21.
[2267] *Id.* (citing Ex. 146 SDG&E/Stewart at 39).

SDG&E customers are demanding more choices and self-service options. SDG&E is committed to creating more benefits for its customers by increasing its capabilities. Since 2012, the following options were added to increase self-service: (1) start/stop service via SDGE.com, (2) schedule gas turn-on after house fumigation via IVR, (3) restart service after service disconnect via IVR, and (4) report/check outages via SDGE.com. In addition, SDG&E continuously improves the self-service menus on IVR, and self-service navigation on Web and My Account to enhance customers' self-service experience.[2268]

- Customer Insight Study (CIS) (SoCalGas only): Measures customers' perception of SoCalGas. The ICP goal relates to the percentage of favorable ratings from residential customers.
    - The CIS measurement provides SoCalGas with a way to better understand what is important to its customers. Areas affecting the reputation metric include trust, value for what customers pay, value of customer service received, and ease of doing business with and responsiveness to customers' needs. It allows SoCalGas to identify improvement opportunities with its communications related to safety, and assess any gaps between customer need and preference and the customer experience, products and services SoCalGas offers.
- Paperless Billing Increase (SoCalGas only): Focuses on increasing the percentage of customer accounts billed electronically (not receiving a paper bill).[2269]
    - The SoCalGas Paperless Billing performance measure benefits ratepayers by providing a convenient, online bill payment option for our customers and reducing SoCalGas' operational costs. Online paperless billing provides SoCalGas' customers with the ability to schedule payments (including automatic payments), receive email reminders, and avoid postage costs. The convenience, postage cost savings, and environmental benefits make online paperless billing an attractive payment option that customers have come to expect from service providers and merchants. In addition, online paperless billing reduces costs to ratepayers. For every customer that converts from paper to electronic billing, ratepayers save $4.56 per year. Including this as an ICP measure challenges employees to work together to promote paperless billing to customers through creative ideas as well as through encouraging friends and family to convert to electronic billing. In 2017, SoCalGas had 2,467,725 paperless customers which saved ratepayers $11,238,126, which otherwise would have been included in rates. ***The cost savings from achieving additional increases in the number of customers using paperless billing are included in SoCalGas' TY 2019 General***

[2268] *Id.*
[2269] *Id.* at 22.

Rate Case forecast**,** as discussed in the revised direct testimony of Michael Baldwin.[2270]

- Supplier Diversity: Measures the Diverse Business Enterprise spend as a percentage of overall spend.
  - SoCalGas and SDG&E each submit an annual report and plan to the CPUC, due on March 1, as part of the requirements of General Order 156.[2271] Within these reports, the utilities provide a detailed breakdown by diverse business groups capturing the dollars spent, number of diverse suppliers, and percentage of spend.[2272] Within the last 5 years, SDG&E and SoCalGas have initiated Supplier Diversity Champion and Ambassador programs with the primary purpose of developing a supplier diversity strategy and identifying sourcing opportunities to incorporate diverse suppliers with the supply chain for products and services procured within their respective organizations. SDG&E and SoCalGas have more than 185 employees who served as supplier diversity champions and ambassadors that help firms connect with business opportunities. Additionally, these employees who are key decision makers provide guidance and mentoring to help suppliers grow their business.

Financial performance measures

As previously mentioned, the Commission declined to micromanage SoCalGas' and SDG&E's ICP metrics in the TY 2012 GRC, rejecting arguments that short-term incentive compensation should not be funded unless metrics are changed.[2273] ORA and TURN's similar arguments against financial metrics should be rejected in this case as well.[2274] ORA and TURN are incorrect to assume that strong utility financial performance does not benefit ratepayers, as the Commission has correctly stated:

> The financial metric may benefit ratepayers as a result of the companies' lower borrowing costs.[2275] …[A] financially strong company usually has lower borrowing costs, which benefits ratepayers by lowering costs.[2276]

2270 Ex. 130 SCG/Baldwin.

2271 Ex. 211 SCG/SDG&E/Robinson at 23 (citing CPUC G.O. 156, Rules Governing the Development of Programs to Increase Participation of Women, Minority, Disabled Veteran and Lesbian, Gay, Bisexual, and Transgender (LGBT) Business Enterprises in Procurement of Contracts from Utilities as Required by Public Utilities Code Sections 8281-8286).

2272 *Id.* (citing San Diego Gas & Electric Company, *Supplier Diversity, Diverse Business Enterprises, 2017 Annual Report, 2018 Annual Plan* (March 1, 2018)).

2273 D.13-05-010 at 882.

2274 Ex. 211 SCG/SDG&E/Robinson at 23.

2275 D.13-05-010 at 882.

2276 *Id.* at 883.

The linkage between utility financing costs and benefits to ratepayers was also discussed by Commissioner Ferron in his comments at an October 3, 2013, investor meeting:

> This reduction in risk has led to a direct reduction in the cost of financing capital for the utility sector in California. If you do the math, the reduction in the risk premium – the reduction in the incremental cost of capital to our utilities – when applied to the balance sheet of our utilities, is equal to several hundred million dollars every year in direct savings to rate-paying customers. In short, the ratepayer is ultimately the direct benefactor of this Commission making decisions that improve the investment climate in California.[2277]

In the District of Columbia Public Utilities Commission's 2013 decision regarding short-term incentive pay (in that case, "STIP") for Washington Gas Light Company, the commission stated:

> We have not set as a requirement for STIP that each and every goal within an incentive plan must only benefit ratepayers. We recognize that a financially healthy utility company that provides quality service is beneficial to ratepayers and shareholders alike. As long as the STIP is structured to provide significant benefits to ratepayers, it can also contain a financial performance goal that benefits shareholders. For that reason, we decline to accept OPC's recommendation to reduce the STIP cost recovery by one-sixth because of the existence of the return on equity goal.[2278]
>
> Consequently, we approve the Company's adjustment that increased test year expenses by $809,883 to fund the Company's at-risk STIP.[2279]

In the 2012 decision by the Florida Public Utilities Commission for Gulf Power Company regarding short-term incentive pay (in that case, "PPP"), the commission stated:

> We recognize that the financial incentives that Gulf employs as part of its incentive compensation plans may benefit ratepayers if they result in Gulf having a healthy financial position that allows the Company to raise funds at a lower cost than it otherwise could.[2280]
>
> We find that the short-term incentive compensation test year amounts related to the PPP shall be included in O&M expense…[2281]

[2277] Ex. 211 SCG/SDG&E/Robinson at 23 (quoting CPUC Commissioner Reports at Voting Meetings, Commissioner Ferron's Report at CPUC Voting Meeting on Meetings with Investors (October 3, 2013) at 1, *available at* http://cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Former_Commissioners/Peevey(1)/News_and_Announcements/CommissionerFerronsReportonMeetingswithUtilityInvestorsOctober32013.pdf.)

[2278] 2013 D.C. PUC LEXIS 103 at *206.

[2279] *Id*. at *206-207.

[2280] 2012 Fla. PUC LEXIS 233 at *253.

[2281] *Id.*

The Colorado Public Utilities Commission has also authorized the inclusion of financial incentives in Black Hills/Colorado Electric Utility, LP's revenue requirement. Black Hills argued that "customers directly benefit when they are being served by a financially secure utility that is able to meet their needs efficiently and economically" and the commission agreed that the incentive compensation tied to financial goals "represent[ed] a reasonable amount that directly benefits [Black Hills'] customers."[2282] More recently, the Colorado Public Utilities Commission reaffirmed their position to include financial incentive compensation in revenue requirements. Black Hills offers equity compensation to employees in the form of stocks and argues that ratepayers "directly benefit from the employee's activities that are being compensated which are directed towards providing safe, reliable and efficient electric service."[2283] Moreover, they argued that "there [had] been no showing that the overall level of compensation [was] excessive, compared to similarly situated utilities."[2284] While the commission recognized that there was shareholder benefit, they also agreed with Black Hills that the "expense represents a reasonable amount that directly benefits [Black Hills'] customers" and as such, equity compensation benefits should be included in the test period.[2285]

The Indiana Utility Regulatory Commission also "recognizes the value of incentive compensation plans as part of an overall compensation package to attract and retain qualified personnel."[2286] They have well-established criteria for the recovery of incentive compensation plan costs in rates when "the incentive compensation plan is not a pure profit-sharing plan, but rather incorporates operational as well as financial performance goals…"[2287]

Corporate Center allocations should be evaluated based on whether the amount allocated to the utilities is reasonable.

TURN takes issue with the design of the Corporate Center ICP and recommends no funding for performance measures related to Sempra Energy's financial performance or, in the case of the Executive ICP for senior corporate officers, performance measures related to non-

[2282] 2011 Colo. PUC LEXIS 1285 at *67-68.
[2283] 2014 Colo. PUC LEXIS 1508 at *138.
[2284] *Id*. at *139.
[2285] *Id*. at *141.
[2286] 2012 Ind. PUC LEXIS 178 at *195
[2287] *Id*. at *196. *See also* 2011 Ind. PUC LEXIS 115 at *149-151. (Finding that incentive compensation programs that included financial goals as well as operation and individual goals incent employees to aid the utility in improving its capabilities and service through increased efficiency and reliability.)

regulated businesses. A portion of Corporate Center compensation and benefits costs, including Corporate Center ICP costs, is allocated to SoCalGas and SDG&E to cover the costs of the services provided to the utilities by Corporate Center. Corporate Center allocations are included in the revised direct testimony of Mia DeMontigny.[2288] SoCalGas and SDG&E strongly disagree with TURN's approach.[2289] While Corporate Center employees are not employees of SoCalGas and SDG&E, they do provide services to Sempra Energy business units and their ICP is designed to be broad enough to capture performance across all businesses.

Recovery of Corporate Center allocations, including allocations for Corporate Center ICP, should be based only on whether the allocation methodology and allocation amounts are reasonable.[2290] The performance measures of the Corporate Center ICP are not relevant. Allocation methodologies and percentages (percent of a given cost allocated to each utility) are covered in Ms. DeMontigny's testimony. The remaining variable impacting the allocation amount is the compensation level for Corporate Center employees. Corporate Center jobs were included in the SoCalGas and SDG&E Total Compensation Study. The Total Compensation Study determined that total compensation, including an allocation of costs for Corporate Center jobs, was in line with the market. Actual total compensation (defined as base salaries, short-term incentives, long-term incentives and benefits) is within 0.7% and 0.4% of market for SoCalGas and SDG&E, respectively, including Corporate Center.[2291]

Recognition Programs – Spot Cash

SoCalGas and SDG&E use special recognition awards to reward individual employees and teams for outstanding achievements, exceptional customer service, and process improvements and innovations.[2292] Recognition awards, which may be financial or non-financial, are a key means of recognizing and rewarding high-performing employees and teams. Ms. Robinson testified that Spot Cash awards were forecast based on a five-year historical average and are expected to remain flat. Amounts shown for 2016 actual exclude $3.34 million in overtime costs related to the Aliso Canyon Storage Facility gas leak incident. Employee

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[2288] Ex. 315 SCG/SDG&E/DeMontigny.
[2289] Ex. 211 SCG/SDG&E/Robinson at 26.
[2290] *Id.*
[2291] *Id.* at 26-27.
[2292] Ex. 208 SCG/SDG&E/Robinson at 22.

Recognition programs were forecast at $75 per non-executive employee, as Ms. Robinson testified.[2293]

ORA recommends funding Spot Cash based on costs for 2016, the lowest year in the five-year period. But costs in this area vary from year to year, with 2016 being the lowest year,[2294] therefore a five-year average is appropriate. ORA's suggestion to "cherry-pick" the lowest year of the five-year period is unwarranted and should be rejected.

Employee Recognition

Employee recognition awards were forecasted based on the budgeted amount of $75 per employee, resulting in a TY 2019 cost of $646K for SoCalGas and $339K for SDG&E. TURN recommends funding based on a three-year average, resulting in $92K for SoCalGas and $119K for SDG&E. ORA recommends funding based on 2016 costs, resulting in $99K for SoCalGas and $86K for SDG&E. SoCalGas and SDG&E contend that a zero-based forecast based on the budget amounts for this program is the more appropriate forecasting methodology.

32.3 Long-Term Incentive Pay (LTIP)

ORA and TURN recommend disallowing 100% of Long-Term Incentive Plan expenses. In their view, these incentives only benefit executives and shareholders. SoCalGas and SDG&E disagree.

For SoCalGas and SDG&E, long-term incentives are a critical component of a competitive compensation and benefits package required to attract, motivate and retain executives and key management employees.[2295] These incentives have three-year performance and service periods and are a powerful tool for ensuring the retention of SoCalGas' and SDG&E's management team. Consistent with SoCalGas' and SDG&E's compensation philosophy, a greater proportion of pay is at-risk, or performance-based, at higher levels of responsibility. Long-term incentives make up 11 percent to 51 percent of total target compensation (which includes base pay, short-term incentives, and long-term incentives) for key management and executive employees.

[2293] *Id.* at 23.
[2294] Ex. 211 SCG/SDG&E/Robinson at 27.
[2295] *Id.* at 27.

A strong, stable leadership team is essential to delivering safe, reliable service to our customers while maintaining efficient, financial sound operations.[2296] Long-term incentives are critical to the attraction, motivation and retention of a skilled, experienced leadership team. The three-year performance period for long-term incentives makes them a particularly powerful retention tool.

The WTW total compensation study found that SoCalGas' and SDG&E's total compensation is reasonable and at market. Without long-term incentives, compensation for executive and other senior management employees would be significantly below market.[2297] Like ICP, long-term incentives are part of a reasonable, competitive total compensation package and should be recoverable.

32.4 Health and Welfare Benefits

SoCalGas and SDG&E provide employees with group health benefits including medical, dental, vision, employee assistance, mental health and substance abuse and wellness plans.[2298] Benefit programs are a critical component of a competitive total rewards program. SoCalGas and SDG&E offer a comprehensive and balanced employee benefits program that includes:

- Health benefits: medical, dental, vision, wellness, employee assistance program (EAP), and mental health and substance abuse benefits;
- Welfare benefits: long-term disability, workers compensation, life insurance, accidental death and dismemberment (AD&D) insurance, and business travel accident insurance;
- Retirement benefits: pension and retirement savings plans; and
- Other benefit programs.

The differences between the amounts requested by SoCalGas and SDG&E and the amounts proposed by ORA and TURN are summarized below in Table 32.4.A for SoCalGas and Table 32.4.B for SDG&E.

[2296] Ex. 208 SCG/SDG&E/Robinson at 20.
[2297] *Id.*
[2298] *Id.* at 25.

Table 32.4.A – Comparison of ORA and TURN Proposals for SoCalGas

Component	TY2019				
	SoCalGas Request ($M)	ORA Recommendation ($M)	Difference	TURN Recommendation	Difference - TURN vs. SCG
Health Benefits	$ 105.1	$ 98.5	$ (6.6)	$ 102.4	$ (2.7)
Welfare Benefits	$ 1.9	$ 1.9	$ -	$ 1.9	$ -
Retirement Savings Plan	$ 25.4	$ 25.4	$ -	$ 25.4	$ -
NQ Savings Plan	$ 0.3	$ -	$ (0.3)	$ 0.2	$ (0.2)
Supplemental Pension	$ 1.9	$ -	$ (1.9)	$ 1.0	$ (1.0)
Other programs/fees	$ 4.5	$ 3.3	$ (1.2)	$ 3.9	$ (0.6)
Benefits	**$ 139.1**	**$ 129.1**	**$ (10.0)**	**$ 134.7**	**$ (4.4)**

Table 32.4.B – Comparison of ORA and TURN Proposals for SDG&E

Component	TY2019				
	SDG&E Request ($M)	ORA Recommendation ($M)	Difference - ORA vs. SDG&E	TURN Recommendation	Difference - TURN vs. SDG&E
Health Benefits	$ 63.9	$ 59.3	$ (4.6)	$ 62.3	$ (1.5)
Welfare Benefits	$ 0.8	$ 0.8	$ -	$ 0.8	$ -
Retirement Savings Plan	$ 17.4	$ 17.4	$ -	$ 17.4	$ -
NQ Savings Plan	$ 0.2	$ -	$ (0.2)	$ 0.1	$ (0.1)
Supplemental Pension	$ 2.4	$ -	$ (2.4)	$ 1.2	$ (1.2)
Other programs/fees	$ 1.6	$ 1.3	$ (0.3)	$ 1.4	$ (0.2)
Benefits	**$ 86.3**	**$ 78.8**	**$ (7.4)**	**$ 83.3**	**$ (3.0)**

The differences between the amounts requested by SoCalGas and SDG&E and the amounts proposed by ORA and TURN for health and welfare programs are summarized below in Table 32.4.C for SoCalGas and Table 32.4.D for SDG&E.

Table 32.4.C – Comparison of Health and Welfare Proposals for SoCalGas

Component	TY2019				
	SoCalGas Request ($M)	ORA Recommendation ($M)	Difference - ORA vs. SoCalGas	TURN Recommendation ($M)	Difference - TURN vs. SoCalGas
Medical	$ 96.0	$ 90.3	$ (5.7)	$ 93.4	$ (2.7)
Dental	$ 5.1	$ 5.1	$ -	$ 5.1	$ -
Vision	$ 0.6	$ 0.6	$ -	$ 0.6	$ -
Wellness	$ 0.7	$ -	$ (0.7)	$ 0.7	$ -
EAP	$ 0.8	$ 0.8	$ -	$ 0.8	$ -
Mental Health	$ 1.9	$ 1.7	$ (0.2)	$ 1.9	$ -
Health Benefits	**$ 105.1**	**$ 98.5**	**$ (6.6)**	**$ 102.4**	**$ (2.7)**
AD&D	$ 0.1	$ 0.1	$ -	$ 0.1	$ -
Business Travel Insurance	$ 0.1	$ 0.1	$ -	$ 0.1	$ -
Life Insurance	$ 1.8	$ 1.8	$ -	$ 1.8	$ -
Welfare Benefits	**$ 1.9**	**$ 1.9**	**$ -**	**$ 1.9**	**$ -**

Table 32.4.D – Comparison of Health and Welfare Proposals for SDG&E

Component	TY2019				
	SDG&E Request ($M)	ORA Recommendation ($M)	Difference - ORA vs. SDG&E	TURN Recommendation ($M)	Difference - TURN vs. SoCalGas
Medical	$ 56.2	$ 52.9	$ (3.3)	$ 54.7	$ (1.5)
Dental	$ 4.0	$ 4.0	$ -	$ 4.0	$ -
Vision	$ 0.4	$ 0.4	$ -	$ 0.4	$ -
Wellness	$ 1.1	$ -	$ (1.1)	$ 1.1	$ -
EAP	$ 0.3	$ 0.3	$ -	$ 0.3	$ -
Mental Health	$ 1.9	$ 1.7	$ (0.2)	$ 1.9	$ -
Health Benefits	**$ 63.9**	**$ 59.3**	**$ (4.5)**	**$ 62.3**	**$ (1.5)**
AD&D	$ 0.1	$ 0.1	$ -	$ 0.1	$ -
Business Travel Insurance	$ 0.03	$ 0.0	$ -	$ 0.0	$ -
Life Insurance	$ 0.7	$ 0.7	$ -	$ 0.7	$ -
Welfare Benefits	**$ 0.8**	**$ 0.8**	**$ -**	**$ 0.8**	**$ -**

- ORA recommends funding for medical and mental health benefits based on a TY 2019 medical escalation rate assumption of 4.25%, compared to the 7.0% escalation proposed by SoCalGas and SDG&E, resulting in a recommendation of $90.3 million for SoCalGas medical benefits and $52.9 million for SDG&E. ORA's recommendation is $5.7 million lower than SoCalGas' recommendation and $3.3 million lower than SDG&E's recommendation.[2299]
- ORA (Tang) recommends a post-test year medical escalation rate of 4.25% rather than the medical escalation rates of 6.50% for 2020, 6.0% for 2021, and 5.50% for 2022 as proposed by SoCalGas and SDG&E.[2300]
- ORA recommends zero funding for wellness.[2301] ORA does not take issue with dental, vision, EAP or welfare benefit costs.

TURN recommends the use of a lower medical escalation assumption of 6.0%, compared to the 7.0% escalation proposed by SoCalGas and SDG&E for TY 2019, resulting in a recommendation of $93.4 million for SoCalGas medical benefits and $54.7 million for SDG&E. TURN's recommendation is $2.7 million lower than SoCalGas' recommendation and $1.5 million lower than SDG&E's recommendation.[2302]

32.4.1 MEDICAL

In August 2018, SoCalGas and SDG&E updated their TY 2019 medical cost forecast to take into account actual 2018 and projected 2019 medical rates, net of employee contributions, and the actual percentage of employees enrolled in each benefit plan, by company, union status

[2299] Ex. 211 SCG/SDG&E/Robinson at 30 (summarizing Ex. 417 ORA/Hunter at 17-18).
[2300] *Id.* at 31 (summarizing Ex. 426 ORA/Tang at 10-11).
[2301] *Id.* (summarizing Ex. 417 ORA/Hunter at 16).
[2302] *Id.* (summarizing Ex. 494 TURN/Marcus).

and coverage level, based on data as of January 2018.[2303] The updated TY 2019 medical costs are $94.3 million for SoCalGas (a decrease of $1.7 million from the $96.0 forecasted in Ms. Robinson's direct testimony) and $55.8 million for SDG&E (a decrease of $0.4 million from the $56.2 million forecasted in Ms. Robinson's direct testimony.

ORA and TURN – ORA takes issue with the medical cost escalation rates used by SoCalGas and SDG&E and SoCalGas. SoCalGas and SDG&E recommend using an escalation rate of 8.0% for 2018 and 7.0% for 2019 and post-test year escalation rates of 6.5% for 2020, 6.0% for 2021, and 5.5% for 2022, while ORA recommends a rate of 4.25% per year for 2018 through 2022. TURN recommends a 2018 and 2019 escalation rate of 6.0%.

ORA witness Ms. Hunter proposes using an average of the Kaiser Family Foundation's 2017 Employer Health Benefits Survey and the Price Waterhouse Coopers (PWC) Health Research Institute Survey. ORA cites an expected medical cost increase of 3.0% for the Kaiser survey and 5.5% for the Price Waterhouse Coopers survey.[2304] ORA's recommendation of 4.25% is based on the average of the two surveys. TURN's recommended escalation rate of 6.0% is based on the assumption that the utilities will successfully achieve cost reductions through new plans or plan design changes. TURN also cites a five-year average actual increase of 5.64%.

SoCalGas and SDG&E disagree with ORA's and TURN's recommendations, and support using the WTW medical escalation forecast, which takes into account SoCalGas' and SDG&E's Southern California location, workforce demographics, and medical plan design, as described in more detail below:

- **Location:** The unit cost of health care (medical and pharmacy) and the rate of cost increases is most accurately determined by the local health care market. SoCalGas' and SDG&E's escalation rates reflect the markets where the enrolled employees and their dependents receive health care services, which is primarily Southern California. Other data sources report national trends. Projected national cost increases are not directly relevant to SoCalGas and SDG&E projected increases.[2305]
- **Workforce Demographics:** SoCalGas' and SDG&E's projected escalation rates incorporate their enrolled population's age, gender and family size makeup. The other data sources will have a wider range of demographics. WTW survey results indicate

[2303] Ex. 514 SCG/SDG&E/Robinson Update Testimony (August 2018) at 8.
[2304] Ex. 417 ORA/Hunter at 17-18. Ms. Robinson noted that ORA clarified in a data request response that 5.5% was the intended citation from the PWC survey and that the 6.5% shown on page 18 of Ex. 417 ORA/Hunter was a typographical error. Ex. 211 SCG/SDG&E/Robinson at 31, n.48.
[2305] Ex. 211 SCG/SDG&E/Robinson at 32.

SoCalGas' and SDG&E's enrolled employees are, on average, slightly older than WTW's database average and family size (number of enrolled dependents) is slightly larger. Since demographics are a key component of how a population utilizes services and generates health care costs, any differences in demographics affect the forecast of future costs. Older age generally results in higher cost and a faster rate of increase if all else is equal.

- **Type of Plans:** Projections for SoCalGas and SDG&E are based on the majority of enrolled members being in capitated HMO plans. Capitated HMOs are very cost-effective compared to plan designs like PPOs that are based on fee for service payment models. Outside of Southern California, fully-insured capitated HMO plans are uncommon. However, the national market is moving toward innovative provider payment approaches and a shift toward consumer-driven health care designs that are expected to mitigate future cost increases to employer plans. SoCalGas and SDG&E will tend to benefit less from this trend because of the high enrollment in capitated HMOs.

32.4.2 Wellness

The objective of the SDG&E and SoCalGas wellness programs is to improve employee health and productivity.[2306] Wellness programs promote healthy lifestyle changes and illness prevention, facilitate early detection and management of illness and disease, and help ensure that employees diagnosed with health conditions receive optimal and effective treatment. Employers are uniquely positioned to reach employees with these programs. Onsite programs, in particular, provide convenient, easy access and encourage participation through peer and leadership examples.

ORA recommends zero funding for Wellness programs, categorizing them as duplicative of services available under the medical plans. SoCalGas and SDG&E strongly disagree with ORA's position.[2307] While certain onsite programs are available through the medical plans, participation is much higher when programs are offered onsite. For example, 2,648 employees received onsite flu vaccinations in 2017. Encouraging a high vaccination rate by providing the vaccine onsite is a cost-effective means of protecting employees from illness and decreasing illness-related time off and the associated impact on productivity. Onsite health screenings facilitate early detection and intervention, helping employees to work with their medical providers to manage their health and reducing the need for emergency treatment and disease progression.

[2306] *Id.* at 33.
[2307] *Id.*

Based on data provided by SoCalGas' and SDG&E's medical plan providers, a high percentage of SoCalGas' and SDG&E's employees and dependents are obese or overweight. Many of the chronic medical conditions that drive medical plan cost increases are correlated with obesity, particularly Type II diabetes. SoCalGas and SDG&E offer onsite and offsite weight management and fitness programs to encourage employees to achieve and maintain a healthy weight.[2308]

Linking wellness programs to safety programs through participation in safety stand-down events further reinforces our safety culture and promotes a focus on healthy behaviors and the prevention of illnesses and injuries. Moreover, a primary goal for SoCalGas' and SDGE's comprehensive wellbeing program is to build a culture of health and safety, both at work and in personal life, that makes a positive impact on our medical plan populations' morbidities, and to create an understanding of the incremental impact that a collective wellbeing program presence can have on helping SoCalGas and SDGE continue their high performance and achievement of organizational goals.[2309] SoCalGas and SDGE's wellbeing program is designed to:

- Increase employee awareness of personal health and safety,
- Empower and educate employees about making healthy lifestyle choices,
- Improve employee and their social communities' quality of living.[2310]

Supporting a healthy workforce not only contributes to SoCalGas' and SDG&E's success it is also part of their role as a responsible employer.

32.4.3 Mental Health and Substance Abuse

The cost forecast for the mental health and substance abuse program is impacted by the medical plan escalation rate.[2311] ORA takes issue with the medical plan escalation rate, as described above, and recommends an escalation rate of 4.25% for 2018 and 2019. SoCalGas and SDG&E recommend an escalation rate of 8.0% for 2018 and 7.0% for 2019, which is based on the WTW forecast. The WTW forecast is better suited for SDG&E and SoCalGas, for the reasons discussed in section 32.4.1 "Medical," *supra.*

[2308] *Id.*
[2309] *Id.*
[2310] *Id.* at 34.
[2311] *Id.*

32.5 Retirement Benefits

SoCalGas and SDG&E retirement benefits provided to all regular employees include a defined benefit pension plan, a defined contribution (401(k)) retirement savings plan, and postretirement health and welfare benefits.[2312] Employees whose benefits or pay exceed Internal Revenue Service (IRS) limitations specified under the Internal Revenue Code (IRC) also participate in the Cash Balance Restoration Plan, which maintains participation at the same percentage level as all other employees. Certain management employees participate in a nonqualified retirement savings plan, or deferred compensation plan.

Ms. Robinson's rebuttal testimony addresses intervenor testimony regarding the Companies' 401(k) retirement savings plan, the nonqualified deferred compensation plan, and the supplemental pension plans. Ms. Robinson discussed the defined benefit pension plan and postretirement health and welfare benefits in Ex. 208 SCG/SDG&E/Robinson and Exhibit 216 SCG/SDG&E/Robinson.

ORA recommends zero funding for the nonqualified retirement savings plan and supplemental pension. ORA does not take issue with the forecast for the 401(k) retirement savings plan. TURN recommends 50% funding for the nonqualified retirement savings plan and supplemental pension, citing the Commission's previous approach of allocating costs for these plans equally between ratepayers and shareholders.[2313]

Nonqualified Retirement Savings Plan

SoCalGas and SDG&E disagree with ORA's and TURN's recommendations regarding the nonqualified savings plan.[2314] The nonqualified savings plan, or deferred compensation plan, allows pre-tax contributions for employees subject to IRS compensation and contribution limits. Company matching contributions under the plan are consistent with company matching contributions under the Retirement Savings Plan. Deferred compensation plans are a component of a competitive compensation and benefits package. Availability of these plans facilitates recruiting and retention of the best candidates for executive, director, attorney, and other key management positions.

[2312] *Id.*
[2313] *Id.* at 35 (summarizing Ex. 417 ORA/Hunter and Ex. 494 TURN/Marcus).
[2314] *Id.*

Supplemental Pension

SoCalGas and SDG&E disagree with ORA's and TURN's recommendations regarding the supplemental pension plan.[2315] SDG&E and SoCalGas offer two supplemental pension plans: the Supplemental Executive Retirement Plan, which covers a very small number of senior executives, and the Cash Balance Restoration Plan.

The Cash Balance Restoration Plan restores benefits for employees that would otherwise be lost due to limitations on earnings and/or benefits established by the Internal Revenue Service and the Employee Retirement and Income Security Act. Benefits are accrued at the same percentage and using the same benefit formula as the broad-based retirement plan.

Supplemental pension plans are an important component of a competitive compensation and benefits package for executive and other key employees. These benefits are common in the external market, particularly among utilities. Attracting and maintaining talented employees at all levels provides value to ratepayers. SDG&E and SoCalGas request that the Commission approve the Nonqualified Retirement Savings Plan and Supplemental Pension requests as proposed.

32.6 Other Benefit Programs

SoCalGas and SDG&E offer a number of benefit programs that are designed to provide opportunities to enhance employees' knowledge and skills, reduce lost time, recognize achievements and promote a collaborative, team-oriented environment. These programs and costs are outlined in Tables 32.6.A and 32.6.B below.[2316]

SoCalGas – Table 32.6.A

Component	TY2019				
	SoCalGas Request ($M)	ORA Recommendation ($M)	Difference - ORA vs. SoCalGas	TURN Recommendation ($M)	Difference - TURN vs. SoCalGas
Benefits Administration Fees	$ 1.11	$ 1.11	$ -	$ 1.11	$ -
Educational Assistance	$ 1.09	$ 1.09	$ -	$ 1.11	$ 0.03
Emergency Childcare	$ 0.22	$ -	$ (0.22)	$ 0.18	$ (0.04)
Mass Transit Incentive	$ 1.10	$ 1.10	$ -	$ 1.37	$ 0.27
Retirement Activities	$ 0.18	$ -	$ (0.18)	$ -	$ (0.18)
Service Recognition	$ 0.25	$ 0.13	$ (0.13)	$ 0.11	$ (0.14)
Special Events	$ 0.53	$ -	$ (0.53)	$ -	$ (0.53)
Total	**$ 4.48**	**$ 3.42**	**$ (1.06)**	**$ 3.88**	**$ (0.60)**

2315 *Id.*
2316 *Id.* at 36.

SDG&E – Table 32.6.B

Component	TY2019				
	SDG&E Request ($M)	ORA Recommendation ($M)	Difference - ORA vs. SDG&E	TURN Recommendation ($M)	Difference - TURN vs. SDG&E
Benefits Administration Fees	$ 0.67	$ 0.67	$ -	$ 0.67	$ -
Educational Assistance	$ 0.51	$ 0.51	$ -	$ 0.46	$ (0.04)
Emergency Childcare	$ 0.16	$ -	$ (0.16)	$ 0.12	$ (0.04)
Mass Transit Incentive	$ 0.09	$ 0.09	$ -	$ 0.08	$ (0.01)
Retirement Activities	$ 0.07	$ -	$ (0.07)	$ -	$ (0.07)
Service Recognition	$ 0.11	$ 0.05	$ (0.05)	$ 0.07	$ (0.04)
Total	**$ 1.60**	**$ 1.32**	**$ (0.28)**	**$ 1.40**	**$ (0.19)**

ORA – ORA did not take issue with the forecasts for benefits administration fees, educational assistance, and the mass transit incentive. ORA recommends 50% funding for service recognition and zero funding for emergency childcare, retirement activities and special events (SoCalGas only).

TURN – TURN did not take issue with the forecast for benefits administration fees. TURN generally recommended using a five-year average for SoCalGas and a six-year average for SDG&E, with no funding for retirement activities or special events (SoCalGas only) and 50% funding for service recognition.

ORA's and TURN's positions on reducing funding for these benefits areas should be rejected, as the programs are reasonable costs that provide benefits to ratepayers, for example, by way of improved employee productivity. The benefits of these programs are described below:[2317]

<u>Service Recognition</u>

Service awards provide employers with a means of recognizing and thanking employees for their service to the organization. Such awards also benefit the company, as they promote employee loyalty and longevity. Recognizing length of service is one of the most common types of employee recognition programs. Promoting the retention of long-service employees and maintaining a positive organizational culture by recognizing employee loyalty and longevity benefits ratepayers.

[2317] *Id.* at 37.

Retirement Activities

Similar to service awards, retirement activities promote an organizational culture that values the contributions of employees. Publicly recognizing and expressing appreciation for a retiring employee's career-long contributions to the organization helps to inspire loyalty and longevity among active employees.

SoCalGas Special Events

Special Events night is a long-standing benefit valued by employees at all levels.

Zero-based forecasting versus six-year or five-year average

The methodologies used for developing SoCalGas' and SDG&E's forecasts are tailored to the cost drivers of each benefit, and are therefore preferable to the six-year or five-year averages TURN recommends. The forecasting methodologies for each are described below:

- Educational Assistance and Mass Transit Incentive: Based on current levels of utilization factoring expected changes in headcount.
- Benefits Administration Fees and Retirement Activities: Based on current levels of utilization.
- Emergency Childcare: Based on fees per current contract with vendor.
- Service Recognition: Based on demographics (length of service) of current employees.

SoCalGas and SDG&E believe these methodologies are appropriately suited for purposes of forecasting each of these specific areas, and therefore should be approved.

32.7 Conclusion

As described in thorough detail in Ms. Robinson's testimony chapters, SoCalGas' and SDG&E's compensation and benefits costs are part of a reasonable, market-driven compensation package. These programs are critical to attracting, motivating and retaining the experienced, highly-skilled workforce required to operate safe and reliable utilities while providing excellent service to customers. Costs for these programs are well-supported, reasonable and should be approved as submitted.

33. Post-Retirement Benefits

Pension and post-retirement benefits other than pensions (PBOP) are key components of a competitive total compensation program that enables the Companies to attract and retain a high-performing workforce. The Commission has a longstanding practice of providing funding for pension and PBOP benefits that are offered as part of a reasonable total compensation program. As discussed in SoCalGas and SDG&E witness Debbie Robinson's direct testimony for Compensation and Benefits,[2318] a comprehensive study of the Companies' compensation and benefit programs, the Willis Towers Watson Study (WTW Study), found the Companies' total compensation to be at market. For purposes of the WTW Study, "total compensation" consisted of the aggregate value of annualized base pay, incentive compensation (short-term and long-term) and benefits programs, including pension and PBOP benefits. The WTW Study is included in Ms. Robinson's direct testimony for Compensation and Benefits.[2319]

The Companies' projected TY 2019 costs are based on:

- Pension: Changing the methodology for recovery of pension costs, as described below.
- PBOP: Continuing to recover postretirement health and welfare benefits expense based on costs determined pursuant to Subtopic 715-60 in the FASB Accounting Standard Codification (ASC 715-60) limited by the Internal Revenue Code maximum tax deductible contribution, but not less than zero.
- Balancing Accounts: Maintaining the long-standing use of the two-way balancing account mechanism for pension and PBOP expenses since expense variability is generally due to external economic and regulatory variables, which are outside the control of the Companies.

As shown below, SoCalGas' and SDG&E's total compensation programs are in line with the market and reasonable, and should be approved.

33.1 Pensions

SoCalGas and SDG&E are proposing a change in their pension funding methodology in order to mitigate a funding shortfall and avoid generational equity issues where future ratepayers would be asked to fund costs that benefited earlier generations.[2320] SoCalGas' and SDG&E's proposed pension funding methodology is consistent with the Commission's historical practice of providing for ratepayer funding of pension plan costs based on California utilities' cash contributions to their pension plans.

The Companies' proposed change in funding policy is designed to:

- Fully fund the pension plan over a reasonable period;
- Minimize long term costs of funding the pension plan;
- Provide stable contribution pattern; and
- Limit ratepayer generational inequity.[2321]

[2318] Ex. 208 SCG/SDG&E/Robinson at 5-8.
[2319] *Id.* at Appendix A and B.
[2320] Ex. 219 SCG/SDG&E/Robinson at 3.
[2321] Ex. 216 SCG/SDG&E/Robinson at 13.

Ms. Robinson's direct testimony describes the history and characteristics of the Companies' pension plans, leading to how and why the funding shortfall has occurred.[2322] Historically, for SoCalGas and SDG&E, funding has been based on the minimum required contribution under the Employee Retirement Income Security Act of 1974 (ERISA), and a two-way balancing account is used to adjust for any differences between forecasted and actual contributions.

SoCalGas' and SDG&E's current pension plan funding policy (used to determine the expense allowed by the settlement of the Companies' test year (TY) 2016 General Rate Case and the TY 2012 General Rate Case is based on the minimum required contributions in accordance with ERISA and as allowed by the Internal Revenue Code (IRC), but no less than the amount sufficient to maintain an 85% Adjusted Funding Target Attainment Percentage.[2323]

The Pension Protection Act of 2006 (PPA) sets minimum required contributions at a level designed to achieve full funding within seven years. As noted in Ms. Robinson's direct testimony, subsequent federal legislation resulted in lower than projected minimum required contributions, the approved regulatory mechanism for pension funding and cost recovery.[2324] If not for the changes in the calculation of ERISA minimum contribution amounts, the current request would have been much lower and the PPA funding requirements would have minimized or eliminated the current shortfall.

Ms. Robinson explained that for SoCalGas and SDG&E, the growth in the pension liability has outpaced contributions, creating a significant funding shortfall.[2325] This funding shortfall increases long-term costs to ratepayers due to higher Pension Benefit Guaranty Corporation premiums and higher accrued interest costs. In addition, deferring funding creates generational equity issues where future ratepayers will be asked to fund costs that benefited earlier generations.

[2322] *Id.* at 3-13.
[2323] *Id.* at 2; Ex. 219 SCG/SDG&E/Robinson at 5-7.
[2324] Ex. 219 SCG/SDG&E/Robinson at 6 (citing Ex. 216 SCG/SDG&E/Robinson at 7-10).
[2325] *Id.*

SoCalGas' and SDG&E's proposed methodology stops the continued underfunding of the Projected Benefit Obligation[2326] and targets its full funding within seven years. Recovery is based on the greater of:

- The annual service cost[2327] plus a seven-year amortization of the Projected Benefit Obligation shortfall;
- The annual ERISA (as modified by PPA) minimum required contribution; or
- The contribution required to maintain an 85% Adjusted Funding Attainment Percentage.

Annual contributions will be limited so that the contribution does not result in pension assets exceeding 110% of the Projected Benefit Obligation.

33.1.1 SoCalGas and SDG&E Rebuttal

The differences between the amounts requested by SoCalGas and SDG&E and the amounts proposed by ORA and TURN are summarized below in Table 33.1.A (for SoCalGas) and Table 33.1.B (for SDG&E). The differences between the amounts requested by SoCalGas and the amounts proposed by Indicated Shippers (Shippers) are summarized below in Table 33.1.C. ORA does not take issue with SoCalGas' and SDG&E's pension and PBOP funding forecast or the proposed change in pension funding methodology. TURN and Shippers take issue with the pension funding forecast and propose alternative pension funding methodologies.

Table 33.1.A – SoCalGas

Component	2019 GRC				
	SoCalGas Request ($M)	ORA Recommendation ($M)	Difference	TURN Recommendation	Difference - TURN vs. SCG
Pension	$ 202.8	$ 202.8	$ -	$ 90.7	$ (112.1)
PBOPs	$ -	$ -	$ -	$ -	$ -
Total Pension & PBOPs	**$ 202.8**	**$ 202.8**	**$ -**	**$ 90.7**	**$ (112.1)**

[2326] As determined pursuant to Subtopic 715-30 of the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC 715-30), the authoritative source of GAAP. The Projected Benefit Obligation is an estimate of the present value of expected future benefit payments and is a widely accepted measure of a plan's liabilities. Ex. 219 SCG/SDG&E/Robinson at 6, n.8. (citing Appendix I at 31).

