ORA DATA REQUEST
ORA-SDGE-035-LMW
SDG&E 2019 GRC – A.17-10-007
SDG&E RESPONSE PARTIAL
DATE RECEIVED: NOVEMBER 29, 2017
DATE RESPONDED: JANUARY 22, 2018

Exhibit Reference: SDG&E-22
SDG&E Witness: Tattersall
Subject: Various Projects
Please provide the following:

1. Referring to SDG&E's workpaper page 13, 00701A.001 - Structures & Improvement Blanket 2017 - 2019, please provide/answer the following:

   a. The historic data for 2012-2016 for this category.

   b. Identify specific projects justifying the increases in the 2018 and 2019 forecasts as compared to the 2017 forecast.

   c. As the methodology used to forecast is a combination of zero based and historic, provide the numeric details as to how this forecast was derived.

SDG&E Response 1:

a. This category includes all projects proposed under Budget Code 00701.0, Workpaper Detail 00701A.001. The nature of projects typically covered under Budget Code 00701.0 is described on page 10 of the workpapers. Generally speaking, Workpaper Detail 00701A.001 provides blanket funding for planned and unknown future projects with estimated values less than $1M, while each of Workpaper Details 00701A.003 and 00709A.004 covers individual, proposed projects with estimated values greater than $1M. As projects greater than $1M are approved and released to proceed, SDG&E typically re-assigns the budget codes to a separate, unique budget code for convenience of internal tracking and reporting. The historical data provided in the table below, therefore, includes projects with costs under budget code 701, as well as those of qualifying scope that have been assigned unique budget codes. Costs are expressed in constant 2016 dollars.

		Constant $ (000)				
Workpaper Detail 000701A.001	**Workpaper Title**	**2012**	**2013**	**2014**	**2015**	**2016**
007010	STRUCTURES & IMPROVEMENTS BLANKET	2418	1862	1228	1319	2819
117390	CP6 INDOOR/OUT DINING AREA RENOVATION	-148	39			
147560	CP SITE IMPROVEMENTS & LANDSCAPING	0	0	3475	1320	0
157630	CP1 FOOD PAVILION	0	0	0	1476	179
Totals		**2270**	**1901**	**4703**	**4115**	**2998**

As identified in SDG&E's response to Data Request # 29, Question # 1, a portion of costs attributable to budget code 147610 were erroneously charged to Budget Code 0701.0. The above table reflects the removal of those costs.

SDG&E Response 1 Continued:

b. The below table identifies projects included in our 2017, 2018 and 2019 forecast for Workpaper Detail 00701A.001.

	Forecast $ (000)		
Project Name - Workpaper Detail 000701A.001	**2017**	**2018**	**2019**
Structures & Improvement Blanket	0	2217	0
Beach Cities Main Gate Replacement	15	0	0
Beach Cities Roof Replacement	0	0	260
Beach Cities Warehouse Roof Replacement	0	0	700
Caspian Crane Demo & Site Security	407	0	0
Caspian Racking Installation	200	0	0
CP5 Outdoor Conference Rooms	0	775	0
Eastern C&O New Parking Upgrade	0	0	839
Eastern Roof Replacement	0	0	75
Eastern Warehouse Door Replacement	0	0	30
EIC Entry Door Replacement	0	0	75
Kearny Villa Parking Lot Improvements	250	0	0
Kearny C&O Yard Fencing	0	0	20
Metro 69KV Storage Shed	0	0	250
Metro Parking Lot Improvement	0	0	260
Metro Warehouse Roof Replacement	0	700	0
Miramar Equipment Operations Storage Racks	0	0	125
Mission Control Elevator Replacement	0	0	400
Mission Control IDF Raised Floor Replacement	245	0	0
Mountain Empire Light Pole Replacement	149	0	0
Mt. Empire Yard Improvement	0	0	250
Northeast C&O Driveway Widening	0	466	0
Northeast C&O NW Perimeter Fence Replacement	179	0	0
Northeast Pedestrian Walkway to Alpine Way	75	0	0
Southbay DO Roof Improvement	0	65	0
Subtotals	**1520**	**4223**	**3284**
Vacation & Sick	12	33	26
Totals	**1532**	**4256**	**3310**

c. The numeric details of SDG&E's forecasting methodology are essentially the tabulations of project values included in the response to Question b. above. Included in 2018 is an estimated allowance of $2.2M, proposed to cover emergent and as-yet unspecified projects of a type normally covered by this blanket budget code (i.e., improvements to sitework, building structure or shell components), as well as planning, design and permitting for projects expected in 2019. This is the primary driver of the increased forecast to 2018 and allows for flexibility in addressing unplanned needs beyond the four other projects forecasted for 2018. The allowance is equal to the 3-year average indicated for Budget Code 701 in the below table, less the forecasted values of the four (4) projects planned for completion in 2018. The costs shown in the table include the FERC component of facilities costs.

SDG&E Response 1 Continued:

	GRC Amount	GRC Amount	GRC Amount	GRC Amount	3-year Avg
Budget Code	K4/2014	K4/2015	K4/2016	Overall Result	
00701.0	$ 1,373,729.19	$ 7,989,390.06	$ 3,306,410.19	$ 12,669,529.44	$ 4,223,176.48

The 2019 forecast is composed entirely of projects known and identified. The summation of these projects in 2019 is the driver for the increase beyond 2017 forecast levels.

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2. Referring to SDG&E's workpaper page 21, 00703A.001 - RAMP - Incremental Environmental/Safety Blanket 2017 - 2019, please provide/answer the following:

a. The historic data for 2012-2016 for this category.

b. Identify specific projects justifying the increases in the 2018 and 2019 forecasts as compared to the 2017 forecast.

c. As the methodology used to forecast is a combination of zero based and historic, provide the numeric details as to how this forecast was derived.

SDG&E Response 2:

a. This category includes all projects proposed under Budget Code 00703.0, Workpaper Detail 00703A.001. The nature of projects typically covered under Budget Code 00703.0 is described on page 18 of the workpapers. Generally speaking, Workpaper Detail 00703A.001 provides blanket funding for planned and unknown future projects with estimated values less than $1M. The historical data provided in the table below thus includes projects ordinarily covered by this blanket funding. Costs are expressed in constant 2016 dollars.

	Constant $ (000)				
Workpaper Detail 000703A.001	**2012**	**2013**	**2014**	**2015**	**2016**
Totals	668	981	1386	290	2120

b. The below table identifies projects included in our 2017, 2018 and 2019 forecast for Workpaper Detail 00703A.001.

SDG&E Response 2 Continued:

	Forecast $ (000)		
Project Name - Workpaper Detail 000703A.001	**2017**	**2018**	**2019**
2016 Environmental Blanket	0	1463	0
Beach Cities Storm Drain Improvements	0	0	75
Mtn Empire 90 Day Containment Pad Installation	0	0	150
Northeast Gas Crew Room Secondary Exit Installation	0	30	0
Kearny OWS Improvements	0	0	250
Kearny Stormwater Improvements	0	0	150
Miramar Gas Ops Stormwater Mgmt Improvements	376	0	0
Miramar Inlet Improvements	0	0	100
Miramar C2 Improvement	0	0	50
Miramar Swale A Oil Water Separator	0	0	400
Miramar Swale A Improvement	0	0	100
Northcoast Stormwater Improvements	0	0	50
Mission Site Mitigation	50	0	0
Mission Skills Gas Pipe Replacement	0	0	50
Beach Cities Stormwater Improvements	0	0	25
Metro Sewer Drain Improvements	0	0	50
Eastern Lot Improvements	0	0	250
Miramar Hazmat Facility Expansion	0	0	400
Northeast Ice Machine Site Drainage	27	0	0
EIC External Drainage Improvements	0	0	30
Subtotals	**453**	**1493**	**2130**
Vacation & Sick	3	11	16
Totals	**456**	**1504**	**2146**

c. The numeric details of SDG&E's forecasting methodology are essentially the tabulations of project values included in the response to Question b. above. Included in 2018 is an estimated allowance of $1.5M, proposed to cover emergent and as-yet unspecified projects of a type normally covered by this blanket budget code (i.e., improvements to comply with safety or environmental regulations, or implement best practices in mitigating risk to the environment or employee, public or contractor safety), as well as planning, design and permitting for projects expected in 2019. This allows for flexibility in addressing unplanned needs beyond the other project forecasted for 2018. The allowance is equal to the 3-year average indicated for Budget Code 703 in the below table. The costs shown in the table include the FERC component of facilities costs.