[2327] Service cost refers to the present value of the projected retirement benefits earned by plan participants in the current period. Generally, a company's pension service cost is the amount it must set aside in the current period to match the retirement benefits accrued by plan participants during the year. Ex. 219 SCG/SDG&E/Robinson at 6, n.9. (emphasis in original).

Table 33.1.B – SDG&E

Component	2019 GRC				
	SDG&E Request ($M)	ORA Recommendation ($M)	Difference - ORA vs. SDG&E	TURN Recommendation	Difference - TURN vs. SDG&E
Pension	$ 64.0	$ 64.0	$ -	$ 29.1	$ (35.0)
PBOPS	$ 1.4	$ 1.4	$ -	$ 1.4	$ -
Total Pension & PBOPS	**$ 65.4**	**$ 65.4**	**$ -**	**$ 30.5**	**$ (35.0)**

Table 33.1.C – SoCalGas

Component	2019 GRC		
	SoCalGas Request ($M)	Shippers Recommendation ($M)	Difference - Shippers vs. SCG
Pension	$ 202.8	$ 124.7	$ (78.1)
PBOPs	$ -	$ -	$ -
Total Pension & PBOPs	**$ 202.8**	**$ 124.7**	**$ (78.1)**

33.1.2 Rebuttal to ORA

ORA issued its report on Pension and PBOPs on April 13, 2018.[2328] ORA witness Stacey Hunter did not take issue with either SoCalGas' or SDG&E's pension benefits expense or methodology change requests. ORA also did not take issue with either SoCalGas' or SDG&E's PBOP requests. ORA recommends continuance of two-way balancing accounts for pension and PBOPs.

33.1.3 Rebuttal to Other Intervenors

The rebuttal testimony of Ms. Robinson and Mr. Yannick Gagne address in detail TURN's and Shippers' claims,[2329] many of which are based on erroneous assumptions and wild guesses. For assistance in understanding the accounting principles and facts that demonstrate the logical fallacies and errors throughout TURN's proposals, Mr. Gagne's testimony provides two appendices: (1) a U.S. GAAP primer on pension accounting and (2) a table summary of factual errors and misrepresentations in TURN's testimony.[2330]

Mr. Gagne's rebuttal testimony shows that TURN's proposed alternative basis for recovery, namely Pension Expense under ASC 715, is flawed as a prospective basis for recovery,

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[2328] Ex. 417 ORA/Hunter.
[2329] Ex. 219 SCG/SDG&E/Robinson/Gagne.
[2330] *Id.*, Appendix I and II.

given that there is more than $300 million of current pension deficit that would not be recognized.[2331] Additionally, Mr Gagne notes that if GAAP Pension Expense is negative, federal pension regulations prohibit the removal of assets from pension trusts until benefit obligations have been satisfied, thus ratepayers would not receive benefits from negative amounts. TURN's claims that the Companies made unauthorized retirement incentive payments and unknown benefits decisions that contributed to the PBO shortfall are inaccurate, as demonstrated throughout Ms. Robinson's and Mr. Gagne's testimony.

TURN's Proposal of Pension Funding Methodology Based on GAAP Pension Expense.

TURN's primary proposal is to adopt a pension plan funding methodology based on "GAAP Pension Expense."[2332] Rather than determine future contributions based on funding the annual service cost plus the current pension shortfall over seven years, TURN proposes that future contributions be based on GAAP Pension Expense, which TURN defines as current service cost, interest cost, expected return on assets, amortization of prior service cost, and amortization of unamortized gains or losses. However, according to ASC 715-30, TURN should have also included special accounting events such as settlements, curtailments, and special termination benefits, but they did not.[2333] In addition to this discrepancy, there are several reasons why funding pension expense based on GAAP Pension Expense is not appropriate:

- Prospective use of GAAP Pension Expense would partially ignore the current deficit, leaving $303.4 million in existing pension obligation unfunded;
- Even if GAAP Pension Expense is negative, federal pension regulations prohibit the removal of assets from pension trusts until benefit obligations have been satisfied;
- The amortization period for GAAP is inconsistent with ERISA minimum funding requirements; and
- GAAP Pension Expense can be quite volatile, as it must include settlement and other special accounting charges.

Mr. Gagne rebuts TURN's proposals and presents SoCalGas' and SDG&E's concerns in detail in his rebuttal testimony.[2334]

[2331] Ex. 219 SCG/SDG&E/Gagne, *passim.*

[2332] As defined by Subtopic 715-30 of the FASB ASC 715-30, the authoritative source of GAAP. *Id.,* Robinson at 6, n.8.

[2333] The components of Net Periodic Benefit Cost (which TURN refers to as "GAAP Pension Expense"), as specified under ASC 715, are described in Ex. 219 SCG/SDG&E/Gagne, Appendix I at 31-35.

[2334] *Id., passim* and Appendix II.

<u>TURN's Argument Regarding Retirement Incentive Payments Increasing Pension Liabilities.</u>

TURN asserts that a portion of the pension plan funding shortfall was caused by "unauthorized practices" by SoCalGas and SDG&E in offering voluntary retirement incentives. TURN argues shareholders should contribute a total of $30 million for SoCalGas and $16 million for SDG&E in addition to the amounts of authorized ratepayer contributions. According to TURN:

> Some of the PBO Shortfall is the result of unauthorized practices by the Companies, especially the provision of benefits through the Voluntary Retirement Enhancement Program (VREP), which results in higher cost to ratepayers.[2335]

As explained in Mr. Gagne's testimony,[2336] accounting standards require accelerated recognition of deferred gains or losses when total lump sum benefit distributions for a plan year exceed a pre-determined threshold. In this case, the number of employees who elected VREP increased total lump sum pension distributions resulting in the settlement charge. Because the lump sum payments relieved the plans of future benefit obligation and associated risk relating to pension plan benefits, a settlement was required, as Mr. Gagne explains. In the normal course, the accumulated deferred gains or losses would have been recognized in future periods. Consequently, the VREP simply affected the timing of pension distributions and the associated settlement charge. It is also important to note that the VREP, a postretirement health benefit, did not affect the pension benefits provided to VREP participants.[2337]

SoCalGas and SDG&E also take issue with TURN's implication that retirement incentives require advance authorization by the Commission. Such incentives are an important workforce planning tool, allowing SoCalGas and SDG&E to manage the level of skills and experience required to continually improve efficiency and effectiveness in a dynamic business environment.[2338] TURN acknowledges that they are not aware of any Commission authorizing, or declining to authorize, a similar voluntary retirement incentive program:

> SDG&E Asked:
>
> Is TURN aware of any state legislation or public utilities commission decisions authorizing or declining to authorize a program similar to the Companies' recent

[2335] Ex. 501 TURN/McGovern at 7.
[2336] Ex. 219 SCG/SDG&E/Gagne at 14.
[2337] *Id.,* Robinson at 8.
[2338] *Id.*

> VREP? If yes, please identify any and all citations to all statutes and/or public utilities commission decisions.
>
> TURN Responded:
>
> TURN is not aware of any other Commission authorizing or declining to authorize a similar voluntary retirement incentive program.[2339]

<u>TURN's Argument that SoCalGas Should Pay for 20% of Required Contributions in Excess of the GAAP Pension Expense.</u>

TURN contends that the current unfunded pension liability is a result of SoCalGas underfunding its pension plan by masking actual pension expenses for years. As a result, TURN recommends that SoCalGas be responsible for 20% of any additional contribution above the GAAP Pension Expense that may be required in order to meet the Minimum Required Contribution or maintain an 85% Adjusted Funding Attainment Percentage.

TURN vaguely implies that SoCalGas acted improperly in funding its plan, while offering no support for its claim, stating:

> SoCalGas has underfunded its plan, and contributed to the PBO, through years of masking actual pension expense on their balance sheet and making unknown and non-transparent benefits decisions.[2340]

This argument ignores the fact that both SoCalGas and SDG&E funded their plans using the funding methodology authorized by the Commission and based on certified actuarial calculations.[2341] TURN also fails to provide support for its contention that the underfunding of SoCalGas' PBO is due to years of unknown and non-transparent decisions about benefits, as discussed in detail in Mr. Gagne's testimony.[2342]

<u>TURN's Secondary Recommendation Regarding the Amortization Period for Funding the Projected Benefit Obligation Shortfall.</u>

If the Commission adopts SoCalGas' and SDG&E's proposed funding methodology based on the service cost and amortization of the PBO shortfall, TURN recommends against amortizing the PBO shortfall over seven years. Instead, TURN proposes amortizing any shortfall over 20 years and requiring shareholders to pay 10% of the PBO shortfall amount contributed to the plan each year.

[2339] *Id.* at 8-9 (citing TURN Response to SDG&E/SoCalGas Data Request 03, Question 6).
[2340] Ex. 501 TURN/McGovern at 5.
[2341] Ex. 219 SCG/SDG&E/Robinson at 9; Ex. 219 SCG/SDG&E/Gagne, *passim*.
[2342] *Id.,* Gagne, *passim.*

SoCalGas and SDG&E strongly disagree with TURN's proposed approach. TURN's approach is unreasonable because it:

- Ignores the fact that SoCalGas and SDG&E funded their plans in accordance with the funding methodology authorized by the Commission;
- Exacerbates generational equity issues by funding the PBO shortfall over 20 years. Ratepayers in 2039 will be paying for the existing shortfall;
- Arbitrarily assigns 10% of the funding for contributions related to the PBO shortfall to shareholders based on a vague assertion that SoCalGas and SDG&E underfunded their plans and contributed to "untraceable increases to the PBO."[2343]

Mr. Gagne's testimony discusses the shortcomings of TURN's proposal in greater detail.[2344]

<u>Shippers' Recommendation Regarding Amortization Period for Funding the Projected Benefit Obligation Shortfall.</u>

Shippers recommends that if SoCalGas' new funding policy is adopted, the Pension Plans' PBO shortfall should be amortized over 21 years and not the seven years in the proposed funding policy. Shippers contends that the suggested 21-year period is based on the number of years between the average age of a SoCalGas pension plan participant and the plan's normal retirement age of 65.

SoCalGas strongly disagrees with Shippers' proposed approach. Shippers' approach is unreasonable because it:

- Ignores the fact that SoCalGas funded its pension plan in accordance with the funding methodology authorized by the Commission;
- Fails to take into account that under the plan, a participant's full benefit can be paid as a lump sum upon termination of employment, which can be significantly sooner than age 65;
- Fails to recognize that the unfunded liability is for past years of employment (a portion of which is for former employees and retirees), and that the related pension benefits were received by a prior generation of customers;
- Incorrectly calculates the remaining expected average service of eligible employees;
- Exacerbates generational equity issues by funding the PBO shortfall over 21 years. Ratepayers in 2040 will be paying for the existing shortfall; and
- Fails to acknowledge the original statutory mandate under the PPA that required plans to attain full funding status over a seven year period.

In sum, TURN's and Shippers' proposals to adopt alternative pension plan funding methodologies contain factual errors, unfounded assertions, and misrepresentations, which are

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[2343] *Id.,* Robinson at 9-10.
[2344] *Id.,* Gagne at 29, *passim*.

discussed in detail in Ms. Robinson's and Mr. Gagne's testimony, and are demonstrated in appendices that describe U.S. GAAP pension accounting fundamentals and identify TURN's errors and misrepresentations.

33.2 Post-Retirement Benefits Other Than Pensions (PBOPS)

Ms. Robinson testified that SDG&E provides post-retirement health and life insurance benefits, collectively referred to as the (SDG&E PBOP) or the (SDG&E PBOP Plan), to approximately 4,200 active employees and 2,000 retirees and survivors.[2345] The average age of active employees is 46.2 years with an average of 14.4 years of service. Retirees who are currently receiving benefits average 71.3 years of age.

SoCalGas provides post-retirement health and life insurance benefits, collectively referred to as the SoCalGas PBOP or the SoCalGas PBOP Plan, to approximately 8,000 active employees (5,000 represented and 3,000 non-represented) with an average age of 44.2 years and an average of 15.2 years of service. There are approximately 5,600 retirees and survivors. Retirees who are currently receiving benefits average 73.2 years of age.

Cost projections for the SoCalGas and SDG&E PBOP Plans, collectively referred to as the PBOP Plans, consider the future cost of providing benefits to active employees. Ms. Robinson provided an overview of PBOP Plans for SoCalGas and SDG&E Union and Non-Represented Employees,[2346] and provided a summary of the PBOP expense based on ASC 715-60,[2347] as summarized in Table 33.2.A below:

[2345] Ex. 216 SCG/SDG&E/Robinson at 29-30.
[2346] *Id.* at 30-32.
[2347] *See id.* at 34-37 (showing actual expenses and projected amounts), and 37-43 (showing health care cost escalation and funded ratios).

Table 33.2.A – Summary of 2016 vs. 2019 PBOP Expense

	Cost Center	Benefit Description	In Thousands 2016 Actual	2019 Budget[1]	2013-2016 Change
SDG&E	2200-8001.000	PBOP	$ 2,356	$ 1,430	$ (926)
SoCalGas	2200-8001.000	PBOP	$ 271	$ -	$ (271)

[1]Reflects current projected PBOP contribution

As Ms. Robinson explained, the future costs related to PBOP are difficult to determine due to the numerous variables that affect the actual ASC 715-60 expense, including the applicable discount rate, actual investment returns on plan assets, plan design features, demographic characteristics, health care inflation, claims experience, and legislative changes.[2348] Consequently, the current estimated TY 2019 contribution of $1.4 million for SDG&E and $0 for SoCalGas are likely to change.

In response to this forecasting challenge, the Commission has approved recovery of PBOP expenses subject to a two-way balancing account to adjust the revenue requirement to the ASC 715-60 costs actually incurred, limited by the maximum tax deductible amount allowed by the IRC, but not less than zero. This approach has been employed for all California utilities for almost 27 years (*see* D.92-12-015).

The Commission has consistently approved the use of a two-way balancing account mechanism for addressing the risk of variability in PBOP expense.[2349] In the 2008 GRC, the Commission (in D.08-07-046) approved a settlement agreement that provided for annual PBOP funding in rates based on an estimate of ASC 715-60 expense for SDG&E and SoCalGas. Any increase or decrease in actual expense, limited by the amounts permitted as deductible by the IRS, would be recorded as an adjustment to the Post-Retirement Benefits Other than Pensions Balancing Account (PBOPBA).

In conjunction with its request to modify the mechanism for recovery of pension expense, SDG&E and SoCalGas also requested permission to implement an annual PBOPBA true-up rather than wait until the next scheduled general rate case. In D.09-09-011, the Commission

[2348] Ex. 216 SCG/SDG&E/Robinson at 43.
[2349] *Id.* at 44.

approved SDG&E's and SoCalGas' petition to modify the mechanism for recovery of PBOP expenses as ordered in D.08-07-046 and "allow the annual amortization of Post-Retirement Benefits Other than Pensions recorded in the … [PBOPBA] incremental to the expenses included in the settlement revenue requirement."[2350]

As with pension benefits, SDG&E and SoCalGas received approval from the Commission in D.13-05-010 to continue the two-way balancing account treatment and the annual amortization of the PBOPBA, since the circumstances supporting such a mechanism had not changed. The impact of external factors in determining PBOP expense continues to affect the annual and projected determination of this expense. The PBOPBA is described in detail in the testimony of Regulatory Accounts witnesses Norma Jasso and Rae Marie Yu,[2351] including SDG&E's and SoCalGas' proposal to continue the annual amortization of the PBOPBA as adopted in D.09-09-011.

ORA did not take issue with either SoCalGas' or SDG&E's PBOP requests. [2352] ORA recommends continuance of two-way balancing accounts for pension and PBOP. Shippers does not take issue with SoCalGas' continuance of two-way balancing accounts for pension and PBOP.

34. Human Resources Department, Safety, Workers' Compensation & Long-Term Disability

34.1 Common Issues – Workers' Compensation Medical Escalation

SoCalGas projects a medical premium escalation rate of 8% to Test Year 2019.[2353] SDG&E projects a medical premium escalation rate of 6.5% to Test Year 2019. ORA and TURN recommended a downward adjustment to SoCalGas and SDG&E's forecast of workers' compensation expenses to reflect the application of their projected lower escalation rates for medical benefit premiums to the medical-cost line item of Workers' Compensation costs.[2354] ORA claims the escalation rate should be 4.25% for both test year 2019 based on a generic *2017 Employer Health Benefits Survey*, prepared by the Kaiser Family Foundation, which expects the average family premium increase for employers to be 3%.[2355] ORA also quotes the Price

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[2350] D.09-09-011 at 7-8.
[2351] Exs. 184-186 SDG&E/Jasso; Exs. 181-183 SCG/Yu.
[2352] Ex. 417 ORA/Hunter.
[2353] Ex. 256 SCG/Gevorkian at 48.
[2354] Ex. 417 ORA/Hunter at 17-18and Ex. 498 TURN/Jones and Marcus at 94 and 105.
[2355] Ex. 417 ORA/Hunter at 17-18.

Waterhouse Coopers' Health Research Institute which projects 2018's medical cost trend to be 6.5% - the first uptick in growth in three years. ORA then averages these two rates to develop its recommended medical escalation rate of 4.25% for 2018 and 2019."[2356]

TURN, on the other hand, proposes its own medical premium escalation rate of 6% in Test Year 2019. TURN's rationale for the lower projected increased is based on it comparisons of historical projections versus actuals, citations to "economy-wide medical-cost trend line[s]," and that the Commission should "presume the utilities will continue to successfully achieve cost reductions going forward."[2357]

SoCalGas and SDG&E disagree with ORA and TURN's recommended rates. For SoCalGas, the medical escalation rate of 8.0% for 2018 and 7.0% for 2019 and for SDG&E, the medical escalation rate of 7.0% for 2018 and 6.5% for 2019, which were prepared by Willis Towers Watson for each utility, are more appropriate because they take into account *the actual demographic factors specific to SoCalGas or SDG&E*. These demographic factors - location, workforce demographics, and medical plan design – are key drivers of medical plan costs. ORA and TURN's numbers are based on general industry information, presumptions that may or may not apply to SoCalGas or SDG&E, and historical information which is not the best measure when addressing future medical costs. Accordingly, the Commission should adopt the medical escalation rates provided by SoCalGas and SDG&E, which are based on solid data applicable to SoCalGas or SDG&E's workforce and existing medical plans.

34.2 SoCalGas Issues

SoCalGas seeks $50.920 million for operations and maintenance (O&M) costs for both non-shared and shared services associated with the Office of the SoCalGas CEO, President & COO, Chief Human Resources (HR) & Chief Administrative Officer (CAO), Human Resources Department, Safety, and Workers' Compensation & Long-Term Disability areas for SoCalGas.[2358] While the Test Year 2019 request represents a $15.052 million increase over Base Year 2016 adjusted-recorded costs, many of the incremental activities are RAMP-related requests. For example, $6.012 million is an incremental increase for RAMP and other driver

2356 *Id.*
2357 Ex. 498 TURN/Marcus and Jones at 86.
2358 Ex. 255 SCG/Gevorkian at v-vi. Ex. 257 SCG/Gevorkian at fn 1.

safety programs. Another $1.906 million over Base Year 2016 adjusted-recorded is to mitigate the RAMP risks related to workforce planning.[2359]

The only parties to rebut SoCalGas' revenue request were ORA and TURN.[2360] Other than the medical escalation rate discussed above, the only areas where ORA or TURN recommended adjustments to SoCalGas' revenue request were in the following areas:

34.2.1 HR Services – RAMP-Related Costs

In the area of HR Services, SoCalGas seeks $840,000 for RAMP related costs specifically to address its identified RAMP risk related to workforce planning. In particular, SoCalGas has programs in flight to mitigate this significant risk, including a new Workforce Planning Program Manager and the implementation of a pilot program to create a workforce planning model within Gas Distribution. Additional staff is needed to perform analysis, improve the forecasting model, deploy the program company-wide, support technical training, and ensure the program meets legal and professional testing guidelines. SoCalGas is also in the process of tying competency modeling work to the new job description management system being implemented. All this important work requires additional resources.[2361]

While ORA does not dispute the importance of these programs, it argues SoCalGas should simply rely on the low-end of its projected costs for these items as outlined in the 2015 RAMP filing.[2362] The low end in that 2015 filing was $693,000.[2363] Those numbers, however, are not appropriate because they were estimates developed in 2015 before SoCalGas began implementing these mitigations. The GRC forecast to continue these proposed mitigations is more reliable as it is based on actual program costs in use today.[2364] As ORA itself acknowledged, in ORA-3 on RAMP-to-GRC Integration, page 15, "ORA recommends that the data produced by the RAMP and integrated into this GRC be used to <u>inform</u> funding decisions, but not to dictate these decisions or bypass a traditional review of proposals and their

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2359 *Id.*

2360 The Office of Safety Advocates made other proposals in its rebuttal, but it did not argue against the revenue request proposed by SoCalGas.

2361 Ex. 257 SCG/Gevorkian at 10-11.

2362 Ex. 418 ORA/Hunter at 24.

2363 *Id.*

2364 Ex. 257 SCG/Gevorkian at 11.

alternatives."[2365] We agree and therefore urge the Commission to continue funding these programs at the level requested by SoCalGas.

34.2.2 Labor Relations

ORA agreed with SoCalGas' forecast for Labor Relations.[2366] TURN, however, took issue with SoCalGas' forecasts related to costs removed in 2016 due to the Aliso Canyon incident and the work-leveling system.[2367] With regard to Labor Relations employees who were temporarily reassigned during the Aliso Canyon incident, TURN argues that if SoCalGas was able to get the work done without those resources during the Aliso incident, the Company should continue to operate its programs with diminished staff through the 2019 Test Year and beyond.[2368] This is flawed because those re-assignments were temporary and part-time. Important regular projects and assignments were deferred to address the Aliso Canyon emergency incident.[2369] Labor Relations was able to defer some of their work *for a short period* to support the Aliso incident, but those employees have returned to their regular work assignments.[2370] TURN's contention that work did not fall behind is unsupported. Moreover, TURN's assertion that Labor Relations did not spend 2016 allocated amounts (and therefore must not have needed those funds) is flawed because those unspent dollars were simply due to work being deferred as a result of providing support for the Aliso Leak mitigation.[2371]

Regarding the work-leveling system, TURN argues the 2019 projected cost of $167,000 be "normalized over the three-year GRC cycle (2019-2021)."[2372] As SoCalGas explained, the Company needs a new work-leveling system because the one in use has been the same system used since the 1970s. It is outdated and costly because the vendor often relies on retired personnel to conduct the job surveys. A new system is necessary. TURN's logic regarding spreading the 2019 costs over several years is flawed because the new Work Leveling System Test Year 2019 expenses are based on a new system implementation cost plus large scale re-leveling of existing jobs that is necessary whenever a new measurement tool is employed.[2373]

[2365] Ex. 398 ORA/Stannik at 15 (emphasis in the original).
[2366] Ex. 418 ORA/Hunter at 25.
[2367] Ex. 498 TURN/Marcus and Jones at 97-98.
[2368] *Id.* at 97.
[2369] Ex. 257 SCG/Gevorkian at 12-13.
[2370] *Id.*
[2371] *Id.*
[2372] Ex. 498 TURN/Marcus and Jones at 97-98.
[2373] Tr. v. 25:2380-2386 (Gevorkian).

Labor Relations will be working with an external vendor to refresh the job leveling system, which includes updating the existing system or implementing a new system. This is not a one-time cost and the work to maintain this system will be continuous. The $500,000 cost estimate was to initially implement the system and update a number of jobs over several years.[2374] After the initial job updates, SoCalGas will continuously be updating and re-leveling jobs every year and incurring costs.[2375] Therefore, TURN's position of normalizing the $167,000 across the GRC cycle (2019-2021) is unworkable.

34.2.3 Safety & Wellness – RAMP-Related Costs Related to Driver Safety

Safe driving programs have been in place at SoCalGas for decades. In the past, driving programs have been limited to certain classes of field personnel. Because so many employees drive as a part of their jobs, not just field employees, SoCalGas has decided that all employees need to receive safe driver training to mitigate the RAMP public safety risk. The driver safety programs have proven to be effective in reducing controllable motor vehicle incidents.[2376] As such, SoCalGas seeks funding to continue its piloted Interactive Driver Safety Program (which saw a 35% reduction in controllable motor vehicle accidents between June and December 2017).[2377]

TURN recommends an adjustment that removes all funding for the Interactive Driver Safety Program ($2.165 million) and Defensive Driver Training and In-Vehicle Instruction ($1.683 million).[2378] TURN's request is based on an incorrect assumption that SoCalGas has not provided any information regarding the benefits of these programs or savings related to reductions in accidents. Regarding the former claim, SoCalGas provided data on its pilot which supports continuation of Interactive Driving. As to the cost savings from fewer accidents, TURN misses the mark. The goal of these programs is increased safety and mitigation of risk, which is why SoCalGas proposed the driver safety programs as part of the RAMP filing. Given the Commission's directive to complete RAMP and to assess risk reduction effectiveness, it is

[2374] Ex. 255 SCG/Gevorkian at 25.
[2375] Ex. 257 SCG/Gevorkian at 13; Tr. v. 25:2380-2386 (Gevorkian).
[2376] Ex. 257 SCG/Gevorkian at 17.
[2377] Ex. 257 SCG/Gevorkian at 18.
[2378] Ex. 498 TURN/Marcus and Jones at 101.

TURN's obligation to explain, with evidence and support, how or why the proposed RAMP activity does not reduce the safety risk or does not enhance safety.[2379]

The Commission should adopt SoCalGas' request to continue funding both the new Interactive Driver Safety Program (to be provided to all employees) and the existing In-Vehicle Instruction designed for field employees.

34.2.4 Organizational Effectiveness – RAMP-Related Costs

In the area of organizational effectiveness, SoCalGas identified risks associated with employee departures which cause loss of critical knowledge and skills.[2380] To address this RAMP risk (Workforce Planning), SoCalGas implemented a knowledge management department in 2014 to provide resources to transfer knowledge through activities, such as knowledge transfer plans and to launch Communities of Practice (CoP). Organizational Effectiveness created ad-hoc knowledge transfer plans for critical individuals in the organization who have announced retirement and created CoPs for 2-3 areas in the Company (*e.g.*, Cathodic Protection).[2381] Additionally, SoCalGas requested funds designed to maintain core leadership training, technical training, and to expand the use of technology to enhance training. Finally, SoCalGas requires funding to expand succession planning beyond the executive and director level to critical roles below the director level. All these efforts require additional resources, some of which have already been implemented.[2382]

ORA did not dispute the importance of these programs, but suggested the 2015 RAMP filing rates, specifically, the low end of the range, be used to guide the funding decisions for 2019.[2383] For the same reasons discussed above, this is the wrong measure. Since these programs are in-flight, SoCalGas has real data to project more accurate costs for Test Year 2019 than the estimates provided in the 2015 RAMP filing.

TURN's dispute with SoCalGas' Organizational Effectiveness revenue request was based on Aliso Canyon adjustments from 2016 and TURN's misunderstanding of the Director Development Program. With regard to the Aliso Canyon adjustments, similar to its arguments

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[2379] Investigation (I.) 16-10-016, Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company, Chapter RAMP-A at A-1, A-7.
[2380] Ex. 257 SCG/Gevorkian at 19-24.
[2381] Ex. 257 SCG/Gevorkian at 19-20.
[2382] Ex. 257 SCG/Gevorkian at 19.
[2383] Ex. 418 ORA/Hunter at 29.

with Labor Relations' costs, TURN claims SoCalGas must not need those folks who were temporarily reassigned to work on Aliso in 2016. For the same reasons discussed before, that's simply incorrect. While reassignment of company resources can be done for a *limited amount of time*, it cannot be done long term because other important Organizational Effectiveness work was deferred.

Regarding the Director Development program, TURN incorrectly believes the training ends in Test Year 2019 and thus, the funding request should not continue into 2020 and beyond.[2384] As Ms. Gevorkian explained, however, director and manager training programs have been in place since 2015 and, even if not this specific program, training programs will continue through the post-test years.[2385] These training programs are key to ensuring SoCalGas' directors and senior managers remain equipped to handle the myriad of issues facing SoCalGas and its customers. TURN's proposed forecast of $55,000 for Test Year 2019 is simply not sufficient to run this program or any other and SoCalGas' original proposal of $426,000 should be approved.

34.2.5 Conclusion for SoCalGas

For the above reasons, the Commission should adopt SoCalGas' funding request for test year 2019, including those areas discussed above. SoCalGas' shared services request for $1.7 million funds valuable diversity and employee care services programs.[2386] Neither ORA nor TURN took issue with SoCalGas' forecasts for shared services O&M cost categories/cost centers.[2387] The Commission should adopt SoCalGas' forecasts as reasonable.

Furthermore, the Human Resources area had one capital request related to a business optimization project which is supported by Ms. Gevorkian's testimony.[2388] ORA does not take issue with the business justification for the IT capital forecast for the business optimization project related to the claims system replacement.[2389] The Commission should adopt SoCalGas' forecast as reasonable.

2384 Ex. 498 TURN/Marcus and Jones at 103.
2385 Ex. 257 SCG/Gevorkian at 22; Tr. v. 25:2387 (Gevorkian).
2386 Ex. 255 SCG/Gevorkian at 35-41.
2387 Ex. 418 ORA/Hunter at 31-34.
2388 Ex. 255 SCG/Gevorkian at 41-42.
2389 Ex. 418 ORA/Hunter at 34-35.

34.3 SDG&E Issues

SDG&E seeks $19,794 million for operations and maintenance costs for both non-shared and shared services for the Human Resources & Chief Administrative Officer, Human Resources Department, Safety, and Workers' Compensation & Long-Term Disability areas for SDG&E.[2390] The Test Year 2019 request represents a $2,794 million increase over Base Year 2016 adjusted-recorded costs. Most of the increase, 89% of it, is due to increased Long Term Disability and Workers' Compensation costs, RAMP-related requests for safety awareness, drug testing, OSHA training, and contractor safety programs.[2391]

The only parties to rebut SDG&E's revenue request were ORA and TURN.[2392] ORA recommended that SDG&E's forecasts and allocation of shared service expenses should be adopted.[2393] The only areas where either ORA or TURN recommended adjustments to SDG&E's revenue request were in the following areas:

34.3.1 Organizational Effectiveness - RAMP-Related Training Expenses

Organizational Effectiveness provides individual and organizational development programs and services for SDG&E and performs five (5) key functions: Talent Management, Talent Development, Organizational Design, People Research, and Workforce Planning. Incremental non-labor costs of $330,000 are requested for a new Supervisor Effectiveness training program, Human Performance Program, and Working Foreman Leadership training. As described in RAMP Chapter 17 (Workforce Planning), the Supervisor Effectiveness training program enhances supervisor knowledge, leadership skills, safety awareness and policy knowledge to mitigate risks associated with retirements and the resulting knowledge gap experienced when losing highly tenured employees. This training will be provided to all operations departments. The Human Performance Program is an effective set of techniques and methods (*e.g.*, training, coaching, incident analysis, behavior analysis) to enhance safety preparedness and investigations used by best-in-class utilities and companies across the country.

ORA takes issue with the Test Year 2019 forecast for Organizational Effectiveness, specifically with the cost estimates associated with RAMP-related training programs, proposing

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[2390] Ex. 362 SDG&E/Taylor at iv-v.
[2391] *Id.*
[2392] The Office of Safety Advocates made other proposals in its rebuttal, but it did not argue against the revenue request proposed by SDG&E.
[2393] Ex. 418 ORA/Hunter at 2.

that SDG&E simply select the lower alternate funding level it identified in its 2015 RAMP filing. ORA requests a downward adjustment of $198,000.[2394] ORA has not argued that the programs should not be funded at all.[2395]

SDG&E disagrees with ORA for two reasons. First, all the programs SDG&E identified its Opening Testimony, Ex. SDG&E-30 on page TT-24 beginning on line 3, are in development or were implemented in late 2017 and are ongoing.[2396] SDG&E maintains its position on needing the full resources to continue the programs and disagrees with ORA's position that fully funding the programs would cause ratepayers to overpay. The costs are not speculative because these programs are not new.

Second, the alternate funding level that was proposed by ORA was based on the lower end of the range proposed in the initial RAMP filing. The project assumptions and estimated costs put forth in the RAMP Report were superseded by the requests made in supporting testimony in the Test Year 2019 GRC. GRC workpapers include a range of estimated costs for RAMP mitigation activities. The range reflected in the Test Year 2019 workpapers may not always align with the range put forth in the RAMP Report which was developed in 2015.[2397] As ORA itself acknowledged, in ORA-3 on RAMP-to-GRC Integration, page 15, "ORA recommends that the data produced by the RAMP and integrated into this GRC be used to inform funding decisions, but not to dictate these decisions or bypass a traditional review of proposals and their alternatives."[2398]

The Supervisor Effectiveness, Working Foremen Leadership, and Human Performance programs focus on enterprise-wide leadership and behavior development programs and services that translate business needs into specific team and individual learning needs. These programs are aimed at increasing involvement in field operations and leadership levels where program quality and accuracy are needed for success. These RAMP-related programs are already implemented or in development and are consistent with SDG&E's forecasts and risk mitigation goals. The Commission should adopt SDG&E's forecast as reasonable.

[2394] Ex. 418 ORA/Hunter at 11.
[2395] TURN did not take issue with SDG&E's forecast for this cost category/cost center.
[2396] Ex. 364 SDG&E/Taylor at 16-18.
[2397] *Id.* at 17.
[2398] Ex. 398 ORA/Stannik at 15 (emphasis in the original).

34.3.2 Edison Electric Institute Dues

While ORA did not take issue with SDG&E's forecast for dues related to the Edison Electric Institute (EEI), TURN argued that EEI dues either be 100% shareholder funded or alternatively, that no more than $300,000 (50% of the base year gross cost) be funded by ratepayers.[2399] TURN states that SDG&E did not provide supporting documentation of the increase of dues from $600,000 to $800,000 in Test Year 2019 and failed to meet its burden of proof regarding exclusions for "lobbying," including legislative and regulatory advocacy, public relations, advertising, donations, and club dues.

SDG&E disagrees with TURN's proposed reductions. First, EEI membership is a value for ratepayers. EEI brings SDG&E employees together with peers and colleagues from other companies in the industry to perform collective activities that are not regularly performed by the individual companies on a full-time basis, such as benchmarking studies, industry surveys, and sharing best practices. This collaborative approach benefits SDG&E ratepayers by reducing the need for expensive customized research and studies, consultants and experts, database development and maintenance, publication development, and specialized training. Second, as to the 50% reduction, SDG&E provided EEI invoices in response to TURN Data Request-019 which identify the portions of the membership fees that EEI attributes to "lobbying" activities. SDG&E reduced its request according to the information provided on EEI invoices.[2400] As such, the Commission should adopt SDG&E's forecast as reasonable.

34.4 Conclusion for SDG&E

For the above reasons, the Commission should adopt SDG&E's funding request for test year 2019, including those areas discussed above. SDG&E's shared services request for $4.606 million funds valuable field safety, labor relations, business partner, safety compliance, employee care services, wellness, and workforce planning activities.[2401] Neither ORA nor TURN took issue with SDG&E's forecasts for shared services O&M cost categories/cost centers.[2402] The Commission should adopt SDG&E's forecasts as reasonable.

[2399] Ex. 494 TURN/Marcus and Jones at 73-75.
[2400] Ex. 364 SDG&E/Taylor at 19.
[2401] Ex. 362 SDG&E/Taylor at 29-37.
[2402] Ex. 418 ORA/Hunter at 14-18.

35. A&G – Accounting and Finance/Legal/Regulatory Affairs/External Affairs

35.1 Introduction

35.1.1 Summary of Administrative & General Costs

Exhibits 318 – 323[2403] present SoCalGas' and SDG&E's TY 2019 forecasts of Administrative and General (A&G) costs (both shared and non-shared) for SoCalGas' and SDG&E's Accounting and Finance, Legal, Regulatory Affairs, and External Affairs divisions. Table SL-1 and Table SKH-1 below – from SoCalGas' and SDG&E's direct testimony, Ex. 318 SCG/Lee/Gonzales and Ex. Ex. 321 SDG&E/Hrna - summarize the total cost forecast for these A&G functions for TY 2019.

TABLE SL-1
SoCalGas TY 2019 Summary of Total Costs by Division

Categories of Management (In 2016 $)	2016 Adjusted-Recorded (000s)	TY2019 Estimated (000s)	Change (000s)
Accounting and Finance Division	27,204	21,873	-5,331
Legal Division	6,652	6,968	316
Regulatory Affairs Division	3,365	4,488	1,123
External Affairs Division	1,864	1,976	112
Total	**39,085**	**35,305**	**-3,780**

TABLE SKH-1
SDG&E Test Year 2019 Summary of Total Costs

ACCOUNTING AND FINANCE, LEGAL, REGULATORY AFFAIRS, EXTERNAL AFFAIRS (In 2016 $)	2016 Adjusted-Recorded (000s)	TY2019 Estimated (000s)	Change (000s)
Accounting and Finance Division	12,984	13,535	551
Legal Division	16,041	13,407	-2,634
Regulatory Affairs Division	5,638	5,963	325
External Affairs Division	3,160	3,072	-88
Total	**37,823**	**35,977**	**-1,846**

A&G functions include accounting, financial and business planning, regulatory support and analysis, case management, legal, and communications and community relations. These

[2403] Ex. 318 SCG/Lee (adopted by Gonzales), Ex. 319 SCG/Lee (adopted by Gonzales), Ex. 320 SCG/Gonzales, Ex. 321 SDG&E/Hrna, Ex. 322 SDG&E/Hrna, Ex. 323 SDG&E/Hrna.

functions are necessary in order to attend to our customers, maintain our internal controls, support internal clients and external stakeholders, and meet accounting/regulatory/legal requirements.

SoCalGas and SDG&E have experienced continued regulatory and accounting standard changes over the last couple years and anticipate these changes to have a direct impact on the A&G divisions. For example, to meet changes in reporting processes and needs led by the Commission, new regulatory proceedings, and additional reporting requirements associated with RAMP, SoCalGas and SDG&E are proposing to add additional resources to our workforce and fill vacancies in positions to effectively conduct business operations.

35.1.2 Forecast Methodology

The development of the TY 2019 forecasts for A&G expenses was initially based on the recorded data for each cost center analyzed from the previous 5 years in the A&G area. After analyzing the recorded costs, specific adjustments were made to align the historical costs to SoCalGas' and SDG&E's current operations and organizational structure. Please refer to the supporting workpapers for the adjustments made to the recorded data.

A&G costs are generally prone to fluctuations because of changes in regulatory mandates, new accounting requirements, legal proceedings, and non-recurring events. These changes impact staffing levels, purchased service costs, and other factors. Our workpapers support these fluctuations when reviewing the past 5 years of A&G recorded costs. It is generally recognized that the use of multi-year averaging is a valid methodology where costs fluctuate significantly from year-to-year. As such, for most A&G cost centers, a 5-year average is used as it represents a reasonable base to estimate operational needs for TY 2019.

35.1.3 Summary of Differences with Other Parties

The following tables – taken from SoCalGas' and SDG&E's rebuttal testimony, Ex. 320 SCG/Gonzales and Ex. 323 SDG&E/Hrna, respectively - summarize the differences between SoCalGas' and SDG&E's proposals and other parties' recommendations.

SOCALGAS VERSUS OTHER PARTIES - SUMMARY OF DIFFERENCES

TOTAL O&M - Constant 2016 ($000)				
	Base Year 2016	**Test Year 2019**	**Change**	**Variance to SCG Ask**
SOCALGAS	**39,085**	**35,305**	**-3,780**	
ORA	**39,085**	**34,104**	**-4,981**	
TURN				**-155***

*Represents total company reduction, not only A&G.

SDG&E VERSUS OTHER PARTIES - SUMMARY OF DIFFERENCES

TOTAL O&M - Constant 2016 ($000)				
	Base Year 2016	**Test Year 2019**	**Change**	**Variance to SDG&E Ask**
SDG&E	**37,823**	**35,977**	**-1,846**	
ORA	**37,823**	**35,877**	**-1,946**	
TURN				**-403***
UCAN				**0**[2404]
FEA				**0**[2405]

*Represents total company reduction, not only A&G.

For the reasons set forth below, SoCalGas and SDG&E request that the Commission adopt their proposals as reasonable.

35.1.4 Organization of Brief

The focus of this brief is on contested A&G issues. After identifying a RAMP-risk in Section II, SoCalGas and SDG&E address common issues ORA and TURN raised in their A&G submittal in Section III. In Section IV, SoCalGas responds to ORA's recommendation to reject SoCalGas' proposed Incident Support and Analysis Department. Finally, in Section V, SDG&E responds to UCAN's and FEA's recommendations regarding SDG&E's proposed TPCBA.

35.2 RAMP

As illustrated in the following table (adopted from SoCalGas' and SDG&E's direct testimony, Ex. 318 SCG/Lee/Gonzales and Ex. 321 SDG&E/Hrna, respectively), part of

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[2404] UCAN proposed changes in the mechanism of SDG&E's Third-Party Claims Balancing Account (TPCBA). No numerical changes are associated with this proposal.

[2405] FEA recommends that the request to establish a TPCBA be denied. No numerical changes are associated with this proposal.

SoCalGas' and SDG&E's requested A&G funds are linked to mitigating a top safety risk that has been identified in the RAMP Report.

TABLE SL-4/TABLE SKH-6
RAMP Risk Chapter Description

RAMP Risk	Description
Records Management (SCG-8)/(SDG&E-13)	Relates to the potential public safety, property, reliability, regulatory, or financial impacts that result from the use of inaccurate or incomplete records.

As discussed in more detail below, SoCalGas and SDG&E are each forecasting $200,000 in TY 2019 incremental costs to address this RAMP risk.

35.3 SoCalGas and SDG&E Joint Response To Common Issues

35.3.1 SoCalGas and SDG&E's Response to ORA'S Proposed Reduction for the RAMP Records Management Project

ORA recommends a $100,000 reduction to each of SoCalGas' and SDG&E's $200,000 TY 2019 forecasts to address a RAMP records management risk. ORA asserts that SoCalGas and SDG&E failed to provide a working spreadsheet explaining how the Companies arrived at their $200,000 forecast.[2406]

The Commission should reject ORA's recommendation. In direct testimony, SoCalGas and SDG&E explained that "in order for our employees to follow leading records management practices we must first identify what these leading practices for utilities are and what we need to do to improve our practices" and "[t]o do this, the Companies will hire a third-party records management expert to conduct a gap assessment between current policies and practices and leading policies and practices, then provide recommendations on filling these gaps."[2407] And as summarized in SoCalGas' and SDG&E's rebuttal testimony, during discovery, SoCalGas and SDG&E explained to ORA that its $200,000 forecast was the average of a $100,000 - $300,000 estimated range and was based on the following information.

The low end of SoCalGas' and SDG&E's estimates ($100,000) was based on a records management project that was performed in 2007. In 2007, Sempra Energy engaged a third-party consultant to perform an assessment of the records management process. The project cost given

[2406] Ex. 419 ORA/Hadiprodjo at 7 and 21.
[2407] Ex. 318 SCG/Lee/Gonzales at 5; Ex. 321 SDG&E/Hrna at 7.

in 2007 was approximately $75,000. SoCalGas and SDG&E used an escalation factor to forecast the increase in the hourly costs for the 2019 GRC at approximately $100,000 for each utility.

The high end of SoCalGas' and SDG&E's estimates ($300,000) reflected anticipated additional scope and other factors as follows:

1. Increased scope – SoCalGas and SDG&E have more records than what were analyzed in the 2007 assessment. As such, SoCalGas' and SDG&E's 2019 RAMP project covers a larger number and a wider variety of records.
2. Increased expertise - The 2019 RAMP project will require more in-depth expertise, which will require specialized advisors and experts with experience in utility operations.
3. Increased hours and billable rates - The 2019 RAMP project will be performed in multiple phases over a longer period and will naturally require more consulting hours.
4. Increased Risk - The 2019 RAMP project expands beyond records management and includes the operational considerations for RAMP. Because the focus of the 2019 RAMP project is on operational records, it is even more important to ensure that the records are accurate and that they capture all relevant information. Additionally, operational records are not centralized like administrative records. Operational records are included across multiple systems, which require additional time and effort to maintain.

SoCalGas and SDG&E believe they have provided appropriate justification for their RAMP records management project and for the $200,000 mid-range forecast. SoCalGas and SDG&E request that the Commission adopt the forecasts as reasonable.

35.3.2 SoCalGas and SDG&E Response to TURN's Proposed Reductions for Dues and Donations, Clothing and Gear, and Charitable and Other Sponsorships

35.3.2.1 SoCalGas v. TURN

TURN challenges SoCalGas' Base Year 2016 O&M expenses for dues, clothing and gear.[2408] As SoCalGas explained in its rebuttal testimony, SoCalGas disagrees with TURN (as summarized below).[2409]

<u>Dues</u>

TURN proposes a $22,000 reduction in dues, based on 2016 expenses, for various club dues and chamber of commerce dues. However, as SoCalGas explained in rebuttal testimony, of the $22,000 identified by TURN for removal from the case, SoCalGas had already removed

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[2408] Ex. 494 TURN/Marcus at 75-78.
[2409] Ex. 320 SCG/Gonzales at 7-8.

$1,365 during the production of its direct testimony. SoCalGas does not dispute TURN's recommendation to remove the remaining $20,635.

Clothing and Gear

TURN proposes removing $134,000 for clothing and other gear, based on 2016 expenses, because it argues that these expenses are "largely promotional and image-building" and should not be paid for by ratepayers.[2410] As SoCalGas explained in rebuttal testimony, there is no basis for TURN's claim that these expenses are "largely promotional and image-building." These items in conjunction with SoCalGas' customer events help to create awareness of services and provide customers with a better understanding of various Commission-approved customer programs, reinforcing SoCalGas' role as an energy provider and advisor. In addition, the growing diversity of SoCalGas' customer base in the areas of age, ethnicity, culture and language can make it challenging to reach customers. The use of logo items, including clothing, provides SoCalGas an important means to maintain and/or enhance the communication channels with customers and ensure they have access to SoCalGas' available programs and service offerings. TURN's request to remove these costs should be rejected.

35.3.2.2 SDG&E v. TURN

TURN challenges SDG&E's Base Year 2016 O&M expenses for dues and donations, clothing and gear, and charitable and other sponsorships.[2411] As SDG&E explained in its rebuttal testimony, SDG&E disagrees with TURN (as summarized below).[2412]

Dues and Donations

TURN recommends a reduction to SDG&E's forecast of $85,362 for dues and donations. SDG&E disputes this recommendation in part. As SDG&E stated in its rebuttal testimony, SDG&E already had removed from its GRC request $74,000 of the $85,362 amount. As such, SDG&E overstated its GRC forecast for dues and donations by only $11,362, not $85,362.

Clothing and Gear

TURN requests the removal of $64,000[2413] for clothing and other gear with SDG&E's name and logo in base year 2016, stating that these expenses are largely promotional and image-

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[2410] Ex. 494 TURN/Marcus at 77.
[2411] *Id.* at 75-78.
[2412] Ex. 323 SDG&E/Hrna at 5-6.
[2413] *See* Ex. 494 TURN/Marcus at 78, Table 57. TURN's narrative discussion appears to have reversed TURN's proposed reductions for SoCalGas and SDG&E, but Table 57 appears to accurately represent

building. SDG&E disagrees. As SDG&E explained in its rebuttal testimony, these expenses help identify company employees at company-sponsored community events. In addition, company employees attend such events to promote safety (*i.e.*, "call 811 before you dig"), service options and energy conservation. The giveaways remind customers of safety and Commission-approved programs such as energy efficiency, low income, medical baseline, and clean transportation. The Commission should reject TURN's recommendation.

Charitable and Other Sponsorships

TURN further has recommended the removal of $183,000 from SDG&E's Base Year 2016 for Charitable and Other Sponsorships. SDG&E disagrees with TURN. As SDG&E explained in its rebuttal testimony, these sponsorships provide awareness and education of SDG&E programs supporting safety, energy efficiency, and other customer programs. As an example, an expense for $75,000 of this total was used to support an electric transportation campaign related to Commission programs to promote clean energy transportation throughout San Diego County, including disadvantaged communities. Educating the public on clean transportation, grid optimization and efficiency will promote broader customer benefits system wide. Other expenses in this total of $183,000 were used for outreach and education activities targeted to military customers, safety partners, underserved urban nonprofit organizations, and authorized CPUC programs. As such, these costs should remain in the case. The Commission should reject TURN's recommendation.

35.4 SoCalGas Response to ORA's Recommendation With Respect To SoCalGas' Incident Support and Analysis Department

As explained in SoCalGas' direct testimony, SoCalGas' Incident Support and Analysis (ISA) department requests $1.10 million for TY 2019.[2414] The requested dollar amount is for ten staff members plus non-labor expenses for the new ISA department. ISA will work collaboratively with the Risk Management, Emergency Services, and the Safety & Wellness departments to coordinate with individual business units on identifying historical major incidents (*e.g.*, enterprise-wide IT outage, high pressure line struck in Visalia) to develop proactive response plans of support and incident mitigation measures. By proactively enhancing response

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TURN's proposal (a proposed reduction for SDG&E of approximately $64,000 and a proposed reduction for SoCalGas of approximately $134,000).

[2414] Ex. 318 SCG/Lee/Gonzales at 14.

plans with business units, ISA will help reduce the potential impact that major incidents have on normal operations as well as reduce potential business interruptions. ISA consists of staff with experience in responding to major incidents and leading incident-related business practices. The ISA team will utilize their past experiences in responding to major incidents to help with the coordination of incident response, and when needed, can act in a leadership role to oversee response activities during major incidents. Additionally, ISA provides ongoing data and records management related to prior incidents, and other informational support (*e.g.*, regulatory) during non-incident periods. ISA is also responsible for ongoing financial reporting associated with incidents to regulatory agencies.

ORA challenges SoCalGas' TY 2019 O&M forecast for the ISA on the grounds that SoCalGas does not have a study to create the department.[2415] For the reasons SoCalGas stated in its rebuttal testimony, SoCalGas strongly disagrees with ORA's position, as summarized below.[2416]

SoCalGas requested funding for an ISA department to have a team to specifically focus on major incident preparedness and response activities. ISA will work in a coordinated manner with the Emergency Services, Risk Management, and Safety & Wellness departments. The proposal contemplates leveraging staff experience and providing dedicated focus on major incidents and the different types of support that are needed during such events, in addition to the operational response. Activities include (but are not limited to):

- Responding to major incidents to help with the coordination of incident response and restoration;
- Acting in a leadership role to oversee and support response and restoration activities during major incidents;
- Responsibility for fiscal guidelines, guidance, and financial reporting associated with incidents;
- Working with Emergency Services and other departments to identify and enhance preparedness planning for major incidents;
- Performing data and records management, and providing other informational support as needed related to incidents.

ORA opposed providing funding of $1.1 million for ISA. SoCalGas notes that ORA did not oppose the need for ISA, but based its objection on their belief that SoCalGas did not: a) provide justification for the proposed salary levels, and b) conduct a workload analysis to

[2415] Ex. 419 ORA/Hadiprodjo at 22.
[2416] Ex. 320 SCG/Gonzales at 3-7.

support the number of employees requested. As explained below, SoCalGas has supported the need to create this function at the proposed staffing level.

The proposal for funding ISA is consistent with the Commission's focus on safety and incident preparedness. In addition to the Commission's Safety and Enforcement Division's oversight of the operation and safety of utilities, there is emphasis on safety and incident response through a number of Commission proceedings,[2417] including the risk assessment and mitigation activities (*i.e.*, RAMP) in this GRC. Recently, the Commission issued its Proposed Decision in Order Instituting Rulemaking (OIR) 18-03-011 to consider whether to adopt comprehensive post-disaster consumer protection measures for all utilities under the Commission's jurisdiction, and is conducting Rulemaking (R.) 18-04-019 to consider strategies to integrate climate change adaptation measures to ensure safety and reliability for utilities. Enhancements to emergency preparedness, including establishment of an incident support function, is consistent with the direction of State policy and increased focus in this area across the utility industry.[2418] These matters, along with the risks identified therein, underscore the need for the support that ISA will provide.

Given changes in the operating environment, the creation of this function is both prudent and reasonable. SoCalGas has experienced a number of recent significant incidents, including the December 2017 wildfires in Southern California and January 2018 rainstorms and resulting mudslides in Santa Barbara County. It has been reported there is an increasing likelihood and severity of wildfires over fire seasons that last most or all of the year,[2419] and due to the recent fires, a higher likelihood of associated damages due to storms or other weather events resulting

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[2417] *See e.g.*, California Public Utilities Commission, *Major Proceedings Identified by the Safety and Enforcement Division, Utility Risk Assessment and Safety Advisory, available at* http://www.cpuc.ca.gov/riskassessment/.

[2418] Accenture, Davies, Brooke, *"Enhancing emergency preparedness for utilities,"* (June 8, 2017), *available at* https://www.accenture.com/us-en/blogs/blogs-enhancing-emergency-preparedness-utilities.

[2419] *See e.g.*, Chris Clarke, *California Has Two Fire Seasons, and Climate Change Will Make Both Worse* (September 9, 2015), *available at* https://www.kcet.org/redefine/california-has-two-fire-seasons-and-climate-change-will-make-both-worse; *see also* Brandon Miller, *Climate change could leave Californians with 'weather whiplash'* (April 23, 2018), *available at* https://www.cnn.com/2018/04/23/us/climate-change-california-whiplash-wxc/index.html; *see* R.18-03-011, E-mail Ruling suspending Order Instituting Rulemaking schedule (dated May 14, 2018) at 3, wherein ALJ Rizzo stated, "California now has a year-long wildfire season."

in subsequent damages due to erosion.[2420] Along with other potential physical disasters, the continued evolution of business practices that are tied to Information Technology systems, and the number of large-scale cyber-security incidents[2421] require the attention of utilities not only from a preventiveness perspective, but also for preparedness and response, the latter which will be the focus of ISA.

Due to these and other incidents, within the past three-plus years, SoCalGas has recorded over 30 Emergency Operations Center-activated incidents, which triggered over 60 activations of SoCalGas' regional gas emergency centers throughout the service territory, resulting in frequent attention at varying activity levels of incident response staff. SoCalGas anticipates this trend to continue, or at a minimum, must prepare for it to continue with the appropriate staffing. This is supported by studies recently conducted by the University of California Los Angeles which stated that "the state [California] will experience a much greater number of extremely wet and extremely dry weather seasons — especially wet — by the end of the century."[2422] According to The National Centers for Environmental Information, researchers have found that the costs associated with natural disaster events reach billions of dollars.[2423]

ORA also proposes not funding the ISA department on the basis that "[SoCalGas] did not justify how it derived the salary amounts."[2424] However, this statement is incorrect. The workpapers to the testimony clearly state "[t]he labor is based on the mid-range salary of the Market Reference Ranges (MRR) pay band of these positions."[2425] Furthermore, in response to a data request from ORA, SoCalGas provided the salary amount for each position reflecting the noted MRR mid-point to provide ORA with the data to derive the quantity of staff and requested dollar amount.[2426] As the ISA function was not fully staffed at the time of application filing,

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[2420] *See e.g.*, Paul Vercammen, *Mudslide danger replaces fire threat in Southern California* (January 2, 2018), *available at* https://www.cnn.com/2018/01/02/us/california-thomas-fire-mudslide-threat/index.html.

[2421] *See e.g.*, Selena Larson, *The hacks that left us exposed in 2017* (December 20, 2017), *available at* http://money.cnn.com/2017/12/18/technology/biggest-cyberattacks-of-the-year/index.html.

[2422] Colgan, D., UCLA Newsroom, *Study forecasts a severe climate future for California* (April 23, 2018), *available at* http://newsroom.ucla.edu/releases/california-extreme-climate-future-ucla-study.

[2423] National Centers for Environmental Information, National Oceanic and Atmospheric Administration, *Billion-Dollar Disasters: Calculating the Costs*, *available at* https://www.ncdc.noaa.gov/monitoring-references/dyk/billions-calculations.

[2424] Ex. 419 ORA/Hadiprodjo at 22:14.

[2425] Ex. 319 SCG/Lee/Gonzales at 26.

[2426] November 20, 2017, SoCalGas response to Question 1b of data request ORA-SCG-010-FH2, included in Appendix A of Ex. 320 SCG/Gonzales.

SoCalGas used the mid-point of the applicable MRR pay band in the forecast of labor costs. ORA was provided information on how SoCalGas developed the ISA labor forecast, and did not submit any meaningful objection to the requested positions, proposed cost, or need for the department. SoCalGas requests the Commission approve funding for ISA as proposed.

35.5 SDG&E Response to UCAN's and FEA's TPCBA Recommendations

As SDG&E explained in its direct testimony, despite increasing efforts by SDG&E to manage its operations to prevent third-party related claims, it remains difficult to predict third-party incidents, as have historically occurred, as well as natural disasters outside of SDG&E's control.[2427] Wildfires, for example, are a type of natural disaster that will continue to occur in our service territory at an increasingly alarming rate due to exacerbated drought conditions, climate change, and other factors outside the control of SDG&E. California's laws regarding strict liability and inverse condemnation essentially make it inevitable that when wildfires or other events occur that involve utility-owned facilities, claims will be filed against the local utility. Under inverse condemnation, a public entity is held to be strictly liable for property damage when its facilities are a cause of the damage, irrespective of fault and when its facilities are merely one of several concurrent causes. The policy rationale for inverse condemnation is that public utilities (extended by California courts to include investor owned utilities) can spread costs through taxation or rates.

As described in SoCalGas' and SDG&E's insurance testimony (Exs. 238 SCG/SDG&E/Cayabyab and 240 SCG/SDG&E/Cayabyab), SDG&E is proposing a Liability Insurance Premium Balancing Account (LIPBA) to address the uncertainty regarding the need for and price of liability insurance, including wildfire insurance. However, even if the Commission approves SDG&E's proposed LIPBA, there can be significant shortfalls for SDG&E when comparing the dollar amount of claims paid against the amount of available insurance. This is due to a multitude of factors, including the impossibility of predicting the exact amount of insurance the Company will require at any given time and the inevitable tradeoff between price and the level of coverage due in part to the limited number of insurance carriers willing to provide liability insurance for utilities (particularly utilities with California wildfire exposure).

[2427] Ex. 321 SDG&E/Hrna at 25-27.

In light of the mismatch experienced historically between third-party related claims to be paid versus the amount of available insurance at any given time, SDG&E is proposing a new two-way balancing account named the Third-Party Claims Balancing Account (TPCBA) to be recorded on SDG&E's accounting general ledger to compare the revenue requirement approved in this GRC for third-party related claims payments and recoveries with actual net expenses booked. The balancing account is necessary due to the impossibility of predicting the number of claims and amounts resulting through resolution of the claims. While the recovery of damages and injury claims is important, customers should be protected by only paying for the claims expensed. This balancing account will see that customers are ultimately billed no more or no less than actual claims net payments. The balancing account protects both customers and SDG&E against the exposure to expenses that are predicated on a five-year history of events but may actually differ dramatically from such a forecast. As such, the TPCBA is a reasonable approach to managing the claims and should be approved in this proceeding. Please see the testimony of SDG&E's Regulatory Accounts witness, Ms. Norma Jasso (Exs. 184 SDG&E/Jasso and 186 SDG&E/Jasso) for details on the TPCBA.

35.5.1 Response to UCAN

UCAN proposes that the Commission should reject SDG&E's proposed TPCBA and instead authorize SDG&E to establish a memorandum account to track third-party claims that exceed SDG&E's liability insurance coverage. UCAN also states that "this limited oversight would leave the utilities with less incentive to reduce costs and manage risk wisely."[2428] UCAN errs in its view that there will be "limited [Commission] oversight." Per the direct testimony of Norma Jasso, "The TPCBA balance will be addressed in each GRC on a going forward basis."[2429] Reviewing the TPCBA in the next GRC will provide UCAN and any other party appropriate oversight.

UCAN also argues that SDG&E is already asking ratepayers to bear significant costs due to wildfire risk, which includes an increase in liability insurance costs as well as capital investments to mitigate certain risks.[2430] However, as SDG&E explained in its rebuttal testimony, SDG&E's proposed changes in capital investment to address wildfire risk are in

[2428] Ex. 511 UCAN/Charles at 91.
[2429] Ex. 184 SDG&E/Jasso at 14.
[2430] Ex. 511 UCAN/Charles at 92.

accordance with the Commission's new risk-informed safety directives. These investments should reduce the risk of incidents, which in turn would decrease the number and amounts of future claims. In addition, liability insurance costs are being driven by changing insurance market conditions, as described in our insurance testimony.

For these reasons, the Commission should reject UCAN's recommendation.

35.5.2 Response to FEA

FEA also recommends that the Commission should reject SDG&E's request to establish a TPCBA. FEA asserts that SDG&E has not demonstrated that it has a unique problem to warrant the creation of this account.[2431] FEA ignores the important reasons SDG&E seeks approval of the TPCBA. As SDG&E explained in its direct testimony, "[t]he balancing account is necessary due to the impossibility of predicting the number of claims and amounts" and to address "the mismatch experienced historically between third-party related claims to be paid versus the amount of available insurance at any given time."[2432] SDG&E also explained that the "balancing account will see that customers are ultimately billed no more or no less than actual claims net payments" and that "[t]he balancing account protects both SDG&E and customers against the exposure to expenses that are predicated on a five-year history of events but may actually differ dramatically from such a forecast."[2433]

FEA also asserts that the TPCBA could reduce incentives currently in place for SDG&E to prudently settle third-party claims and control costs.[2434] FEA's speculation is unfounded. SDG&E currently manages claims prudently and will continue to do so. The establishment of the TPCBA will see that ratepayers are refunded revenues when actual claims expenses are below authorized. Claims are evaluated on a case-by-case basis taking into consideration the allegation asserted, potential liability against the utility, and the measure of damages both from a property damage and bodily injury perspective. If liability against the utility is determined, this information is weighed to develop a settlement value or range for the case. Negotiations are initiated and settlement is achieved either within the claims process or through litigation.

[2431] Ex. 366 FEA/Smith at 30.
[2432] Ex. 321 SDG&E/Hrna at 26.
[2433] *Id*.
[2434] Ex. 366 FEA/Smith at 36.

Lastly, FEA claims that SDG&E has not explained the increase in claims expense in 2016 over the previous years.[2435] SDG&E's claim payments in any given year are dependent upon the number of claims and types of claims brought against the company. Each year and each case is unique in the dollars sought, complaint alleged, and time to resolve the matter through litigation or settlement. Recovery expenses are also dependent upon the same factors described for claims payments. In 2016, there was an increase in the amount paid for bodily injury claims and property damage claims. This increase caused claims payments for 2016 to be higher compared to claims payments and recovery expenses for 2014 and 2015. An increase in claims payments in 2016 is no reason to deny the establishment of the TPCBA. Rather, the increase in 2016 claims expenses demonstrates the variability of claims costs and reinforces the need for the TPCBA.

36. Shared Services & Shared Assets Billing, Segmentation & Capital Reassignments

36.1 Introduction

SDG&E's and SoCalGas' shared services and shared assets billing and segmentation and capital reassignment testimony is set forth in Ex. 324.[2436] Ex. 324 describes the functional process and methodology of multiple activities covering billed out costs as shared services and shared assets, the derivation of common activity costs into business segments, the capitalization of certain clearing accounts and Administrative & General (A&G) accounts, and the identification of costs (and elimination of those costs from the GRC revenue requirement) for Electric Transmission capital and operations and maintenance (O&M), which are filed for recovery with the Federal Energy Regulatory Commission (FERC).

Shared services are activities permitted by the Affiliate Transaction Rules Decision (D.) 97-12-088 that are performed by the SDG&E and SoCalGas departments that are designated as utility Shared Services departments (*i.e.*, functional area) for the benefit of (i) SDG&E or SoCalGas, (ii) Sempra Energy Corporate Center (Corporate Center), and/or (iii) any Sempra unregulated subsidiaries. Shared Assets are assets that are on the financial records of one utility, but also benefit other Sempra Energy affiliates. Ex. 324 also describes how SDG&E segments certain business areas and how SDG&E and SoCalGas reassign certain costs to capital to recognize that those costs are incurred in support of construction efforts. Segmentation into

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[2435] *Id.* at 35.
[2436] Ex. 324 SDG&E/Vanderhye.

business areas occurs at SDG&E and identifies the allocation of common costs into Gas, Electric or Electric Generation, then with Electric into Electric Distribution or Electric Transmission.

ORA was the only party to address SDG&E's and SoCalGas' shared services and shared assets billing and segmentation and capital reassignments testimony (Ex. 324). In its testimony (Ex. 420), ORA set forth its recommendations as follows:

- "ORA does not oppose SDG&E's and SoCalGas' Shared Services and Shared Assets billing policies."[2437]
- "ORA does not oppose SDG&E's and SoCalGas' Shared Services and Shared Assets cost allocations."[2438]
- "ORA does not oppose SDG&E's Segmentation and Reassignment Rates process and resulting rates."[2439]
- "ORA does not oppose SoCalGas' Reassignment Rates process and resulting rates."[2440]
- "Differences between ORA's and SDG&E's/SCG's Reassignment amounts are due to the summation of ORA's different expense and capital recommendations made by other ORA witnesses."[2441]

36.2 Shared Service Billings

SDG&E and SoCalGas have the same policy for Shared Services billing. Pursuant to this policy, which complies with D.97-12-088, shared services costs that are incurred by one utility on behalf of the other utility, and/or on behalf of Sempra Energy or any of its unregulated subsidiaries, are allocated and billed to those companies receiving services. The purpose of the policy is to ensure ratepayers of the utility providing a Shared Service do not to subsidize the costs incurred that support the other utility or any Sempra affiliate.

For purposes of this GRC, Shared Services are activities performed by a utility's Shared Services Department (*i.e.*, functional area) for the benefit of (i) SDG&E or SoCalGas, (ii) Corporate Center, and/or (iii) any unregulated subsidiaries. The utility providing Shared Services allocates and bills incurred costs to the entity or entities receiving those services. "Non-Shared Services" are activities that are performed by a utility solely for its own benefit. As such, Non-Shared Services costs stay within the utility. The Corporate Center also provides certain services to SDG&E, SoCalGas and to other subsidiaries, but for purposes of the GRC, the utility

[2437] Ex. 420 ORA/Oh at 2.
[2438] *Id.*
[2439] *Id.*
[2440] *Id.*
[2441] *Id.*

treats costs for services received from Corporate Center as Non-Shared Services costs, consistent with any other outside vendor costs incurred by the utility.

Each Shared Services functional area at SDG&E and SoCalGas is responsible for determining the proper allocation of its Shared Services costs to the appropriate entity or entities receiving the services. The Shared Services billing process ensures: (1) sharing of services is recognized via a formal billing process, (2) services are billed at fully-loaded cost,[2442] and (3) supplemental loaders[2443] for applicable unregulated entities are applied to the billings. Due to the Shared Services billing process, ratepayers do not subsidize costs that are incurred in support of another entity.

The total amount of shared services "billed out" to Sempra Energy Affiliates will be determined in the final Results of Operations (RO) Model, but is currently forecasted to be approximately $73,010,000 for SDG&E[2444] and $37,234,000 for SoCalGas.[2445]

In its testimony, ORA states that "ORA does not oppose SDG&E/SoCalGas' shared service billing process and allocation of Shared Services costs."[2446] ORA, however, arrives at different dollar amounts because, as ORA explained, "ORA's recommendations . . . reflect the summation of ORA's different expense and capital witnesses."[2447]

36.3 Shared Assets

Shared assets are assets that are on the financial records of one utility, but are also used by other Sempra Energy affiliates. For SDG&E, this applies to assets owned and used by SDG&E, which are also used by SoCalGas, Corporate Center and/or other Sempra Energy affiliates. The same holds true for Shared Assets as financial records at SoCalGas. Assets that can be identified, quantified, valued and exclusively used by one entity are not considered a shared asset.

SDG&E and SoCalGas established their Shared Asset Policy in 2002, which dictates how shared assets are reflected in the financial records. Shared assets are recorded on the financial

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[2442] "Fully-loaded cost" means the direct cost of goods or services plus all applicable indirect charges and overheads, as directed per D.97-12-088.

[2443] Pursuant to Rule V.H.5 of the CPUC's Affiliate Transaction Rules, charges to Corporate Center and/or any of the unregulated affiliates will be calculated at fully-loaded cost, plus a premium on direct labor.

[2444] Ex. 324 SDG&E/Vanderhye at JV-iv.

[2445] *Id.*

[2446] Ex. 420 ORA/Oh at 3.

[2447] *Id.*

records of the utility (owner) that receives the most service or use from the asset. The utility owning the shared asset bills the other Sempra Energy affiliates using allocation percentages, which are based on factors that reflect the usage level of the asset by the other Sempra Energy affiliates. These utilization factors vary depending upon the asset.

These allocation percentages are reviewed annually and are adjusted, as needed, in accordance with the Shared Asset Policy if there are material changes to the business activities. This review is conducted by the organization responsible for the asset and is coordinated by the Plant Accounting organization. If necessary, the allocation percentages change so each utility and affiliate is charged the appropriate level of costs.

SDG&E's and SoCalGas' shared assets consist primarily of facilities, computer hardware and software, and communications (telecommunication infrastructure). SDG&E and SoCalGas charge Sempra Energy affiliates for the use of these assets by developing a capital revenue requirement. This revenue requirement is retained by SDG&E or SoCalGas, and/or billed to other entities according to the particular allocation methodology chosen for each asset to distribute the costs.

When developing the revenue requirement, an annual weighted-average rate base is calculated. A return on rate base, state and federal income taxes, estimated depreciation expense, and property taxes are derived from that information, resulting in a total revenue requirement. The various revenue requirement components are determined and sponsored by other GRC witnesses.[2448]

Once the billable charges (*i.e.*, revenue requirements) for the shared assets are determined, they are apportioned to the appropriate Sempra Energy affiliates using the allocation percentages. As discussed earlier, the allocation percentages are based on utilization factors developed specifically for each forecasted project by the sponsoring witness. The allocation percentages have been weighted by the net book value or estimated project costs to develop

[2448] The total Company weighted-average rate base is sponsored by SDG&E's Rate Base witness, R. Craig Gentes in Exhibit 379 and SoCalGas' Rate Base witness Pat Moersen in Exhibit 376. The calculation of return on rate base percentage is performed in the Results of Operations model and is sponsored by the Summary of Earnings witness Khai Nguyen (adopted by Ryan Hom) in Exhibits 344 and 346. The tax expenses are sponsored by the Corporate Center Tax witness Ragan Reeves in Exhibits 261 and 265. Depreciation rates are sponsored by the SDG&E's Depreciation witness Matt Vanderbilt in Exhibit 388 and SoCalGas' Depreciation witness Flora Ngai in Exhibit 382.

composite allocation percentages for the asset classes in the RO. These percentages are used to determine the amounts to be charged to the appropriate Sempra Energy affiliates.

The total amounts of shared assets "billed out" to the Sempra Energy affiliates will be determined in the final RO Model but is currently forecasted to be approximately $5,158,000 for SDG&E[2449] and $53,920,000 for SoCalGas.[2450]

In its testimony, ORA states that "ORA does not oppose SDG&E/SoCalGas' Shared Asset billing process or the allocation of shared asset costs."[2451] ORA, however, arrived at different dollar figures than SDG&E and SoCalGas because, as ORA explained, "ORA's recommendations . . . reflect the summation of ORA's different expense and capital witnesses' recommendations as they impact the shared assets."[2452]

36.4 Business Segmentation Allocation (SDG&E only)

For SDG&E, the FERC account series of Clearing Accounts, Customer Accounts, Customer Service and Information, and A&G Accounts that are specifically related to the Electric, Electric Generation or the Gas Department are directly assigned to the appropriate department. The general expenses not directly chargeable to the departments are common costs that must be allocated between the Electric, Electric Generation and Gas Departments for rate setting purposes.

In addition, Gas Department expenses and only the Electric Department expenses attributable to Electric Distribution and Electric Generation are recoverable in customer rates authorized by the CPUC. Therefore, Electric Department costs, excluding Electric Generation, were further allocated to Distribution and Transmission. An example of the segmentation process is shown in Appendix D of Ex. 324 and the summary of segmentation rates is shown in Appendix E of Ex. 324.

In its testimony, ORA stated that ORA "does not oppose the allocation of common costs between the Electric, Electric Generation, and Gas Departments."[2453] In its testimony, ORA also

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2449 Ex. 514, SCG/SDG&E/Update Testimony (UT) (August 2018), Attachment A, line G at p. A-2.

2450 *Id.*, Attachment B, line G at p. B-6.

2451 Ex. 420 ORA/Oh at 7.

2452 *Id.* ORA's representations of SDG&E's and SoCalGas' shared asset allocation requests in Tables 25-3 and Table 25-4 of ORA's testimony appear to be based on the December 2017 version of SDG&E and SoCalGas' shared assets testimony, not the April 6, 2018 version entered into the record as Ex. 324 SDG&E/Vanderhye.

2453 Ex. 420 ORA/Oh at 10.

reproduced SDG&E's segmentation rates from Appendix E of Ex. 324 as Table 25-5 and stated that "Table 25-5 of this exhibit is from SDG&E's testimony and shows SDG&E's common expense segmentation rates, which ORA does not oppose."[2454]

36.5 Reassignment to Capital

SDG&E and SoCalGas charge most of their operating costs directly to either capital or O&M. However, some of the O&M costs associated with A&G expenses, labor overheads (*e.g.* pension and benefits, injuries and damages), and clearing account costs support construction efforts. After SDG&E has determined the portion of costs associated with Electric, Electric Generation and Gas Departments, it begins the capital reassignment process. Since these costs are not charged directly to capital, reassignment to capital rates has been developed based on 2016 base year data. The reassignment follows compliance with the Plant Instructions, Part 101 and Part 201 in the Code of Federal Regulations.[2455] These reassigned costs become part of SDG&E's and SoCalGas' rate base.

For TY2019, the SDG&E O&M reassignment to capital for the Electric Department, the Electric Generation Department and the Gas Department will be determined in the final RO Model but is currently forecasted to be approximately $183,424,000.[2456] O&M reassignment of each Business Segment represent the amount of expenses being transferred to construction projects. The SoCalGas O&M reassignment to capital for expenses being transferred to construction projects will be determined in the final RO Model but is currently forecasted to be approximately $186,209,000.[2457]

The calculation and derivation of the various reassignment rates for each category are discussed in Ex. 324 (at pp. 26-31) and a summary of the capital reassignment rates is set forth in Table JV-11 (SDG&E) and Table JV-12 (SoCalGas) of Ex. 324 (at p. 27).[2458]

ORA reproduced Tables JV-11 and JV-12 of Ex. 324 in its testimony as Table 25-6 (SDG&E) and Table 25-7 (SoCalGas) and indicated that "ORA does not oppose" these rates.[2459]

[2454] *Id.* at 10-11.
[2455] 18 CFR § 101 and § 201 (Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act).
[2456] Ex. 514 UT, Attachment B, line 16 at p. B-1.
[2457] *Id.*, Attachment A, line 16 at p. A-1.
[2458] The capital reassignment rates also are set forth in Appendix E (SDG&E) and Appendix F (SoCalGas) of Ex. 324 SDG&E/Vanderhye.
[2459] Ex. 420 ORA/Oh at 12-13.

ORA, however, arrived at different dollar amounts due to, as ORA explained, "the summation of different expense and capital recommendations made by other ORA witnesses."[2460]

36.6 Allocation to Electric Functions (SDG&E only)

Electric Transmission costs are under the jurisdiction of the FERC, and thus the costs allocated to Electric Transmission are excluded from this GRC. To allocate Electric Department expenses, excluding Electric Generation, between the Electric Distribution and Electric Transmission functions, SDG&E used an allocation method based on labor charges for most O&M accounts.[2461] For capital reassignment and Clearing Accounts, SDG&E used 2016 actual data as described below. The summary of segmentation rates is shown in Appendix E (SDG&E) of Ex. 324.

The labor ratio method has been adopted by FERC and the CPUC for rate setting purposes in prior GRCs. The adoption of this method by SDG&E ensures consistency between state and federal regulatory jurisdictions for the allocation of Electric Transmission expenses separate from Electric Department expenses, excluding Electric Generation.

The SDG&E 2015 SDG&E Annual FERC Form 1, Distribution of Salaries & Wages pages 354-355 (see Ex. 325 SDG&E/Vanderhye at WP-54-FERC) are used for the labor ratio calculations, since this is also filed with the FERC as part of SDG&E's FERC Form 1. The information presented on the Distribution of Salaries & Wages pages is based on detailed analysis of how labor costs would apply to the various functional areas for 2016.

For TY 2019, the total O&M amount allocated to Electric Transmission and excluded from this GRC will be determined in the final RO Model but is currently forecasted to be approximately $82,024,000.[2462] For TY 2019, the total capital amount allocated to Electric Transmission and excluded from this GRC will be determined in the final RO Model but is currently forecasted to be approximately $42,249,000.[2463]

In its testimony, ORA states that it "does not oppose the O&M and capital costs that have been allocated to Electric Transmission for exclusion from this GRC."[2464]

[2460] *Id.* at 14.
[2461] For certain other O&M accounts, such as Account 924.0 (Property Insurance), FERC has established a different allocation methodology, as explained in Ex. 324 SDG&E/Vanderhye at 33.
[2462] Ex. 514 UT, Attachment B, line 17 of p. B-1.
[2463] Ex. 324 SDG&E/Vanderhye at 32.
[2464] Ex. 420 ORA/Oh at 15.

36.7 Conclusion

The identification of shared services and shared asset costs shared with the other utility, Corporate Center and the unregulated affiliates ensures the ratepayer is not subsidizing costs when there is no benefit. Additionally, the process, methodology and derivations of the business segmentation rates and reassignment rates ensure costs to support capital activity are properly adjusted from O&M. Electric Transmission costs are identified, but are not recovered in this proceeding.

The process and methodology of segmentation and reassignments of costs between Electric, Electric Generation and Gas Departments, the reassignment of costs for A&G, labor overheads and Clearing Accounts, and the division of Electric costs into Electric Distribution and Electric Transmission have been accepted by the Commission in past GRCs.[2465] The concept of segmenting and reassigning the common costs also is consistent with FERC guidelines. SDG&E and SoCalGas believe the methodology used and rates computed continue to be appropriate and reasonable, and therefore should be adopted by the Commission to determine the SDG&E and SoCalGas TY 2019 revenue requirement.

37. Rate Base

SoCalGas' projects a Test Year (TY) 2019 rate base of $6.997 billion.[2466] SDG&E projects a TY 2019 rate base of $5.4 billion for Electric and $1.0 million for Gas.[2467] Rate base's four major categories are Fixed Capital, Working Capital, Other Deductions, and Deductions for Reserves.[2468] The Companies determined their weighted average rate base by using the accepted industry practice of calculating a 13-month average.[2469] Capital expenditure information was provided through the annual planning process to determine plant balances.[2470]

[2465] *See, e.g.*, SDG&E's and SoCalGas' 2016 GRC (D.16-06-054 at 157-160, 267-269, Findings of Fact 93-96 and 214-216. See also SDG&E's and SoCalGas' 2012 GRC (D.13-05-010 at pp. 983-984): "None of the other parties take issue with the mapping process, or the segmentation and reassignment rates and processes. We have reviewed the testimony concerning these processes and the rates that SDG&E and SoCalGas used. We adopt as reasonable the mapping processes, the segmentation and reassignment processes, and the segmentation and reassignment rates that SDG&E and SoCalGas use in their GRC applications."

[2466] Exs. 376-378 SoCalGas/Moersen.

[2467] Exs. 379-381 SDG&E/Gentes.

[2468] Ex. 376 SoCalGas/Moersen at 2; Ex. 379 SDG&E/Gentes at 3.

[2469] Ex. 376 SoCalGas/Moersen at 2; Ex. 379 SDG&E/Gentes at 2.

[2470] Ex. 376 SoCalGas/Moersen at 2; Ex. 379 SDG&E/Gentes at 3.

Most of SoCalGas and SDG&E's rate base recommendations are uncontested. TURN challenges one issue from Pat Moersen's rate base testimony for SoCalGas. ORA, TURN, and FEA address issues raised by Craig Gentes' rate base testimony for SDG&E.[2471] The differences in forecast are outlined below.

37.1 Common Issue: AFUDC Rates

TURN challenges both Companies' forecast for allowance for funds used during construction (AFUDC). AFUDC is a component of plant-in-service. It reflects the costs of debt and equity funds used to finance a capital project before that project becomes functional.[2472]

SoCalGas and SDG&E propose using the Companies' authorized rate of return as a reasonable proxy for estimating AFUDC.[2473] The authorized rate of return is generated from the Cost of Capital process and is designed to cover a three-year period.