	GRC Amount	GRC Amount	GRC Amount	GRC Amount	3-year Avg
Budget Code	K4/2014	K4/2015	K4/2016	Overall Result	
00703.0	$ 1,552,309.52	$ 329,514.99	$ 2,506,239.89	$ 4,388,064.40	$ 1,462,688.13

The increase in forecast to 2018 is a result of using a blanket allowance, which was determined from the 3-year historical average, FERC component included. The 2019 forecast is composed entirely of projects currently known and identified, and the increase to 2019 is a result of the summation of these preliminary forecasts.

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3. Referring to SDG&E's workpaper page 30, 00705A.001 - Misc. Equipment Blanket 2017 - 2019, please provide/answer the following:

   a. The historic data for 2012-2016 for this category.

   b. Identify specific projects justifying the increase in the 2018 forecasts as compared to the 2017 and 2019 forecasts.

   c. As the methodology used to forecast is a combination of zero based and historic, provide the numeric details as to how this forecast was derived.

SDG&E Response 3:

a. This category includes all projects proposed under Budget Code 00705.0, Workpaper Detail 00705A.001. The nature of projects typically covered under Budget Code 00705.0 is generally described on page 27 of the workpapers. Generally speaking, Workpaper Detail 00705A.001 provides blanket funding for planned and unknown future projects with estimated values less than $1M. The historical data provided in the table below thus includes projects ordinarily covered by this blanket funding. In addition to Budget Code 00705.0, the table captures historical costs for Budget Code 02782.0, as well, which had been used to track Fleet equipment costs prior to 2017. Effective 2017, SDG&E elected to consolidate all capital equipment funding for Facilities and Fleet equipment in to Budget Code 00705.0. Costs are expressed in constant 2016 dollars.

	Constant $ (000)				
Workpaper Detail 000705A.001	**2012**	**2013**	**2014**	**2015**	**2016**
Totals	202	157	1381	774	324

b. The below table identifies projects included in our 2017, 2018 and 2019 forecast for Workpaper Detail 00705A.001.

SDG&E Response 3 Continued:

	Forecast $ (000)		
Project Name - Workpaper Detail 000705A.001	**2017**	**2018**	**2019**
Misc Equipment Blanket Fleet	369	369	369
EOC Videoconference Improvements	40	0	0
Metro Garage Hoist Improvement	500	500	1000
EIC Replace Forklift	0	0	10
EIC Replace Video Conference equipment	0	0	35
EIC Replace/Upgrade Audio/Video Equipment	0	0	25
EIC Replace/Upgrade Audio/Video Equipment	0	50	0
EIC Replace/Upgrade Audio/Video Equipment	0	0	50
EIC Replace Refrigeration Equipment	0	0	15
EIC Replace Refrigeration Equipment	0	15	0
EIC Replace Refrigeration Equipment	0	0	15
Fleet Fuel Management System Upgrades	0	2000	0
Telepresence Equipment Upgrade	533	0	0
Misc AV Upgrades	500	515	530
Subtotals	**1941**	**3449**	**2049**
Vacation & Sick	15	27	16
Totals	**1956**	**3476**	**2065**

c. The numeric details of SDG&E's forecasting methodology are essentially the tabulations of project values included in the response to Question b. above. In years 2017-2019, blanket allowances for each of miscellaneous fleet equipment purchases, garage hoists replacements (carried under Metro Garage Hoist Improvements), and miscellaneous audio-visual equipment systems are included. These allowances are proposed to cover emergent and as-yet unspecified projects for improving or providing new equipment of this nature, creating flexibility for addressing future needs. The allowance for fleet equipment purchases is equal to the 3-year average indicated for Budget Code 02782 in the below table. The costs shown in the table include the FERC component of facilities costs. The other allowances are based on judgment of funding needs from both Facilities and Fleet.

	GRC Amount	GRC Amount	GRC Amount	GRC Amount	3-year Avg
Budget Code	K4/2014	K4/2015	K4/2016	Overall Result	
02782.0	$ 202,649.91	$ 788,798.93	$ 115,436.99	$ 1,106,885.83	$ 368,961.94

SDG&E's forecast for 2018 is larger by comparison to 2017 and 2019 due to a $2M funding allowance for implementation of Fleet's Fuel Management Program. The fuel management project is an upgrade to the existing fuel terminals, on-board vehicle equipment, and software/servers to allow for the controlled dispensing of on-site fuel and vehicle diagnostic code and odometer data capture. The upgrade is required as the existing infrastructure is aging and running on outdated and non-supported software versions that pose a critical risk to on-site fueling operations.

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4. Referring to SDG&E's workpaper page 36, 00707A.001 - RAMP - Incremental Security
Blanket 2017 - 2019, please provide/answer the following:

a. The historic data for 2012-2016 for this category.

b. Identify specific projects justifying the increases in the 2018 and 2019 forecasts as compared to the 2017 forecast.

c. As the methodology used to forecast is a combination of zero based and historic, provide the numeric details as to how this forecast was derived.

SDG&E Response 4:

a. This category includes all projects proposed under Budget Code 00707.0, Workpaper Detail 00707A.001. The nature of projects typically covered under Budget Code 00707.0 is generally described on page 33 of the workpapers. Generally speaking, Workpaper Detail 007075A.001 provides blanket funding for planned and unknown future projects with estimated values less than $1M. The historical data provided in the table below thus includes projects ordinarily covered by this blanket funding. Costs are expressed in constant 2016 dollars.

	Constant $ (000)				
Workpaper Detail 000707A.001	**2012**	**2013**	**2014**	**2015**	**2016**
Totals	367	1326	388	1404	2420

b. The below table identifies projects included in our 2017, 2018 and 2019 forecast for Workpaper Detail 00707A.001.

SDG&E Response 4 Continued:

	Forecast $ (000)		
Project Name - Workpaper Detail 000707A.001	**2017**	**2018**	**2019**
NE Perimeter Cameras & Motion Sensors Upgrade	0	0	500
NE Remainder of Perimeter fence	600	0	0
2016 Security Improvements Blanket	0	2626	2367
Eastern Interior Door Installation	25	0	0
EIC Guard Booth/Panic Button Installation	15	0	0
EIC Parking Security Improvement	0	0	225
EIC Security Improvements	0	0	200
Escondido Branch Office Security Improvements	30	0	0
Kearny Guard Shack Installation	20	0	0
Mission Grid Ops Security (Dbl door entry to Grid Control, only)	50	0	0
National City BO Security System Improvements	30	0	0
OCCO Security Upgrades	227	0	0
Miramar Base Security Camera Upgrades	0	0	725
C&O Site Audit Security Upgrades	750	750	0
Subtotals	**1747**	**3376**	**4017**
Vacation & Sick	13	26	31
Totals	**1760**	**3402**	**4048**

The numeric details of SDG&E's forecasting methodology are essentially the tabulations of project values included in the response to Question b. above. The increased forecast to years 2018 and 2019 is primarily due to the forecasted blanket allowances proposed for those years. These allowances are proposed to cover emergent and as-yet unspecified projects for improving or providing new equipment of this nature, creating flexibility for addressing future needs, as well as planning, design and permitting for projects expected in 2019. The allowances were determined by subtracting the value of two projects from RAMP forecasts for 2018 and 2019, which were released to proceed in 2017. These projects were the NE perimeter camera project noted in the first line of the above table and Mission Control Security work addressed through Budget code 16767.