Using the authorized rate of return as a proxy is consistent with how the Companies have calculated AFUDC in prior GRC proceedings before the Commission, including the 2016 GRC.[2474] In 2017, that authorized rate of return was 8.02% for SoCalGas, and 7.79% for SDG&E.[2475]

TURN, by contrast, proposes to: (1) use the Companies' actual rate of return for 2017; and (2) reduce SoCalGas and SDG&E's AFUDC rates for 2018 and 2019 by 62 and 41 basis points below the Companies' authorized rates of return, respectively.[2476] TURN's proposal is seemingly based on the fact that SoCalGas' and SDG&E's 2017 actual rate of return were 62 and 41 basis points below their authorized rates of return for that year.[2477]

Because TURN's position only considers one year's worth of data, it is inconsistent with prior practice and should be rejected. TURN's proposal to use the actual rate of return for 2017 should likewise be dismissed. The authorized rate of return has been found to be a reasonable proxy for AFUDC; as it covers a typical three-year Cost of Capital time frame.[2478] Forecasts are not selectively updated with isolated actual data during a GRC proceeding because it would

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2471 Ex. 381 SDG&E/Gentes at 1.
2472 *See, e.g.*, Tr. V26:2500:13-17 (Moersen); Tr. V26:2514:27 – 2515:3 (Gentes).
2473 Ex. 378 SoCalGas/Moersen at 1; Ex 381 SDG&E/Gentes at 7; Tr. V26:2501:9-11 (Moersen).
2474 *See, e.g.*, Ex. 381 SDG&E/Gentes at 5 (citing D.16-06-054 at 216).
2475 Ex. 378 SoCalGas/Moersen at 2; Ex. 381 SDG&E/Gentes at 5.
2476 *See* Ex. 494 TURN/Marcus at 72.
2477 *Id.*; *see also* Tr. V26:2505:16-19 (Moersen) (SoCalGas' agrees that its actual AFUDC rate for 2017 was 7.36 percent).
2478 *See, e.g.*, Ex. 381 SDG&E/Gentes at 5 (citing D.16-06-054 at 216).

provide an incomplete picture.[2479] Sometimes the actual rates end up being lower – and sometimes they end up being higher – such as in the second quarter of 2018 for SoCalGas, where the company's actual rate of return was higher than its authorized rate.[2480]

As to TURN's proposal to reduce SoCalGas and SDG&E's AFUDC rates for 2018 and 2019 by 62 and 41 basis points below the Companies' authorized rates of return, TURN's position is unclear.[2481] As noted, TURN is proposing to reduce the Companies' AFUDC rate by the exact basis point difference between the Companies' 2017 authorized rates of return and eventual actual rates of return (62 basis points for SoCalGas, and 41 basis points for SDG&E). Given that, it seems that TURN's proposal is to set the 2018 and 2019 AFUDC rates at 62 and 41 basis points below SoCalGas and SDG&E's 2017 authorized rates; *i.e.*, to use SoCalGas and SDG&E's 2017 actual rates of return as the AFUDC rates for 2018 and 2019.[2482]

But notably, SoCalGas and SDG&E already have new (lower) authorized rates of return for 2018 – 7.34 percent and 7.55 percent, respectively.[2483] If TURN is proposing to set the 2018 and 2019 AFUDC rates at 62 and 41 basis points below SDG&E and SoCalGas' 2017 authorized rates or return, then the figures resulting from TURN's proposal are nearly identical to the already established 2018 authorized rates of return for SDG&E and SoCalGas.[2484] In fact, SoCalGas' authorized rate would be slightly below TURN's recommendation.[2485]

If, on the other hand, TURN is proposing to reduce the Companies' (already-reduced) 2018 authorized rates of return by 62 and 41 basis points, it offers no justification for doing so. The practice in prior GRCs of using the authorized rate of return as a reasonable proxy for AFUDC should be reaffirmed here.

37.2 SDG&E Specific Issues

ORA and FEA raise additional challenges specific to SDG&E's rate base forecast. ORA objects to SDG&E's proposal for electric and gas customer advances for construction (CAC). CACs are cash advances for construction, paid for by third parties and/or customers who have

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2479 *See, e.g.*, D.13-05-010 at 939.
2480 Tr. V26:2502:24 – 2503:3 (Moersen).
2481 *See id.* at 2506:11-20.
2482 *Id.* at 2509:1-18.
2483 *See* Ex. 381 SDG&E/Gentes at 5; Ex. 378 SoCalGas/Moersen at 2.
2484 Tr. V26:2507:27 – 2508: 7 (Moersen); Tr. V26:2516:19-28 (Gentes).
2485 Ex. 378 SoCalGas/Moersen at 2.

requested new business mains and services.[2486] SDG&E forecasted its CAC requirements using a five-year historical average of recorded CAC for routine projects, and recorded activity for planned major projects.[2487] This is consistent with how SDG&E has forecasted CAC in prior GRCs.[2488]

ORA instead recommends a five-year linear regression of historical monthly balances.[2489] But as Mr. Gentes points out, such a linear regression provides an inadequate forecast because it measures the past; it does not necessarily accurately forecast the future. [2490] CAC balances tend to reflect the economic cycle.[2491] The five-year period used by ORA occurred during a business expansion, and featured CAC growth.[2492] But there has never been indefinite economic growth.[2493] Because a linear projection is based on a trend line, it incorrectly assumes that CAC balances will continue to increase indefinitely.[2494]

A five-year historical average, by contrast, smooths out these business fluctuations, providing a reasonable estimate of what could happen in the future.[2495] It also normalizes yearly variability in the CAC balance.[2496] The Commission should thus follow past practice and adopt SDG&E's five-year average for electric and gas CAC.

ORA also objects to SDG&E inclusion of $285,000 in its gas rate base for fuel in storage (*i.e.*, line pack gas).[2497] Yet line pack, when initially installed in a gas pipeline, allows the pipeline to be a used and useful asset. So the inclusion of fuel in storage in rate base is consistent with other rate base inventory assets, such as materials and supplies.[2498] SDG&E has included fuel in storage in its rate base since at least its 1982 GRC.[2499] The Commission explicitly rejected ORA's argument to exclude fuel in storage in SDG&E's 2012 GRC,

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[2486] Ex. 379 SDG&E/Gentes at 17.
[2487] Ex. 381 SDG&E/Gentes at 3.
[2488] *Id.*; Tr. V26:2531:22-25 (Gentes).
[2489] Ex. 381 SDG&E/Gentes at 3.
[2490] Tr. V26:2530:10-13 (Gentes).
[2491] *Id.* at 2525:15 – 2526: 1.
[2492] *Id.* at 2525:20-27.
[2493] *Id.* at 2525:27-28.
[2494] *Id.* at 2530:17-20.
[2495] *Id.* at 2524:15-17; 2527:1-3.
[2496] Ex. 381 SDG&E/Gentes at 3.
[2497] *Id.* at 4.
[2498] *Id.*
[2499] *Id.* (citing D.93892 at 165).

"agree[ing] with SDG&E that since fuel in storage has been included in SDG&E's gas rate base in the past . . . the same treatment should apply in this GRC."[2500]

FEA separately challenges SDG&E's proposed inclusion of the Ocean Ranch Substation Land and Oceanside Substation Land in plant held for future use (PHFU) until those plants are operating. This objection likewise misses the mark. PHFU is primarily land that has been purchased by a utility for later use.[2501] It is included in rate base when there is a reasonably imminent plan for its development. The Commission has previously determined that, for electric distribution property, the maximum period an asset can remain in PHFU is five years – or until such time that the asset is included in a construction project.[2502] Both Ocean Ranch and Oceanside fall within that five-year time frame:

- Oceanside Substation Land was purchased in 2012 and transferred to a construction project in 2017;
- Ocean Ranch Substation Land was purchased in 2013 and transferred to a construction project in 2018.

FEA's position should be rejected.

38. Depreciation

SoCalGas and SDG&E request approval of the depreciation and amortization expenses, and associated revenues, of $606 million,[2503] and $559.6 million,[2504] respectively. The purpose of depreciation and amortization expensing is to provide for the recovery of the original cost of plant, minus the estimated net salvage.[2505] SoCalGas and SDG&E's requested depreciation parameters are conservative and gradual. They were identified from expert depreciation studies, conducted in accordance with the Commission's longstanding Standard Practice (SP) U-4 methodology, to determine service lives, retirement dispersion, and net salvage rates.[2506]

ORA does not object to SoCalGas' recommendations – noting that SoCalGas' proposals include "'partially offsetting requests to extend certain average service lives and to increase

2500 Ex. 381 SDG&E/Gentes at 4 (quoting D.13-05-010 at 902 – 903).
2501 *See* D.84-09-089 at 55.
2502 *See* Ex. 381 SDG&E/Gentes at 6 (citing D.92-12-019 at 66; D.87-12-066).
2503 Ex. 516 Joint Comparison Exhibit (JCE) SCG/JCE at 362.
2504 Ex. 517 SDG&E/JCE at 412.
2505 Ex. 382 SCG/Ngai at iii; Ex. 388 SDG&E/Vanderbilt (adopted by Watson) at iv.
2506 *See* Ex. 382 SoCalGas/Ngai at 4-6 and n.16; Ex. 385 SDG&E/Vanderbilt/Watson at 4.

certain net salvage rates.'"[2507] TURN is the only party to raise objections to SoCalGas' depreciation proposal; Flora Ngai's rebuttal testimony responds to those complaints.[2508]

Matt Vanderbilt conducted SDG&E's depreciation study.[2509] Dane Watson then adopted Mr. Vanderbilt's direct testimony and provided rebuttal support,[2510] after running his own analysis to confirm he could adopt Mr. Vanderbilt's recommendations.[2511] There were three accounts where Mr. Watson accepted ORA's recommendations – wind energy projects, legacy meters, and legacy meter installations.[2512] Because he could not make his own recommendations, Mr. Watson "chose to go with the ORA [recommendations] because it was closer to what I believe was appropriate."[2513] He adopted Mr. Vanderbilt's remaining proposals.[2514] Mr. Watson's rebuttal testimony responds to objections raised by TURN and ORA.[2515]

38.1 Common Issues

TURN broadly objects to all proposed depreciation changes for both SDG&E and SoCalGas, arguing that all 2016 GRC depreciation rates for both Companies should remain in place. TURN does not provide any statistical analysis for why it reflects sound judgment for each individual account to stay at its 2016 GRC depreciation level – or why the 2016 GRC depreciation parameters provide for the adequate recovery of the Companies' original cost of investment.

Instead, TURN relies primarily on the Commission's determination in Southern California Edison Company's (SCE) 2015 GRC regarding the need for SCE to provide sufficient explanation to support a depreciation expert's judgment.[2516] TURN argues that SoCalGas and SDG&E here failed to provide sufficient written description justifying their depreciation recommendations.[2517]

[2507] Ex. 384 SCG/Ngai at 3:13-14 (quoting Ex. 422 ORA/Lambert at 2:7-9).
[2508] Ex. 384 SoCalGas/Ngai.
[2509] *See* Ex. 388 SDG&E/Vanderbilt/Watson at 1.
[2510] Tr. V27: 2596:14-18 (Watson).
[2511] *Id.* at 2605:2-8; 2625:13-16 (Watson).
[2512] *Id.* at 2625:24-26; 2626:10-25.
[2513] *Id.* at 2626:7-9.
[2514] *Id.* at 2625:13-26.
[2515] *See* Ex. 391 SDG&E/Watson.
[2516] Ex. 395 TURN at 11 (addressing 2015 SCE GRC Decision (D.) 15-11-021).
[2517] Ex. 503 TURN/Finkelstein at 1:7-9.

In the 2015 SCE GRC decision, the Commission was primarily focused on SCE's net salvage proposals.[2518] The Commission noted that it had already "warned SCE against over-reliance on judgment without further explanation" in SCE's 2012 GRC proceeding.[2519]

The Commission then discussed the interplay between judgment and statistical analysis in a depreciation study. The Commission found that, "under certain circumstances, expert judgment can and should be used to complement, balance, and even override statistical results or other quantitative, factual information."[2520] But, the Commission continued, an expert witness must be able to explain the quantitative or qualitative basis for his or her judgment.[2521] A statement that "'our judgment suggests X without supporting analysis or explanation cannot meet the burden of proof on a contested issue, particularly if the recommended conclusion conflicts with statistical results and no countervailing evidence is identified."[2522]

In other words, the more that a depreciation expert makes a recommendation based on judgment that conflicts with the underlying data, the more explanation that expert must provide. As detailed below, the Companies here either provided an adequate analysis – or largely did not rely on judgment – in reaching their proposals.

38.1.1 SoCalGas

In making her recommendations, Ms. Ngai considered the mix of curve and life, historical trend, changes in service life, and the resulting reasonableness of the proposal.[2523] Although TURN raises a broad, generalized objection to SoCalGas' proposed changes, TURN seems particularly focused on SoCalGas Accounts 366, 367, and 376.

Account 366 relates to Transmission Structures and Improvements. TURN seemingly objects to SoCalGas' proposal to increase the account's net salvage rate from -40 percent to -45 percent.[2524] But this account has had an actual -208 percent net salvage rate for the last fifteen years.[2525] In addition, SoCalGas is proposing to lengthen the service life for this account by six years. Salvage rates tend to be more negative when service lives are lengthened.[2526] Yet Ms.

[2518] Tr. V27:2620:18-20 (Watson).
[2519] D.15-11-021 at 396.
[2520] *Id.* at 397.
[2521] *Id.* at 397-398.
[2522] *Id.* at 398.
[2523] Tr. V27:2581:12-23; 2559:21-23 (Ngai)
[2524] *See* Ex. 384 SCG/Ngai at 9.
[2525] Tr. V27:2579:1-3 (Ngai).
[2526] Ex. 384 SCG/Ngai at 8:6-9.

Ngai did not believe that the net salvage rate would remain at -208 percent.[2527] So she proposed a mere 5 percent increase – a gradual change, given the above factors.[2528]

Account 367 is for transmission mains. It is one of SoCalGas' largest transmission accounts.[2529] In addition to direct testimony and workpapers, the account was thoroughly addressed in Ms. Ngai's rebuttal testimony.[2530] TURN objects to SoCalGas' proposals to change the account's net salvage rate and to maintain the account's current average service life.

With regard to Account 367's net salvage rate, SoCalGas proposes a five percent increase from -60 to -65 percent.[2531] SoCalGas is undertaking two major pipeline replacement programs; the Pipeline Integrity Program and PSEP.[2532] These programs' replacement of transmission mains has led to "sharp increases" in net salvage rates for this account,[2533] ranging from -238.14 to -904.22 percent between 2012-2015.[2534] Nevertheless, Ms. Ngai limited the impact of that increase, proposing only a five percent change in future net salvage rate.

TURN also appears to take issue with Ms. Ngai maintaining the current life/curve for Account 367 because that curve is the 14th ranked in Ms. Ngai's statistical study.[2535] Although TURN's proposal to retain the 2016 GRC depreciation rates would retain this same life/curve, TURN protests that "'[i]n terms of visual fit, the 64 R3 curve does not seem a strong" candidate.[2536]

But, as Ms. Ngai details, choosing a curve depends on the interaction of the curve and average service life,[2537] as well as the reasonableness of the proposed outcome.[2538] For Account 367, Ms. Ngai recommends retaining the 2016 GRC authorized life/curve of 64 R3 – because the higher ranked 78 R2.5 curve would require extending the average service life for the account's transmission mains by 14 years.[2539] Ms. Ngai did not find any changes in technology, regulatory

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2527 Tr. V27:2579:4-8 (Ngai).
2528 *Id.* at 2579:13-17.
2529 *Id.* at 2552:26 – 2553:4.
2530 *Id.* at 2593:10-17.
2531 Ex. 384 SCG/Ngai at 10.
2532 Tr. V27:2584:26 – 2585:6 (Ngai).
2533 Ex. 384 SCG/Ngai at 10:7-9.
2534 Tr. V27:2569:24 – 2570:5 (Ngai).
2535 Ex. 384 SCG/Ngai at 11:18-19.
2536 *Id.* at 11 (quoting Ex. 503 TURN/Finkelstein at 9).
2537 Tr. V27:2558:20-23 (Ngai).
2538 *Id.* at 2559:21-23.
2539 Ex. 384 SCG/Ngai at 12:5-9.

requirements, or other reason to suggest such a significant increase in average service life was warranted. Instead, the aforementioned pipeline replacement programs are leading to an increased retirement of transmission mains.[2540] Given this, Ms. Ngai reasonably concluded that it was more sensible to maintain the current average service life, leading her to recommend retaining the same life/curve.[2541]

TURN also focuses on Ms. Ngai truncating Account 367's data at 44 years to reach her life/curve recommendation. Truncation "is generally used to mathematically perform automatic visual fitting of the standard Iowa curves to actual data."[2542] Truncation helps in the selection process if the historical data does not provide reasonable results[2543] – by putting a greater emphasis on younger assets, and less reliance on historical data.[2544]

Again, Ms. Ngai's believed it reasonable to maintain the average service life for this account. She found from her study that the current 64 R3 life/curve fit the data well through age 44, and so truncated the data at that age.[2545] She only did so after identifying what she believed in her judgment was the best fit after "going through multiple iterations and different matching" possibilities, which she detailed graphically in her workpapers.[2546]

Account 376 is for distribution mains. It is another one of SoCalGas' larger accounts.[2547] TURN, again, focuses on SoCalGas' proposal to maintain the same life/curve for this account – even though TURN's proposal to keep the 2016 GRC depreciation parameters would also result in using this same average service life.[2548]

Nevertheless, although SoCalGas acknowledged that the selected 68 R3 life/curve is the 13th ranked account, and that its proposal will increase the depreciation expense for this account by $1.64 million,[2549] Ms. Ngai again adequately explained her reasoning. She believed it was reasonable to maintain the current average service life. Choosing the R3 curve over the R2.5

[2540] Tr. V27:2586:16-18 (Ngai).
[2541] *Id.* at 2586:16-27.
[2542] Ex. 384 SCG/Ngai at 12:1-2.
[2543] Tr. V27:2586:6-8 (Ngai).
[2544] *Id.* at 2587:11-17.
[2545] Ex. 384 SCG/Ngai at 12:4-5.
[2546] Tr. V27:2584:2-3 (Ngai).
[2547] *Id.* at 2552:26 – 2553:4.
[2548] Ex. 384 SCG/Ngai at 12.
[2549] Tr. V27:2571:14-26 (Ngai).

curve did so.[2550] Choosing the higher ranked 89 R2.5 curve, by contrast, would "suggest lengthening the average service life by 21" years.[2551] Ms. Ngai found such a marked increase in service life unreasonable.[2552] Again, there were no identifiable factors that would support such an increased change in average life.[2553]

Nor is TURN correct in its desire to focus solely on plastic mains, rather than SoCalGas' decision to examine the average service lives for this account by combining plastic and steel mains. The assets in this account have long-lives.[2554] Yet plastics only began being used in the 1970s. Steel mains have been in existence since the early 1900s. In these circumstances, it is reasonable to combine plant subaccounts with similar characteristics or operations functions to form a single account.[2555] In short, the chosen R3 curve maintained the 68-year average service life from the 2016 GRC,[2556] and was a "small modification" to the current R2.5 curve.[2557]

38.1.2 SDG&E

As with SoCalGas, TURN brings a generalized challenge to all of SDG&E's recommended depreciation changes, arguing that SDG&E's 2016 GRC depreciation rates should remain in place.[2558] And, as with SoCalGas, TURN does not provide any statistical basis for contending that the 2016 GRC depreciation rates adequately ensure the recovery of the original cost of investment.

Instead, TURN again relies upon the Commission's 2015 GRC SCE decision, contending that SDG&E has failed to provide sufficient analysis to support its judgment. TURN makes much of the fact that Mr. Watson was SCE's depreciation witness in that GRC proceeding.[2559]

But this argument, again, falls short. As noted, the Commission's 2015 SCE decision laid out a sliding scale between judgment and quantitative analysis – the more that a proposal differs from the statistical analysis, the more explanation is required.[2560] As Mr. Watson points

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[2550] *See* Ex. 384 SCG/Ngai at 12:17-18.
[2551] *Id.* at 12:18-21.
[2552] Tr. V27:2573:12-16 (Ngai).
[2553] Ex. 384 SCG/Ngai at 12.
[2554] *Id.* at 12:21-23.
[2555] *Id.* at 12:24-25 (citing Ex. 381 SCG/Ngai at 8:9-10).
[2556] Tr. V27:2574:13-19 (Ngai).
[2557] Ex. 384 SCG/Ngai at 6.
[2558] Tr. V27:2603:14-21 (Watson).
[2559] *See, e.g.*, *id.* at 2612:3-7.
[2560] D.15-11-021 at 397-398.

out, that discussion of judgment is largely inapplicable to SDG&E here because Mr. Vanderbilt applied minimal, if any, judgment in a large number of his depreciation selections.[2561]

According to Mr. Watson, when a depreciation expert picks the top ranked, full placement band, judgment is not involved because the expert is simply picking the highest ranked statistical choice out of one set of data.[2562] Judgment comes into play when a depreciation expert does not pick the top ranked statistical choice. Or when an expert is comparing multiple placement or experience bands that allow an expert to prioritize more recent retirement experience with the account,[2563] trying to "understand the pattern of life through time,"[2564] and then making decisions such as shortening the life of the account based on those comparisons.[2565] In other words, when a depreciation expert runs multiple bands, they must use their judgment to pick one.[2566]

This is akin to what Mr. Watson did in the SCE 2015 GRC. There, Mr. Watson often used visual fitting (rather than statistics), providing even more choices that require the depreciation expert's judgment.[2567]

By contrast, Mr. Vanderbilt here employed minimal judgment. His approach was entirely statistically based.[2568] He only ran full placement bands, meaning there was only one set of data to analyze.[2569] So when he selected the top ranked band there "was no judgment [because] [i]t was exactly what the statistics said."[2570]

With the overwhelming number of electric distribution accounts where a top ranked standard statistical choice was available, Mr. Vanderbilt picked the top-ranked curve.[2571] He selected the highest-ranking standard curve produced by his statistical analysis for 11 of 14 electric distribution accounts,[2572] representing over 83 percent of SDG&E's total request.[2573]

[2561] Tr. V27:2652:8-20 (Watson).
[2562] *Id.* at 2652:4-7.
[2563] *Id.* at 2655:1-3.
[2564] *Id.* at 2656:21-27.
[2565] *Id.* at 2653:23-28.
[2566] *See id.* at 2657:5-13.
[2567] *Id.* at 2657:14-17.
[2568] *Id.* at 2657:18-22.
[2569] *Id.* at 2624:25-26.
[2570] *Id.* at 2652:20-21.
[2571] *Id.* at 2652:4-7.
[2572] *Id.* at 2652:16-20.
[2573] *Id.* at 2647:1-2.

Of those three remaining three electric distribution accounts, Mr. Watson accepted ORA's proposal for the Legacy Meter accounts.[2574] On a second – Account E365 – the data provided a poor statistical match to determine an appropriate curve,[2575] because SDG&E's actual experience with the assets in this account is "not smooth."[2576] This results in being unable to create a continually observed life table curve.[2577] As a result, Mr. Vanderbilt chose a curve that was visually appropriate.[2578] And on the third account, E361, he selected the second ranked curve. So, as Mr. Watson stated, "effectively 13 out of the whole 14 [accounts] in [electric] distribution had basically no judgment related to the life analysis."[2579] In addition, little, if any judgment was used for other, smaller accounts, as evidenced by Mr. Vanderbilt's workpapers.

TURN also raises its generalized objection to SDG&E's net salvage proposals. But as Mr. Watson detailed in his rebuttal testimony, SDG&E's proposed net salvage rates are below SDG&E's five-year average of actual net salvage rates for each account.[2580] In fact, most proposals are at or below the actual five-year average that SDG&E experienced before the 2016 GRC.

Table DAW-13: Net Salvage Summary

Account	2012 GRC	2016 GRC	2019 GRC	5-yr Avg. 2016 GRC	5-Yr Avg. 2019 GRC
E366	-40%	-50%	-75%	-90.24%	-101.09%
E367	-55%	-65%	-90%	-96.55%	-116.43%
E369.1	-90%	-110%	-137.5%	-179.20%	-219.95%
E369.2	-70%	-75%	-100%	-113.42%	-229.17%
E373.2	-70%	-85%	-110%	-157.71%	-187.25%
E397	-15%	-50%	-75%	-128.23%	-132.88%
G366	0%	0%	-25%	-950.67%	-579.18%
G367	-5%	-25%	-50%	-41.61%	-55.59%
G376	-45%	-55%	-80%	-70.58%	-121.77%

2574 *Id.* at 2652:24-26.
2575 *Id.* at 2648:2-5.
2576 *Id.* at 2645:20-23.
2577 *Id.* at 2646:4-10.
2578 *Id.* at 2658:5-7.
2579 *Id.* at 2652:26 – 2653:1.
2580 Ex. 391 SDG&E/Watson at 19:3-4, Table DAW-13.

G378	-15%	-25%	-50%	-50.93%	-77.05%
G380	-75%	-70%	-95%	-109.99%	-173.11%

As Mr. Watson states, "gradualism is the incremental movement toward the actual experience" of the company at issue.[2581] The proposals reflect that here.

TURN also takes issue with SDG&E's proposed average services lives for two specific accounts, Accounts E398.2 and E370.1/E370.2.[2582] Accounts E370.1/E370.2 are the legacy meter accounts – where Mr. Watson accepted ORA's recommendation.[2583] Account E398.2 is a new account for electric vehicle charging stations. SDG&E relied on an 823-page study from Sargent & Lundy, a nationally recognized engineering firm, which determined that a 5-year life was appropriate.[2584] TURN, by contrast, recommends a 10-year life, based upon information from SDG&E's electric vehicle charging pilot program application.[2585] But Sargent & Lundy's determination was based upon its study of the type of assets and pace of technological change at issue, as well as from benchmarking other studies.[2586] It should be adopted.

38.2 SDG&E Specific Issues

ORA also challenged several of SDG&E's requested depreciation lives and proposed increases in net salvage rates. Although, as noted, Mr. Watson accepted ORA recommended survivor curves for the WEP and legacy meter accounts,[2587] disagreements remain.

ORA challenges SDG&E's recommended depreciation life for the Desert Star Energy Center. SDG&E proposes to increase the depreciation rate to 5.57 percent. This results from reducing the retirement life by three years to accurately reflect that SDG&E's Desert Star lease expires in mid-2026 – instead of mid-2029, the date originally used to set Desert Star's depreciation rate.[2588]

ORA, by contrast, argues that SDG&E should be bound to that 2029 date, based on "fail[ing] to conduct basic due diligence" in immediately recognizing that the lease expires in

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2581 *Id.* at 18:23-24.
2582 *Id.* at 14:17-18.
2583 *See id.* at 4-7.
2584 Tr. V27:2641:2-4 (Watson).
2585 Ex. 391 SDG&E/Watson at 20:4-6.
2586 Tr. V27:2642:8-13 (Watson).
2587 Ex. 391 SDG&E/Watson at 4-8.
2588 Ex. 517 SDG&E/JCE at 270.

2026 – even though ORA does not dispute that the lease expires that year.[2589] But, as Mr. Watson states in his rebuttal testimony, "ORA offers no precedent or support for why an inaccurate depreciation rate should purposefully be used as a penalty."[2590] A depreciation rate's purpose is to recover the original cost of an investment. SDG&E's investment in Desert Star was approved by the Commission. Yet ORA's proposal would prevent SDG&E from recovering a portion of the cost of that investment.[2591]

ORA also challenges six of SDG&E's proposed net salvage rate increases. ORA relies on a 15-year average to calculate net salvage.[2592] Yet as Mr. Watson discussed, the "normal depreciation standard is to analyze short, medium, and long averages (*e.g.*, 3, 5, and 10-year averages), to look for changes or trends in the actual experience of a company."[2593] And as he detailed, SDG&E's net salvage proposals are reasonable in light of the recent actual net salvage rates for those accounts:

- E365 (OH Conductors and Devices): SDG&E's -70 percent proposal is in line with the actual net salvage rate for this account over the last 15 years;
- E366 (UG Conduit): SDG&E's -75 percent proposal is below the actual net salvage rate for all bands in this account except the 15-year band – and the 15-year band is only less negative because of a single transaction 15 years ago;
- E367 (UG Conductors and Devices): SDG&E's -90 percent proposal reflects the steadily increasing removal costs for this account over the last decade;
- E368.2 (Capacitators): SDG&E's -95 percent proposal reflects the continuously more negative actual net salvage rate for his account, particularly in the last five years;
- E371 (Installations on Customer Premises): SDG&E's proposed 106.25 percent proposal reflects the fact that SDG&E has experienced more than -100 percent net salvage for this account for the last six years;
- E373.2 (Street Lighting & Signal Systems): SDG&E's proposed -110 percent proposal reflects that all bands for this account through the last 11 years have exhibited a more negative net salvage rate than SDG&E's recommendation.[2594]

39. Taxes

SoCalGas proposes a Test Year (TY) 2019 income tax expense of $48.2 million, payroll tax expense of $ 48.8 million, *ad valorem* (property) tax expense of $77.6 million, and franchise

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[2589] Ex. 422 ORA/Lambert at 10:21-24.
[2590] Ex. 391 SDG&E/Watson at 3:18-23.
[2591] *Id.*
[2592] *Id.* at 7 (citing Ex. 424 ORA/Lambert at 7).
[2593] Ex. 391 SDG&E/Watson at 7:8-10.
[2594] *Id.* at 8-14.

fees expense of 39.1 million.[2595] SDG&E recommends a TY 2019 income tax expense of $80.8 million, payroll tax expense of $18.3 million, property tax expense of 104.7 million, and franchise fees expense of $69.3 million.[2596]

Ragan Reeves' testimony in support of SoCalGas and SDG&E's proposals focuses on the three categories of taxes that SDG&E and SoCalGas incur — income taxes, payroll taxes, and property taxes — along with franchise fees.[2597] Mr. Reeves revised his direct testimony to reflect the Tax Cuts and Jobs Act (TCJA)'s impacts on April 6, 2018 on SDG&E and SoCalGas' TY 2019 GRC.

ORA does not challenge SoCalGas and SDG&E's forecast for income taxes, property taxes, or franchise fees. Mr. Reeves' rebuttal testimony for SoCalGas addresses issues raised by ORA and TURN.[2598] His SDG&E rebuttal responds to matters raised by ORA, TURN, and FEA.[2599]

On August 24, 2018, Mr. Reeves submitted update testimony that: (1) updates SDG&E and SoCalGas' proposed payroll and property tax forecasts; (2) corrects a formula error in SDG&E and SoCalGas' property tax forecasts; (3) discusses new Internal Revenue Service (IRS) proposed regulations related to the TCJA's bonus depreciation rules; and (4) provides an estimate of the TCJA's 2018 revenue requirement impact for SoCalGas and SDG&E.[2600]

39.1 Common Issues

39.1.1 Payroll Tax Rate

ORA's sole objection to SoCalGas and SDG&E's TY 2019 tax forecasts is the Companies' payroll tax rate calculations. But, as outlined in Mr. Reeves' update testimony, the Companies' updated payroll tax rate calculations are largely in line with ORA's 2018 proposed rates.

SoCalGas and SDG&E determine their payroll tax rates using the Social Security Administration's (SSA) projected Old-Age, Survivors, and Disability Insurance (OASDI) wage base limitations for 2018 and 2019.[2601] The Companies update those payroll projections when

[2595] Exs. 261-264 SCG/Reeves; SCG/SDG&E/Reeves Update Testimony (UT) (August 2018) at 13-22.
[2596] Exs. 265-267 SDG&E/Reeves; Ex. 514 Reeves UT at 13-22.
[2597] Ex. 261 SCG/Reeves at 1; Ex. 265 SDG&E/Reeves at 1.
[2598] Ex. 264 SCG/Reeves at 1.
[2599] Ex. 267 SDG&E/Reeves at 1.
[2600] Ex. 514 Reeves UT at 13-22.
[2601] *See* Ex. 264 SCG/Reeves at 4; Ex. 267 SDG&E/Reeves at 5.

the SSA provides its actual OASDI wage base limit for a relevant year.[2602] This is consistent with the Companies' method in previous GRCs.[2603] In 2012, the Commission observed that the Companies' method for the "forecasts of [] payroll taxes are reasonable" and should be used.[2604]

When the Companies filed their TY 2019 GRC applications, the SSA's projected wage base limit for 2018 and 2019 as published in the SSA's 2017 Annual Report was $130,500 and $135,600, respectively.[2605] Based on this, SoCalGas proposed a composite payroll tax rate for TY 2019 of 7.44 percent;[2606] SDG&E, 6.66 percent.[2607]

In response, ORA recommended calculating the Companies' payroll tax rate with different wage base limitations. For 2018, ORA used the Office of Retirement and Disability Policy's 2018 wage base limit of $128,400.[2608] For 2019, it employed a complicated formula that resulted in a $132,300 limit.[2609] This led to ORA's proposed composite tax rates: for SoCalGas, 7.40 percent for both 2018 and 2019, and for SDG&E, 6.61 and 6.60 percent for 2018 and 2019.[2610]

After the Companies filed their applications, the SSA published its actual 2018 wage base limit of $128,400.[2611] SoCalGas and SDG&E recalculated their payroll tax rate with this actual limit in their update testimony, resulting in a payroll tax rate forecast for 2019 of 7.41 percent for SoCalGas, and 6.64 percent for SDG&E.[2612] This, again, largely mirror's ORA's forecasted rates.

As Mr. Reeves' update testimony noted, the SSA also provided a revised forecast of the wage base limitation for 2019, which remains subject to further changes.[2613] The Companies did not update their 2019 payroll tax rate to reflect the SSA's revised forecast, however, because

[2602] Ex. 514 Reeves UT at 13-14.
[2603] Ex. 264 SCG/Reeves at 5; Ex. 267 SDG&E/Reeves at 6; Tr.V25:2428:5-11 (Reeves).
[2604] *Id*., Ex. 264 at 5 (quoting Decision (D.) 13-05-010 at 939).
[2605] Ex. 267 SDG&E/Reeves at 5.
[2606] Ex. 514 Reeves UT at 14.
[2607] *Id.*
[2608] Ex. 264 SCG/Reeves at 4 (citing Ex. 397 ORA/Oh at 7); Ex. 267 SDG&E/Reeves at 5 (citing Ex. 397 ORA/Oh at 7).
[2609] *Id.*
[2610] *Id.*
[2611] Ex. 514 Reeves UT at 13.
[2612] *Id.* at 14
[2613] *Id.* at 14, n.20.

forecasts are not updated during a GRC proceeding. Such updated forecasts would provide an incomplete picture unless all forecasts were regularly updated.[2614]

The Commission should adopt SDG&E and SoCalGas' updated proposals and reaffirm that using the SSA's actual wage base limitations — if known for a specific year — and the SSA's forecasted wage base limitations for future years as of the filing date of the application is the appropriate method for forecasting the Companies' payroll tax rates.

39.1.2 Tax Memorandum Accounts

ORA and FEA also recommend extending SDG&E and SoCalGas' Tax Memorandum Accounts (TMA). ORA suggests that the TMA should incorporate changes to deferred income taxes and other functional accounts that are impacted by the tax law, and that the Companies should be required to file an annual advice letter to make appropriate revenue adjustments if tax changes result in significant balances.[2615]

SoCalGas and SDG&E initially proposed in Mr. Reeves' direct testimony to not extend the TMAs for the 2019 GRC cycle. Alternatively, the Companies proposed continuing the TMA if the Commission believed that TMAs are necessary for the 2019 GRC cycle — but asked that the Commission reaffirm that a TMA is not intended to be a true-up mechanism for taxes.[2616]

Because of the uncertainties surrounding the TCJA's impacts, SoCalGas and SDG&E subsequently proposed in their rebuttal testimony that the Commission adopt the Companies' alternative proposal and continue the TMAs.[2617] In so doing, the Companies further requested that the Commission reaffirm that a TMA is not intended to track differences between forecasted and incurred tax expenses that are caused by events unrelated to tax changes.[2618] As the Commission recently held, a TMA is not supposed to be a "'true-up mechanism.'"[2619] Instead, it provides insight into "the revenue impacts caused by the utilities' implementation of various tax laws, tax policies, tax accounting changes, or tax posture changes.'"[2620]

[2614] *See, e.g.*, D.13-05-010 at 939.
[2615] Ex. 516 SCG/JCE at 266; Ex. 517 SDG&E/JCE at 274.
[2616] *See* Ex. 264 SCG/Reeves at 7-8; Ex. 267 SDG&E/Reeves at 7-8.
[2617] *See id.*
[2618] *Id.*
[2619] *See, e.g.*, Ex. 267 SDG&E/Reeves at 10 (quoting D.17-05-013 at 226-227).
[2620] *Id*. at 10 (quoting D.16-06-054 at 196).

Given the uncertainties surrounding both the TCJA's impacts and the scope of the TMA, the Companies believe it is premature to decide on how to dispose of future TMA balances.[2621]

39.1.3 Amortization Method for Unprotected Excess Accumulated Deferred Income Taxes

SoCalGas and SDG&E propose returning excess accumulated deferred income taxes (ADIT) from unprotected, plant-based assets using the average rate assumption method (ARAM).[2622] TURN and FEA disagree and make separate proposals.

ADIT results from the timing difference between the income or expense recognition between tax law and book accounting rules. SoCalGas and SDG&E have recomputed their ADIT balances as of January 1, 2018 to reflect the reduction of the federal corporate income tax rate from 35% to 21% under the TCJA. The TCJA's reduction in the corporate tax rate increased the amount of excess ADIT. The difference in the ADIT balance under the old tax rate versus under the new tax rate represents the excess ADIT created by the TCJA.[2623]

There are two types of excess ADIT: protected and unprotected. Protected ADIT is subject to the IRS's normalization rules and primarily results from the accelerated tax depreciation of a utility's plant investment.[2624] Unprotected ADIT is not subject to accelerated tax depreciation or to the IRS's normalization rules.[2625]

Excess ADIT can be a deferred tax asset (DTA) to SoCalGas and SDG&E, or a deferred tax liability (DTL).[2626] A DTA results when a book expense for an item accrues before that item is tax deductible. A DTL is the opposite — the item is tax deductible before the book expense is accrued.[2627] So a DTA is a future cost to ratepayers; a DTL, a future benefit.[2628] For example, an asset's cost of removal is a DTA, because those costs are not incurred and thus are not deductible for tax purposes until the plant is removed.[2629]

The parties agree that:

- Excess ADIT must be returned to ratepayers; 2630

2621 Ex. 264 SCG/Reeves at 11-12; Ex. 267 SDG&E/Reeves at 12-13
2622 *Id.*, Ex. 264 at 15; Ex. 267 at 15-16.
2623 *See, e.g.*, Ex. 261 SCG/Reeves at 20; Tr. V25:2434:10-13 (Reeves).
2624 Ex. 261 SCG/Reeves at 22; Ex. 264 SDG&E/Reeves at 23.
2625 Tr. V25:2435:28 – 2436:10 (Reeves).
2626 Ex. 264 SCG/Reeves at 15; Ex. 267 SDG&E/Reeves at 16.
2627 *Id.*
2628 Tr. V25:2439:7-12 (Reeves).
2629 Ex. 264 SCG/Reeves at 15; Ex. 267 SDG&E/Reeves at 16; Tr. V25:2438:21-25 (Reeves).
2630 Tr. V25:2434:14-18 (Reeves).

- Protected excess ADIT is subject to the IRS's normalization rules and must be returned to ratepayers by applying ARAM;2631 and
- The Commissions may determine how unprotected excess ADIT should be returned.[2632]

As noted, SoCalGas and SDG&E propose returning unprotected, plant-based excess ADIT using the same ARAM method that is applied to protected excess ADIT. This would effectively return the excess ADIT over the remaining life of the associated plant.[2633]

The reason for this proposal is as follows. The excess ADIT associated with cost of removal is a DTA. The other three unprotected categories of excess ADIT result in a net DTL.[2634] But, because cost of removal is overwhelmingly the largest category of unprotected excess ADIT, the Companies' overall unprotected excess ADIT is a DTA.[2635] As such, the Companies' proposal:

- Provides consistency in the treatment of all plant-based ADIT;
- Reduces the chance of unfairness between current and future ratepayers, given that the repayment period corresponds to the book like of the plant at issue; and
- Minimizes the annual cost to ratepayers and results in a slower payback period, since the unprotected excess ADIT is a DTA and thus a future cost to ratepayers.[2636]

The proposal is also consistent with prior GRCs, where unprotected, plant-based assets were given ARAM treatment.[2637]

TURN and FEA make separate proposals that differ from those presented by the Companies. TURN proposes to return the unprotected excess ADIT over six years — **except for cost of removal**.[2638] TURN separately proposes to return cost of removal by applying ARAM; presumably because cost of removal is a DTA.[2639]

But in so doing, TURN inconsistently treats the different categories of unprotected excess ADIT — with no explanation other than maximizing near-term benefit to ratepayers.[2640] This

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2631 *Id*. at 2435:3-16.
2632 *Id.* at 2414:9-12.
2633 *See* Ex. 264 SCG/Reeves at 16; Ex. 267 SDG&E/ Reeves at 17; Tr.V25:2437:26 – 2438:1 (Reeves).
2634 Tr. V25:2437:8-25 (Reeves).
2635 *See* Ex. 264 SCG/Reeves at 15; Ex. 267 SDG&E/Reeves at 16.
2636 *Id.*, Ex. 264 at 15-16; Ex. 267 at 16-17.
2637 *Id.*, Ex. 264 at 16; Ex. 267 at 16.
2638 Tr. V25:2440:14:18 (Reeves).
2639 *See* Ex. 494 TURN/Marcus at 83.
2640 *See* Ex. 264 SCG/Reeves at 17; Ex 267 SDG&E/Reeves at 18.

could harm future ratepayers, who would be responsible for bearing the costs of removal.[2641] Nor, as noted, is it consistent with how unprotected assets have been treated in prior GRCs.

FEA, by comparison, proposes to return all unprotected excess ADIT to ratepayers over 10 years. This would result in an **increased** immediate cost to ratepayers, given that the unprotected excess ADIT, taken together, is a DTA. The Commission should thus follow past practice and specify that all excess ADIT should be returned using ARAM.

39.1.4 The TCJA's Impact on Including New Cost of Removal Book Accruals in the ARAM Calculation

TURN also takes issue with SoCalGas and SDG&E's interpretation of the TCJA that costs of removal accrued after December 31, 2017 should be excluded from the Companies' ARAM calculation. Yet TURN's proposed method for addressing this issue largely mirrors that of the Companies.

Although the TCJA specifies that excess protected ADIT are subject to IRS normalization rules and must be returned using ARAM, the TCJA does not explain whether ARAM should be calculated using the entirety of book depreciation; or whether new removal costs incurred after December 31, 2017 should be excluded.[2642] SoCalGas and SDG&E believe that the TCJA's ARAM rules are most logically read to exclude those new removal costs — because the TCJA's ARAM definition only applies to historical tax reserves, and the cost of removal does not arise until a plant is removed.[2643] So the cost of removal does not involve the recovery of the original cost. It is a future event.[2644]

TURN seemingly takes issue with that interpretation. TURN proposes that the Commission should: (1) order that the Companies obtain an IRS private letter ruling on whether cost of removal should be included; and (2) require that the Companies track the difference between including and excluding the cost of removal in their respective TMAs.[2645]

But the Companies' position on this issue largely tracks TURN's proposal. Southern California Edison (SCE) has already sought a private letter ruling from the IRS on whether cost of removal should be included. SoCalGas and SDG&E will abide by the IRS' private letter

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2641 *Id.*
2642 *Id.,* Ex. 264 at 12; Ex. 267 at 13.
2643 *Id.,* Ex. 264 at 13; Ex. 267 at 13-14.
2644 *Id.*
2645 *Id.,* Ex. 264 at 13-14 (quoting Ex. 494 TURN/Marcus at 82); Ex. 267 at 14 (quoting Ex. 494 TURN/Marcus at 82).

ruling to SCE — unless the IRS issues further general guidance.[2646] And the Companies will track any differences in their TMAs.[2647]

39.2 SoCalGas Specific Issues

TURN also raises issues specific to SoCalGas and SDG&E, including challenging SoCalGas' property tax and franchise fees forecasts.

39.2.1 Property Taxes

As noted, SoCalGas' update testimony corrected a formula error that was discovered when responding to a TURN data request.[2648] Any remaining disagreement TURN has with SoCalGas' property tax forecast largely stems from a misunderstanding. TURN, relying upon unadjusted property tax figures that SoCalGas provided to an earlier data request response, used SoCalGas' unadjusted, total recorded property taxes to produce its forecast.[2649] But, as in prior GRCs, property taxes must be adjusted to only include GRC items. SoCalGas uses GRC-adjusted figures to ensure that the forecast only include the property taxes projects and assets within the scope of the GRC.[2650] SoCalGas provided this "correct" adjusted data in response to a TURN data request made after SoCalGas rebuttal testimony was served.[2651] Once those adjusted figures are used, TURN's recommendation results in no material impact compared to SoCalGas' forecast.[2652]

39.2.2 Franchise Fees

TURN also objects to SoCalGas' franchise fee forecast. SoCalGas propose a franchise fee factor of 1.3720 percent for TY 2019, based on a five-year average of franchise fee percentages.[2653] This, again, is consistent with how SoCalGas has forecast franchise fees in previous rate cases.[2654]

TURN proposes a franchise fee factor of 1.29% for TY 2019, based upon a two-year average of franchise fee percentages from 2016-2017.[2655] This proposal includes actual

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2646 Tr. V25:2430:10-26 (Reeves).
2647 *Id.* at 2432:24 – 2433:1.
2648 Ex. 514 Reeves UT at 14-15.
2649 Tr. V25:2448:16-21 (Reeves).
2650 Ex. 264 SCG/Reeves at 21.
2651 Tr. V25:2448:1-15 (Reeves).
2652 Ex. 264 SCG/Reeves at 23.
2653 *Id.*
2654 Tr. V25:2457:19-23 (Reeves).
2655 Ex. 264 SCG/Reeves at 23 (quoting Ex. 494 TURN/Marcus at 96).

franchise fee amounts from 2017 that were not available when SoCalGas prepared its forecast.[2656]

Although SoCalGas agrees that franchise fee percentages have been declining over the last five years, TURN's proposal uses an arbitrary, two-year timeline.[2657] The two-year time frame unnecessarily increases the volatility of the forecast — without explanation for why such volatility is justified.[2658] And accepting TURN's proposal would create confusion regarding what standard should apply in calculating franchise fees for future GRCs.

In addition, the use of 2017 actual data would violate the general rule that selectively updating the GRC forecast with isolated actual amounts is inappropriate, because it "'ignores the fact that while certain costs may be lower than expected, other costs are higher than expected and there is no provision to reflect those instances.'"[2659] As such, SoCalGas' forecast — based upon a five-year historical average that is consistent with past precedent — should be accepted.

39.3 SDG&E Specific Issue — Property Taxes

Although SDG&E also corrected its property tax formula error,[2660] TURN continues to challenge SDG&E's property tax proposal. SDG&E uses a five-year trend of historical property tax rates for its forecast;[2661] meaning that SDG&E takes an average of the difference in tax rates between the beginning and ending of that five-year period.[2662] In other words, it is an average of the increase or decrease in rates over that time frame.[2663] This is consistent with how SDG&E has calculated its property tax forecast in previous GRCs.[2664]

After filing its application, SDG&E received its 2017 property tax valuations and property tax rates.[2665] To reflect this, SDG&E updated its five-year average to include the years from 2013-2014 through 2017-2018.[2666]

2656 *Id.* at 24.
2657 Tr. V25:2458:15-19 (Reeves).
2658 Ex. 264 SCG/Reeves at 24.
2659 *Id.* (quoting D.13-05-010 at 939).
2660 Ex. 514 Reeves UT at 14-15.
2661 Tr. V25:2450:4-13 (Reeves).
2662 *Id.* at 2453:24 – 2454:2.
2663 *Id.* at 2455:16-20.
2664 Ex. 264 SCG/Reeves at 22.
2665 Ex. 514 Reeves UT at 15.
2666 *Id.* at 15-16.

TURN proposes a shorter, four-year trend period from 2014-2015 through 2017-2018. By doing so, TURN excludes 2013-2014 to 2014-2015—the year with the largest single-year increase in SDG&E 's property tax rates over SDG&E's five-year period.[2667] This allows TURN to arrive at a lower forecast.[2668]

But TURN does not offer any justification for its four-year approach, other than the end result of lowering the property tax rate. TURN does not explain why the Commission should ignore its prior precedent.

Moreover, TURN's counterproposal for SDG&E is based upon a different methodology than it used to forecast property tax rates for SoCalGas. If TURN's position were adopted, it would be unclear what standard should apply in future GRCs, perhaps resulting in all parties proposing different forecasts that maximize their short-term position.

40. Working Cash

SoCalGas' and SDG&E's Working Cash testimony and workpapers, supported by witnesses Karen Chan and Steven Dais, describe and justify the utilities' Test Year (TY) 2019 working cash requirements to compensate investors for providing funds committed to operating expenses in advance of receiving the offsetting customer revenues.[2669]

The Joint Comparison Exhibits (JCE) for SoCalGas and SDG&E summarize each utility's request and corresponding Intervenor proposals in this area.[2670] This section focuses on working cash principles and calculations directly disputed by ORA, TURN and FEA in their working cash testimony. Any working cash items not addressed in this section are fully supported in the direct testimony and workpapers and should be adopted by the Commission.[2671]

[2667] Tr. V25:2454:7-17 (Reeves).
[2668] Ex. 267 SDG&E/Reeves at 23.
[2669] Exhibits (Ex.) 173, 174R, 175 SCG/Chan and Ex. 176, 177R, 178 SDG&E/Dais.
[2670] Ex. 516 SCG/JCE at 266-268 (comparison between SoCalGas and ORA), 368-370 (comparison between SoCalGas and TURN); Ex. 516 SDG&E/JCE at 275-276 (comparison between SDG&E and ORA), 419-421 (comparison between SDG&E and TURN), 482-483 (comparison between SDG&E and FEA).
[2671] The working cash calculation is derivative of certain other forecasts in the GRC; thus, to the extent that Intervenors contest such forecasts and the Commission adopts revised forecasts, the working cash requirement would need to be recalculated pursuant to the methodology described in Ms. Chan's and Mr. Dais' testimony.

40.1 Common Issues

40.1.1 Cash Balances

SoCalGas requests $4.560 million and SDG&E requests $4.452 million for their respective 2019 cash balance working cash component. ORA opposes the inclusion of cash balances in working cash because they are not required bank deposits.[2672] However, CPUC Standard Practice U-16 (SP U-16) explicitly allows for "[consideration of] the required minimum bank deposits that must be maintained ***and** reasonable amounts of working funds*" for "day-to-day operations."[2673] Although not required by their banks, SoCalGas and SDG&E maintain an above-zero cash balance to ensure goodwill with their financial institutions and to avoid overdraft fees.[2674]

ORA's citation to the last three GRC decisions for SCE, where cash balances were excluded from working cash,[2675] is inapposite because SCE did not show whether it was maximizing its use of cash balances.[2676] In contrast, SoCalGas and SDG&E provided evidence that they are extremely efficient with their cash. For 2016, SoCalGas' ratio of its average cash balance to cash transactions that flow through its bank in a given month was only 0.29%;[2677] similarly, SDG&E's ratio was only .31%.[2678] Therefore, SoCalGas' and SDG&E's cash balance working cash components should be adopted for TY 2019.

40.1.2 GHG Balances

SoCalGas and SDG&E seek to include asset and liability balances associated with GHG Cap-and-Trade activities in the working cash determination;[2679] ORA claims these balances should be excluded because they receive balancing account treatment that "removes any risk associated with the relevant assets."[2680] ORA is incorrect. GHG compliance instruments are

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2672 Ex. 421 ORA/Lambert at 15-16, 35-36. FEA makes the same argument as to SDG&E. Ex. 366 FEA/Smith at 63.
2673 CPUC, Water Division, Determination of Working Cash Allowance, Standard Practice U-16 (March 2006) at 1-4 (emphasis added), *available at* http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M055/K059/55059235.PDF.
2674 Ex. 175 SCG/Chan at 5; Ex. 178 SDG&E/Dais at 6.
2675 Ex. 421 ORA/Lambert at 14 (citing Decision (D.)12-11-051, D.09-03-025 and D.06-05-016).
2676 D.09-03-025 at 266.
2677 Ex. 175 SCG/Chan at 5 and n.14.
2678 Ex. 178 SDG&E/Dais at 6 and n.17.
2679 Ex. 175 SCG/Chan at 6; Ex. 178 SDG&E/Dais at 7.
2680 Ex. 421 ORA/Lambert at 17:20-22. FEA makes a similar argument with respect to SDG&E. Ex. 366 FEA/Smith at 66.

only recorded to the balancing account when they are used to offset actual emissions.[2681] SoCalGas and SDG&E properly excluded the balancing account balances from their working cash studies to ensure no double compensation from regulatory interest earned on the balancing account balances.[2682]

It is well established that GHG compliance instruments lawfully can be purchased in advance of when they are needed to offset emissions.[2683] SoCalGas' and SDG&E's inclusion of these items in their working cash request is reasonable and *not* risk-free.[2684] Although D.14-12-040 and D.15-10-032 address calculating forecasted and recorded natural gas-related GHG allowance proceeds and GHG costs, they are silent on how to treat GHG instrument carrying costs. Because compensation for this item is not addressed in other Commission decisions, it is reasonable to consider it within working cash. Should the Commission disagree, SoCalGas and SDG&E request guidance regarding the appropriate recovery mechanism.

SoCalGas and SDG&E maintain that their working cash requests for GHG instruments are reasonable. SoCalGas and SDG&E sensibly acquire instruments at a lower cost before shortened supply impacts this competitive market.[2685] Furthermore, SoCalGas and SDG&E are subject to punitive penalties "four times the entity's excess emissions" if they fail to timely acquire the necessary amount of compliance instruments.[2686] As prudent operators, SoCalGas and SDG&E seek to avoid incurring these penalties.[2687] Therefore, acquiring instruments at today's lower prices is reasonable, and the GHG asset and liability accounts should be included within working cash to compensate investors for providing upfront funding.

ORA's alternative GHG proposal is to require SoCalGas and SDG&E to show that their compliance instrument inventories are economic and efficient.[2688] However, there are already multiple processes that provide ORA insight into these confidential activities,[2689] and there is no evidence that the existing processes are ineffective or that additional transparency is needed.

[2681] Ex. 175 SCG/Chan at 6:12-13.
[2682] *Id*. at 6:13-16; Ex. 178 SDG&E/Dais at 10:6-10.
[2683] Ex. 175 SCG/Chan at 6:22-25; Ex. 178 SDG&E/Dais at 7:16-19.
[2684] *Id*.
[2685] Ex. 175 SCG/Chan at 7-8; Ex. 178 SDG&E/Dais at 8.
[2686] California Code of Regulations, Title 17, Section 95857(b)(2), Untimely Surrender of Compliance Instruments by a Covered Entity.
[2687] Ex. 175 SCG/Chan at 8; Ex. 178 SDG&E/Dais at 8-9.
[2688] Ex. 421 ORA/Lambert at 19, 36.
[2689] Ex. 175 SCG/Chan at 8-9; Ex. 178 SDG&E/Dais at 9-10.

40.1.3 Customer Deposits

SoCalGas' and SDG&E's working cash requests properly exclude the interest-bearing customer deposit accounts, as specified by SP U-16.[2690] TURN argues, against SP U-16, that customer deposits should be included in the working cash study as a reduction to the working cash request.[2691] ORA argues, and TURN supports as an alternative, that customer deposits should be treated as lower-cost long-term debt and that revenue requirement adjustments should be made to incorporate lower effective interest costs.[2692] SoCalGas and SDG&E do not agree with either of these alternatives. ORA and TURN refer to PG&E's 2014 General Rate Case as an example in which this alternative treatment was adopted; however, the circumstances in which the Commission adopted such treatment for PG&E are inapplicable here. As noted in D.14-08-032, the Commission has "not always adopted identical treatment of customer deposits among utilities or for the same utility over time. The treatment of customer deposits adopted for PG&E here is based on the circumstances before us[.]"[2693] Specifically, the Commission directed PG&E to treat customer deposits as long-term debt because it was trying to find middle ground until the issue could be fully addressed in the cost of capital proceeding.[2694] The Commission also stated its preference for consistency under SP U-16: "As a general matter, however, we presume that ratemaking treatment consistent with SP U-16 should be deemed reasonable, especially where there are no special circumstances that justify a deviation."[2695] Neither TURN nor ORA have highlighted any special circumstances which would justify such a deviation from SP U-16; therefore, interest-bearing customer deposit accounts should not be included in the working cash calculation. Further, rates for recovery of interest costs have already been determined in cost of capital proceedings for each utility, and should not be relitigated here.

[2690] Ex. 175 SCG/Chan at 10; Ex. 178 SDG&E/Dais at 11.
[2691] Ex. 494 TURN/Marcus at 119-120.
[2692] Ex. 421 ORA/Lambert at 20, 37-38; Ex. 494 TURN/Marcus at 119-120. FEA makes the same argument with respect to SDG&E. Ex. 366 FEA/Smith at 69.
[2693] D.14-08-032 at 628.
[2694] *Id*. at 629.
[2695] *Id*. at 628.

40.1.4 California Corporate Franchise Tax (CCFT) and Federal Income Tax (FIT) Expense Lags

SoCalGas and SDG&E properly based their state and federal income tax lags on 2016 recorded information.[2696] ORA and TURN recommend calculating expense lag based on quarterly payment due dates of SoCalGas' and SDG&E's 2019 state and federal taxes, asserting that lead days based on 2016 recorded information is not reflective of TY 2019 conditions.[2697] ORA's and TURN's approach is unrealistic, assuming SoCalGas and SDG&E will be able to perfectly forecast their tax payments upon each due date.[2698] Even ORA acknowledges that a plethora of factors can impact tax payments, including the potential occurrence of refunds, extensions, true-ups, net operating losses, or other irregularities.[2699] Thus, the exact amount of total taxes due is not known until the fiscal year is complete.[2700]

Moreover, it is not uncommon for SoCalGas and SDG&E to have tax refunds, generating a historic trend of *lead* days for state and federal tax expense.[2701] As prudent operators, with a strong desire to comply with tax regulations, SoCalGas and SDG&E adopt a conservative approach to pay their estimated taxes, often paying more than required to avoid penalties—resulting in refunds that generate lead days.[2702] SoCalGas' and SDG&E's working cash requests for federal and state income expense comply with SP U-16[2703] and should be adopted.

40.1.5 Depreciation and Deferred Income Taxes

SoCalGas and SDG&E followed SP U-16 by including depreciation and deferred income taxes in their working cash studies—and TURN does not disagree.[2704] Nevertheless, TURN argues depreciation and deferred income taxes should be removed from working cash because "there is no cash involved in those transactions."[2705] TURN's recommendation is based on an incomplete understanding of accrual accounting and utility rate making in California and should be denied.

[2696] Ex. 173 SCG/Chan at 13-14; Ex. 176 SDG&E/Dais at 17-18.
[2697] Ex. 421 ORA/Lambert at 30-31, 45-47; Ex. 494 TURN/Marcus at 113.
[2698] Ex. 175 SCG/Chan at 16-17; Ex. 178 SDG&E/Dais at 15-16.
[2699] Ex. 421 ORA/Lambert at 30-31, 45-47.
[2700] *See id*.
[2701] Ex. 175 SCG/Chan at 15:28-16:1; Ex. 178 SDG&E/Dais at 16:10-11.
[2702] Ex. 175 SCG/Chan at 16:1-5; Ex. 178 SDG&E/Dais at 16:11-15.
[2703] Ex. 175 SCG/Chan at 16:6-8; Ex. 178 SDG&E/Dais at 16:16-18.
[2704] Ex. 490 TURN/Borden at 50.
[2705] *Id*. at 49:23-25.

While "depreciation" is commonly described as a "non-cash item," this does not mean that there was no cash outlay related to the expense. The opposite is true.[2706] When depreciation is included on the income statement, it represents the accrued expense recognition of a transaction for which cash was previously outlaid.[2707] Depreciation expense would not exist but for an associated upfront investment;[2708] thus, the investor who provides that investment should be compensated through working cash.

Deferred income taxes operate under the same logic as for depreciation; timing differences between cash outlays from investors and cash inflows from customer revenues drives the need for working cash for these taxes.[2709] Due to the differences in depreciation methods, the utility's tax obligation to the IRS may differ from the tax amount billed to its ratepayers.[2710] This temporary difference (deferred income taxes) is adjusted in rate base to offset the tax benefits taken by the utility; as a result, there is no return on this item in the interim.[2711] Thus, as with depreciation, it is proper to include deferred income taxes in the working cash determination.

40.2 SoCalGas Issues

40.2.1 Revenue Lag

SoCalGas consistently uses 2016 recorded data to determine its TY 2019 working cash requirement, including revenue lag.[2712] ORA recommends deviating from this approach, proposing 43.42 revenue lag days (instead of SoCalGas' proposed 44.35 lag days) based on a 5-year average (2012-2016).[2713] TURN recommends a series of adjustments to revenue lag, including a 6-year average for (2012-2017) for collection lag, resulting in an overall recommendation of 42.85 revenue lag days.[2714]

SoCalGas' approach of using 2016 data as a proxy for TY 2019 conditions more accurately measures revenue lag than a 5- or 6-year average.[2715] For revenue lag, SoCalGas properly used the Accounts Receivable (A/R) method permitted by SP U-16 to calculate the

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[2706] Ex. 175 SCG/Chan at 16; Ex. 178 SDG&E/Dais at 14.
[2707] Ex. 175 SCG/Chan at 16:23-28.
[2708] *Id*. at 17:1-2.
[2709] *Id.* at 17; Ex. 178 SDG&E/Dais at 14.
[2710] Ex. 175 SCG/Chan at 17:20-21.
[2711] *Id*. at 17:21-23.
[2712] *Id.* at 11:19-21.
[2713] Ex. 421 ORA/Lambert at 41:9-13.
[2714] Ex. 494 TURN/Marcus at 112 and Table 74.
[2715] Ex. 175 SCG/Chan at 11:17-19.

collection lag component.[2716] The use of a 5-year or 6-year average considers the lowest data point, thus skewing the quantitative metric.[2717]

Should the Commission disagree with SoCalGas' revenue lag proposal based on 2016 balances, SoCalGas alternatively proposes a revenue lag of 43.5 days based on applying linear regression to its historic revenue lags.[2718] The linear regression approach is a better predictor than a simple average because it incorporates trends that are inherent in data over time.[2719]

40.2.2 Employee Benefits Expense Lag

For pension expense lag, as with all working cash items, SoCalGas used 2016 recorded information, rather than selectively apply alternative calculations, as ORA does.[2720] ORA proposes 34.46 lag days for employee benefits compared to SoCalGas' proposal of 15.84 lag days. ORA's calculation is based on 18.8 lag days for workers' compensation and 59.75 lag days for pension expense.[2721] SoCalGas disputes the latter proposal for pension expense. SoCalGas' approach is reasonable, as actual lag days for individual items in TY 2019 may differ, both higher and lower, than the 2016 recorded lag days.[2722] SoCalGas' consistent, impartial approach to its working cash determination, based on 2016 recorded data, should be adopted.

40.3 SDG&E Issues

40.3.1 Revenue Lag

SDG&E's proposed revenue lag of 42.81 days is based on 2016 recorded data.[2723] ORA recommends that the five-year (2012-2016) average of 40.79 revenue lag days be adopted instead.[2724] SDG&E disagrees for the same reasons presented in Section 40.2.1. Moreover, even ORA acknowledges that "SDG&E's collection lag increased steadily from 20.38 days in 2012 to 24.55 days in 2016."[2725] Based on the trending increase in revenue lag, SDG&E's utilization of actual 2016 data is a *conservative* estimation of 2019 revenue lag,[2726] and should be adopted.

2716 *Id*. at 11:20-21.
2717 *Id*. at 12:23-24.
2718 *Id*. at 13:3-6.
2719 *Id*. at 13:6-9.
2720 *Id*.at 14:9-13.
2721 Ex. 421 ORA/Lambert at 42-43.
2722 Ex. 175 SCG/Chan at 14:13-15.
2723 Ex. 178 SDG&E/Dais at 12-13.
2724 Ex. 421 ORA/Lambert at 22-23.
2725 *Id*. at 23:2-3.
2726 Ex. 178 SDG&E/Dais at 12-13.

TURN proposes a revenue lag reduction relating to the date in which climate credits are applied against customer bills.[2727] Cash received through customer collections and the non-cash climate credit applied to customer bills are two distinct items that should not be comingled.[2728] Therefore, SDG&E's proposed revenue lag needs no further adjustment.

40.3.2 Deferred Lease Incentive Liability

TURN proposes a deviation from SDG&E's use of 2016 recorded information for 2019 working cash with respect to deferred lease incentive liability.[2729] TURN's suggestion that the 2016 year-end balance in this account will follow a known amortization schedule is correct.[2730] However, TURN's logic overlooks that further lease incentives may occur in future years.[2731] Because of uncertainties regarding future events, which may either increase or reduce SDG&E's working cash requirement, utilizing a holistic, 2016 actuals based approach provides a more reasonable, accurate estimation,[2732] and should be adopted.

40.3.3 Pension Expense Lag

SDG&E consistently used 2016 recorded information for pension expense lag, as with all the other working cash items.[2733] ORA proposes another deviation from this methodology with its pension expense lag proposal.[2734] SDG&E's approach is reasonable, as actual lag days for individual items in TY 2019 may differ—higher and lower—than the recorded lag days observed in 2016.[2735] SDG&E's consistent, 2016-based approach to pension expense lag should be adopted.

41. Customer Forecasts

SoCalGas and SDG&E's Gas Customer Forecast testimonies and workpapers, supported by witness Rose-Marie Payan, describe and justify SoCalGas and SDG&E's gas customer growth forecasts.[2736] Ms. Payan's testimonies do not discuss gas volumes, as SoCalGas and SDG&E use the current adopted throughput forecast as their gas sales assumption, as adopted by

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[2727] Ex. 494 TURN/Marcus at 106.
[2728] Ex. 178 SDG&E/Dais at 13:18-19.
[2729] Ex. 494 TURN/Marcus at 110-111.
[2730] Ex. 178 SDG&E/Dais at 17:4-5.
[2731] *Id*. at 17:5-6.
[2732] *Id*. at 17:6-9.
[2733] *Id.* at 18:3-4.
[2734] Ex. 421 ORA/Lambert at 28-29.
[2735] Ex. 178 SDG&E/Dais at 18:4-6.
[2736] Exs. 326-327 SCG/Payan; Exs. 328-330 SDG&E/Payan.

the CPUC in Decision (D.) 14-06-007, the Triennial Cost Allocation Proceeding (TCAP) Phase II Settlement Agreement.[2737] Electric Customer Forecast testimonies and workpapers, supported by witness Kenneth Schiermeyer, describe and justify electric customer growth forecasts for SDG&E only.[2738] Mr. Schiermeyer's testimony does not discuss electric energy sales, which will be provided in SDG&E's TY 2019 GRC Phase 2 application.[2739] The gas customer forecasts for both utilities were prepared similarly and will be discussed together. The electric customer forecast for SDG&E will be discussed separately.

41.1 Gas (SoCalGas and SDG&E)

SoCalGas and SDG&E request adoption of their respective TY 2019 forecasts for gas customers. Active gas customers for SoCalGas are forecasted to increase from 5.7 million in 2016 to 5.82 million in 2019.[2740] SoCalGas gas customer growth is forecasted to be 0.60%, 0.54%, 0.74%, and 0.79% in 2016, 2017, 2018, and 2019, respectively.[2741] Annual average total gas customers for SDG&E are forecasted to increase from 875,462 in 2016 to 892,419 in 2019.[2742] SDG&E gas customer growth is forecasted to be 0.60%, 0.55%, 0.71%, and 0.67% in 2016, 2017, 2018, and 2019, respectively.[2743]

Ms. Payan's testimony and workpapers detail the methodology SoCalGas and SDG&E utilized to develop these forecasts.[2744] For the residential market segment, SoCalGas and SDG&E use housing starts as the basis for their forecasts because a housing start is likely to lead to a new gas meter hookup.[2745] Recorded and forecasted housing start assumptions underlying the residential customer forecast came from IHS Global Insight's February 2017 Regional Forecast.[2746] Employment assumptions underlying the non-residential customer forecasts were based on recorded data from the California Employment Development Department.[2747] Both utilities use econometric and statistical techniques to develop quarterly-data forecasts of

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2737 Ex. 326 SCG/Payan at 1; Ex. 328 SDG&E/Payan at 1.
2738 Exs. 331-333 SDG&E/Schiermeyer.
2739 Ex. 331 SDG&E/Schiermeyer at 1.
2740 Ex. 326 SCG/Payan at i.
2741 *Id*.
2742 Ex. 328 SDG&E/Payan at i.
2743 *Id*.
2744 Exs. 326-327 SCG/Payan; Exs. 328-330 SDG&E/Payan.
2745 Ex. 326 SCG/Payan at 2; Ex. 328 SDG&E/Payan at 2.
2746 *Id*.
2747 *Id*.

residential, commercial, and industrial customers, using linear econometric models.[2748] After historical data and predicted values are compared for the most recent observed historical period, the model forecasts are calibrated to match up with the last recorded actuals so that historical trends are consistent.[2749]

41.1.1 Gas Customer Forecast Methodology

ORA submitted testimony on SoCalGas and SDG&E's gas customer forecasts for 2017, 2018, and 2019, and ***did not oppose any of the forecasts*** stating: "ORA's forecast . . . showed minimal differences with the utility's forecast."[2750] TURN, however, submitted testimony arguing that SDG&E should be ordered to re-run its regression model using Moody's housing start data instead of IHS Global Insight data.[2751] TURN claims that Moody's housing start forecasts "appear to be more reasonable" because IHS Global Insight's forecasts have been overly optimistic in previous years.[2752] Rather than re-running the regression model, TURN alternatively suggests that the Commission reduce the number of forecast gas connections by about 2,900 and 5,000 in 2018 and 2019, respectively.[2753] TURN's opposition is specific to SDG&E; TURN did not offer testimony regarding SoCalGas' gas forecast methodology.

There is no factual support for TURN's proposal that SDG&E re-run its gas meter model using Moody's data, or that its forecast should be lowered based on a percentage TURN derived from discovery related to SDG&E's electric residential customer forecast.[2754] As Ms. Payan noted in rebuttal testimony, IHS Global Insight is an internationally recognized econometric forecasting firm.[2755] SDG&E's forecasted and actual recorded 2017 gas meters, shown in the table below, confirm that the forecast SDG&E prepared using IHS Global Insight data is virtually spot on and even minimally under forecast.[2756]

[2748] *Id*. at 3.
[2749] *Id*.; see also Ex. 327 SCG/Payan and Ex. 329 SDG&E/Payan.
[2750] Ex. 424 ORA/Kanter at 7, 16.
[2751] Ex. 490 TURN/Borden at 1.
[2752] *Id*. at 56-58.
[2753] *Id*. at 58.
[2754] *Id*.
[2755] Ex. 330 SDG&E/Payan at 2.
[2756] *Id*. at 3, Table RMP-2.

Table 41.1.A

	2017 Forecasted Total Active Meters	2017 Forecasted Total Residential Active Meters	2017 Recorded Total Active Meters	2017 Recorded Residential Meters	Forecasted Minus Actual Total Active Meters	Forecasted Minus Actual Total Residential Meters
SDGE	**880,289**	**849,856**	**880,394**	**850,136**	**-105**	**-280**

As shown above, SDG&E's residential gas meter forecast for 2017 is under forecast by 280 meters, a minimal amount. TURN's recommended downward adjustment would bias the forecast downward and result in an inferior forecast. Further, the gas forecasting group cannot access Moody's data through the electric forecasting group's subscription due to the contractual terms of its contract.[2757] If ordered to re-run its model using Moody's data, SDG&E would incur additional ratepayer expense of purchasing its own access to Moody's data in order to create a new forecast to replace one that has *already been shown to be minimally under forecast*. 2017 recorded data has confirmed the forecast to be extremely accurate. TURN has not demonstrated evidence that SDG&E's method is not reliable that would justify purchasing access to a new database to re-run its model, or alternatively making a downward adjustment. SDG&E therefore requests that the Commission reject TURN's requests, and the Commission should adopt SDG&E and SoCalGas' gas meter forecasts without revision.

41.2 Electric (SDG&E Only)

SDG&E requests adoption of its TY 2019 forecast for electric customers. The annual average total electric customers for SDG&E are forecasted to increase from 1,430,175 in 2016 to 1,468,391 in 2019.[2758] Electric customer growth is forecasted to be 0.75%, 0.93%, and 0.97% in 2017, 2018, and 2019, respectively.[2759]

Mr. Schiermeyer's testimony and workpapers detail the methodology SDG&E utilized to develop its electric forecast.[2760] SDG&E develops its electric customer forecast using statistical models based on economic and demographic data, seasonal patterns, and other inputs that influence customer growth.[2761] Economic and demographic data for the forecast are based on February 2017 information released from IHS Global Insight's Regional Economic Service and

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[2757] *Id.* at 4-5.
[2758] Ex. 331 SDG&E/Schiermeyer at i.
[2759] *Id.*
[2760] Exs. 331-333 SDG&E/Schiermeyer.
[2761] Ex. 331 SDG&E/Schiermeyer at 2.

February 2017 information released from Moody's Regional Economic Service.[2762] The residential forecast was developed using an econometric model based on the service area's projected level of housing starts, seasonal factors, and other inputs that influence customer growth.[2763] The commercial/industrial customer forecast was developed using a statistical analysis based on growth in employment relative to the growth of commercial/industrial customers.[2764] Both the residential and industrial/commercial customer forecasts are based on respective quarterly historical data from 1990 through 2016.[2765]

41.2.1 Electric Customer Forecast Methodology

ORA submitted testimony on SDG&E's electric customer forecast for 2017, 2018, and 2019, and ***did not oppose any of the forecasts***, stating: "ORA's forecast . . . showed minimal differences with the utility's forecast."[2766] TURN, however, submitted testimony recommending that the Commission requires SDG&E to *only* use Moody's historical and forecast housing data as input into its forecast model.[2767] TURN claims that since SDG&E uses a blend of Moody's and Global Insight's historical and forecast housing data as input "SDG&E is likely to over-forecast the number of residential customer connections" in this GRC cycle.[2768] TURN claims this over-forecasting will occur because Global Insight's forecasts have been overly optimistic in the previous TY 2016 GRC cycle.[2769] TURN's recommendation would result in a reduced average residential customer forecast for 2019 of 1,301,083 (3,808 lower than SDG&E's 1,304,891 forecast).[2770]

There is insufficient factual support for TURN's proposal that SDG&E only use Moody's data to create the residential electric customer forecast. As Mr. Schiermeyer noted in rebuttal testimony, using a blend of Global Insight and Moody's data nearly halfway into this GRC's forecast cycle (2017-2019) results in a May 2018 forecast of residential customers that is 1,190

[2762] *Id*.
[2763] *Id*.
[2764] *Id*.
[2765] *Id*.
[2766] Ex. 424 ORA/Kanter at 6.
[2767] Ex. 490 TURN/Borden at 1.
[2768] *Id*. at 51-54.
[2769] *Id*. at 53.
[2770] *Id*. at 55-56.

under-forecast, contrary to TURN's statement that "SDG&E is likely to over-forecast."[2771] Moreover, TURN's recommendation to only use Moody's data would result in a May 2018 forecast of residential customers that is 3,186 under-forecast, as shown in the table below.[2772]

Table 41.2.A
Residential Electric Customer Forecasts
Versus May 2018 Actual[2773]

	Actual May 2018 Level	**May 2018 Forecast Utilizing Global Insight Only**[2774]	**May 2018 Forecast Utilizing Blend of Global Insight & Moody's**[2775]	**May 2018 Forecast Utilizing Moody's Only**[2776]
Customers	1,291,963*	1,292,782	1,290,773	1,288,777
Forecast vs. Actual		819	-1,190	-3,186
Recommendation			SDG&E & ORA	TURN

TURN has not demonstrated evidence that SDG&E's methodology is unreliable, nor that by selectively favoring the use of Moody's as the only source of forecasted housing starts, this will result in a more accurate forecast. SDG&E understands the variability and differences in any economic forecasting concept and believes that using a 50/50 blend of data from these two highly-regarded economic forecasting firms provides an unbiased and balanced view of the forecast period.[2777] SDG&E therefore requests that the Commission reject TURN's recommendation and adopt its electric customer forecasts without revision.

41.3 Conclusion

SDG&E and SoCalGas have shown that their gas and electric customer forecasts are both reasonable and based on sound methodology. ORA has not opposed the utilities' forecasts. The

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2771 Ex. 333 SDG&E/Schiermeyer at 3.
2772 *Id*. at 3, Table KES-2.
2773 Please note that for the purpose of rebutting TURN's recommendation, the May 2018 recorded data should be considered as an additional information point. SDG&E used May 2018 because it was the most current actual information to compare the electric customer forecast with actual information prior to the filing of SDG&E's rebuttal testimony on June 18, 2018. SDG&E does not contend that a single data point, nor 2018 data, should be used to represent a TY 2019 electric customer forecast.
2774 Ex. 333 SDG&E/Schiermeyer at 3, Table KES-2 (citing Appendix A's TURN Data Request-022, Question 3).
2775 *Id.* (citing Ex. 332 SDG&E/Schiermeyer).
2776 *Id.* (citing Appendix A's TURN Data Request-022, Question 3).
2777 *Id*. at 4.

Commission should reject TURN's requests with respect to SDG&E's forecasts and adopt both utilities' forecasts without revision for the reasons discussed above.

42. Cost Escalation

SoCalGas and SDG&E's Cost Escalation testimonies and workpapers, supported by witness Scott Wilder, present the cost escalation factors used to reflect the effect of external inflation in SoCalGas and SDG&E's labor O&M, non-labor O&M, and capital related costs in their respective TY 2019 revenue requirements and annual post-test-year (PTY) adjustments.[2778] On August 24, 2018, SoCalGas and SDG&E served their update testimony, which included updates to Cost Escalation.[2779] The updated cost escalations were developed using indexes from the Second Quarter 2018 Power Planner forecast of IHS/Markit Global Insight's[2780] Utility Cost Information Services published on July 26, 2018.[2781]

The parties have not disputed the cost escalation factors presented by the utilities, nor the updated cost escalations. The escalations are reasonable forecasts that should be adopted by the Commission for use in determining the utilities' TY 2019 revenue requirement and annual PTY adjustments.[2782]

43. Miscellaneous Revenues

43.1 Common Issues

Miscellaneous Revenues are comprised of fees and revenues collected by SoCalGas and SDG&E from non-rate sources for the provision of specific products or services.[2783] They

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[2778] Exs. 334-335 SCG/Wilder; Exs. 336-337 SDG&E/Wilder. Cost escalators are used to adjust for inflation the utility's labor, materials, and service costs from BY 2016 nominal dollars into TY 2019 nominal dollars. To aggregate escalators, inputs are weighted based on the utility's actual BY 2016 expenses. Ex. 334 SCG/Wilder at i; Ex. 336 SDG&E/Wilder at i.

[2779] As per the Commission's Rate Case Plan, D.07-07-004, the escalation factors are to be updated after hearings and before implementation, based on the same indexes used in the original presentation during hearings. Ex. 334 SCG/Wilder at 1; Ex. 336 SDG&E/Wilder at 1.

[2780] IHS/Markit Global Insight is used to forecast external national/regional-level utility industry cost inputs (with the exception of represented labor costs, which use the utility's actual union contract escalations). Ex. 334 SCG/Wilder at i, see Table SRW-1 at 3; Ex. 336 SDG&E/Wilder at i, see Table SRW-1 at 3.

[2781] Ex. 514 SCG/SDG&E/Wilder Update Testimony (UT) (August 2018) at 5-6. The tables in the update testimony replace the escalations previously shown in Table SCG-SRW-2 and Table SDG&E-SRW-2 of Mr. Wilder's direct testimony. *See* Ex. 334 SCG/Wilder at 4; Ex. 336 SDG&E/Wilder at 5.

[2782] Ex. 334 SCG/Wilder at 1; Ex. 336 SDG&E/Wilder at 1.

[2783] Ex. 338, SoCalGas/Steffen at 2; and Ex. 341, SDG&E/Dalton at 4 include such revenues as collection fees, rents, and charges.[2784] Miscellaneous revenues are incorporated into rates as a reduction to base margin revenue requirements charged to customers for utility service, thereby lowering rates.[2785]

For purposes of forecasting TY 2019 miscellaneous revenues, SoCalGas and SDG&E performed an item by item analysis of miscellaneous revenue accounts, including a review of prior-year recorded results as well as the factors that could impact future results.[2786] The forecasts were developed using methodologies that reflect the drivers for each miscellaneous revenue item.[2787] For many items, such as cogeneration reimbursements, where the Utilities have multiple years of recorded activity, the forecast was developed using a multi-year recorded average adjusted by estimated customer or sales growth factors, where applicable.[2788] In circumstances where the charge is based on a per customer basis, a customer growth factor was applied to adjust historical results to develop the 2019 forecast.[2789] In instances where the multi-year recorded results are not available or recent factors have caused the multi-year results to no longer reflect a reasonable expectation of the future, the Utilities used the most recent recorded year (BY 2016) to develop the forecast.[2790] In other cases, such as rents from property, the forecast is based on executed lease agreements adjusted for applicable escalation clauses.[2791] Finally, for other miscellaneous revenue items not reflected in the categories described above, a forecasting methodology was applied to reflect the unique circumstances of the activity.[2792]

43.2 SoCalGas Issues

SoCalGas' Miscellaneous Revenue testimony and workpapers, supported by witness Annette Steffen, describes and justifies SoCalGas' forecasted revenues for TY 2019.[2793] SoCalGas forecasts TY 2019 miscellaneous revenues of $83.114 million.[2794] The following tables provide a summary and description of miscellaneous revenue items recorded in BY 2016,

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2784 Ex. 338, SoCalGas/Steffen at 2; and Exs. 341-343, SDG&E/Dalton at 4-5.
2785 Ex. 338, SoCalGas/Steffen at 2; Ex. 341 SDG&E/Dalton at 5.
2786 *Id.*
2787 *Id.*
2788 *Id.*
2789 *Id.*
2790 *Id.*
2791 *Id.*
2792 *Id.*
2793 Ex. 338, SoCalGas/Steffen, p. 1.
2794 Exs. 338 & 340, SoCalGas/Steffen, p. 2.

and estimated for TY 2019. In addition, SoCalGas is proposing to eliminate the Service Establishment Charge ("SEC") of $25 per customer or $10 per CARE customer and accordingly, provides two tables to show the net change when the SEC is included in the 2016 Recorded revenue versus the net change when the SEC is excluded from the 2016 Recorded revenue.

SoCalGas Test Year 2019 Summary of Miscellaneous Revenue

FERC Acct. – Description ($ in 000's)	2016 Recorded	2019 Test Year	Net Change
488 – Customer Service Revenues*	30,806	10,921	(19,885)
493 – Rent from Gas Property	471	489	18
495 – Other Gas Revenues	73,024	71,704	(1,320)
Total	104,300	83,114	(21,186)

*Reflects Service Establishment Charges as included in 2016 Recorded.

FERC Acct. – Description ($ in 000's)	2016 Recorded	2019 Test Year	Net Change
488 – Customer Service Revenues**	9,232	10,921	1,689
493 – Rent from Gas Property	471	489	18
495 – Other Gas Revenues	73,024	71,704	(1,320)
Total	82,727	83,114	387

**Reflects Service Establishment Charges as excluded from 2016 Recorded.

43.2.1 ORA

ORA did not oppose SoCalGas' forecast.[2795] However, ORA's report used the total miscellaneous revenues proposed in a previous version of SoCalGas' direct testimony.[2796] As a result of tax changes related to shared assets, there was a reduction to SoCalGas' proposed shared assets revenue to $83.114 million.[2797] SoCalGas presented the information and adjusted revenue amount in the Second Revised Direct Testimony of Annette Steffen.[2798] This is the amount that should be used when considering ORA's proposal.