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5. Referring to SDG&E's workpaper page 43, 00708A.001 - Infrastructure/Reliability Blanket 2017 - 2019, please provide/answer the following:

   a. The historic data for 2012-2016 for this category.

   b. Identify specific projects justifying the increase in the 2019 forecast as compared to the 2017 and 2018 forecasts.

   c. As the methodology used to forecast is a combination of zero based and historic, provide the numeric details as to how this forecast was derived.

SDG&E Response 5:

a. This category includes all projects proposed under budget code 00708.00, which is generally described on Page 40. The proposed allocation of funding for these projects is described in Workpaper Details 00708A.001 through 00709A.009. Generally speaking, Workpaper Detail 00708A.001 provides blanket funding for planned and unknown future projects with estimated values less than $1M. As projects greater than $1M are approved and released to proceed, SDG&E typically re-assigns the budget codes to a separate, unique budget code for convenience of internal tracking and reporting. The historical data provided in the table below, therefore, includes projects with costs under budget code 708, as well as those of qualifying scope that have been assigned unique budget codes. Costs are expressed in constant 2016 dollars.

		Constant$ (000)				
Budget Code	**Workpaper Title**	**2012**	**2013**	**2014**	**2015**	**2016**
00708A	Remodel/Relocate/Reconfig Blanket	2003	2091	1138	1299	1035
137490	Mission Generator Replacement	0	1305	1624	5	0
147580	RBDC SERVER RM #1 CRAC UNIT REPLACEMENT	0	0	796	123	628
157640	MISSION CONTROL SWITCHGEAR & UPS IMPROVE	0	0	0	1176	136
157650	METRO GODO GENERATOR REPLACEMENT	0	0	0	960	37
	Totals	**2003**	**3396**	**3558**	**3563**	**1836**

b. The below table identifies projects included in the 2017, 2018 and 2019 forecast for Workpaper Detail 00708A.001.

SDG&E Response 5 Continued:

	Forecast $ (000)		
Infrastructure/Reliability Blanket	**2017**	**2018**	**2019**
Infrastructure/Reliability Blanket	400	1332	1332
Beach Cities Generator & ATS Replacement	0	0	500
Beach Cities OGW HVAC Replacement	0	0	40
CP Master Lighting Control System	0	0	750
Eastern C&O Boiler Replacement	0	0	25
Eastern HVAC Replacement	0	0	12
Eastern Microwave Bldg Generator Replacement	0	0	50
Eastern Warehouse HVAC Improvement	0	0	25
Metro EDO UPS Installation	24	0	0
Miramar Bldg B Generator Replacement	0	0	500
MIssion Control SCADA Room	425	0	0
Mission Telecom Halon System Replacement	0	0	174
Ramona Package Unit Replacement	12	0	0
RBDC Halon System Replacement	0	0	555
Southbay DO Split Cooling System Replacement	0	0	124
EIC HVAC Replacement(Coolorados, Aqua Chill)	0	0	75
EIC HVAC Replacement	0	0	50
EIC HVAC Replacement	0	0	50
Replace UPS System Batteries	0	0	15
Unplanned replacments	0	0	0
Century Park Generator Replacement	600	600	0
RBDC Nitrogen System Install	0	0	50
Tierra Del Sol HVAC Replacement	0	0	25
Tierra Del Sol Generator Replacement	0	0	100
North Coast C&O Compressor Replacement	87	0	0
Ramona Generator Installation	0	0	150
Subtotals	**1548**	**1932**	**4602**
Vacation & Sick	12	15	34
Totals	**1560**	**1947**	**4636**

c. The numeric details of SDG&E's forecasting methodology are essentially the tabulations of project values included in the response to Question b. above. The increased forecast to 2019 is primarily due to the inclusion of two generator replacement projects, totaling $1M, as well as a lighting control system upgrade proposed for Century Park, forecast at $750K.

There are also blanket allowances proposed for each of 2018 and 2019, equal to the 3-year average indicated for Budget Code 708 in the table below. The costs shown in the table include the FERC component of facilities costs. These allowances are proposed to cover emergent and as-yet unspecified projects for improving or providing new equipment of this nature, creating flexibility for addressing future needs, as well as planning, design and permitting for projects expected in 2019.

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SDG&E Response 5 Continued:

	GRC Amount	GRC Amount	GRC Amount	GRC Amount	3-year Avg
Budget Code	K4/2014	K4/2015	K4/2016	Overall Result	
00708.0	$ 1,282,191.07	$ 1,518,926.93	$ 1,194,977.50	$ 3,996,095.50	$ 1,332,031.83

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6. Referring to SDG&E's workpaper page 43, 00708A.003 - Network Operations Center (NOC) Equipment Improvement, please provide/answer the following:

   a. Justification for why this project is considered necessary, and beneficial to ratepayers.

   b. When was the last time a remodel was done?

   c. How old is the A/V equipment?

   d. How poor are the sightlines now and what detriments exist?

   e. What is wrong with the current distribution components?

   f. How old is the ceiling and what is currently wrong with it?

   g. How old is the carpet and what is currently wrong with it?

   h. Provide a breakout of costs by item requested (e.g., upgraded audio visual technologies, reorganization of the space for improved sightlines to visual displays, functional flexibility, conferencing and collaboration, replacement of operator consoles to meet current company ergonomic standards, provision of energy efficient lighting, and replacement of raised floor and sub-floor electrical distribution components, ceilings, carpet and paint).

   i. What are the negative impacts to the ratepayer if the project is not approved? For each impact noted, provide a detailed description of how this impact is negative and the associated costs of such an impact.

SDG&E Response 6:

a. The Network Operations Center (NOC) has not had a significant tenant improvement/remodel in over 10 years. This facility is critical to our operations and the proposed project is intended to improve and increase the operational performance of the systems and SDG&E's personnel required to staff the network. The NOC is a 24/7/365 facility that allows SDG&E's operators to supervise, monitor, and maintain every facet of our network. Some functional areas include troubleshooting, distribution, updating, routing, performance and diagnostics, security, access, and overall integrity to ensure operational reliability and safety for our infrastructure and assets. The current audio-visual technology that supports the operational performance and enables visualization of the network is antiquated, adversely impacting the line of sight, the ability to respond in a timely manner, and the ability to maintain (due to the scarcity of replacement parts). The intent of this project is to improve the responsiveness of our operators, and increase the

SDG&E Response 6 Continued:

reliability, security, and stability of our network by upgrading the existing infrastructure, equipment, and systems that are being used to control sensitive information and data.

b. The space has not been remodeled in over eight (8) years. The last remodel involved furniture replacement, carpet replacement and painting in the Situation Room, only.

c. The audio-visual equipment is approximately eighteen (18) years.

d. The poor sightlines are largely attributable to the outdated audio-visual technology that currently exists in the NOC. The current display wall has a row of large rear-projection type monitors centered at roughly 15' above the floor level. The monitors are located higher than optimal ergonomic height for seated operators, do not have HD technology and are difficult to see. The viewing angle required in the current configuration is wide, and because rear projection screens focus light towards the on-axis viewer, you can experience light reduction and color uniformity issues on the edges. Below the large monitors are rows of aged CRT monitors that are only useful to front row operators, and are also difficult to see. Both components will be replaced with a singular video wall application.