[2795] Ex. 424, ORA/Kanter, p. 18.
[2796] Ex. 424, ORA/Kanter, p. 18.
[2797] Ex. 338, SCG/Steffen, p. 1 (subsequently corrected as noted in Ex. 340 at 2 via Update Testimony served on August 24, 2018).
[2798] *Id*.

43.2.2 CFC Disputed Issues

CFC took the position that SoCalGas' revenue forecast for Reconnection Charges should be higher $ 0.205 million from $1.513 million to $1.718 million for three basic reasons.

(1) CFC argued that SoCalGas' use of a three-year average approach is not appropriate because, based on historical Reconnection Charges from 2012 through 2016, only 2014 fell below the initial year of 2012.

(2) CFC also argued that the charges during that time were artificially low due to disconnection restrictions born out of the 2008 economic crises.[2799]

(3) CFC also argued that the rate of disconnections will increase because a rate increase will purportedly cause more customers to juggle bills, leading to increased disconnections, and subsequently, reconnections and Reconnection Charge revenue.[2800] CFC would propose a $205,000 increase in Reconnection Charge revenue.

Each of CFC's arguments lack context, substantiation, or are simply based on speculative suppositions masked as testimony. Therefore, SoCalGas disagrees with each of them. First, CFC argues that, historically, SoCalGas Reconnection Charges have grown every year from 2012, except for 2014 and that an increase in Miscellaneous Revenue is warranted.[2801] However, the facts relied upon by CFC are narrow and do not consider additional factors. For example, Customer Services - Field forecasted reconnection orders of 101,034 for TY 2019 compared to 106,637 reconnection orders worked in BY 2016 – **this is in line with SoCalGas' Miscellaneous Revenue forecast for Reconnection Charges of $1.513 million**.[2802] However, CFC proposes to increase Reconnection Charge revenue to $1.718 million an increase in the amount of $0.205 million. As proposed by CFC, the increase in revenue will result in approximately 107,000 reconnections or **6,000 more than SoCalGas' forecast**.[2803] To fulfill this increased volume, SoCalGas would need additional staffing and/or support in the Customer Services - Field area.[2804] But, SoCalGas did not propose additional staffing or support for this

[2799] Ex. 485, CFC/Roberts, p. 8.
[2800] *Id.* at p. 5.
[2801] Ex. 485, CFC/Roberts at 2.
[2802] Ex. 340, SCG/Steffen, pp. 3-4.
[2803] *Id.*
[2804] *Id.*

level of increase in its TY 2019 GRC request.[2805] CFC's testimony does not address these considerations and therefore, is incomplete. Because these related issues are not considered, CFC's alternative approach fails and should be rejected.

Second, CFC argues that SoCalGas' use of a 3-year average for forecasting was artificially low due to economic conditions and due to the disconnection restrictions implemented during the 2008 economic crisis.[2806] This argument is flawed because it assumes that SoCalGas' current policies and practices have reverted back to exactly those in place prior to 2010.[2807] SoCalGas has voluntarily continued the end of year holiday moratorium for the last seven years and has instituted an extreme weather policy that was part of the SoCalGas/SDG&E Disconnection OIR Settlement Agreement[2808] even after those restrictions were lifted.[2809] Both policies have become a part of the Credit Moratorium policies included in the SoCalGas Credit Policy and Process outlined in Exhibit 131.[2810] SoCalGas' policies are the most influential in considering disconnection and reconnection rates and SoCalGas took these policies into consideration when forecasting its revenue.[2811] Therefore, CFC's argument should be rejected. Third, CFC argues that there is a correlation between disconnections and reconnections but that correlation occurs within one year after a rate change.[2812] This argument is not supported by the evidence. SoCalGas received its TY 2016 decision in June 2016 and implemented the new rates on August 1, 2016 however, as shown in the table, below, SoCalGas' 2017 Reconnection revenue is lower than 2016.[2813]

Table 43.A
SoCalGas Recorded Miscellaneous Revenues – Reconnection Charges[2814]

	2012	2013	2014	2015	2016	2017
Total Reconnection Charges (in millions)	$1.30	$1.40	$1.25	$1.49	$1.80	$1.66

2805 Ex. 340, SCG/Steffen at 4; *see, also,* Ex. 119, SCG/Marelli.
2806 Ex. 485, CFC/Roberts at 3.
2807 Ex. 340, SCG/Steffen at 4.
2808 (D.)10-12-051, Attachment A, Exhibit 2
2809 Ex. 340, SCG/Steffen at 4.
2810 Ex. 131, SCG/Baldwin at 4.
2811 *Id*.
2812 Ex. 485, CFC/Roberts at 5.
2813 Ex. 340, SCG/Steffen at 5.
2814 *Id.*

In addition, SoCalGas has already explained that "since 2010, SoCalGas' residential class average rate has fluctuated year over year, as has the number of disconnections for non-payment [yet] SoCalGas observes that the annual number of residential disconnections does not appear to correlate to the fluctuations in the residential class average rate."[2815] The Commission should reject the recommendation made by CFC and adopt SoCalGas' Reconnection Charge miscellaneous revenue as forecasted for TY 2019.

43.3 SDG&E Issues

SDG&E's Miscellaneous Revenue testimony and workpapers, supported by witness Eric Dalton, describes and justifies SDG&E's forecasted miscellaneous revenues for TY 2019.[2816] SDG&E forecasts a TY 2019 miscellaneous revenues forecast of $17.5 million, which includes the impact of new programs relating to renewable meter adapters, parts replacement, and smart meter opt-out fees.[2817] The following table provides a summary of SDG&E's recorded BY 2016 and proposed TY 2019 Test Year 2019 Summary of Miscellaneous Revenue.

SDG&E Test Year 2019 Summary of Miscellaneous Revenues

Department ($ in 000's)	2016 Recorded	2019 Test Year	Net Change
Electric	13,953	14,653	700
Gas	3,167	2,843	(324)
Total	17,120	17,496	376

43.4 ORA Disputed Issues

ORA takes two basic positions; the first, relating to the use of a five-year average, appears to arise from ORA's reliance upon facts which are not in the record, and the second, relating to including ITCC as revenue in this GRC, arises from a misapplication of a Commission Decision. SDG&E addresses each of these positions, below.

2815 Ex. 131, SCG/Baldwin at 5.
2816 Ex. 341, SDG&E/Dalton, p. 4.
2817 Ex. 341, SDG&E/Dalton, p. 10, 14, and 9.

43.4.1.1 ORA's Proposal to Use a five-year Average Should be Rejected Because it is Based on Outdated Information Which is Not a Part of the Record

First, ORA proposes to use a five-year average methodology as the basis for forecasting both SDG&E's Electric and Gas Shared Asset Revenue.[2818] Under ORA's methodology, the Electric Shared Asset Revenue would be $5.818 million and the Gas Shared Asset Revenue would be $2.394 million.[2819] This is an increase in SDG&E's proposed electric revenue by $2.483 million from SDG&E's forecast of $3.335 million for Electric Shared Asset Revenue and an increase in SDG&E's proposed Gas Shared Asset Revenue by $1.052 million from SDG&E's forecast of $1.342 million for Gas Shared Asset Revenue.[2820] ORA's approach is inappropriate because it "does not capture the most accurate view of the Shared Asset revenue."[2821] As explained in Exhibit 341, "The portion of the shared asset costs allocated to SDG&E, SECC [Sempra Energy Corporate Center] and its unregulated affiliates is based on methodologies used to measure utilization. For each type of shared asset, an assignment of a causal/beneficial relationship is determined (*e.g.*, number of users, square footage, etc.). The asset is then allocated to affiliates based on their share of the benefit from that asset according to the applicable utilization methodology."[2822] ORA's proposal, however, does not take utilization and related factors, such as the type of asset, causal/beneficial relationship, number of users, footage, into account.[2823] And, ORA's proposal does not explain why a five-year average is more accurate or more beneficial to ratepayers given the different utilization rates.[2824] ORA presented no evidence to indicate that its proposal will lead to a more reasonable or accurate result. ORA's failure is magnified by the fact that ORA did not take the RO model into account or refute it with any evidence.[2825] The RO model is structured to take on multiple calculations to forecast and allocate the Shared Asset Revenue.[2826] Due to the complex nature of Shared Asset

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[2818] Ex. 424, ORA/Kanter at 10-11; *cf*, Ex. 341, SDG&E/Dalton at 12 & 19.
[2819] *Id.*
[2820] Ex. 424, ORA/Kanter at 10-11; *cf*, Ex. 341, SDG&E/Dalton at 12 & 19.
[2821] Ex. 343, SDG&E/Dalton at 2.
[2822] *Id.*
[2823] *Id.*
[2824] *See, e.g.,* Ex. 342, SDGE/Vanderhye at 14-15.
[2825] Ex. 424, ORA/Kanter at 11. In Exhibit 424, ORA refers generally to Exhibit 342, the Workpapers to Exhibit 341 (SDG&E/Dalton). However, Exhibit 424 does not specify whether ORA reviewed Exhibit 346, SDG&E/Hom (Summary of Earnings) where the RO Model is discussed.
[2826] *Id.*

Revenues, it is more appropriate to use the forecast that is derived from current assumptions from the RO model,[2827] rather than take a straight five-year average as recommended by ORA.[2828] Accordingly, ORA's proposal is not justified and SDG&E requests that it be rejected.

As purported support for using a version of a five-year average methodology, ORA also stated, "SDG&E's testimony refers to the testimony of James Vanderhye [relating to Shared Services & Shared Assets Billing, Segmentation & Capital Reassignments] (Ex. SDG&E-32), but Table JV-7 of page JV-21 of that testimony gives a TY 2019 estimate $5.938 for SDG&E Electric Shared Asset revenues. Based on SDG&E's confusion regarding this issue, a five-year average is appropriate." ORA's reliance upon the prior versions of Exhibit SDG&E-32 is misplaced. SDG&E explained in Exhibit 343 that the difference between the Table JV-7 in Exhibit 324 (Vanderhye) and the earlier version of Mr. Dalton's direct testimony was an inadvertent error.[2829] As SDG&E explained on April 6, 2018, SDG&E corrected this error in the Second Revised Direct Testimony of James Vanderhye, Shared Services & Shared Assets Billing, Segmentation & Capital Reassignments.[2830] In addition, since the version of Mr. Vanderhye's testimony cited by ORA has not been admitted into the record in this proceeding, ORA cannot rely upon it here.

Further, as stated in Exhibit 324, "the miscellaneous revenue generated from depreciation of Common shared assets billed to affiliates will contain a portion of revenue related to Electric Transmission. For TY 2019 this amounts to a reduction of $709,000 from $5,386,000."[2831] When $709,000 is reduced from $5,386,000 from electric transmission revenue, this results in the total electric and gas portion of Shared Asset Revenue in the amount of $4,677,000, which was proposed in Exhibit 341.[2832] Therefore, there is no inconsistency, contrary to ORA's position, and there is ample support for SDG&E's position.

[2827] *See generally,* Ex. 346, SDG&E/Hom. The Shared Asset Revenues are one of the outputs from the RO model.
[2828] Ex. 343, SDG&E/Dalton, p. 3.
[2829] Ex. 341, SDG&E/Dalton at 3.
[2830] *Id.*; *see, also,* Exhibit 324, SDG&E/Vanderhye.
[2831] Ex. 324, SDG&E/Vanderhye at 21.
[2832] Ex. 341, SDG&E/Dalton at 12 and 19.

43.4.1.2 ORA's Proposal Concerning Income Tax Component of Contribution in Aid of Construction (ITCC) Would Have Consequences Including the Shifting of Risk from Shareholder to Ratepayer

ORA's second proposal – a *wholly new* proposal that was ***not*** sponsored in SDG&E's direct testimony – would add ITCC to SDG&E's miscellaneous revenue, thereby increasing SDG&E's miscellaneous revenue by $12.967 million.[2833] Because this is a wholly new proposal, SDG&E provides some additional background. Contributions in aid of construction (CIAC) are non-refundable contributions collected from utility customers in the form of money – or its equivalent – toward the construction of plant, such as customer-requested relocations.[2834] CIAC became taxable under the Tax Reform Act of 1986 (TRA 86).[2835] In response to TRA 86 and questions about expenses like CIAC, the Commission instituted an Investigation (I.)86-11-019.[2836] In Decision (D.)87-09-026 for I.86-11-019, the Commission authorized three different methods for utilities to account for the tax impacts of CIAC and the related income tax component of CIAC, referred to as ITCC.[2837] Of the three methods, non-water or non-telephone utilities could select either the Maryland Method or Method 5, as acceptable alternatives for the ratemaking treatment of CIAC.[2838]

SDG&E elected the Maryland Method to account for the ratemaking treatment of CIAC (whereas SoCalGas elected Method 5).[2839]

> "Under [the Maryland Method], the present value of the tax benefits is computed utilizing the utility's authorized rate of return as the discount factor. <u>The current tax shortfall would be funded by the utility shareholder</u>. **It is Method 5 with the shareholder funding the shortfall, not the ratepayer** . . . Under this proposal, **there is no chance of a rate increase to general ratepayers** and there is no impact on the utility's capital budget. . .

[2833] Ex. 424, ORA/Kanter at 10 and11; *Cf*, *generally,* Ex. 341, SDG&E/Dalton at 3.
[2834] Ex. 265, SDG&E/Reeves at 21-22.
[2835] *Id.*
[2836] D.87-09-026 at 6.
[2837] *Id.*; *see also,* D.87-09-026 at 53-64. SDG&E notes that OP 6 allows utilities to use Method 3 but this method is not relevant to these arguments.
[2838] D.87-09-026 at 58 & 64, respectively.
[2839] *See* SDG&E Tariffed Preliminary Statement: Miscellaneous Income Tax Component of Contributions and Advances Provision (ITCCAP); SoCalGas Tariffed Preliminary Statement: Income Tax Component of Contributions and Advances (ITCCA).

> As a Commission duty bound to protect the ratepayers, **we find it difficult to reject an offer by shareholders to assume a tax burden that would otherwise be an obligation of the contributor or the ratepayers.**[2840]

In other words, under the Maryland method, **"the utility shareholders bear the impact of any shortfall between the tax liability and the tax gross-up ITCC collected from the contributor.** The shareholders recover the shortfall through the tax depreciation benefits on the constructed property. **Accordingly, there is no impact on rate base under the Maryland Method."**[2841] (Emphasis added.) This means that since the tax shortfall is borne by shareholders, the revenue impact for the ITCC is not a part of rate base.

ORA ignores this discussion and instead asserts that the Commission should effectively upend SDG&E's application of this long-established decision so that ORA can effectively impose the use of a different methodology upon SDG&E with no identifiable rationale, other than that it is being used by SoCalGas. This rationale seems to have priority over any other factors, including the fact that ORA would be forcing SDG&E into Method 5, which (i) could result in rate base impacts, (ii) could shift the tax liability from shareholders to ratepayers, and (iii) could leave the ratepayer funding any tax shortfall (rather than the shareholder).[2842] As support for this proposal, ORA makes three flawed arguments; one, ORA argues that the sample calculations in SDG&E and SoCalGas' Advice Letters are identical and therefore assumes, "that SDG&E's tax treatment of CIAC contributions is the same as [SoCalGas'] . . . ";[2843] two, ORA seems to argue that SDG&E does not have the option to choose both the ratemaking treatment (*i.e.*, Method 5 or the Maryland method) **and** its "regulatory accounting" treatment[2844] when the selection of the ratemaking treatment necessarily leads to the rate base treatment;[2845] and three, ORA seems to argue that the ITCC is somehow included in a reduction to rate base.[2846] ORA's arguments are incorrect.

[2840] D.87-09-026 at 64. (Underline in original, bold added.)
[2841] Ex. 265, SDG&E/Reeves at 22.
[2842] *Id.*
[2843] Ex. 424, ORA/Kanter at 12.
[2844] It is not clear from ORA's report but SDG&E interprets the term "regulatory accounting" treatment as referring to whether revenues should be placed into rate base.
[2845] Ex. 424, ORA/Kanter at 13.
[2846] *Id.*

First, regarding the "identical" sample calculations argument, ORA makes an erroneous leap in logic by concluding that the similarity of calculations between SDG&E and SoCalGas mean that the tax and rate treatment is the same between the two utilities. D.87-09-026 explains,

> **Respondents adopting Method 5 or the Maryland Method shall compute the federal tax portion of the contribution or refundable advance using the respondent's incremental federal tax rate, as determined on a ratemaking basis and using either a 12% discount rate or the respondent's last authorized rate of return.** Respondents selecting 12% as a discount rate shall also use 17% as the pre-tax rate of return in their Method 5 calculation. Such choice shall be reflected in the tariff filing pursuant to Ordering Paragraph 2.[2847] (Emphasis added.)

In other words, per D.87-09-026, the gross-up calculations – *i.e.*, "the federal tax portion of the contribution" and either the 12% discount rate or last authorized rate of return – would be the same for both utilities whether the utility elected the Method 5 and the Maryland Method.[2848] However, Method 5 and the Maryland Method have disparate impacts between shareholders and ratepayers resulting in disparate impacts to the rate base.

SDG&E explained this difference to ORA as follows:

- **For SoCalGas**: "Since accumulated deferred taxes are included in rate base, the revenue requirement is covering the deferred tax over the life of the asset. The tax gross-up received from CIAC is given back to ratepayers over the life of the asset to prevent double recovery. In this situation, the difference in the revenue requirement received and the tax gross-up received are covered by ratepayers. **This reflects the adoption of the Method 5.**"[2849]
- **For SDG&E**: SDG&E "does not include a line item for accumulated deferred taxes related to CIAC in SDG&E's rate base calculation. . . Therefore, there is no revenue requirement to cover these deferred taxes. The tax gross-up received from CIAC is amortized over the life of the asset to offset the deferred taxes. In this situation, **the difference in the deferred taxes and the tax gross-up received are covered by shareholders**. **This reflects the adoption of the Maryland Method**."[2850]

Since the Maryland Method shifts the ITCC tax liability risk (*i.e.*, the shortfall between the tax liability and the tax gross-up of ITCC collected) onto shareholders, not to ratepayers, there is no impact to the rate base. Therefore, the CIAC collection should not be considered miscellaneous revenue in this GRC.

2847 D.87-09-026 at OP 3a.
2848 Ex. 343, SDG&E/Dalton at 5.
2849 Ex. 471, ORA-SDGE-180-MRK, Q 2. (Emphasis added)
2850 *Id.* (Emphasis added.)

Second, ORA states that "[i]t is clear from [D.87-09-026], that once a utility has chosen a way of accounting for ITCC that is acceptable to the CPUC, then the rate base treatment method is determined" and that the "utility does not have the option of choosing both what method to use (be it Method 5 or the Maryland Method), and then choosing how it will treat its regulatory accounting."[2851] ORA's position is somewhat confusing[2852] but it seems that ORA is arguing that D.87-09-026 prohibits SDG&E from choosing both the method (whether Method 5 or the Maryland Method) **and** its regulatory accounting treatment; that is, once SDG&E chooses the ratemaking method, SDG&E cannot also decide whether the treatment went into rate base.[2853] ORA's position must be evaluated in light of D.87-09-026, which states that under the Maryland Method, "there is no chance of a rate increase to general ratepayers and there is no impact on the utility's capital budget."[2854] If there is no chance of a rate increase due to ITCC, then the ITCC should not be included in the rate base as miscellaneous revenue.

Third, and similar to the first assertion, ORA claims "ITCC is included as a reduction to rate base and is amortized to Miscellaneous Revenue over the tax life of the constructed property, as ordered in D.87-09-026."[2855] ITCC is not included as a reduction to rate base as the Maryland Method requires SDG&E's shareholders, not the ratepayers, to bear the impact of any shortfall between the tax liability and the tax gross-up ITCC collected from the contributor.[2856] Accordingly, SDG&E is prohibited from allowing the ITCC to impact to rate base. Therefore, the CIAC should not be included in SDG&E's Miscellaneous Revenue.

44. Regulatory Accounts

SoCalGas and SDG&E's Regulatory Accounts testimonies, supported by witnesses Rae Marie Yu and Norma Jasso, respectively, explain the ratemaking treatment of the costs associated with the Companies' present and proposed regulatory accounts.[2857] The scope of these testimonies is limited to explaining the ratemaking mechanisms for regulatory accounts,

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2851 Ex. 424, ORA/Kanter at 13.
2852 ORA could also be arguing that once the tax treatment is decided, SDG&E cannot choose the ratemaking impact. If this is ORA's position, it is inaccurate. SDG&E cannot "choose" the tax treatment of CIAC contributions; the tax treatment is dictated by federal tax law. D.87-09-026 involved the selection of the ratemaking treatment of CIAC and ITCC. *See* Ex. 265, SDG&E/Reeves at 21-22.
2853 *Id.*
2854 D.87-09-026 at 68.
2855 Ex. 424, ORA/Kanter at 13.
2856 Ex. 343, SDG&E/Dalton at 5.
2857 Exs. 181-183 SCG/Yu; Exs. 184-186 SDG&E/Jasso.

and does not encompass the purpose, or costs and proposals related to the accounts, which are discussed by various witnesses.[2858] As Ms. Yu and Ms. Jasso testified during hearings, their Regulatory Accounts testimonies only cover the mechanism for costs, and do not address the need for regulatory accounts, or the reasonableness of costs recorded in regulatory accounts.[2859] Appendix A of Ms. Yu and Ms. Jasso's testimonies identifies each witness who sponsors testimony concerning these issues for the account indicated.[2860] Please see other sections of this brief that provide more detail regarding the costs and proposals for these accounts.

44.1 Common Issues

44.1.1 Undisputed Regulatory Accounts (SoCalGas and SDG&E)

SoCalGas' TY 2019 GRC proposals in Ms. Yu's direct testimony relating to regulatory accounts[2861] include the disposition of eight existing regulatory account balances, the closure of two memorandum accounts, the continuation of three existing account mechanisms, the modification of four existing accounts, and the creation of four new accounts.[2862] For the eight existing accounts, SoCalGas requests that the over or undercollected balances be amortized as of December 31, 2018, in customers' gas transportation rates.[2863] SoCalGas also requests that any residual balances for these accounts be transferred to the Core Fixed Cost Account (CFCA) and/or Non-Core Fixed Cost Account (NFCA) followed either by close-out of the program cycle or elimination of the account.[2864] Parties have only disputed four of SoCalGas' proposals discussed further below: the continuation of the Storage Integrity Management Program Balancing Account (SIMPBA) and the creation of four new accounts (PSEPBA, MROWMA, MROWBA, and LIPBA).

[2858] Ex. 181 SCG/Yu at 1; Ex. 184 SDG&E/Jasso at 1.

[2859] Tr. V20:1807:9-17 (Yu); Tr. V20:1800:13-14 (Jasso).

[2860] Tr. V20:1807:3 (Yu); *see* Ex. SCG 181/Yu at A1-2; *see also* Ex. SDG&E 184/Jasso at A-1.

[2861] Ex. 181 SCG/Yu at iii-iv.

[2862] All of these new accounts are disputed: Pipeline Safety Enhancement Plan Balancing Account (PSEPBA), the Morongo Rights-of-Way Memorandum Account (MROWMA), the Morongo Rights-of-Way Balancing Account (MROWBA), and the Liability Insurance Premium Balancing Account (LIPBA). *Id.* at 15-19.

[2863] *Id*. at 2-6. SoCalGas proposes the actual regulatory account balances as of December 31, 2018, be incorporated into the development of the adopted TY 2019 GRC rates if a decision is issued on or after January 1, 2019. If a decision is issued before January 1, 2019, SoCalGas will incorporate a forecast of the ending balances of the accounts as of December 31, 2018, for inclusion in TY 2019 GRC rates.

[2864] *Id*.

SDG&E's TY 2019 GRC proposals in Ms. Jasso's direct testimony relating to regulatory accounts[2865] include the closure of ten accounts,[2866] the continuation of five existing account mechanisms, the modification of three existing accounts, and the creation of three new balancing accounts.[2867] Parties have only disputed four of SDG&E's proposals discussed further below: the modification of the one-way Tree Trimming Balancing Account (TTBA) to two-way balancing treatment and the creation of three new balancing accounts (LIPBA, OMABA, and TPCBA).

Please see Appendix A: Summary Listing of Uncontested Regulatory Accounting Proposals for which SoCalGas and SDG&E proposals were uncontested.

SoCalGas and SDG&E submitted supplemental testimonies on April 6, 2018 proposing to establish sub-accounts in the existing Tax Memorandum Accounts (TMA), which were undisputed and are discussed below.

44.1.1.1 TMA Sub-Accounts for 2018 Impacts from Tax Cuts and Jobs Act

The parties have not disputed SoCalGas and SDG&E's proposals to create new, interest-bearing sub-accounts in the TMA to address the impacts related to the implementation of the Tax Cuts and Jobs Act of 2017 (TCJA) through 2018 (2018 TCJA Impacts).[2868] As noted in Ms. Yu and Ms. Jasso's supplemental testimonies, the "purpose of this sub-account would be to separately track the difference between actual 2018 tax benefits realized as a result of the TCJA and any estimated benefits the Commission may approve" in this proceeding.[2869] The supplemental testimonies also offered two proposals with regard to the disposition of the sub-account: "One option is for the Commission to authorize an estimated amount for the 2018 TCJA Impacts in a final decision in this proceeding to be implemented in rates concurrently with the other approved items in the TY 2019 GRC. Doing so would help offset any increases, if applicable, to customers' rates as a result of the amortization of the GRC Memorandum Account

[2865] Ex. 184 SDG&E/Jasso at 1.

[2866] SDG&E proposed to transfer any remaining residual balances in the balancing/memorandum accounts to one of the following fixed regulatory accounts prior to closing the account: Electric Distribution Fixed Cost Account (EDFCA), Core Fixed Cost Account (CFCA), and Noncore Fixed Cost Account (NFCA). *Id.* at 2.

[2867] All of these new accounts are disputed: Liability Insurance Premium Balancing Account (LIPBA), Otay Mesa Acquisition Balancing Account (OMABA), and Third Party Claims Balancing Account (TPCBA). *Id.* at 13.

[2868] Ex. 182 SCG/Yu at 2; Ex. 185 SDG&E/Jasso at 2.

[2869] *Id.*

(GRCMA). . . . Another option for the Commission's consideration . . . is to issue a separate, interim order prior to January 2019 authorizing [SoCalGas/SDG&E] to create the 2018 TCJA Sub-Account and include an estimate of the 2018 TCJA Impacts in its 2018 year-end consolidated advice letter filing for incorporation in customers' transportation rates effective January 1, 2019."[2870] An estimate of the 2018 TCJA Impacts was provided in the Update Testimony of Ragan Reeves.[2871]

44.1.2 Disputed Regulatory Accounts (SoCalGas and SDG&E)

44.1.2.1 Liability Insurance Premium Balancing Account (LIPBA)

SoCalGas and SDG&E propose the creation of a two-way interest-bearing balancing account, LIPBA, to be recorded on SoCalGas and SDG&E's financial statements.[2872] LIPBA would record the difference between the authorized revenue requirement to be adopted in this TY 2019 GRC specific to liability insurance premiums charged to the Company and the actual expenses incurred and charged to the Company.[2873]

ORA did not oppose SoCalGas and SDG&E's proposed LIPBA or their forecasts of costs, but recommends that it file a new application if additional coverage is needed.[2874] Federal Executive Agencies (FEA) opposed SDG&E's LIPBA request claiming that liability insurance costs are a normal business cost and not beyond the utility's control.[2875] UCAN opposed SoCalGas' LIPBA request while supporting SDG&E's request for LIPBA given that the account is limited to wildfire insurance.[2876]

As explained in the rebuttal testimony of witness Neil K. Cayabyab, insurance premiums can fluctuate from year to year based on various factors, many of which are out of the

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[2870] Ex. 182 SCG/Yu at 3; Ex. 185 SDG&E/Jasso at 3.
[2871] Ex. 514 SCG/SDG&E/Reeves Update Testimony (UT) (August 2018) at 21.
[2872] Ex. 181 SCG/Yu at 19; Ex. 184 SDG&E/Jasso at 13.
[2873] *Id*. See Ex. 238 SCG/SDG&E/Cayabyab for further discussion.
[2874] Ex. 416 ORA/Laserson at 2. ORA recommends conditions, including that the LIPBA have a cap on the level of coverage of insurance procured that is recorded in the LIPBA up to the forecast presented in the GRC, and recommends that an application be filed for recovery of additional purchased coverage. *Id.* at 53:4-10.
[2875] Ex. 366 FEA/Smith at 31, 32:21-22. FEA is silent on SoCalGas' LIPBA, as the scope of its testimony is directed at SDG&E. *See id.* at 2:1-5.
[2876] Ex. 512 UCAN/Charles at 105-07. UCAN provides suggestions as to review and recovery of costs above those approved in the GRC, including the recovery of undercollections through a Tier 3 advice letter (0% to 25% undercollected balance) or a separate application (25% and above undercollections). Ex. 509 UCAN/Sulpizio at 15; Ex. 512 UCAN/Charles at 105.

Company's control.[2877] ORA's recommendation would expose SoCalGas and SDG&E to increased risk during the significant period of time it could take to pursue Commission approval of additional coverage through a new application.[2878] FEA's proposal ignores the fact that insurers have been re-evaluating their positions due to the financial landscape in California, and in particular the 2017 wildfires, making liability insurance costs likely to exceed forecasted amounts.[2879] Given the risk perception of insurers and accompanying market fluctuations, it is reasonable to assume the Companies' insurance premiums and needed levels of coverage will be impacted by factors beyond their control, contrary to FEA's assertions.[2880] UCAN's proposal in turn fails to recognize that liability insurance premiums affect both SoCalGas and SDG&E.[2881]

SoCalGas and SDG&E also disagree with ORA's and UCAN's positions to seek alternative regulatory vehicles for review of LIPBA balances and instead maintain their proposal to amortize the balance in connection with the annual regulatory account update Tier 2 advice letter filing. Doing so with respect to the LIPBA does not weaken the Commission's ability to scrutinize and review undercollections recorded in the balancing accounts. As explained in Ms. Jasso's rebuttal testimony, SDG&E's proposal would facilitate the timely resolution of that review without having to put forth a resolution requiring a full Commission vote as required through a Tier 3 advice letter and a separate application.[2882] Timely approval of insurance is needed because insurance is procured annually[2883] and therefore the revenues should be recovered consistently so that there is no timing gap between the two, whether it be over or undercollected. This reasoning would equally apply to SoCalGas' same proposed mechanism. SoCalGas and SDG&E need to have the flexibility and agility to actively participate in the insurance market, as today's insurance market can be rather volatile.[2884] Therefore, arbitrarily assigning a 25% threshold on recovery is not supported by facts in the case.

[2877] Ex. 240 SCG/SDG&E/Cayabyab at 5-12. *See also* Tr. V23:2301:1-6 (Cayabyab).
[2878] Ex. 240 SCG/SDG&E/Cayabyab at 5-6.
[2879] *Id*. at 6.
[2880] *Id*. at 7.
[2881] *Id*. at 8.
[2882] Ex. 186 SDG&E/Jasso at 6.
[2883] Ex. 240 SCG-SDG&E/Cayabyab at 11.
[2884] *Id*. at 11-12.

44.2 Disputed Regulatory Accounts (SoCalGas Only)

44.2.1 Storage Integrity Management Program Balancing Account (SIMPBA)

SIMPBA is an interest-bearing balancing account recorded on SoCalGas' financial statements to balance the difference between actual and authorized SIMP costs.[2885] As noted in the rebuttal testimony of witness Neil P. Navin, the Commission approved a two-way balancing account for SIMP in Decision (D.) 16-06-054 and found the two-way balancing account to be reasonable.[2886] Despite the Commission's finding, ORA submitted testimony recommending that SIMPBA be changed from a two-way balancing account to a one-way balancing account to "better protect ratepayers."[2887] ORA did not oppose continuing two-way balancing treatment for TIMP or DIMP costs, though SIMP is similarly designed to these programs.[2888]

Contrary to ORA's contentions, a two-way balancing account still protects ratepayers. As Ms. Jasso explained at hearings, one-way balancing accounts do not "better protect ratepayers" and both types of accounts necessitate prudent containment of costs:

> In a two-way balancing account, as well as a one-way balancing account, any underspent funds or overcollections are returned to ratepayers in both cases. In the case of an overspent [account], which would be an undercollection then in the case of a one-way . . . we would not be requesting recovery from ratepayers. And in the case of a two-way, we would . . . have the opportunity to have recovery of those costs. . . . [C]ontaining costs and being prudent in costs is something that needs to be done and is done in both types of accounts.[2889]

Thus, the ratepayers are protected if there is an overcollection in the account as the costs will be returned to ratepayers.

Moreover, the SIMPBA would continue to have the same additional protections approved in the last GRC D.16-06-054 that provide opportunities for the Commission to further scrutinize costs above a certain threshold, as Mr. Navin testified: "recovery of any costs exceeding, but limited to 35% in excess of GRC-authorized costs would require the filing of a Tier 3 advice letter, . . . and any costs above the 35% ceiling must be recovered through a separate application .

[2885] Ex. 181 SCG/Yu at 12.
[2886] Ex. 276 SCG/Navin at 14; ORA does not oppose SoCalGas' SIMP capital forecast but recommends adoption of adjusted-recorded costs for 2017. *Id*. at 17-20.
[2887] *Id*. at 2; Ex. 409 ORA/Lee at 11.
[2888] Ex. 276 SCG/Navin at 14.
[2889] Tr. V20:1798-1799:15-24, 1-3 (Jasso).

. . subject to a reasonableness review. . . ."[2890] Also, as discussed in Mr. Navin's rebuttal testimony, maintaining two-way balancing account treatment for SIMP is appropriate given the unpredictable nature of work, and the dynamic development of new and emerging federal, state, and local regulations.[2891] For example, SIMP capital work is variable, not discrete, and regulations are dynamic and changing, making a two-way balancing account the most appropriate way to address costs.[2892] External market uncertainties exist for SIMP based on the availability of equipment and personnel as well as increasing competition for resources.[2893] Mr. Navin's rebuttal testimony discusses in further detail the reasons why continuing two-way balancing account treatment for SIMP costs is reasonable and appropriate.[2894]

44.2.2 Pipeline Safety Enhancement Plan Balancing Account (PSEPBA)

ORA, TURN/SCGC, and Indicated Shippers oppose SoCalGas' request for two-way balancing account treatment of PSEP costs on various bases. Those arguments are addressed in Section 18 of this brief, *infra*.

44.2.3 Morongo Rights-of-Way Memorandum Account (MROWMA) and Balancing Account (MROWBA)

SoCalGas proposes a memorandum account, MROWMA, to record pre-construction costs associated with the evaluation of potential relocation of transmission pipelines that run underneath land held by the United States Government in trust for the Morongo Band of Mission Indians.[2895] The disposition of the MROWMA balance, if any, would be addressed in a future proceeding before the Commission.[2896] SoCalGas also proposes an interest bearing two-way balancing account, MROWBA, to potentially record and recover costs associated with the renewal of expiring rights-of-way within the Morongo reservation.[2897] Such costs may include the cost for the renewal of rights-of-way, potential gas infrastructure modification, additions and/or partial relocation costs, costs incurred during renewal discussions with Morongo, and

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[2890] Ex. 276 SCG/Navin at 13-14 (citing D.16-06-054 at 249-50, Ordering Paragraph (OP) 8).
[2891] Ex. 276 SCG/Navin at 26.
[2892] *Id*. at 22.
[2893] *Id*. at 23.
[2894] *Id*. at 10-15, 22-25.
[2895] Ex. 181 SCG/Yu at 17.
[2896] *Id*.
[2897] *Id*. at 18.

additional costs incurred for the interim operational period.[2898] SoCalGas proposes to amortize the balance of MROWBA, if any, in customers' gas transportation rates through the annual regulatory account update advice letter filing and would present any costs recorded in MROWBA in its next GRC (or other applicable proceeding) for review.[2899]

ORA recommends that the memorandum account be established to track the cost for the renewal of rights-of-way (subject to reasonableness review) but opposes SoCalGas' proposed balancing account and its request to establish a memorandum account to track pre-construction costs associated with the potential relocation of transmission pipelines around tribal lands.[2900] As discussed in Gas Engineering witness Deanna Haines' rebuttal testimony, ORA did not set forth any rationale, facts, or evidence to support its position.[2901] Due to ORA's failure to support its position, there were no facts or arguments for SoCalGas to rebut, and SoCalGas simply reiterated its request for the reasons set forth in direct testimony.

TURN opposes both of SoCalGas' requests for memorandum and balancing accounts.[2902] TURN bases its opposition on its assertions that SoCalGas should have forecasted costs associated with renewal of the expiring rights-of-way agreements, that the forecast for Gas Engineering's Land Services and Right-of-Way group includes Morongo-related costs due to the use of a linear forecast method,[2903] that SoCalGas can record pre-construction costs through other means,[2904] and that there is no precedent for SoCalGas' request.[2905]

As explained in Ms. Haines' rebuttal testimony, there are examples of Commission-approved balancing accounts (*e.g.*, NERBA) for this type of mechanism where the costs are expected to be reasonably incurred, but the full range and level of those costs are unforeseeable or uncertain. TURN also attempted during hearings to interpret the lack of a forecast for

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2898 *Id*. *See* Ex. 60 SCG/Haines for further discussion of costs; see also Tr. V20:1811:7-28, 1812:1-17 (Yu).
2899 Ex. 181 SCG/Yu at 19; Tr. V20:1813:13-15 (Yu).
2900 Ex. 63 SCG/Haines at 3-4.
2901 *Id*. at 8.
2902 *Id*. at 5.
2903 TURN's allegation that Morongo-related costs were included in this forecast is addressed in Ms. Haines' rebuttal testimony. *Id*. at 9-10.
2904 SoCalGas cannot record pre-construction costs through working cash and ratebase as TURN suggests because costs were too speculative at the time the forecast was prepared. *Id*. at 10-11.
2905 *Id*. at 9-11. As Ms. Haines notes in her rebuttal testimony, other regulatory accounts have been approved (*e.g.*, NERBA) where the expectation and nature of costs is considered reasonable, but the full range and level of costs are either unforeseeable or uncertain. *Id*. at 11.

Morongo costs as effectively turning the requested two-way balancing account into a one-way balancing account.[2906] Ms. Yu clarified that though the Morongo renewal-related costs were not forecasted in the TY 2019 GRC, the mechanism would still function as a two-way balancing account "because we are requesting to recover the costs as we spend them, if authorized to do so."[2907] Ms. Yu further explained: "The way the mechanism would work is as we record the actual costs to the balancing account, undercollection would result as in a debit balance that we would recover back from our ratepayers."[2908] With the two-way balancing account, SoCalGas is "requesting to recover the costs as we spend them if authorized to do so . . . [whereas] with the memo account, we would just track the costs and seek future recovery of those costs" in a separate proceeding.[2909] Though an overcollection would not occur if SoCalGas is not recording authorized amounts to the balancing account, that does not mean the two-way balancing account mechanism transforms into a one-way balancing account mechanism.[2910] Therefore a two-way balancing account is both reasonable and appropriate, and SoCalGas' request should be granted.

44.3 Disputed Regulatory Accounts (SDG&E Only)

44.3.1 Tree Trimming Balancing Account (TTBA)

SDG&E proposes to modify the tree trimming balancing account mechanism from a one-way to a two-way balancing account treatment for the costs authorized in this proceeding as discussed in the testimony of William Speer.[2911] The purpose of the TTBA is to balance the difference between the annual revenues authorized in SDG&E's GRC and actual annual tree trimming costs. This account is addressed in SDG&E's annual regulatory account update advice letter filing where revenues collected in excess of annual costs are returned to electric distribution customers on an annual basis.[2912]

[2906] Tr. V20:1817:15-17 (Finkelstein).
[2907] Tr. V20:1815:17-19 (Yu).
[2908] *Id.* at 1816:23-27.
[2909] *Id.* at 1815:17-19, 26-28.
[2910] *Id*. at 1817:8-18.
Q: Sure. Are there any circumstances under which there would be an overcollection?
A: If we are not recording authorized amounts to the balancing account, there would not be an overcollection to record to the balancing account.
Q: So then would you agree with me that makes this in effect a one-way balancing account?
A: I would not agree with that.
[2911] Ex. 184 SDG&E/Jasso at 12-13.
[2912] *Id*.