e. The sub-floor electrical distribution components were installed with the original improvements to the center, which pre-date 1999. The system is outdated and SDG&E intends to implement current plug and play technologies through new floor boxes, furniture and demountable partition interfacing, universal connectors.

f. The ceiling was installed with the original improvements to the center, which pre-date 1999. The space is not served with heating and is excessively cooled due to the heat loads generated by the outdated monitors. The ceiling will be removed to allow access for replacement of the existing air distribution systems, as well.

g. The carpet was last replaced in 2009. It is a high traffic area due to the shift work that occurs 24/7 within the NOC.

h. This proposed project is only conceptual at this time and the detailed design and requirements have not been formulated. The forecast is based on an estimated cost/square foot of $411. This forecast is comparable to that which was provided for improvements to our Century Park Emergency Operations Center, which per the response to Data Request #29, Question 5.k., indicated a cost per square foot for the EOC of $426. Given the similarity of the projects, component costs will thus approximate those provided in the response to Data Request #29, Question 5.k.

i. Given the early conceptual and development stage of this project, it is difficult to quantify the impacts to ratepayers. The benefits described in our response to question 6a will not be realized if there is no upgrade to the Network Operations Center (NOC). This

SDG&E Response 6 Continued:

facility and system is a critical part of our infrastructure. Continuous and efficient network operations allow us to operate our assets with enhanced capabilities because it is our communications backbone. The faster we can collect, analyze, and respond to operational crisis, emergencies, or daily maintenance, the better our performance will be.

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7. Referring to SDG&E's workpaper page 75, 08729A.001 - Alternative Energy Systems, please provide/answer the following:

   a. As the methodology used to forecast is a combination of zero based and historic, provide the numeric details as to how this forecast was derived.

   b. Is this a new program? If no, provide historic data for the years 2012-2016.

   c. Justification for why this project is considered necessary, and beneficial to ratepayers.

   d. What are the negative impacts to the ratepayer if the project is not approved? For each impact noted, provide a detailed description of how this impact is negative and the associated costs of such an impact.

   e. How much will carbon emissions be reduced if the project is approved?

   f. For each year provide a breakout of costs by installations (vehicle chargers and plug-in receptacles, by facility, and the costs for engineering and construction to install a photo-voltaic energy system.

   g. Identify specific projects justifying the increase in the 2019 forecast as compared to the 2017 and 2018 forecasts.

SDG&E Response 7:

a. The numeric details of SDG&E's forecasting methodology are essentially the tabulations of project values included in the table below.

	Forecast $ (000)		
Project Name - Workpaper Detail 008729.001	**2017**	**2018**	**2019**
Beach Cities Fleet Hybrid Chargers	60	0	0
CP Assigned Parking EV Chargers	0	0	0
Cuyamaca Peaker EV Chargers	100	0	0
Desert Star EV Charging Stations	100	0	0
Eastern C&O EV Charging Station Installation	0	0	0
Eastern C&O Fleet Hybrid & EV Chargers	96	0	0
Kearny C&O Fleet Hybrid Chargers	436	0	0
Kearny EV Charging Station Installation	0	0	0
Metro Hybrid Chargers	180	0	0
Alternative Energy Program Allowance (employee EVs at own cost)	500	1469	2982
Alternative Energy Program Allowance (Fleet EVs)	0	1275	2550
EIC Additional EV Chargers	0	50	150
Century Park East EV Chargers	500	0	0
EV Pilot Program (Greencraig)	633	0	0
Subtotals	**2605**	**2794**	**5682**
Vacation & Sick	20	22	42
Totals	**2625**	**2816**	**5724**

SDG&E Response 7 Continued:

b. This is not a new program. This category includes all projects proposed under Budget Code 08729.0, Workpaper Detail 08729A.001. The nature of projects typically covered under Budget Code 08729.0 is generally described on page 72 of the workpapers. Workpaper Detail 08729A.001 provides blanket funding for planned and unknown future projects. The historical data provided in the table below thus includes projects ordinarily covered by this blanket funding. In addition to Budget Code 08729.0, the table captures historical costs for Budget Code 147590.0, as well, which had been used to track the costs of implementing EV chargers at the Century Park campus facility. Costs are expressed in constant 2016 dollars.

		Constant$ (000)				
Budget Code	**Workpaper Title**	**2012**	**2013**	**2014**	**2015**	**2016**
87290	Alternative Energy Systems	603	66	0	1393	1105
137490	CP CAMPUS EV CHARGER INSTALLATION	0	0	691	423	0
	Totals	**603**	**66**	**691**	**1816**	**1105**

c. This project is in support of legislative, regulatory, and company sponsored initiatives. Clean transportation throughout the state directly supports the Governor's and legislature's goal in SB32 of reducing GHG by 40% below 1990 baseline levels. SDG&E is leading the way by "greening the fleet" and targeting our own goal of 22% of fleet owned vehicles being alternative fuel by 2020. SDG&E employees are also leading the charge by converting their personal vehicles to electric/hybrid types, with a goal of 500 or approximately 12.5% of our workforce. The conversion from conventional vehicles to alternative fuel fleet vehicles may also reduce fuel operating expenses, which in turn will benefit ratepayers. By investing in SDG&E's alternative energy infrastructure, we reduce greenhouse gas (GHG) emissions and thereby improve our environment.

d. If SDG&E does not make investments in our infrastructure to convert our fleet vehicles, ratepayers do not get any of the benefits resulting from reducing/avoiding some of our fuel and operating by using alternative fuel vehicles (AFV). Not converting to AFV vehicles negatively impacts our environment with continued elevated levels of pollutants from fossil fuel emissions, which have a direct impact on air quality, public health and safety, and climate change. In a broader context, climate change can be responsible for erratic weather patterns such as hurricanes, flooding, and drought, similar to what is happening in California. The costs associated with these types of events is enormous when measured in dollars and lives. While there are negative impacts, described above, if the project is not approved, it is impractical to estimate the costs directly attributable to our ratepayers for the social and environmental harm.

e. The Company's goal is the "greening" of approximately 22% of our fleet vehicles by 2020, which includes the conversion to both electric and CNG vehicles. This would

SDG&E Response 7 Continued:

cause the conversion of approximately 376 vehicles. Assuming a 50/50 split between conversions to electric and CNG, and average CO2 emissions annually of 4.62 tons per vehicle, the estimated reduction arising from EV conversions, only, under this "greening" initiative would be approximately 868 tons of CO2 through the life of the program. The project is forecasted to support conversion of 153 EV's through TY 2019; therefore, the project will contribute to the reduction of 707 tons.

f. The table provided in response to Question 7.a. above lists the facilities and types of chargers for which funding needs are forecasted. In the table, "hybrid" chargers can be interpreted to mean "plug-in chargers".

g. The 2019 forecasts include a 2/3 share of the total forecasted "Alternative Energy Program Allowances" included in 2018 and 2019 for both employee and Fleet vehicle charging stations across the portfolio (employees pay for their own energy purchases). The allowances are driven by projected increases in employee EV ownership and electric vehicles additions to the Company fleet.