ORA and FEA support the continuation of a one-way balancing account for SDG&E's vegetation management/tree trimming costs, rather than the modification proposed by SDG&E.[2913] ORA indicates that continuing the one-way balancing account treatment to track expenses will benefit ratepayers by ensuring that unspent funds will be returned to ratepayers.[2914] FEA states that SDG&E has not justified its need to change the TTBA to a two-way balancing account, and that continuing the one-way balancing account will encourage SDG&E to contain costs when performing tree trimming activities.[2915]

SDG&E disagrees with both ORA's and FEA's assertions regarding the one-way versus two-way balancing account mechanism. As Ms. Jasso explains in her rebuttal testimony, underspent funds (*e.g.*, overcollections) are returned to ratepayers in two-way balancing accounts as well in one-way balancing accounts.[2916] The return of an overcollection is not determined by whether an account is designated as one-way or two-way. As noted above in Section 44.2.1 Storage Integrity Management Program Balancing Account (SIMPBA), "containing costs and being prudent in costs is something that needs to be done and is done in both types of accounts."[2917] Moreover, SDG&E's requested change of the TTBA from a one-way to a two-way balancing account allows for the opportunity to recover undercollected tree trimming costs, including efforts to mitigate and manage emergent safety and reliability risks that may arise due to drought and fire safety issues as they become known.[2918] Mr. Speer notes in his rebuttal testimony "The application of a two-way balancing account will both permit the adoption of these [tree trimming] measures and serve to protect customers: SDG&E can employ the newer tools and techniques to improve safety and wildfire risk, and any unspent funds are returned to ratepayers."[2919]

SDG&E further disagrees with FEA's statement that SDG&E has not justified its need for a two-way balancing account. Mr. Speer addresses the reasons for two-way balancing of tree trimming costs considering climate fluctuations from recent drought followed by significant rain and the potential impact these events are expected to have on vegetation management

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[2913] Ex. 186 SDG&E/Jasso at 4.
[2914] Ex. 400 ORA/Godfrey at 57:2-6.
[2915] Ex. 366 FEA/Smith at 48:3-7.
[2916] Ex. 186 SDG&E/Jasso at 5.
[2917] Tr. V20:1799:1-3 (Jasso).
[2918] Ex. 186 SDG&E/Jasso at 6.
[2919] Ex. 71 SDG&E/Speer at 67.

requirements in the form of increased vegetation growth and workload.[2920] These climate-related trends are expected to continue, as explained in the testimony of David Geier, which "as a combination of factors leads to increases in both fire season duration and severity…as well as projected warming across the region."[2921] SDG&E's targeted vegetation management efforts help to mitigate the ongoing, year-round threat of wildfire risk in SDG&E's service territory.[2922] This year-round threat further demonstrates the need for a two-way TTBA.

44.3.2 Otay Mesa Acquisition Balancing Account (OMABA)

SDG&E proposes to create the electric OMABA as a one-way interest-bearing balancing account recorded on SDG&E's financial statements. The purpose of the OMABA is to record the revenues collected from customers through January 1, 2019 until SDG&E takes ownership of the Otay Mesa Energy Center (OMEC) and it becomes a used and useful asset in SDG&E's Generation fleet.[2923] After the plant is in SDG&E's ownership, the balance in the OMABA will be transferred to the appropriate regulatory account and returned to customers during the next available rate change. SDG&E will then close the OMABA. Review of this account will take place in the annual ERRA Compliance proceeding or another proceeding deemed appropriate by the Commission.[2924]

ORA[2925] and FEA[2926] do not object to SDG&E's request to establish the OMABA, and propose the following recommendations: (1) when Calpine notifies SDG&E that it will utilize the put option, SDG&E should file a Tier 1 advice letter to implement the OMABA as opposed to SDG&E's proposal to implement the OMABA on January 1, 2019; (2) the OMABA should be a one-way account to record the revenue requirement associated with the OMEC forecast; and (3) the account should remain open through the TY 2019 GRC cycle and any overcollections

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[2920] Ex. 68 SDG&E/Speer at 72.
[2921] Ex. 360 SDG&E/Geier at 4.
[2922] *Id.* at 7.
[2923] Ex. 184 SDG&E/Jasso at 13; Ex. 186 SDG&E/Jasso at 7-8. At hearings, Ms. Jasso made a correction to her rebuttal testimony in Exhibit 186, page 8, lines 6-7 by removing reference to "authorized revenue requirement associated with the purchase of the OMEC." Tr. V20:1801:5-19 (Jasso). With that correction, Ms. Jasso further clarified that the amount of revenue collected from ratepayers every month will be set based on the total authorized revenue requirement for Otay Mesa, divided by the number of months before SDG&E takes ownership of the plant. *See id.* at 1818:7-1820:8.
[2924] Ex. 184 SDG&E/Jasso at 13.
[2925] Ex. 403 ORA/Logan at 9-10.
[2926] Ex. 366 FEA/Smith at 40:15-19.

returned to ratepayers at the end of the cycle.[2927] Similarly, TURN suggests that the Commission "defer consideration of SDG&E's OMEC ownership costs to a separate phase of this or another case" and review of associated costs "should only begin when Calpine actually exercises the Put Option and not finish until after the sale has closed."[2928]

Parties' concerns seem to generate from SDG&E collecting revenues beginning on January 1, 2019 reflected in the OMABA prior to Calpine potentially exercising the put option or SDG&E owning the plant.[2929] However, SDG&E's account as proposed satisfies all parties' needs in that it would return any recorded overcollections in both scenarios. As stated in the direct testimony of Daniel Baerman, Calpine must exercise its put option to have SDG&E buy the plant during 2019.[2930] SDG&E asserts that the OMABA should be established prior to Calpine exercising the put option and the transaction with Calpine is closed so that any potential incurred costs are identified and recorded to a regulatory account.[2931] Given the time necessary to receive regulatory approval of a revenue requirement and regulatory mechanism (*i.e.*, account), the review and approval of SDG&E's request in this Application with the relief proposed is the most efficient and effective way to make ratepayers neutral with regard to the purchase and for SDG&E to have the necessary funds to operate the plant.[2932] SDG&E reiterates its request to establish the OMABA to record revenue collected from ratepayers.

44.3.3 Third-Party Claims Balancing Account (TPCBA)

SDG&E proposes to create the electric and gas TPCBAs as two-way interest-bearing balancing accounts recorded on SDG&E's financial statements. The purpose of the TPCBA is to record the difference between the authorized revenue requirement and actual expenses specific to transactions associated with third-party-related claims as discussed in the testimony of Sandra K. Hrna.[2933] The TPCBA balance will be addressed in each GRC on a going forward basis.[2934]

[2927] Ex. 186 SDG&E/Jasso at 7.
[2928] Ex. 492 TURN/Woodruff at 2.
[2929] Ex. 186 SDG&E/Jasso at 7-8.
[2930] Ex. 97 SDG&E/Baerman at 5.
[2931] *See generally* Tr. V15:1154-1156 (Baerman) (regarding representations and warranties) and Ex. 100 SDG&E/Baerman/Shimansky at 15 (regarding due diligence); *see also* Tr. V15:1242:23-26 (Shimansky).
[2932] Ex. 186 SDG&E/Jasso at 8.
[2933] Ex. 184 SDG&E/Jasso at 13-14.
[2934] *Id*. at 14.

ORA indicates that it does not take issue with SDG&E's proposal to establish the account.[2935] UCAN[2936] and FEA[2937] reject SDG&E's proposal to establish a two-way balancing account for third-party claims. UCAN recommends instead that the Commission (1) authorize SDG&E to establish a memorandum account to track third-party claims that exceed SDG&E's liability insurance coverage, and (2) require SDG&E to submit an application to recover all costs in the memorandum account.[2938]

As explained in the direct testimony of Sandra K. Hrna, "“[t]he balancing account is necessary due to the impossibility of predicting the number of claims and amounts" and to address "the mismatch experienced historically between third-party related claims to be paid versus the amount of available insurance at any given time."[2939] SDG&E also explained that the "balancing account will see that customers are ultimately billed no more or no less than actual claims net payments" and that "[t]he balancing account protects both SDG&E and customers against the exposure to expenses that are predicated on a five-year history of events but may actually differ dramatically from such a forecast."[2940]

Furthermore, as stated in Ms. Jasso's rebuttal testimony, SDG&E's TPCBA-related proposal "accomplishes much of what UCAN has proposed and improves upon it" by allowing for the TPCBA balances to be reviewed in each GRC on a going forward basis, thus eliminating the need to file a separate application as proposed by UCAN.[2941] SDG&E's proposal is also preferred compared to UCAN's because SDG&E has proposed the TPCBA as a two-way account, which would also refund any recorded overcollections. Simply tracking expenses and requesting undercollections, as proposed by UCAN, misses the important point that ratepayers will experience a decrease in rates should SDG&E overcollect this account. SDG&E's requested TPCBA should be approved.

44.4 Conclusion

SoCalGas and SDG&E have thoroughly presented their proposals for current and proposed regulatory accounts and have explained the ratemaking treatment applicable therein.

2935 Ex. 186 SDG&E/Jasso at 8.
2936 Ex. 512 UCAN/Charles at 107:17-18.
2937 Ex. 366 FEA/Smith at 38:8-9.
2938 Ex. 512 UCAN/Charles at 107:17-21.
2939 Ex. 321 SDG&E/Hrna at 26.
2940 *Id*.
2941 Ex. 186 SDG&E/Jasso at 8.

For the reasons detailed above, as well as those discussed by various witnesses identified herein, the Commission should reject the intervenor parties' proposals and accept the Companies' proposals as presented.

45. Summary of Earnings/Results of Operations Model

SoCalGas and SDG&E's Summary of Earnings testimonies, supported by witnesses Khai Nguyen (adopted by Hom) and Ryan Hom, provide the utilities' summary of earnings tables and discuss the Results of Operation (RO) model, through which all of the cost estimates put before the Commission in this proceeding are compiled into an income statement format to estimate the amount of revenue needed for the utilities to earn an authorized rate of return on their investments.[2942] In Mr. Hom's Second Revised direct testimony, SoCalGas proposed $2,930,792,000 for its TY 2019 revenue requirement.[2943] SDG&E proposed $2,198,718,00 for its TY 2019 revenue requirement.[2944] On August 24, 2018, SoCalGas and SDG&E served their update testimony, which included updates to the Summary of Earnings. The updated proposed revenue requirement for SoCalGas is $2,936,606,000. The updated proposed revenue requirement for SDG&E is $2,202,534,000, on a combined basis and $1,763,508,000 and $439,025,000 for electric and gas departments, respectively.

45.1 Common Issue

The Companies' RO model has been accepted by all parties without challenge or indication that any redesign is necessary to more accurately calculate a revenue requirement. However, ORA and TURN submitted testimonies recommending an adjustment to the Corporate Center forecast as it relates to Sempra Energy's (parent company of SoCalGas and SDG&E) acquisition of Oncor Electric Delivery Company (Oncor).[2945] The rebuttal testimony of Ms. Mia L. DeMontigny addresses ORA and TURN's testimonies regarding the Oncor acquisition and the

[2942] Ex. 344 SCG/Nguyen (adopted by Hom); Ex. 345 SCG/Hom; Ex. 346 SDG&E/Nguyen (adopted by Hom); Ex. 347 SDG&E/Hom. **Note**: Accumulated balances for regulatory accounts (balancing, tracking, or memorandum) addressed in Exs. 181-183 SCG/Yu and Exs.184-186 SDG&E/Jasso are not included in the TY 2019 revenue requirement described herein.

[2943] Ex. 344 SCG/Nguyen/Hom at ii. The impact of the Tax Cuts and Jobs Act (TCJA), signed into federal law on December 22, 2017, has been incorporated into SoCalGas' revenue requirement request. *Id*. at 1.

[2944] Ex. 346 SDG&E/Nguyen/Hom at ii. The impact of the TCJA has not been incorporated into SDG&E's revenue requirement request, as SDG&E is proposing to maintain its revenue requirement at the initial application level. *Id*. at 1.

[2945] Ex. 416 ORA/Laserson at 42; Ex. 397 ORA/Oh; Ex. 498 TURN/Jones/Marcus at 66-69.

General Administration Corporate Center forecast.[2946] As noted in Ms. DeMontigny's rebuttal testimony, ORA and TURN's proposals to adjust Utility Allocations to incorporate Sempra Energy's acquisition of its indirect interest in Oncor would result in relatively minor impacts to the 2019 Corporate Center Multi-Factor allocations.[2947] ORA and TURN's proposals would not materially change overall Utility Allocations[2948] and thus would have an even smaller impact on the utilities' total revenue requirements presented in the Summary of Earnings testimonies.

45.2 Conclusion

The utilities request that the Commission adopt their requested revenue requirements for TY 2019 as proposed. If ORA and TURN's proposals with respect to the Oncor acquisition are instead adopted,[2949] this would have a negligible impact on the total authorized revenue requirements.

46. Post Test Year Revenue Requirement Issues

SoCalGas and SDG&E's post-test-year (PTY) ratemaking testimony chapters, sponsored by Sandra K. Hrna[2950] and Kenneth J. Deremer,[2951] respectively, offer proposals designed (1) to align PTY revenue requirements to account for unique cost escalation issues, such as the expected higher growth medical costs, and (2) to account for SoCalGas' and SDG&E's capital investments that mitigate risk and improve safety and reliability of the utility infrastructure. These proposals do not cover all anticipated expenses and capital-related investments but provide a reasonable level of funding necessary to maintain operational and financial stability while

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2946 Ex. 317 SCG/SDG&E/DeMontigny.

2947 *Id*. at 7-9, 11-12. ORA's proposal would result in a total reduction in SoCalGas and SDG&E Utility Allocations of only $0.8M and $1.6M, respectively. Total forecasted allocations under the Multi-Factor methodology represent a mere 15.1% of the total corporate Center 2019 Forecast, the smallest portion of total costs allocated from the Corporate Center. Similarly, TURN's proposal to exclude assets from the Multi-Factor calculation would have an insignificant impact (approximately 0.1%).

2948 Ex. 317 SCG/SDG&E/DeMontigny at 6-8, 11-12.

2949 As noted by Mr. Hom in his rebuttal testimony, SoCalGas and SDG&E noticed two computational issues with the RO model input of the proposed ORA forecasts. Ex. 345 SCG/Hom at 2; Ex. 347 SDG&E/Hom at 2; (discussing Ex. 416 ORA/Laserson, Table 21-1). First, the ORA RO model currently reflects the SCG or SDG&E Allocation without Oncor ($60,054 for SCG and $49,209 for SDG&E). Ex. 416 ORA/Laserson at 3. Based on ORA's proposal, the ORA RO model should reflect the SCG or SDG&E Allocation with Oncor ($46,362 for SCG and $37,990 for SDG&E). Second, ORA's recommended forecasts are in 2016 dollars. To be consistent with how Corporate Center costs are forecasted and handled in the RO model, the proposed General Administration Corporate Center Costs must be escalated to 2019 dollars before being input in the RO model.

2950 Exhibits (Ex.) 242 and 243 SCG/Malik (adopted by Hrna); Ex. 244 SCG/Hrna.

2951 Exs. 245-247 SDG&E/Deremer.

holding SoCalGas and SDG&E accountable for productivity improvements.[2952] The proposals are summarized as follows:

- A four-year term (2019-2022) for this GRC cycle, with SoCalGas and SDG&E's next test year in 2023.
- A PTY ratemaking mechanism to adjust authorized revenue requirements for:
    - Labor and non-labor costs based on IHS Markit Global Insight's (Global Insight or GI) forecast;
    - Medical costs based on Willis Towers Watson's forecast (as shown in Ms. Robinson's testimony[2953]); and
    - Calculating PTY capital-related revenue requirements using:
        - an escalated 5-year average level of capital additions; and
        - a forecast for Pipeline Safety Enhancement Plan (PSEP) capital additions beyond Test Year (TY) 2019 (applicable only to SoCalGas).
- Continuation of the currently authorized Z-factor mechanism.[2954]

Adoption of SoCalGas' proposal is forecasted to yield attrition-year revenue increases of $236.9 million (8.08 percent) in 2020, $192.9 million (6.09 percent) in 2021 and $202.6 million (6.03 percent) in 2022.[2955]

Adoption of SDG&E's proposal is forecasted to yield attrition-year revenue increases of $151.5 million (6.89 percent) in 2020, $120.0 million (5.10 percent) in 2021 and $122.2 million (4.95 percent) in 2022.[2956]

SoCalGas and SDG&E propose to continue updating their PTY revenue requirements through an annual advice letter process, to be filed on or before November 1 (beginning November 1, 2019) to update the authorized revenue requirement, according to the adopted PTY ratemaking mechanism.[2957] The resulting customer rate adjustments to recover the updated revenue requirement would be effective the following January 1. The advice letter will contain all calculations necessary to update the revenue requirement for the subsequent year.

[2952] Ex. 242 SCG/Malik/Hrna at 1; Ex. 245 SDG&E/Deremer at 1.
[2953] Ex. 211 SCG/SDG&E/Robinson at 31.
[2954] Ex. 242 SCG/Malik/Hrna at ii; Ex. 245 SDG&E/Deremer at ii.
[2955] *Id.,* Ex. 242 at 2.
[2956] Ex. 245 SDG&E/Deremer at 1.
[2957] Ex. 242 SCG/Malik/Hrna at 11; Ex. 245 SDG&E/Deremer at 8-9.

The Companies filed rebuttal testimony on June 18, 2018, addressing the direct testimony of ORA, UCAN, TURN, and CUE.[2958] SoCalGas also responded to IS, CLB, and the joint testimony of SCGC and TURN;[2959] and SDG&E also responded to testimony of FEA and SBUA.[2960] A comparison of the parties' positions regarding SoCalGas' PTY proposal[2961] is provided in Table 46.A below:

Table 46.A – SoCalGas Summary of Intervenor Positions (in Millions of Dollars)

Issue	SoCalGas	ORA Primary	ORA Alternative	UCAN Primary[2962]	UCAN Proposal #2[2963]	UCAN Proposal #3[2964]	CUE	Indicated Shippers Primary	Indicated Shippers Alternative	Long Beach
Estimated attrition revenue increase	$236.9 (8.08%) for 2020, $192.9 (6.09%) for 2021, and $202.6 (6.03%) for 2022	$121.0 (4.5%) for 2020, $145.0 (5.1%) for 2021, and $157.0 (5.3%) for 2022	Not calculated	$130.2 (4.4%) for 2020, $146.0 (4.8%) for 2021, and $150.3 (4.7%) for 2022	$130.9 (4.5%) for 2020, $156.44 (5.1%) for 2021, and $168.4 (5.2%) for 2022	$216.1 (7.4%) for 2020, $123.0 (3.9%) for 2021, and $133.4 (4.1%) for 2022	Not calculated	$50 for 2020 and $60 for 2021	$163 for 2020 and $132.8 for 2021	$89.0 (3.30%) for 2020, $104.5 (3.75%) for 2021, and $108.4 (3.75%) for 2022
GRC Term	4 years (2019 - 2022)	4 years (2019 - 2022)	Same as primary	4 years (2019 - 2022)	Same as primary	Same as primary	3 years (2019 - 2021)	3 years (2019 - 2021)	3 years (2019 - 2021)	4 years (2019 - 2022)
O&M	Escalate using IHS Global Insight's forecast	4.0% increase for each PTY	Escalate using IHS Global Insight's forecast, with a 100-basis points cap	Escalate at CPI-Urban plus 75 basis points	4.0% increase for each PTY	Escalate using IHS Global Insight's forecast, with a 100-basis points cap	Not addressed	Escalate using IHS Global Insight's forecast	Escalate using IHS Global Insight's forecast	Escalate at CPI-Urban
Medical	Escalate using Willis Towers Watson's forecast	4.0% increase for each PTY	4.25% increase for each PTY	Escalate at CPI-Urban plus 75 basis points	4.0% increase for each PTY		Not addressed	Escalate using Willis Tower Watson's forecast	Escalate using Willis Tower Watson's forecast	Escalate at CPI-Urban
Capital Escalations	Escalate using IHS Global Insight's forecast	4.0% increase for each PTY	Escalate using IHS Global Insight's forecast	Escalate at CPI-Urban plus 75 basis points	4.0% increase for each PTY		Not addressed	0% increase for each PTY	Same as primary	Escalate at CPI-Urban
Capital Additions Adjustments	5-year average of 2015-2016 recorded and 2017-2019 forecast	Not addressed	7-year average of 2013-2017 recorded and 2018-2019 forecast	Not addressed	Not addressed	5-year average of 2013-2017 recorded	Commission adopted 2019 capital spending	Not addressed	63% of SoCalGas' proposal	Not addressed
PSEP capital-related revenue	$13.7 for 2020, $34.4 for 2021, and $41.6 for 2022	$13.5 for 2020, $32.5 for 2021, and $40.2 for 2022	Same as primary	$13.7 for 2020, $34.4 for 2021, and $41.6 for 2022	Same as primary	Same as primary	$13.7 for 2020, $34.4 for 2021, and $41.6 for 2022	$9.0 for 2020, $22.0 for 2021, and $29.0 for 2022	Same as primary	$13.5 for 2020, $32.5 for 2021, and $40.2 for 2022
Z-factor mechanism	TY and PTYs	Only PTYs	Only PTYs	Not addressed	Not addressed	Not addressed	Not addressed	Not addressed	Not addressed	TY and PTYs

2958 Ex. 244 SCG/Hrna; Ex. 247 SDG&E/Deremer (rebutting Ex. 396 ORA/Tang, Ex. 511 UCAN/Charles, Ex. 494 TURN/Perea, and Ex. 370 CUE/Marcus).

2959 *Id.,* Ex. 244 (rebutting Ex. 436 IS/Gorman, Ex. 478 CLB/Fulmer, and Ex. 506 SCGC/TURN/Yap).

2960 Ex. 247 SDG&E/Deremer (rebutting Ex. 366 FEA/Smith and Ex. 438 SBUA/Brown).

2961 Ex. 244 SCG/Hrna at 8, Table 1.

2962 Does not include reductions to SoCalGas' proposed test year revenue requirement recommended by ORA or UCAN; Ex. 511 UCAN/Charles at 36-37.

2963 *Id.*

2964 *Id.*

Excluded from Table 46.A is TURN's proposal to increase the ARAM in the PTY period. Further details regarding SoCalGas' and intervenors' proposals are discussed in sections 46.1, 46.2 and 46.3, below.

A comparison of the parties' positions regarding SDG&E's PTY proposal[2965] is provided in Table 46.B below:

Table 46.B – SDG&E Summary of Intervenor Positions

Issue[2966]		SDG&E	ORA #1	ORA #2	UCAN	CUE
GRC Term		4 years	4 years	4 years	N/A	3 years
Escalation Rates	O&M (excluding medical)	IHS Global Insight	4.0%	IHS Global Insight,100 bps cap	CPI plus 75 bps	N/A
	O&M - Medical	Willis Towers Watson	4.0%	4.25%	CPI plus 75 bps	N/A
	Capital	IHS Global Insight	4.0%	IHS Global Insight	CPI plus 75 bps	N/A
Capital Additions Adjustment		5-year average (2015-2016 actual, 2017-2019 forecast)	4.0%	7-year average (2013-2017 actual, 2018-2019 authorized)	CPI plus 75 bps	2019 authorized
Z-factor		TY and PTYs	Only PTYs	Only PTYs	N/A	N/A

Further details regarding SDG&E's and intervenors' proposals are outlined below.

46.1 Term of Rates Adopted

SoCalGas and SDG&E propose a four-year GRC term of 2019-2022, with the next GRC cycle beginning with TY 2023. The Companies were granted a four-year GRC cycle in their TY 2004, 2008, and 2012 proceedings.[2967] In A.14-11-003/-004 (cons.), ORA recommended that SoCalGas be granted a four-year GRC term to allow for "better utility financial and operational management of spending and investment."[2968]

[2965] Ex. 247 SDG&E/Deremer at 2, Table 1.

[2966] ORA Proposal #1 is also recommended by UCAN's secondary proposal and FEA's primary proposal. UCAN offered a third proposal recommending the commission adopt ORA's PTY ratemaking mechanism with capital additions based on a 5-year average of 2013-2017 actuals. FEA offered a secondary proposal recommending the commission adopt ORA's PTY ratemaking mechanism with capital additions based on a 7-year average of 2011-2017 actuals. SBUA recommends a three-year GRC term (2019-2021). Ex. 245 SDG&E/Deremer at 2, n.1.

[2967] In Decisions (D.) 04-12-015, D.08-07-046, and D.13-05-010, respectively.

[2968] D.16-06-054 at 225 (citing ORA Exhibit 398 at 13).

As discussed in the GRC cycle workshop[2969] held on January 11, 2017, SoCalGas and SDG&E support the adoption of the 4-year GRC term because it would free up scarce resources needed to litigate a GRC every three years and to allow the utility to maintain focus on safe, and reliable operations and customer responsibilities.[2970] Over the last several years, the GRC filing process has become more complex and subject to extended delays, which is now compounded by new processes, reviews, and reporting required by the Risk OIR decisions incorporating Safety Model Assessment Proceeding (S-MAP) and Risk Assessment and Mitigation Phase (RAMP) procedures. This process will become even more complex in the near future, when the Commission reaches a decision in the currently pending S-MAP proceeding. As discussed in the Companies' risk management testimony, a Motion for Approval of Settlement Agreement (Motion) was jointly filed by Settling Parties[2971] on May 2, 2018 in Phase 2 of the S-MAP. [2972] The settlement, if adopted, will set forth "minimum required elements to be used by the large utilities for risk and mitigation analysis in the RAMP and GRC,"[2973] to include, among other things, a process for selecting risks for the RAMP, principles for performing risk assessment and risk ranking in preparation for the RAMP, a methodology for mitigation analysis for risks in RAMP including the calculation of risk-spend efficiency, and global items such as ensuring transparency, using data when practical and appropriate, and using Subject Matter Expert (SME) judgment if data is not available. As Ms. Hrna and Mr. Deremer testified, SoCalGas and SDG&E have already experienced timing impacts and the need to request extensions of time in order to internally implement RAMP and S-MAP methodologies, such as the one-year extension that was requested (and granted) to file the next S-MAP application (from May 1, 2018 to May 1, 2019).[2974] SoCalGas and SDG&E expect to experience similar timing impacts in

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[2969] ORA, SDG&E and SoCalGas entered into a separate settlement agreement in A.14-11-003/-004 (cons.) to change the current three-year GRC cycle to a four-year GRC cycle. The Commission denied this petition, but directed Energy Division to hold a workshop to explore options. *See* D.16-06-005 at 6.
[2970] Ex. 242 SCG/Malik/Hrna at 2; Ex. 245 SDG&E/Deremer at 2.
[2971] The Settling Parties are PG&E, Southern California Edison Company (SCE), SoCalGas, SDG&E, ORA, TURN, the Energy Producers and Users Coalition (EPUC), and IS.
[2972] Ex. 4 SCG/SDG&E/Day/Flores/York at 10-11 (citing A.15-05-002/-003/-004/-005 (cons.), Joint Motion for Approval of Settlement Agreement Plus Request for Receipt into the Record of Previously Served Documents and for Expedited Comment Period (filed May 2, 2018)).
[2973] *Id.* at 11 (citing Motion at 10).
[2974] Ex. 244 SCG/Hrna at 10; Ex. 247 SDG&E/Deremer at 7 (citing R.13-11-006 and A-15-05-002, March 14, 2018 letter from Executive Director Alice Stebbens to Charles Manzuk granting joint request by SDG&E, SCE and SoCalGas regarding compliance to D.14-12-025 Ordering Paragraph (OP) 5, for extension of deadline to file next S-MAP Proceeding from May 1, 2018 to May 1, 2019).

implementing revised S-MAP and RAMP processes and methodologies that the Commission currently has yet to determine.

ORA witness Mr. Tang supports SDG&E's request for a four-year GRC term (2019-2022) and urges the Commission to adopt the proposal, stating that "A 4-year GRC term allows for better utility financial and operational management of spending and investment" and is "consistent with SDG&E's and Southern California Gas Company's (SoCalGas) GRCs for Test Years 2008 (2008-2011) and 2012 (2012-2015)."[2975] CUE, IS, TURN/SCGC and SBUA advocate for a three-year GRC term.[2976]

As the examples described (in further detail) in Ms. Hrna's and Mr. Deremer's rebuttal testimony demonstrate, the nature of integrating new risk mitigation efforts in conjunction with a GRC proceeding is complex.[2977] SoCalGas and SDG&E believe that an additional year is crucial, as the utilities and the Commission alike work to operate under new processes. The four-year GRC term would reduce the administrative burden on all parties and allow the Companies to more effectively operate their businesses while implementing new risk mitigation and accountability structures, processes and reporting requirements.

46.2 Methodology

The traditional GRC framework provides for an annual attrition mechanism for interim adjustments to the test-year revenue requirements in the post-test years, as Ms. Hrna and Mr. Deremer explain.[2978] Attrition mechanisms should provide reasonable and consistent funding for operating expenses and capital investments. The proposed attrition increases in 2020, 2021, and 2022 account for expected increases in costs due to inflation and increased capital investments (capital additions). Without an explicit attrition adjustment, SoCalGas and SDG&E would not have a reasonable opportunity to earn their authorized RORs after TY 2019.

SoCalGas and SDG&E expect to make significant annual capital investments in the TY 2019 GRC.[2979] SoCalGas' and SDG&E's capital programs will continue to focus on investments necessary to build and maintain safe and reliable infrastructure and to mitigate safety risks

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2975 Ex. 396 ORA/Tang at 16-17.

2976 Ex. 370 CUE/Marcus at 38-39; Ex. 436 IS/Gorman at 16; Ex. 506 TURN/SCGC at 10; Ex. 438 SBUA/Brown at 22-23.

2977 Ex. 244 SCG/Hrna at 8-11; Ex. 245 SDG&E/Deremer at 5-7.

2978 Ex. 242 SCG/Malik/Hrna at 3; Ex. 245 SDG&E/Deremer at 3.

2979 *Id.*, Ex. 242 at 4; Ex. 245 at 4.

identified in their RAMP presentations. This theme and content is emphasized throughout the testimony of SoCalGas and SDG&E witnesses sponsoring TY 2019 cost forecasts and aligns with SoCalGas and SDG&E's mission to maintain and enhance their safety-focused culture. Consequently, the level of estimated capital expenditures leading up to and including TY 2019 are part of an ongoing investment effort, which will continue beyond the test year period. Therefore, the PTY attrition mechanism should reflect the anticipated growth in capital additions in excess of depreciation in the PTY period, similar to the mechanism the Commission adopted in PG&E's TY 2014 and 2017 GRC proceedings.[2980]

SoCalGas' and SDG&E's proposed PTY ratemaking mechanisms comprise two adjustment components: (1) O&M margin (labor and non-labor) and medical expense escalation, and (2) capital additions. Each utility's proposed mechanism is described in further detail in Ms. Hrna's and Mr. Deremer's direct testimony chapters and workpapers.[2981] Appendix A to Ms. Hrna's and Mr. Deremer's direct testimony chapters provide a calculation of the 2020 through 2022 SoCalGas and SDG&E revenue requirements using the current Global Insight forecasts of O&M and capital cost escalation factors.[2982]

SoCalGas and SDG&E's response to ORA and intervenors' direct PTY testimony proposals are summarized below.

46.2.1 PARTIES' PRIMARY PTY ESCALATION PROPOSALS

<u>Rebuttal to ORA, UCAN, and Long Beach</u>

ORA's proposed PTY increases of 4.0% per year for 2020, 2021, and 2022 is guided by:

- A recent forecast of the annual percent change in Consumer Price Index (CPI), equal to 2.8% for 2020, 2.6% for 2021, and 2.4% for 2022;
- Recognition of capital investment programs which require additional revenues above a strict increase in CPI;
- Attrition increases adopted by the Commission in recent large energy utility GRCs; and
- SoCalGas' and SDG&E's two most recent post-test year percentage increases adopted by the Commission in D.13-05-010 and D.16-06-054.[2983]

[2980] D.14-08-032 at 653; *see also* D.17-05-013 at 246; A.15-09-001, Report on the Results of Operations for Pacific Gas & Electric Company, Test Year 2017, General Rate Case, Post-Test Year Ratemaking, ORA-21 at 22-24.
[2981] Ex. 242 SCG/Malik/Hrna at 5-10; Ex. 245 SDG&E/Deremer at 4-8.
[2982] *Id.*, Ex. 242 at Appendix A; Ex. 245 at Appendix A.
[2983] Ex. 396 ORA/Tang at 19.

For both utilities, UCAN recommends that the Commission adopt the methodology approved by the Commission in SoCalGas' and SDG&E's TY 2012 GRC, which is to increase the Companies' capital and O&M authorized test year revenue requirements by the projected CPI-Urban annual increase plus 75 basis points (resulting in a 3.7% per year average attrition), and excluding SoCalGas' PSEP-related revenues.[2984] IS recommends no capital-related SoCalGas revenue requirement increases for non-PSEP capital expenditures, as discussed separately below.[2985] CLB recommends SoCalGas annual PTY revenue increases based on CPI plus additional revenue for forecasted PSEP capital additions approved by the Commission.[2986]

As Ms. Hrna and Mr. Deremer testified in rebuttal, ORA's and UCAN's proposals (and CLB's proposal, for SoCalGas) inappropriately utilize CPI as a basis for forecasting utility-specific costs, because these recommendations do not represent SoCalGas' and SDG&E's anticipated growing costs, are below attrition increases adopted by the Commission in recent large energy utility GRCs, and are not based on a cost of service.[2987] The Parties' narrow focus on limiting PTY revenue growth ignores relevant facts and would result in underfunding utility operations, which is not sound policy. An attrition mechanism should provide reasonable funding for operating expenses and capital investments – similar to funding for the test year – and create rational incentives to manage costs. SoCalGas' proposal achieves that balance.

First, Ms. Hrna and Mr. Deremer testify that CPI is not appropriate measure to use in this case, because it measures changes in the price of a representative basket of goods and services purchased by a typical U.S. household, and it is not intended to and does not gauge price changes of goods and services purchased by businesses, or specifically, utilities. As the direct testimony states, Global Insight is weighted to incorporate "Utility Service Works," "Managers and Administrators," and "Professional and Technical Workers" and is more appropriate to use as an industry-specific source for escalation.[2988] In addition, CPI would not appropriately distinguish between the attrition necessary for capital and O&M cost, which is a position that has previously been supported by the Commission. In PG&E's TY 2014 GRC decision, the Commission stated:

> We adopt a two-part mechanism to capture distinctions driving attrition increases (a) for expenses versus (b) for capital expenditures. We decline to adopt

[2984] Ex. 511 UCAN/Charles at 35.
[2985] Ex. 436 IS/Gorman at 27.
[2986] Ex. 478 CLB/Fulmer at 23:9-19.
[2987] Ex. 244 SCG/Hrna at 12; Ex. 247 SDG&E/Deremer at 8.
[2988] *Id.* (citing Ex. 242 SCG/Malik/Hrna at 5-6 and Ex. 245 SDG&E/Deremer at 4-5, respectively).

> (Division of Ratepayer Advocate) DRA's primary proposal to set post-test-year revenue increases simply based on a single index, with no distinction between expenses versus capital additions. While applying a single index, as proposed by DRA, offers simplicity, we conclude that such an approach fails to adequately capture the distinctions between expense and capital expenditure attrition. We also decline to apply the CPI as an escalation factor. The CPI reflects consumer retail price changes, not the escalation in wholesale purchases of utility goods and services. Accordingly, we generally adopt industry-specific escalation factors, rather than use of the CPI.[2989]

Furthermore, an attrition adjustment based on CPI will not reflect the revenue requirement increase from plant additions in excess of depreciation (rate base growth) and cost escalation that SoCalGas and SDG&E will face in the attrition years.[2990] Unlike expenses that can generally be escalated using indices reflecting inflation, capital cost growth is much more complex and is driven by plant and rate base growth, not just cost escalation. Changes in capital revenue requirement components (authorized returns on rate base, depreciation expense, and taxes) are determined almost entirely by the relationship between capital additions and depreciation. When capital additions exceed depreciation, rate base increases and the related capital revenue requirement components also increase. These increases are unrelated to inflation, and rate base growth has no correlation to CPI.

Second, SoCalGas and SDG&E expect to make significant annual capital investments during the TY 2019 cycle in order to align with a mission to maintain and enhance their safety-focused culture, and to enhance its risk-focused investment plan in line with Commission policy.[2991] This includes increasing investments necessary to build and maintain safe and reliable infrastructure and to mitigate safety risks identified in the RAMP proceeding, as described in the risk management policy testimony[2992] and in the various direct testimony chapters supporting operations costs. Moreover, the testimony states that the level of capital expenditures leading up to and including TY 2019 are part of an ongoing investment effort, which will continue beyond the test year period.[2993] Both ORA and UCAN recognize that capital investment programs will require additional revenues above a strict increase tied to CPI.[2994]

[2989] D.14-08-032 at 653.
[2990] Ex. 244 SCG/Hrna at 13; Ex. 247 SDG&E/Deremer at 9.
[2991] *Id.* (citing Ex. 242 SCG/Malik/Hrna at 4 and Ex. 245 SDG&E/Deremer at 4, respectively).
[2992] Ex. 3 SCG/SDG&E/Day/Flores/York, *passim* and Appendix A.1, A.2.
[2993] Ex. 244 SCG/Hrna at 13; Ex. 247 SDG&E/Deremer at 9.
[2994] Ex. 396 ORA/Tang at 19.

However, their recommendation supporting a mechanism using CPI plus an adder also would not appropriately capture increases in utility specific cost inflation or increases in deprecation, taxes, and return.

Third, recent non-SoCalGas/SDG&E GRC decisions for PTY attrition yield higher than a 4.0% midpoint. In all recent utility decisions among the other California investor-owned utilities (IOUs), 4.0% is the lowest approved attrition rate.[2995] Since 2012, the average approved PTY escalation for other California IOUs is approximately 5.2%.[2996]

Fourth, ORA's and UCAN's recommendations for annual attrition of 4.0%, and CPI plus 75 basis points, respectively, do not adequately address rising costs and the Companies' growing capital programs, and appear arbitrarily determined. ORA's rebuttal testimony states that the 4.0% attrition was guided by the following factors: CPI, recognition of capital addition revenues required above a strict increase in CPI, and attrition adopted in recent historical GRCs. However, ORA stated in response to a data request that "there were no supporting workpapers/calculations utilized in determining the 4.0% figure." [2997] Similarly, in response to an SDG&E data request on June 13, 2018, UCAN stated, "there are no workpapers associated with the 75 basis points figure."[2998]

<u>SoCalGas Rebuttal to IS</u>

For SoCalGas, IS proposes two alternative adjustments to the PTY mechanism, both of which include adjustments to the revenue requirement for non-PSEP capital expenditures.[2999] IS incorrectly asserts that "the forecasting method of extrapolating historical capital expenditures is deficient in virtually all aspects of proper and prudent planning of the system, and developing known and measurable costs for setting rates."[3000] IS also incorrectly states that SoCalGas can eliminate the attrition mechanism for its capital revenue requirements by means of managing the authorized depreciation granted in the case.

[2995] SCE's and PG&E's authorized post-test year attrition since 2012. Four percent was granted in the first Post-Test Year of SCE's 2015 rate case; the second Post-Test Year attrition was granted at 5.0%.
[2996] Ex. 244 SCG/Hrna at 13; Ex. 247 SDG&E/Deremer at 9-10.
[2997] *Id.* (citing response to May 15, 2018, SEU-ORA-DR-7, Question 1).
[2998] *Id.* (citing response to June 13, 2018, SDG&E/SoCalGas DR 1 to UCAN, referencing Ex. 511 UCAN/Charles).
[2999] Ex. 244 SCG/Hrna at 14-15 (rebutting Ex. 436 IS/Gorman at 27-28).
[3000] Ex. 436 IS/Gorman at 27.

Although IS disagrees with the capital forecasting methodology demonstrated in SoCalGas' mechanism, the level of capital expenditures leading up to and included TY 2019 are part of an ongoing investment effort that continues beyond the test year period.[3001] The forecasting method of extrapolating historical expenditures is a method that has been historically and currently accepted by the Commission and consistent with the basis upon which the entire rate case is modeled. In a period of growth, the extrapolation forecast methodology is the best means for approximating the expenditures. To address concerns of proper and prudent planning of the system, the Risk Spending and Risk Mitigation Accountability Reports, as designed by the Commission, will compare the projections to the actual results.

IS incorrectly states that "…the Company's 2019 proposed revenue requirement includes depreciation and amortization of around $606.8 million per year. Hence, SoCalGas can make capital improvements of $606.8 million per year without increasing rate base in the PTY period."[3002] This assertion is grossly oversimplified and false given large asset basis upon which the depreciation is based and the depreciable useful lives.

Ms. Hrna noted in testimony that the Federal Energy Regulatory Commission's (FERC) Uniform Systems of Accounts (USofA) defines depreciation as follows (as shown in witness Flora Ngai's testimony):

> Depreciation, as applied to depreciable gas plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of gas plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities.[3003]

Ms. Ngai further states that "the annual deprecation rates were calculated for TY 2019 in accordance with CPUC Standard Practice U-4 using the straight-line method, broad group procedure, and remaining life technique for depreciable tangible assets. The straight-line method prorates the recovery of service value in equal annual amounts."[3004] Moreover, the estimated book life for all the FERC accounts except for FERC Account 391.3 exceeds four years.[3005]

[3001] Ex. 244 SCG/Hrna at 14.
[3002] *Id.* (rebutting Ex. 436 IS/Gorman at 28).
[3003] *Id.* at 15 (citing Ex. 382 SCG/Ngai at 3).
[3004] *Id.* (citing Ex. 382 SCG/Ngai at n.11).
[3005] *Id.* (citing Ex. 382 SCG/Ngai, Appendix A).