ORA DATA REQUEST
ORA-SDGE-035-LMW
SDG&E 2019 GRC – A.17-10-007
SDG&E RESPONSE PARTIAL
DATE RECEIVED: NOVEMBER 29, 2017
DATE RESPONDED: JANUARY 22, 2018

8. Referring to SDG&E's workpaper page 89, 14753A - CP6-2 Customer Call Ctr TI, please provide/answer the following:

a. Was this project approved in the last GRC, or by the Commission? If no, why did SDG&E start the project without Commission approval?

b. Justification for why this project is considered necessary, and beneficial to ratepayers.

c. A cost/benefit analysis showing how ratepayers will benefit from this type of project.

d. The plans for the project that ties out to the forecasted project cost.

e. What are total project costs to date?

f. Has the project been completed as 2017 is almost over?

g. Is the project on schedule?

h. Is there any likelihood that project costs will be incurred past the test year?

i. How do demountable wall and raised floor systems benefit employees?

j. Justification for why this project is considered necessary, and beneficial to ratepayers.

k. A breakout of costs by item or addition (e.g., tenant improvement construction costs, installation of new video display system costs, operator console costs, furniture costs, and accessories cost).

l. What are the negative impacts to the ratepayer if the project is not approved? For each impact noted, provide a detailed description of how this impact is negative and the associated costs of such an impact.

SDG&E Response 8:

a. As the 2016 GRC detailed capital forecasts were for years 2014-2016 only, SDG&E manages its portfolio of capital expenditures for the attrition years (2017 and 2018) within the authorized revenue requirement adopted for those years, based on business needs and priorities. GRC decisions frequently do not address each specific project but rather address them in aggregate. Also, many budgets are 'blanket' or 'routine,' in which a collection of many related, similar, or like-kind projects are grouped; the forecasting for those budgets is often derived from averages or trends of past activity and not from cost

SDG&E Response 8 Continued:

estimates for specific assets. The money spent for "14753A - CP6-2 Customer Call Ctr. TI" was within the Commission-authorized revenue requirement adopted in the 2016 GRC for attrition years 2017 and 2018.

GRC testimony is developed to accurately represent a snapshot representation of forecasted capital projects at a moment in time. Although GRC forecasts are carefully and accurately prepared based on the available facts as the utilities know them at that point in time, there is no way of knowing how capital management circumstances and priorities may change as time passes. In contrast, the capital management process is dynamic. There are times when projects are projected to go into service at the end of the year, but are delayed due to permitting, weather, logistics issues, and other factors. Moreover, utility project needs arise on a real-time basis, irrespective of the Commission's GRC cycle and schedule.

Because the utility capital management and prioritization process requires flexibility to make necessary adjustments, the Commission's established GRC process allows for this management flexibility in its approval of an overall revenue requirement and post-test year mechanism based on forecasts.

b. The customer contact center is a 24/7/365 operational unit that manages all incoming calls from our customers. The energy advisors located within the space are required to man their workstation for the duration of their shift, which averages eight hours each day. There are a number of reasons why SDG&E feels this project is necessary: a.) the space utilization and density will be increased to so that other departments can move into the space, b.) the existing office/conference room configuration will be changed to accommodate more offices and collaboration spaces for employees, c.) natural daylighting will be used to increase visibility and reduce electrical consumption for lighting, d.) the workstations will be enhanced to sit/stand to accommodate the energy advisors for ergonomic benefits and improved working conditions. Ratepayers benefit because: a.) by increasing the density and improving space utilization, the cost effectiveness of the lease is optimized, b.) increasing the number and availability of collaboration spaces for employees can improve productivity because they are not forced to leave the building or work area to find a suitable space, c.) reducing SDG&E's electrical consumption by introducing more natural daylighting may decrease operating costs due to increased energy efficiency, and facilitate our Leadership in Energy and Environmental Design (LEED) point score, d.) ergonomically designed workstations for personnel that are required to be at their station for extended periods of time can reduce injuries related to repetitive motion and cumulative trauma, which saves ratepayers costs related to lost time incidents and medical leave.

c. A quantitative cost/benefit analysis has not been completed for this project. Please reference the benefits outlined in the response to question 8b above.

SDG&E Response 8 Continued:

Additional benefits include a healthier workforce and a reduction in injuries. SDG&E's ergonomic prevention strategy includes an on-going and phased-in upgrade to adjustable desks as buildings are refreshed, with the goal of reducing/eliminating future injuries. Below is statistical data regarding OSHA recordable and lost time incidents (LTI) related to repetitive motion injuries (RMI) /cumulative trauma (CTD), based on reports to SDG&E. From 2015 – 2017 there has been a decline in OSHAs and LTIs related to this activity.

OSHA-Rec-Flag	LTI	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Recordable	LTI-YES	8	12	12	11	12	6	8	4	3	5	2	1	0
	LTI-NO	18	18	20	24	11	8	7	1	6	4	7	4	4
Grand Total		26	30	32	35	23	14	15	5	9	9	9	5	4

d. The actual project location was toured during your site visit on 14-15 DEC 2017. If any drawings or plans are still requested, please advise.

e. Financial information for 2017 is anticipated to be available in late Q1 of 2018, whereupon we will be able to provide total project historical costs.

f. Yes.

g. Yes.

h. No.

i. Some benefits from using raised floors include, but are not limited to: a.) ease of access to the building installations from any place at the raised floor if future changes are needed, which ultimately reduces the cost for construction; b.) power, energy, communication, and data base systems can be housed within the plenum and are readily available under the floor without the necessity to core drill and run conduit/cabling through the ceiling; and c.) the use of recycled materials can help with LEED certification.

   The benefits of using modular (demountable) wall systems are 1.) cost avoidance, as the ability to re-purpose, relocate, and adapt the system may save money over the term of the lease and beyond, 2.) increased construction speed, as the walls are pre-finished, pre-glazed and pre-wired so that they can be installed in tandem with other building activities, significantly reducing construction schedules. 3.) environmental and sustainability benefits, from improving air quality for employees, to earning points in LEED; 4.) increased flexibility to change, reconfigure, or relocate walls as business needs and technology dictates.

j. See our response to 8b.

SDG&E Response 8 Continued:

k. The below exhibits a breakdown of the project budget after receiving bids and proposals from the major consultants and contractors involved. A summary of actual costs can be provided upon availability of 2017 financial information, expected later in this quarter.

2015-000215 CP6-2 Remodel - Preliminary Action Plan

Project Definition and Budget Asssumptions

Item Description/ or Phase of Work	CAPITAL Unit Cost (or Lump Sum)	Quantity (or One)	Subtotal
Project Management Labor			
Project Management(Outside labor)	303,520	1.00	303,520
Project Coordination (Outside Labor)	200	48.00	9,600
Internal Labor			
Environmental Mgmt	45	24.00	1,080
Facility Mgmt	90	24.00	2,160
MOVE MGMT	120	48.00	5,760
Safety Mgmt	45	24.00	1,080
Architectural and Engineering			
Architectural and Engineering	208,999	1.00	208,999
IT Consultants	53,203	1.00	53,203
Permitting/Planning/Inspections			
Plan Checks & Permits -	10,000	1.00	10,000
Construction			
CONSTRUCTION SVCS ***(TI Construction)***	4,220,185	1.00	4,220,185
Security & Surveillance	26,407	1.00	26,407
Tenant Improvements			
Audio Visual Equipment / Sound Masking ***(Video Displays)***	587,272	1.00	587,272
Furniture ***(operator consoles not required)***	1,963,223	1.00	1,963,223
Furniture Liquidation	26,000	1.00	26,000
IT Equipment	50,000	1.00	50,000
Moving Costs	60,000	1.00	60,000
Signage (Interior)	5,000	1.00	5,000
Telecom - SOUTHLAND ELECTRIC	261,797	1.00	261,797
Enviromental/Safety Services			
Asbestos and Lead Sampling/Analysis/Monitoring	12,352	1.00	12,352
Asbestos and Lead Abatement	83,875	1.00	83,875
Subtotal			7,891,513
Contingency @ 5%			394,576
Totals			**8,286,088**

l. The project has been completed.