For simplicity sake, and ignoring all the other aspects of rate base and depreciation, assume SoCalGas' depreciable basis is $18 billion[3006] and the depreciable useful life is 30 years (per Ms. Ngai's testimony), using the straight-line depreciation method. The annual depreciation is approximately $600 million per year for 2019 and the future until fully depreciated (e.g., $18 billion/30 years). If SoCalGas eliminated all capital expenditures and did not place any assets in service, the depreciation would remain $600 million.

SoCalGas must expend capital funds to maintain the safety of its system, employees and customers. The capital related activities are a critical function of managing the overall operations of a safe system. As shown in workpapers (SCG-44-WP-2R page 7, Table 6, line number 2), Plant in Service is properly forecasted to increase. To remove attrition on capital-related costs as IS suggesting is not supported in the record of this case. To simply reduce capital expenditures to match depreciation is not prudent, plausible nor in line with Company priorities and Commission objectives. SoCalGas has put forth an extensive showing for the need to invest in our system.

To best capture SoCalGas' operating needs in the PTY environment, the attrition amounts should be based on a numerical basis that reflects the representative index of cost escalation, an appropriate estimation of capital additions, the associated impact on rate base, and then calculating the resulting increases for each revenue requirement component. This is the methodology utilized in SoCalGas' proposed PTY ratemaking mechanism. ORA, UCAN, and IS appear to recognize the deficiency of their primary proposals as they offer an alternate that is similar to SoCalGas' PTY ratemaking mechanism, which is addressed below.

46.2.2 Rebuttal to Parties' Alternative PTY Ratemaking Proposals

ORA, UCAN, IS (for SoCalGas) and FEA (for SDG&E) present alternative PTY proposals that align with SoCalGas' and SDG&E's proposals but contain alternate recommendations to certain components of the Companies' proposed mechanisms. SoCalGas and SDG&E presented rebuttal testimony that primarily addressed ORA's alternate proposal, but also covered the specific recommendations from UCAN, IS, and FEA when different from ORA.[3007]

[3006] *See* Ex. 243 SCG/Malik/Hrna at 7, Table 6 (showing SoCalGas' total fixed capital as ~$17B, $18B, $19B, and $20B per year, for years 2019-2022, respectively).
[3007] Ex. 244 SCG/Hrna at 16-19; Ex. 247 SDG&E/Deremer at 11-13.

SoCalGas and SDG&E disagree with ORA's recommendation on the following items: (1) limit the change in O&M escalation rates to a cap of no more than 100 basis points (1.00%) above the currently forecasted rates, (2) lower the annual medical escalation rate to a fixed rate (4.25%), (3) implement a 7-year average of capital additions (instead of SoCalGas' proposed 5-year average), including actuals for 2017 and authorized forecasts for 2018 and 2019, and (4) PSEP capital-related revenue requirements increases (for SoCalGas). ORA's alternative proposal uses SoCalGas' and SDG&E's proposal, with modifications as discussed below.

O&M (Labor and Non-labor) Margin Escalation Cap

ORA recommends that escalation rates be limited to 100 basis points (1.00%) above the currently forecasted GI rates. SoCalGas and SDG&E disagree with ORA's proposal to set limits on the post-test year O&M (labor and non-labor) escalation rates, limiting to 100 basis points (1.00%).[3008] Using GI escalation rates is fair and equitable for both ratepayers and shareholders and uses the best available data to forecast utility-specific costs. ORA's recommendation adds unnecessary complication to SoCalGas' request. If a cap is adopted, it should also act as a floor.

Medical Escalation Rates

SoCalGas and SDG&E believe that using Willis Towers Watson's PTY medical escalation rates is more appropriate than ORA's recommended 4.25% flat rate.[3009] SoCalGas and SDG&E propose recommend using post-test year escalation rates of 6.5% for 2020, 6.0% for 2021, and 5.5% for 2022, while ORA recommends a rate of 4.25% per year for 2018 through 2022.[3010] A medical escalation forecast, such as the one prepared by Willis Towers Watson, is more appropriate because it takes into account demographic factors specific to SoCalGas and SDG&E. These demographic factors – location, workforce demographics, and medical plan design – are key drivers of medical plan costs. The medical escalation rates determined through Ms. Robinson's chapter should be utilized for the PTY ratemaking methodology.[3011]

[3008] *Id.,* Ex. 244 at 17-18; Ex. 247 at 13.
[3009] *Id.,* Ex. 244 at 18; Ex. 247 at 11.
[3010] UCAN agrees with ORA's proposed medical escalation if a PTY ratemaking mechanism is to be adopted. However, UCAN also shows that SoCalGas and SDG&E propose a 7.8% medical escalation rate for each post-test year in direct testimony of Brandon Charles. Ex. 511 UCAN/Charles at 5. This figure is incorrect. SoCalGas and SDG&E proposed to utilize Willis Towers Watson actuarial forecast, which would result in a medical escalation rate of 6.5%, 6.0% and 5.5% for 2020, 2021 and 2022, respectively. Ex. 244 SCG//Hrna at 18, n.71; Ex. 247 SDG&E/Deremer at 11, n.24.
[3011] Ex. 211 SCG/SDG&E/Robinson at 31.

Capital Related Revenue Requirement

ORA does not oppose the use of an escalated multi-year average of capital additions as a proxy for post-test year capital additions, but recommends a 7-year average (2013-2019), using the 2017 recorded capital additions, and the Commission-adopted 2018 and 2019 capital additions forecasts.[3012] UCAN recommends use of a 5-year average 2013-2017 recorded capital additions,[3013] while IS recommends 63% of non-PSEP capital revenue requested by SoCalGas.[3014]

SoCalGas and SDG&E refuted these proposals, noting that using a 5-year average (2015-2016 recorded and 2017-2019 forecasted) best captures the utility investment profile and operating initiatives of the current utility environment, which has changed in the past few years.[3015] The 5-year average has been widely used and adopted as a relevant and reasonable base for the forecast of future costs in past and current SoCalGas and SDG&E rate cases. The Companies' capital programs are continuing to evolve with a greater focus on increasing investment in utility safety, reliability, and clean energy, which directly support California's energy policies, as noted in SoCalGas and SDG&E's direct testimony presentation.[3016] S-MAP and RAMP have also become a focus over the past few years, and through these proceedings the Companies will continue to identify necessary investment opportunities in safety and reliability in the upcoming years through the new tools and processes developed through those proceedings. The 5-year average includes recorded and forecasted capital additions, which incorporate the Companies' more recent historical capital trend and focuses on critical improvements within our service territory.

To illustrate the recent changes in SoCalGas' capital program, the average escalated capital additions in the 2013-2014 period was approximately $585 million compared to approximately $833 million average of the 2015-2016 period, which resulted in a compound annual growth rate of ~13% over the four years.[3017] For SDG&E's capital program, the average escalated capital additions in the 2013-2014 period is ~$571 million compared to ~$683 million

3012 Ex. 396 ORA/Tang at 24-25.
3013 Ex. 511 UCAN/Charles at 3.
3014 Ex. 436 IS/Gorman at 28.
3015 Ex. 244 SCG/Hrna at 18-19; Ex. 245 SDG&E/Deremer at 12-13.
3016 *See, e.g.,* Ex. 242 SCG/Malik/Hrna at 8; Ex. 245 SDG&E/Deremer at 7.
3017 Ex. 244 SCG/Hrna at 19.

average of the 2015-2016 period, which results in an average annual growth rate of ~6% over the four years.[3018] The demonstrated increase in capital additions over this time frame reflects SoCalGas' and SDG&E's evolving priorities in the areas mentioned above. By utilizing the 5-year average of capital additions (2015-2019), the Companies are able to more appropriately capture the future environment of the utility through the utilization of the most recent historical trends.

SoCalGas and SDG&E also disagree with intervenors' proposal to use 2017 actual capital additions.[3019] The forecasted capital additions for 2017 through 2019 were SoCalGas' best estimates of future capital-related costs and should be used in the 5-year average. 2017 recorded information was not available when the Companies filed testimony and therefore could not be used by us or any of our other witnesses. SoCalGas and SDG&E disagree with subjectively updating items after the date of our original submission. The forecasted capital additions for 2018 and 2019 are SoCalGas' and SDG&E's best estimate of future capital-related costs and should be used in the five-year average.

Rebuttal to PSEP Capital-Related Revenue Requirements

ORA does not oppose additional revenues for SoCalGas' PTY PSEP capital additions,[3020] but recommends that the Commission adopt ORA's capital expenditure forecasts as presented in ORA testimony.[3021] Based on those forecasts, ORA estimates that the PSEP capital-related revenue requirement impact equals $15.5 million, $36.7 million, and $44.7 million for 2020, 2021, and 2022, respectively.[3022] ORA developed its estimate of PSEP-related revenue by relying on ratios and pro-rated amounts based on its forecast of PSEP capital additions relative to SoCalGas' forecast.[3023] With the Tax Cuts and Jobs Act (TCJA) impact, ORA's updated increases are $13.5 million, $32.5 million, and $40.2 million for 2020, 2021, and 2022, respectively.[3024] CLB does not oppose additional revenues for SoCalGas' PTY PSEP capital additions, but as recommended by ORA.[3025] CUE and UCAN do not oppose SoCalGas'

[3018] Ex. 245 SDG&E/Deremer at 12.
[3019] Ex. 244 SCG/Hrna at 19; Ex. 245 SDG&E/Deremer at 12.
[3020] Ex. 396 ORA/Tang at 2.
[3021] Ex. 244 SCG/Hrna at 20 (citing Ex. 398/ORA/Stannik/Li).
[3022] Ex. 396 ORA/Tang at 25.
[3023] *Id.* at 20, n.63.
[3024] *Id.* at 10-11.
[3025] Ex. 478 CLB/Fulmer at 2.

proposal to collect incremental PSEP revenue requirements during the post-test years in addition to the standard post-test year revenue requirement escalation.[3026] IS does not oppose additional revenues for SoCalGas' PTY PSEP capital additions, but recommends that the Commission adopt IS' capital expenditure forecasts.[3027]

SoCalGas appreciates intervenors' recognition that additional revenue requirements will be required for PSEP capital expenditures that are expected to close to plant in service after 2019.[3028] SoCalGas disagrees with ORA's and IS' proposals regarding PSEP capital-related revenue requirements, however, because those amounts are solely based on ratios and pro-rated amounts reflecting ORA's forecast of PSEP capital additions relative to SoCalGas' forecast. SoCalGas witness Rick Phillips rebuts ORA's and IS' proposed PSEP capital expenditures in 2020, 2021, and 2022,[3029] and ORA's and IS' proposed PSEP capital expenditures should be rejected for those reasons. Furthermore, even if ORA's proposed PSEP capital expenditures and the associated capital additions were to be adopted, the PSEP capital-related revenue requirements increase should be \$13.2 million, \$33.9 million, and \$39.4 million for 2020, 2021, and 2022, respectively, and not the amounts proposed by ORA.[3030]

Similarly, even if IS' proposed PSEP capital expenditures and the associated capital additions were to be adopted, the PSEP capital-related revenue requirements increase should be \$9.0 million and \$24.1 million for 2020 and 2021, respectively, and not the amounts proposed by IS.[3031]

46.2.3 Other Intervenor Issues

Rebuttal to UCAN Arguments

In the testimony of Brandon Charles, UCAN argues that, despite lower attrition rates approved in prior GRCs, "SDG&E's actual Rate of Return (ROR) has exceeded its authorized

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3026 Ex. 370 CUE/Marcus at 20-21, 38; Ex. 511 UCAN/Charles at 2.
3027 Ex. 436 IS/Gorman at 31-43.
3028 Ex. 244 SCG/Hrna at 20-21.
3029 Ex. 235 SCG/Phillips, *passim*.
3030 ORA only submitted a recommended forecast for certain projects at the total project costs level without providing the breakdown between the O&M component and the capital component. Ex. 398 ORA/Stannik at 40. To derive ORA's capital expenditures for those projects, SoCalGas applies a ratio between O&M and capital for those projects using SoCalGas' proposal. Ex. 244 SCG/Hrna at 21, n.84.
3031 As IS recommends capital expenditures for the PSEP Valve Enhancement Plan at the program level, SoCalGas applies the ratio between Indicated Shippers' proposal and SoCalGas' proposal to the valve projects that are expected to close to plant in service in 2020 and 2021. Ex. 244 SCG/Hrna at 21, n.85.

ROR in nine out of the past eleven years and in every year since 2013."[3032] According to UCAN, revenue requirement increases have been "used to pad the utilities' revenue requirements in order to reduce shareholder risk and increase shareholder profit," and eliminates "management responsibility to seek continued cost savings and efficiency enhancements." SoCalGas and SDG&E disagree.[3033] The attrition request for revenue requirement is decoupled from earnings. Attrition is designed to adjust utility revenues for the corresponding expected increase in cost escalation during the post-test year period. Separately, the utilities are able to realize earnings above or below the authorized margin based on how effectively they are able to manage those costs. SoCalGas' and SDG&E's future authorized revenue requirement should not be impacted by profits (or losses) earned in prior years. Attrition in the post-test years is implemented to capture cost escalation due to inflation and an expanding capital program, not profits, and the mechanisms proposed by SoCalGas and SDG&E are accordingly designed to account for these elements.

ARAM

SoCalGas and SDG&E disagree with TURN's proposal to increase ARAM in the attrition years. Taxes witness Ragan Reeves speaks to the complexity of ARAM in his response to data request IS-SCG-009 in May 2018, stating: "Due to the thousands of SoCalGas' [and SDG&E's] plant-related assets, and the TCJA's requirement to compute ARAM on an asset-by-asset basis, the ARAM computation is too complex and detailed to incorporate within SoCalGas' [or SDG&E's] Results of Operations (RO) Model or within an Excel file." For simplicity, SDG&E applied the 2019 ARAM amount to the attrition years. The ARAM calculation determined through Mr. Reeves' chapter should be utilized for the PTY methodology.[3034]

Factoring CIS benefits into the 2022 PTY proposal

UCAN argues that SDG&E's 2022 revenue requirement should be adjusted to subtract $39.4 million from the total revenue requirement to account for CIS Replacement Program benefits.[3035] At the time SDG&E served its rebuttal testimony, a final decision in SDG&E's CIS proceeding (A.17-04-027) had not yet been rendered. The decision would provide specific

[3032] Ex. 511 UCAN/Charles at 13-14.
[3033] Ex. 244 SCG/Hrna at 23; Ex. 247 SDG&E/Deremer at 14-15.
[3034] *Id.,* Ex. 244 at 24; Ex. 247 at 15.
[3035] Ex. 511 UCAN/Charles at 45.

direction on the final amount and recovery mechanism for the CIS revenue requirement. Consequently, in GRC rebuttal testimony, SDG&E pointed to the forthcoming CIS decision for final determination of the revenue requirement, while acknowledging that any 2022 benefits to customers authorized by the CIS decision would be appropriately credited to ratepayers via the PTY or other designated mechanism.

On August 10, 2018, the CPUC issued D.18-08-008, approving the settlement agreement in the CIS proceeding and authorizing SDG&E to, among other things:

- Establish a Customer Information System Balancing Account (CISBA) to record the implementation costs, O&M costs and capital-related costs associated with the CIS program.[3036]
- Authorize SDG&E to recover amounts authorized in the decision through its annual end of the year consolidated advice letter filing into appropriate revenue requirements for affected years.[3037]

If SDG&E's request for an additional attrition year of 2022 is adopted in this GRC, the benefits authorized in the CIS decision would be credited against the total 2022 revenue requirement to ensure ratepayers appropriately received the benefit as directed. Pursuant to D.18-08-008, SDG&E understands this revenue requirement adjustment would be reflected through the consolidated advice letter process referred to in the CIS decision. If the additional 2022 attrition year is not approved, then the 2022 CIS revenue requirement, which would include both CIS benefits and the ongoing 2022 costs, would be addressed in the next (2022 test year) GRC.

46.3 Z-Factor

SoCalGas and SDG&E propose to continue the existing Z-factor mechanism, unchanged for this 2019-2022 GRC term.[3038] The mechanism uses a series of eight criteria outlined in D.94-06-011 to identify exogenous cost changes that qualify for rate adjustments prior to the next GRC test year. If all eight criteria are met, the Z-factor mechanism allows for rate adjustments for only the portion of the Z-factor costs not already contained in SoCalGas' and SDG&E's annual revenue requirement and only for costs that exceed a $5 million deductible per event.

In the case of a potential Z-factor event, the Companies will notify the Commission's Executive Director of the event by letter, providing all relevant and available information about

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3036 D.18-08-008 at 21, Ordering Paragraph 4.
3037 D.18-08-008 at 21, Ordering Paragraph 2.
3038 Ex. 242 SCG/Malik/Hrna at 10-11; Ex. 245 SDG&E/Deremer at 8.

the event, and will activate the Z-factor Memorandum Account for potential entries. Following this notification, the Companies would have the option to file an application for a revenue requirement supplement if the Z-factor event exceeds the $5 million per event deductible.[3039]

SoCalGas and SDG&E disagree with ORA's recommendation that the Z-factor mechanism only be effective for the post-test years, and not the test year.[3040] The Z-factor was established to protect both the utility and ratepayers by preventing both windfall profits and large financial losses as a result of unexpected and uncontrollable events. ORA's proposal does not take into account the fact that these events can take place at any time during the rate case cycle, including the test year, which is why the Z-factor should remain continuously effective throughout.

In the final decision granting SDG&E Z-factor treatment for increased insurance premiums, the Commission cited the eight criteria that needed to be met in order to approve SDG&E's Z-factor eligibility.[3041] ORA's suggested requirement was not included in this list. Rather, the timing of the Z-factor event is required to be "caused by an event that occurred after the implementation of rates."[3042] In SDG&E's case, the Commission found that "the incurred costs caused by increases in insurance occurred in 2009, after the implementation of rates in 2008, thus satisfying the second Z-factor criterion."[3043] Since the Z-factor event occurred after the first day of rate implementation (January 1, 2008), the Commission granted SDG&E's requested Z-factor treatment. This decision demonstrates that the Z-factor is in effect during both the test year and the post-test years.

Furthermore, the very nature of a Z-factor event is its unpredictability. Although SDG&E's Z-factor case for insurance premium adjustments occurred in the following year after the implementation of rates, the fact remains that this was an unforeseen incident that just as easily could have occurred in 2008. And, if a Z-factor event occurred in the test year that served to benefit SDG&E, the ratepayers would be similarly unprotected from a justified lowering of rates. Indeed, an unexpected and uncontrollable incident could also easily occur in 2019 that is not foreseeable as of the time of writing the instant brief. Therefore, the Commission should

[3039] *Id.*
[3040] Ex. 244 SCG/Hrna at 21-23; Ex. 245 SDG&E/Deremer at 13-14.
[3041] D.10-12-053 at 27.
[3042] *Id.* at 32-33.
[3043] *Id.*

remain true to the Z-factor's practical intent, which serves as a protection to both the ratepayer and utility, and disregard ORA's limiting proposal.

46.4 CONCLUSION

To summarize, SoCalGas and SDG&E have proposed a set of PTY ratemaking proposals that fairly balance the interests of both ratepayers and shareholders. The Companies believe that a reasonable PTY mechanism should meet the following goals: (1) use O&M and medical cost escalation indices that are representative of SoCalGas' and SDG&E's actual cost drivers, (2) use capital additions cost escalation that balances the certainty of historical spending with the best available estimates of future period capital additions, (3) include a forecast for PSEP capital additions beyond TY 2019. For the reasons discussed above, the proposals of ORA, UCAN, TURN, SCGC, CUE, IS, CLB, and FEA fail to meet these goals. The 4-year GRC term SoCalGas and SDG&E have proposed should be adopted, as ORA agrees, for all of the reasons noted above.

SoCalGas' and SDG&E's PTY ratemaking proposals are fair and reasonable mechanisms to provide the foundation for operational and financial stability in the post-test years. This proposal accounts for the major cost drivers impacting the Companies, which allows them to provide safe and reliable service to its customers, comply with regulations, and manage their operations as prudent financial stewards.

47. Presentation of Rates

SoCalGas and SDG&E's Present and Proposed Gas Transportation Revenues and Rates testimonies, supported by witness Iftekharul (Sharim) Chaudhury, present the utilities' proposed gas transportation revenue and rate changes, and the expected residential customer bills impact associated with TY 2019 GRC proposals.[3044] Present and Proposed Electric Revenues and Rates testimonies, supported by witnesses Jeffrey Shaughnessy (adopted by Fang) and Cynthia Fang, present the proposed electric revenue and rate changes, and the expected residential customer bills impact associated with TY 2019 GRC proposals for SDG&E only.[3045] These revenue and rate changes and expected bill impacts are based on rates at the time the TY 2019 GRC application was filed. The gas transportation revenues and rates for both utilities were prepared

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[3044] Exs. 349, 351 SCG/Chaudhury; Exs. 350-351 SDG&E/Chaudhury.
[3045] Ex. 352 SDG&E/Shaughnessy (adopted by Fang); Ex. 353 SDG&E/Fang.

similarly and will be discussed together. The electric revenues and rates for SDG&E will be discussed separately.

47.1 Common Issue: Reasonableness and Affordability of Proposed Revenues and Rates

Consumer Federation of California (CFC), National Diversity Coalition (NDC), and IS submitted testimony raising concerns regarding the reasonableness of natural gas rates and affordability of natural gas usage if SoCalGas and SDG&E's TY 2019 GRC revenue requirements are approved.[3046] IS and CFC argue that SoCalGas and SDG&E's rate increases and revenue requirements should be limited to the projected Consumer Price Index changes, and observed median income growth in the utilities' service region, respectively.[3047] NDC claims that the proposed revenue requirements unreasonably exceed ratepayers' ability to afford the use of natural gas.[3048] Similarly, NDC submitted testimony questioning the affordability of SDG&E's electric rates, while San Diego Consumers' Action Network (SDCAN) raised affordability concerns regarding how SDG&E's rates compare to those of other investor-owned utilities (IOUs).[3049]

While affordability is a serious concern that SoCalGas and SDG&E share with these parties, it is not the standard by which the Commission approves a total revenue requirement in a general rate case. In Decision (D.) 13-05-010, the final decision on the Companies' TY 2012 GRC, the Commission noted that several parties had raised concerns regarding the affordability of requested rate increases due to the state of the economy.[3050] In response to these arguments, the Commission clarified that the appropriate standard for approving rate increases is whether they are just and reasonable, stating:

It must be kept in mind, that the Commission's duty and obligation under Pub. Util. Code § 451 is to establish just and reasonable rates to enable SoCalGas and SDG&E to provide safe and reliable service for the convenience of the public, ratepayers, and employees, while allowing SDG&E and SoCalGas an opportunity for their shareholders to earn a fair return on the property that the companies use in providing their utility services…Consistent with this statutory

[3046] Ex. 488 CFC/Roberts; Ex. 437 NDC/Bautista; Ex. 436 IS/Gorman.
[3047] Ex. 436 IS/Gorman at 10; Ex. 488 CFC/Roberts at 3.
[3048] Ex. 437 NDC/Bautista at 4.
[3049] Ex. 437 NDC/Bautista at 4:6-8; Ex. 220 SDCAN/Shames at 15.
[3050] D.13-05-010 at 12-13.

guidance, the Commission is faced with the challenge of finding the appropriate balance of utility funding and programs to ensure safety, while keeping rates affordable, and allowing a fair rate of return.[3051]

As noted in the Scoping Memo for this proceeding, the main issue within the scope of this GRC is "[w]hether or not the proposed revenue requirements and proposed costs for TY2019 are just and reasonable and should be adopted by the Commission and reflected in rates."[3052] Consistent with Public Utilities Code Section 451,[3053] Mr. J. Bret Lane and Ms. Caroline Winn's policy testimonies discuss SoCalGas and SDG&E's overall approach to how their TY 2019 revenue requirement requests are just and reasonable, while various operations witnesses' direct testimonies explain why the Commission should adopt their specific forecasts as reasonable.[3054] The Commission's determination of an authorized total revenue requirement is what will ultimately be deemed "just and reasonable" in this case.

47.2 Electric Rates

48. Results of Examination (ORA Audit)

ORA conducted its examination of SoCalGas and SDG&E's financial records in accordance with the authority and mandates set forth in the Public Utilities Code sections 314, 314.5 and 309.5. ORA found "no exceptions" during its audit of SDG&E's $97.1 million in O&M expenses, SoCalGas' $148.9 million in O&M expenses, and the Companies' $44.2 million in customer service costs.[3055] According to ORA, it reached this position after reviewing a selection of the Companies' internal audit reports, the 2014 and 2016 audit reports and workpapers of Sempra's independent auditor, and 54 percent of the Companies' total costs for major expense items for 2014-2016 recorded data entries.[3056]

[3051] *Id*.
[3052] A.17-10-007/-008 (cons.), Assigned Commissioner's Scoping Memorandum and Ruling (issued Jan. 29, 2018) at 4 (emphasis added).
[3053] Cal. Pub. Util. §451:

> All charges demanded or received by any public utility, or by any two or more public utilities, for any product or commodity furnished or to be furnished or any service rendered or to be rendered shall be just and reasonable. . . Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities . . . as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.

[3054] Ex. 01 SCG/Lane; Ex. 02 SDG&E/Winn.
[3055] Ex. 428 ORA/Chia/Lee/Stannik at 17.
[3056] *Id.* at 2, 14.

ORA only recommends the removal of SoCalGas and SDG&E's costs to conduct 20 attorney-client privileged internal audit reports. For SDG&E, ORA recommends the removal of $511,000 in 2014, $338,000 in 2015, and $119,000 in 2016. For SoCalGas, ORA recommends the removal of $55,000 in 2014, $462,000 in 2015, and $153,000 in 2016.[3057]

Yet as detailed in the rebuttal testimony of Mia DeMontigny, ORA does not claim that these expenses were incorrect or imprudent. Instead, ORA only contends that, because ORA was not granted access to these 20 privileged audit reports, the corresponding expenses should be removed.[3058]

But as Ms. DeMontigny detailed, although these reports are legally privileged, they represent legitimate expenses.[3059] The Commission has recognized the validity of these privileges. There should not be an automatic penalty for a regulated entity exercising its legal rights.[3060] In addition, ORA improperly applied a three-year historical average to determine its recommended reduction, rather than using the actual costs for those audits. Chapter 30 provides more detail as to why these costs should be included.

49. Mobilehome Park Utility Upgrade Program

49.1 SoCalGas

SoCalGas seeks review of costs reasonably incurred in the course of executing the Commission-ordered Mobilehome Park Utility Upgrade Pilot Program (MHP Pilot Program) and presents evidence in support thereof in the testimony of Joseph Velasquez.[3061] The MHP Pilot Program was ordered to be a three-year program to convert master-metered/submetered natural gas and/or electric services to direct utility services for approximately ten percent of spaces in mobilehome parks and manufactured housing communities (collectively, MHPs) in SoCalGas' service territory.[3062] The focus of the conversions is primarily on safety and secondarily on system reliability/capacity.[3063] The Commission ordered that review for reasonableness of costs

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[3057] *Id.* at 4.
[3058] Ex. 317 SCG/SDG&E/DeMontigny at 10.
[3059] *Id.*
[3060] *Id.*
[3061] Exs. 354 SCG/Velasquez, 355 SCG/Velasquez.
[3062] D.14-03-021 at 3.
[3063] *Id.*

expended in executing the MHP Pilot Program should occur in each utility's general rate case.[3064]

Pursuant to the foregoing, SoCalGas presented evidence in this proceeding to support its request for a determination of reasonableness of $15.8 million ($15.5 million in capital expenditures and $0.3 million in O&M expenditures) incurred in completing conversion of 32 MHPs, for a total 1,665 individual spaces.[3065] These costs were recorded to the Master Meter Balancing Account (MMBA) authorized by Advice Letter 4643-G on June 25, 2014.[3066] Recorded costs include costs for utility and contracted labor, purchased services and materials, and trenching and paving.[3067]

Table 49.A
SoCalGas Capital and O&M MHP Pilot Program through 2016
(Constant 2016)

MHP Pilot Program	Costs Incurred for MHP Projects Completed through 2016 ($Million)
Capital	15.5
O&M	0.3
Total	**15.8**

SoCalGas demonstrated that it prudently organized and administered the MHP Pilot Program,[3068] undertook efforts to minimize costs,[3069] and, as a result, the costs incurred are reasonable.[3070] No party opposed the reasonableness of the costs incurred by SoCalGas in executing the MHP Pilot Program. ORA's witness Christian Lambert stated ORA reviewed SoCalGas' showing of reasonableness and does not object.[3071]

As such, SoCalGas requests the Commission approve as reasonable the costs incurred through 2016 in executing the MHP Pilot Program.

3064 *Id.* at OP 8.
3065 Ex. 354 SCG/Velasquez at 1.
3066 *Id.* at 5.
3067 *Id.* at 5.
3068 *Id.* at 6-8.
3069 *Id.* at 8-12.
3070 *See id.*
3071 Ex. 427 ORA/Lambert at 1.

49.2 SDG&E

SDG&E also seeks review of costs reasonably incurred in the course of executing the MHP Pilot Program, and presents evidence in support thereof in the testimony of Joseph Velasquez.[3072]

Pursuant to the Commission's orders,[3073] SDG&E presented evidence in this proceeding to support its request for a determination of reasonableness of $11.5 million ($11.3 million in capital expenditures and $0.2 million in O&M expenditures) incurred in completing conversion of 6 MHPs, for a total 411 individual spaces.[3074] These costs were recorded to the Master Meter Balancing Account (MMBA) authorized by Advice Letter 2601-E/2292-G on June 25, 2014.[3075] Recorded costs include costs for utility and contracted labor, purchased services and materials, and trenching and paving.[3076]

Table 49.B
SDG&E Capital and O&M MHP Pilot Program through 2016
(Constant 2016)

MHP Pilot Program	Gas Costs Incurred for MHP Projects Completed through 2016 ($Million)	Electric Costs Incurred for MHP Projects Completed through 2016 ($Million)	Total ($Million)
Capital	5.9	5.4	11.3
O&M	0.1	0.1	0.2
Total	**6.0**	**5.5**	**11.5**

SDG&E demonstrated that it prudently organized and administered the MHP Pilot Program,[3077] undertook efforts to minimize costs,[3078] and, as a result, the costs incurred are reasonable.[3079] No party opposed the reasonableness of the costs incurred by SDG&E in

[3072] Exs. 356 SDGE/Velasquez, 357 SDGE/Velasquez.
[3073] D.14-03-021 at 3, OP 8.
[3074] Ex. 356 SDGE/Velasquez at 1.
[3075] *Id.* at 5.
[3076] *Id.* at 5.
[3077] *Id.* at 5-8.
[3078] *Id.* at 8-11.
[3079] *See id*.

executing the MHP Pilot Program. ORA's witness Christian Lambert stated ORA reviewed SDG&E's showing of reasonableness and does not object.[3080]

As such, SDG&E requests the Commission approve as reasonable the costs incurred through 2016 in executing the MHP Pilot Program.

50. Other Issues

50.1 Accessibility Issues

The Center for Accessible Technology (CforAT), SoCalGas and SDG&E submitted joint testimony (Accessibility Request), which addresses SoCalGas and SDG&E's plans to hire one or more Accessibility Coordinators who will provide oversight and training on accessibility issues and oversee other identified measures to ensure that SoCalGas' and SDG&E's Branch Offices and third party payment locations are accessible, to improve the accessibility of their customer communications, including websites, emergency communication systems, and written communications, and to address accessibility issues involving pedestrian rights of way.[3081] The Accessibility Request includes a proposal for the Applicants to jointly spend $1.5 million per year over the TY 2019 GRC cycle, with a minimum spend of $450,000 for each utility.[3082] The Accessibility Request also sets forth standards, compliance timelines, reporting and other important criteria.[3083] The Accessibility Request is of specific scope, centered on the interests of persons with disabilities. No party has opposed the Accessibility Request. Adoption of the Accessibility Request by the Commission is appropriate because the request is reasonable, consistent with law and in the public interest. SDG&E and SoCalGas urge the Commission to adopt the Accessibility Request as filed.

51. Conclusion

SoCalGas and SDG&E believe they have fully justified and supported their requested TY 2019 revenue requirements, as well as associated ratemaking mechanisms for the proposed four-year rate case cycle. The Companies therefore request that the Commission promptly approve

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[3080] Ex. 427 ORA/Lambert at 1.

[3081] Ex. 365, Joint Testimony/Kasnitz and Manzuk (May 14, 2018). The Joint Testimony, which was prepared after the Applicants filed their direct testimony, describes specific eligible activities, some of which were initially requested in the direct testimony of witnesses Baldwin (Ex. 130 SCG/Baldwin at 29-30), Davidson (Ex. 151 SDG&E/Davidson at 38) and Stewart (Ex. 146 SDG&E/Stewart at 38-39) and are now subsumed within the Joint Testimony request.

[3082] Ex. 365 Joint Testimony/Kasnitz and Manzuk at PDF p. 5:9-11.

[3083] *Id.* at PDF pp. 5-8.

the requested relief in this proceeding by adopting their proposed revenue requirements and proposed costs for TY 2019 as just and reasonable, and their proposed test-year ratemaking mechanisms as just and reasonable. The Commission's final decision should also include an ordering paragraph specifically authorizing the Companies to implement the regulatory accounts as proposed in the Companies' testimonies.

Finally, pursuant to Ordering Paragraph 10 of the January 29, 2018 Assigned Commissioner's Scoping Memorandum and Ruling and Commission Rule 13.13, SoCalGas and SDG&E wish to reserve their right to request that the Commission hold oral argument in this proceeding.

Respectfully submitted,

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APPENDIX A

Summary of Uncontested Regulatory Accounting Proposals

APPENDIX A

Summary Listing of Uncontested Regulatory Accounting Proposals

SoCalGas Uncontested Proposals

Undisputed disposition includes:

- Research, Development, and Demonstration Expense Account (RDDEA)[1]
- Post-2011 Distribution Integrity Management Program Balancing Account (DIMPBA)
- Energy Data Request Memorandum Account (EDRMA)
- Operational Flow Cost Memorandum Account (OFCMA)[2]
- Fire Hazard Prevention Memorandum Account (FHPMA)
- Advanced Meter Opt-Out Program Balancing Account (AMOPBA)
- Aliso Canyon Memorandum Account (ACMA)[3]
- Aliso Canyon True-up Tracking Account (ACTTA)[4]

Undisputed closure includes:

- Federal Energy Regulatory Commission (FERC) Settlement Proceeds Memorandum Account (FSPMA)
- Deductible Tax Repairs Benefits Memorandum Account (DTRBMA)[5]

Undisputed continuation of the ratemaking treatment includes:

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[1] It should be noted that Sierra Club (SC)/Union of Concerned Scientists (UCS) submitted testimony arguing that SoCalGas' RD&D program should be eliminated entirely. *See* Ex. 475 Sierra Club/UCS/Golden at 45-46. During hearings on August 28, 2018, ALJ Lirag granted SoCalGas' motion to strike concerning portions of SC/UCS' testimony regarding the RD&D program. Tr. V30:2765-66:18-28, 1-10.

[2] Though ORA initially recommended the OFCMA account balance be recovered over a two-year, rather than a one-year period, ORA withdrew its recommendation in errata. See Ex. 406A ORA/Phan at 92.

[3] As noted in Ms. Yu's rebuttal testimony, SoCalGas has modified its proposals relating to the ACMA from those presented in direct testimony. Though ACTR project costs have exceeded the $200.9M cost-cap established in D.13-11-023, SoCalGas is not seeking an update to its TY 2019 GRC revenue requirement regarding these additional expenses. SoCalGas will continue recording excess costs in the ACMA and may seek recovery of the remaining balance in its next GRC. Ex. 183 SCG/Yu at 3; *see also* Ex. 279 SCG/Buczkowski at 2.

[4] Since the Aliso Canyon Turbine Replacement (ACTR) Project was not in service as of the TY 2019 GRC filing, $0 was recorded in the account at that time. SoCalGas will discontinue recording benefits to the ACTTA upon implementation of the TY 2019 GRC decision to avoid double refunding of benefits as O&M and capital benefits forecasted to be generated by the project have been included in this GRC. Ex. 181 SCG/Yu at 6.

[5] The DTRBMA addresses 2015 tax repairs. Pursuant to D.16-06-054, activity related to tax repair deductions for the period of January 1, 2016, through December 31, 2018, will be recorded to the Tax Memorandum Account (TMA). SoCalGas proposes to transfer any remaining residual balances in the FSPMA and DTRBMA to the CFCA, and CFCA and NFCA, respectively. Ex. 181 SCG/Yu at 7.

- Pension Balancing Account (PBA) and Post-Retirement Benefits Other than Pension Balancing Account (PBOPBA)
- Research Royalties Memorandum Account (RRMA)
- New Environmental Regulation Balancing Account (NERBA)

Undisputed modification includes:

- Core Fixed Cost Account (CFCA)
- Advanced Meter Infrastructure Balancing Account (AMIBA)
- Discontinuation of Service Establishment Charges (SEC)
- Transmission Integrity Management Program Balancing Account (TIMPBA)
- Post-2011 DIMPBA

Undisputed supplemental disposition includes:

- Tax Memorandum Account (TMA) Sub-Account for 2018 Tax Cuts and Jobs Act of 2017 (TCJA) Impacts

<u>SDG&E Uncontested Proposals</u>

Undisputed closure includes:

- Assembly Bill 802 Memorandum Account (AB802MA)
- Alternative Fuel Vehicle Memorandum Account (AFVMA)
- Community Choice Aggregation Implementation Balancing Account (CCAIBA)
- California Solar Initiative Performance-Based Incentive Memorandum Account (CSIPMA)
- Deductible Tax Repairs Benefits Memorandum Account (DTRBMA)[6]
- EDRMA
- Non-Residential Submetering Memorandum Account (NRSMA)
- Residential Disconnect Memorandum Account (RDMA)
- Real-Time Energy Metering Memorandum Account (RTEMMA)
- Smart Meter Opt-Out Balancing Account (SMOBA)

Undisputed continuation of the ratemaking treatment includes:

- FHPMA
- NERBA
- PBA and PBOPBA
- Rate Reform Memorandum Account (RRMA)
- SONGS O&M Balancing Account (SONGSBA)

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[6] In compliance with D.16-06-054, SDG&E updated its rates effective August 1, 2016, to amortize the DTRBMA balance over a 17-month period (August 2016 through December 2017). Ex. 184 SDG&E/Jasso at 3.

Undisputed modification includes:

- Net Energy Metering Aggregation Memorandum Account (NEMAMA)
- TIMPBA
- Post-2011 DIMPBA[7]
- Master Meter Balancing Account (MMBA)

Undisputed supplemental disposition includes:

- TMA Sub-Accounts for 2018 TCJA Impacts

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7 No parties disputed SDG&E's proposed calculation change to determine whether SDG&E should file a Tier 3 advice letter or application seeking recovery of an undercollection in the TIMPBA and/or Post-2011 DIMPBA. In fact, ORA did not comment on the following two related items from Ms. Jasso's testimony: (1) SDG&E's proposal to incorporate the undercollected balance in its annual regulatory account update filing advice letter for recovery in the following year's gas transportation rates, and (2) SDG&E's proposal that if a net overcollection exists at the end of the GRC cycle, SDG&E be able to refund the balance in customers' rates in connection with its annual regulatory account update filing. In their testimony, ORA supported both items in regard to SoCalGas' DIMPBA in which the same proposal was made, but yet was silent about the same issues when providing recommendations regarding SDG&E's consistent testimony. SDG&E addressed what appears to be an oversight on ORA's part in Ms. Jasso's rebuttal testimony and SDG&E is not aware that ORA has commented on SDG&E's interpretation as of this time. Ex. 186 SDG&E/Jasso at 9-10. Therefore, the Commission should consider ORA's DIMPBA-related support for SoCalGas to also apply for SDG&E.

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U902M) for Authority, Among Other Things, to Update its Electric and Gas Revenue Requirement and Base Rates Effective on January 1, 2019.	Application No. 17-10-007 (Filed October 6, 2017)
And Related Matters.	Application No. 17-10-008 (Filed October 6, 2017)

NOTICE OF AVAILABILITY OF OPENING BRIEF OF SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) AND SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M) IN THE TEST YEAR 2019 GENERAL RATE CASE

Please take notice that on September 21, 2018, Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) electronically filed their Opening Brief in the Test Year 2019 General Rate Case. Pursuant to Rule 1.9 of the Rules of Practice and Procedure of the California Public Utilities Commission, the opening brief will be made available by 5:00 p.m. on September 21, 2018 on SoCalGas' website at the following location:

https://www.socalgas.com/regulatory/A17-10-008.shtml

The brief will be made available by 5:00 p.m. on September 21, 2018 on SDG&E's website at the following location.

https://www.sdge.com/regulatory-filing/22261/sdge-2019-general-rate-case

The opening brief exceeds 50 pages, per Rule 1.9(d)(1). SoCalGas and SDG&E will upon request provide a copy of the opening brief. SoCalGas and SDG&E have the brief on a compact disc (CD-ROM), which SoCalGas and SDG&E would prefer to provide in lieu of hard copies for ease of handling and to conserve resources. SoCalGas and SDG&E will however mail hard copies of the brief to parties who request it. Copies of the opening brief may be obtained by contacting:

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