ORA DATA REQUEST
ORA-SDGE-035-LMW
SDG&E 2019 GRC – A.17-10-007
SDG&E RESPONSE
DATE RECEIVED: NOVEMBER 29, 2017
DATE RESPONDED: NOVEMBER 30, 2017

Exhibit Reference: SDG&E-22
SDG&E Witness: Tattersall
Subject: Various Projects
Please provide the following:

9. Referring to SDG&E's workpaper page 101, 16766A.001 - RAMP - Incremental Mission Control Modernization, please provide/answer the following:

    a. Was this project approved in the last GRC, or by the Commission? If no, why did SDG&E start the project without Commission approval?

    b. What are total project costs to date?

    c. Is the project on schedule?

    d. Is there any likelihood that project costs will be incurred past the test year?

    e. A cost/benefit analysis showing how ratepayers will benefit from this type of project.

    f. The plans for the project that ties out to the forecasted project cost.

    g. What are the negative impacts to the ratepayer if the project is not approved? For each impact noted, provide a detailed description of how this impact is negative and the associated costs of such an impact.

    h. SDG&E as justification for the project stated "It is also anticipated that a significant reduction in the man-hours required to maintain dynamic system content will be realized". Where have these cost savings been reflected in the current GRC?

    i. Justification for why this project is considered necessary, and beneficial to ratepayers.

    j. Provide a breakout of costs by year, and by addition type that ties out to the forecasted request. For example, cost of tenant improvement construction, cost of installation of new video display systems, cost of operator consoles, cost of cost of furniture, and cost of accessories.

    k. SDG&E as justification for the project stated "it will increase grid operators' situational awareness by reducing time to identify abnormal or adverse system conditions, and enable them to make better and faster decisions". Based on this, please describe the current environment noting the specific deficiencies, and cost of those deficiencies. Further, describe how decisions will be better and faster.

Question 9- Continued

l. SDG&E as justification for the project stated "the audio-visual technology intended for implementation will more easily adapt to display changes necessary to coincide with changes to the grid system configuration, enhancing accuracy of interpretive and responding actions". Based on this, describe the current environment noting the specific deficiencies, and cost of those deficiencies. Further, how much easier will it be to adapt with the new technology, and how will accuracy in interpretive and responding actions be enhanced?

m. SDG&E as justification for the project stated "the remodeled space will enhance data visualization, analysis, and collaboration". Based on this, please explain how data visualization, analysis, and collaboration will be enhanced.

SDG&E Response 9:

a. As the 2016 GRC detailed capital forecasts were for years 2014-2016 only, SDG&E manages its portfolio of capital expenditures for the attrition years (2017 and 2018) within the authorized revenue requirement adopted for those years, based on business needs and priorities. GRC decisions frequently do not address each specific project but often address them in aggregate. Also, many budgets are 'blanket' or 'routine,' in which a collection of many related similar or like-kind projects are grouped; the forecasting for those budgets is often derived from averages or trends of past activity and not from cost estimates for specific assets. The money spent for "16766A.001 - RAMP - Incremental Mission Control Modernization" was within the Commission-authorized revenue requirement adopted in the 2016 GRC for attrition years 2017 and 2018.

   GRC testimony is developed to accurately present a snapshot representation of forecasted capital projects at a moment in time. Although GRC forecasts are carefully and accurately prepared based on the available facts as the utilities know them at that point in time, there is no way of knowing how capital management circumstances and priorities may change as time passes. In contrast, the capital management process is dynamic. There are times when projects are projected to go into service at the end of the year, but are delayed due to permitting, weather, logistics issues, and other factors. Moreover, utility project needs arise on a real-time basis, irrespective of the Commission's GRC cycle and schedule.

   Because the utility capital management and prioritization process requires flexibility to make necessary adjustments, the Commission's established GRC process allows for this management flexibility in its approval of an overall revenue requirement and post-test year mechanism based on forecasts.

b. Financial information for 2017 is anticipated to be available in late Q1 of 2018, whereupon total project historical costs will also be available.

SDG&E Response 9:-Continued

c. Yes.

d. No, barring any unforeseen conditions affecting SDG&E's ability to complete the work on time.

e. There is no quantitative cost/benefit analysis available for this project. The detailed costs will be available in late Q1 of 2018, as stated in the response to 9b. The benefits of performing this project are: a) increasing situational awareness of our transmission assets across the grid, which includes our service territory, other ISO's, and generators, b) improving the efficiency of our control operators, c) mitigating and reducing risks associated with operating the transmission system, d) implementing current technology to effectively operate the system.

   Ratepayers benefit: a) by increasing situational awareness, SDG&E can make more informed decisions faster because of the availability of useful information regarding real-time conditions, b) having better information will enhance the speed of communication and collaboration between GRID transmission personnel, other independent system operators (ISO), CA-ISO, and generators, c) reducing and mitigating risks of operating the transmission system ultimately increases safety and reliability, and d) being able to leverage new technology will allow us to operate the systems and control them more effectively and accurately, also improving safety and reliability.

f. The actual project location was toured during the site visit on 14-15 DEC 2017. If any drawings or plans are still desired, please advise.

g. If this project is not approved, the benefits outlined in the response to question 9e may not be realized. The negative impacts would be: a) decreased operational and situational awareness, b) no efficiency gains within the operational staff, c) not mitigating the existing risk profile that is inherent in the transmission system itself and staff not having improved technology to perform their job better, and d) not operating the system as efficiently as possible using the right tools and resources.

   While there are negative impacts, described above, if the project is not approved, it is impractical to estimate the costs directly attributable to our ratepayers. One of our primary objectives in doing this project is to implement a RAMP (Risk Assessment Mitigation Phase) project specifically designed to reduce our risk profile, as has been mandated by the CPUC.

h. The reference to man-hour savings is attributable to the labor costs associated with maintaining and updating the existing control grid operating board. Associated O&M costs for grid operations are authorized by FERC and are not part of the GRC.

SDG&E Response 9:-Continued

i. In terms of justification and benefits to ratepayers, see the responses to question(s) 9e and 9g.

j. Approximately $555K was recorded in 2016 against Budget Code 167660. Below is a breakdown of the total project budget after receiving bids and proposals from the major consultants and contractors involved. A summary of total historical costs through 2017 will be available upon release of 2017 financial information, expected late Q1 2018.

2015-000012 Mission Grid Control Room Remodel - Preliminary Action Plan

Project Definition and Budget Asssumptions

Item Description/ or Phase of Work		CAPITAL Unit Cost (or Lump Sum)	CAPITAL Quantity (or One)	CAPITAL Subtotal
Project Management Labor				
Construction Mgmt & Project Coordination (Outside Labor)		745,000	1.00	745,000
CAFM Analyst (Company)		45	4.00	180
Document Control (Company)		40	4.00	160
Internal Labor				
Environmental Mgmt		45	160.00	7,200.00
Facility Mgmt		45	300.00	13,500
IT Mgmt		50	240.00	12,000.00
MOVE MGMT		45	240.00	10,800.00
Safety Mgmt		45	240.00	10,800
Architectural and Engineering				
Architectural and Engineering		400,000	1.00	400,000
Architectural Services - Special Consultants: A/V		250,000	1.00	250,000
Electrical Engineering	incl	100,000	1.00	100,000
Interior Design		50,000	1.00	50,000
Reprographics		1,500	1.00	1,500
Structural Engineering	incl	50,000	1.00	50,000
Permitting/Planning/Inspections				
Plan Checks & Permits		25,000	1.00	25,000
Testing & Inspections		7,000	1.00	7,000
Construction				
CONSTRUCTION SVCS		6,200,000	1.00	6,200,000
Removal		15,000	1.00	15,000
Security & Surveillance		40,000	1.00	40,000
Security Equipment		75,000	1.00	75,000
Trailers		8,000	1.00	8,000
Tenant Improvements				
Artwork		3,500	1.00	3,500
Audio Visual Equipment		6,200,000	1.00	6,200,000
Furniture		650,000	1.00	650,000
Interior Plants		1,500	1.00	1,500
IT Equipment		300,000	1.00	300,000
Moving Costs		20,000	1.00	20,000
Signage (Interior)		2,000	1.00	2,000
Telecom		12,000	1.00	12,000
Enviromental/Safety Services				
Asbestos and Lead Sampling/Analysis		4,000	1.00	4,000
Subtotal				15,214,140
Contingency @ 10%				1,521,414
Totals				**16,735,554**

SDG&E Response 9:-Continued

k. The current technology used for providing grid operators a "lens" of how the transmission system is performing and what is happening in real time is very antiquated. Due to its age, it is very difficult to make changes or updates as the system(s) change or make dynamic information available to all the relevant parties that rely on it, such as CA-ISO and generators. Moreover, not having updated equipment puts the grid team at a disadvantage by not reducing the inherent risks associated with slow processing speeds and unreliable infrastructure. By improving the technology, SDG&E will have increased visibility into how and what is happening on the transmission systems, which will translate into better informed decisions based on more accurate information on a faster network.

l. See our responses to questions 9h and k.

m. See our responses to questions 9h and k.

ORA DATA REQUEST
ORA-SDGE-035-LMW
SDG&E 2019 GRC – A.17-10-007
SDG&E RESPONSE
DATE RECEIVED: NOVEMBER 29, 2017
DATE RESPONDED: NOVEMBER 30, 2017

10. Referring to SDG&E's workpaper page 106, 16767A - RAMP - Mission Control Critical Asset Security Hardening, please provide/answer the following:

    a. What are total project costs to date?

    b. Has the project been completed as 2017 is almost over?

SDG&E Response 10:

a. Financial information for 2017 is anticipated to be available in late Q1 of 2018, whereupon total project historical costs will also be available.

b. Yes, the project was completed and put in to service in 2017.

ORA DATA REQUEST
ORA-SDGE-035-LMW
SDG&E 2019 GRC – A.17-10-007
SDG&E RESPONSE
DATE RECEIVED: NOVEMBER 29, 2017
DATE RESPONDED: NOVEMBER 30, 2017

11. Referring to SDG&E's workpaper page 116-118, 16768A.001 - CP East Tenant Improvements, please provide/answer the following:

    a. The plans for the project that ties out to the forecasted project cost.

    b. A cost/benefit analysis showing how ratepayers will benefit from this type of project.

    c. Provide current pictures of the location subject to remodel and the proposed look after the remodel.

    d. What are total project costs to date?

    e. Is the project on schedule?

    f. Is there any likelihood that project costs will be incurred past the test year?

    g. Provide a breakout of costs by year, and by addition type that ties out to the forecasted request. For example, cost of technology infrastructure upgrades, cost of demolition and remodel of the existing office space, cost of modular walls and raised floor, cost of new HVAC distribution system, cost of lighting, cost of information systems distribution (routers, switches, wireless access points and cabling), cost of audio visual technologies, cost of security and surveillance systems, cost of furniture to meet current company ergonomic standards, cost of improvements to the exterior site surrounding the CP East, CP Annex and CP Annex Plus facilities, cost of construction of a gate-controlled interior driveway and pedestrian pathway between the leased Century Park Headquarters campus and the CP East, CP Annex and CP Annex Plus facilities, cost of secured perimeter fencing and gates with controlled access and surveillance cameras, cost of signage (monument and wayfinding), cost of outdoor conference rooms, cost of outdoor dining & activity area, cost of improved landscaping, cost of implement new or improved IT system related equipment or operating platforms, cost of an automated ordering and payment system at the CP East cafeteria, cost of a comprehensive workstation reservation and usage tracking system for visiting employees and contractors, cost of electronic wayfinding displays across the CP East, CP Annex and CP Annex Plus facilities, cost of a new underground fiber communications loop from the Century Park, Building 6, MDF room to accommodate increased bandwidth requirements at CP East, CP Annex and CP Annex Plus facilities, and cost of a new emergency generator to preserve continuation of IT activities in the event of power service loss.

    h. Has this area ever been remodeled in any capacity? If yes, provide a listing of the upgrades and the cost.

Question 11-Continued:

i. Is any of the remodel to meet ADA compliancy? If so, please provide a description and the cost.

j. SDG&E states "The project will provide tenant improvements to roughly 92,000 square feet of newly leased office space". Does this mean that SDG&E does not own the space? Further, will SDG&E be reimbursed for any improvements?

k. Was this project approved in the last GRC, or by the Commission? If no, why did SDG&E start the project without Commission approval?

l. SDG&E states the project will "house employees relocating expiring leaseholds at the Lightwave and RB Annex facilities". Does this mean SDG&E will vacate the Lightwave facility? If so, how much did SDG&E spend upgrading the Lightwave facility and will SDG&E be reimbursed in any capacity?

m. What are the negative impacts to the ratepayer if the project is not approved? For each impact noted, provide a detailed description of how this impact is negative and the associated costs of such an impact.

n. Provide justification for why this project is considered necessary, and beneficial to ratepayers.

SDG&E Response 11:

a. The actual project location was toured during the site visit on 14-15 DEC 2017. If any drawings or plans are still desired, please advise.

b. There is no quantitative cost/benefit analysis available for this project. Detailed costs have been provided in the response to question 11g. The benefits of this project are: a) consolidating SDG&E's geographic footprint in the Kearny Mesa area, b) consolidating personnel from two separate locations into one facility, and c) improved safety and wellness for our employees. Ratepayers benefit from: a) increased employee efficiency, as the consolidation of the workforce into a common area such as Kearny Mesa facilitates communication and collaboration between employees and groups, b) improved cost effectiveness of lease costs, as more of the space is utilized, optimizing the investment, and c) reduced costs by facilitating less workforce travel time, which in turn improves safety, reduces fuel and expenses, and reduces emissions (GHG).

c. The actual project location was toured during the site visit on 14-15 DEC 2017. If any drawings or plans are still desired, please advise.

SDG&E Response 11:-Continued

d. Financial information for 2017 is anticipated to be available in late Q1 of 2018, whereupon total project historical costs will also be available.

e. Yes.

f. No.

g. Approximately $11.156M was recorded in 2016 against Budget Code 167660. Below is a breakdown of the total project budget after receiving bids and proposals from the major consultants and contractors involved. This budget corresponds to the project described in Workpaper Detail 16768A.001. A summary of total historical costs through 2017 will be available when 2017 financial information is available at the end of Q1 2018.

2014-000039 CP East Tenant Improvement - Preliminary Action Plan
Project Definition and Budget Asssumptions

Item Description/ or Phase of Work	CAPITAL Unit Cost (or Lump Sum)	Quantity (or One)	Subtotal
Project Management Labor			
Project Management (Company - Cap Programs, RE Planning	150,000	1.00	150,000
Project Coordination (Outside Labor)	25,000	1.00	25,000
CAFM Analyst (Company)	2,500	1.00	2,500
Document Control (Company)	2,500	1.00	2,500
Internal Labor			
MOVE MGMT	30,000	1.00	30,000
Architectural and Engineering			
Architectural and Engineering	631,773	1.00	631,773
Permitting/Planning/Inspections			
Plan Checks & Permits	42,000	1.00	42,000
Testing & Inspections	10,000	1.00	10,000
Construction			
CONSTRUCTION SVCS	15,350,000	1.00	15,350,000
Removal	405,000	1.00	405,000
Security Equipment	425,000	1.00	425,000
Equipment (Food Service)	165,000	1.00	165,000
Tenant Improvements			
Artwork	30,000	1.00	30,000
Audio Visual Equipment	1,233,000	1.00	1,233,000
EQUIPMENT	125,000	1.00	125,000
Furniture	3,233,000	1.00	3,233,000
Interior Plants	5,000	1.00	5,000
IT Equipment	1,184,894	1.00	1,184,894
Signage (Interior)	125,000	1.00	125,000
SPECIALTIES (Condeco Electrical)	250,000	1.00	250,000
Subtotal			23,424,667
Contingency @ 1.00%			234,247
Totals			**23,658,914**

SDG&E Response 11:-Continued

The forecasts covered in Workpaper Details 16768A.002 and 16768A.003, covering 2018 and 2019, are generally summarized as follows:

CP EAST 2018 & 2019 Forecasted Scope/Cost Summary

Description	Cost
Site Related - 2018	
Vehicular Access CP to CP East	$892
Pedestrian Pathway (incl above)	$0
CP East Generator	$654
CP Annex & Annex Plus Generator	$292
Fiber Loop CP to CP East	$785
Permiter Gates, Fence, Guardbooth	$750
Additional 25 EV parking	$530
Outdoor Conf. Rms.	$750
Subtotal Site Related	**$4,654**
IT Related - 2019	
CP Annex & Annex 2nd Floor TI	$4,278
Total Site & IT Related	**$8,932**

The combined 2018 and 2019 costs are less than forecasted in the Workpapers because a portion of scope contemplated in those years were accelerated forward and included in the CP East Tenant Improvement project, completed in 2017. This includes the cost of an automated ordering and payment system at the CP East cafeteria, and the cost of a comprehensive workstation reservation and usage tracking system for visiting employees and contractors.

h. No.

i. No.

j. Correct, SDG&E is leasing the space. Tenant improvement allowances provided by the owner would be addressed in the O&M portion of the testimony.

k. As the 2016 GRC detailed capital forecasts were for years 2014-2016 only, SDG&E manages its portfolio of capital expenditures for the attrition years (2017 and 2018) within the authorized revenue requirement adopted for those years, based on business needs and priorities. GRC decisions frequently do not address each specific project but often address them in aggregate. Also, many budgets are 'blanket' or 'routine,' in which a collection of many related similar or like-kind projects are grouped; the forecasting for those budgets is often derived from averages or trends of past activity and not from cost estimates for specific assets. The money spent for "16768A.001 - CP East Tenant Improvements" was within the Commission-authorized revenue requirement adopted in the 2016 GRC for attrition years 2017 and 2018.

SDG&E Response 11-k:-Continued

GRC testimony is developed to accurately represent a snapshot representation of forecasted capital projects at a moment in time. Although GRC forecasts are carefully and accurately prepared based on the available facts as the utilities know them at that point in time, there is no way of knowing how capital management circumstances and priorities may change as time passes. In contrast, the capital management process is dynamic. There are times when projects are projected to go into service at the end of the year, but are delayed due to permitting, weather, logistics issues, and other factors. Moreover, utility project needs arise on a real-time basis, irrespective of the Commission's GRC cycle and schedule.

Because the utility capital management and prioritization process requires flexibility to make necessary adjustments, the Commission's established GRC process allows for this management flexibility in its approval of an overall revenue requirement and post-test year mechanism based on forecasts.

l. SDG&E vacated the Lightwave facility this month, January 2018. SDGE is not being reimbursed in any capacity for vacating the property. SDG&E upgraded the Lightwave office space facility across two separate projects. The first involved 36K sf of improvements and was completed in 2011. SDG&E paid for the furniture, IT, AV and security components, only. The architectural and engineering design and tenant improvement construction was funded by the Landlord as a part of the leasing arrangement. The cost of this first project to SDG&E was approximately $865K.

   The second project was completed in 2013 and involved 51K sf. SDG&E paid for all elements of the improvements in this project, including both those elements it paid for in the first project, and the architectural and engineering design and tenant improvement construction. SDG&E spent approximately $6.65M on this second project.

m. The project is complete and the benefits are outlined in the response to question 11b. The negative impacts would be: a) no increased employee efficiency, b) no improved cost effectiveness of lease costs, and c) no reduced costs by facilitating less workforce travel time, and in turn no corollary improvements in safety, reduction in fuel and expenses, and reduction in emissions (GHG).

n. The project allows SDG&E to join personnel from two separate locations and house them in one facility. The Lightwave and RB Annex facilities will be vacated. The RB Annex is approximately 12 miles from the Century Park campus and this move will bring these employees on campus. By consolidating personnel from separate locations, SDG&E can leverage adjacencies to facilitate a more efficient workforce and improved safety by reducing travel, which helps mitigate accidents and provides environmental benefits through a reduction of emissions (GHG). Also see the response to question 11b specific to ratepayer benefits.

ORA DATA REQUEST
ORA-SDGE-035-LMW
SDG&E 2019 GRC – A.17-10-007
SDG&E RESPONSE
DATE RECEIVED: NOVEMBER 29, 2017
DATE RESPONDED: NOVEMBER 30, 2017

12. Referring to SDG&E's workpaper page 121, 16770A - Moreno Admin Bldg Tenant Improvements, please provide the following:

    a. What are total project costs to date?

    b. Has the project been completed as 2017 is almost over?

SDG&E Response 12:

a. Financial information for 2017 is anticipated to be available in late Q1 of 2018, whereupon total project historical costs will also be available.

b. Yes.

ORA DATA REQUEST
ORA-SDGE-035-LMW
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13. Referring to SDG&E's workpaper page 127, 16771A - RBDC Power Reliability Improvements, please provide/answer the following:

    a. Has this project started? If yes what are the total costs to date?

    b. Why will it take 3 years to complete the project?

    c. Why are expenditures decreasing in the 2018 forecast?

    d. Is the project on schedule?

    e. Is there any likelihood that project costs will be incurred past the test year?

SDG&E Response 13:

a. Yes. Financial information for 2017 is anticipated to be available in late Q1 of 2018, whereupon total project historical costs will also be available.

b. SDG&E is completing various parts in phases. Because this facility is a 24/7/365 operation, SDG&E needs to coordinate closely with the system operators and some of the scope involves facility or isolated circuit power shutdowns to perform cutovers. Thus, three years is a conservative estimate of how long this project will take.

c. The scope and phases of the projects covered by this budget code capture all improvements to the operating reliability of this critical facility. Being a year focused mostly on design and engineering activities, 2018 is forecasted at a lower cost level than 2017 and 2019. In 2017, SDG&E forecasted and commenced the implementation of the first phase of UPS cutovers to the new generation plant. The 2018 forecast covers engineering design of the 2nd phase of UPS cutovers to the new generator plant, and also the addition of (2) new redundant UPS systems. Implementation of these projects, as well as the replacement of existing UPS battery strings, is forecasted for 2019.

d. No. The first phase of UPS cutovers to the new generation plant has been delayed by evolving operating restrictions on the implementation schedule. There will be some costs incurred in 2018 for this first phase, which was originally forecasted to be completed in 2017, as reflected in the Workpaper Detail 16771A.001 forecast.

e. It is possible that project costs will be incurred past the test year. The complexity of adding redundant UPS modules in support of this critical facility involves the development of Methods of Procedures (MOP's) and sensitivity to operating schedule restrictions that may not be fully understood or documented until the design period proceeds in earnest and phasing plans emerge. SDG&E's intention and current forecast is to complete the project by the end of the test year, but Facilities cannot speak for IT initiatives or restrictions that may take priority when developing the construction schedule.