DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 21, 2018

Exhibit Reference: SDG&E-22 - Capital

SCG Witness: Tattersall

Subject: Real Estate, Land Services & Facilities

Please provide the following:

- 1. In response to data request ORA-SDGE-035-LMW Q.11g, SDG&E provided a breakout of forecasted costs for 2018 and 2019. Based on this, please provide/answer the following:
 - a. In 2018, 2 generators are forecasted. What is the purpose of the generators, that makes them a necessity if they are not installed?
 - b. In 2018, a fiber loop CP to CP East is forecasted. What is purpose of the fiber loop, that makes it a necessity if not installed?
 - c. In 2018, outdoor conference rooms are forecasted. Are these rooms necessary? If not, what benefits do they provide to ratepayers?
 - d. In 2019, CP Annex & Annex 2nd Floor TI is a single line item. Provide a listing similar to 2018 showing what individual projects comprises this forecast

SDG&E Response 01:

- a. The emergency generators provide backup power to our facility in case of a loss of primary utility power. Without emergency generation, our operational reliability is jeopardized, which may impact our customers.
- b. The fiber loop is a fail-safe, secondary communications pathway between our facilities at Century Park (CP) and Century Park (CP) East. Currently, we have a single communications path interconnecting the facilities, which is located in a franchise service area (city street). We are installing the secondary fiber loop on private property to improve security and control of the infrastructure.
- c. The outdoor conference areas increase the utilization of space on our campus and provide additional venues for employees to meet, which mitigates scheduling conflicts for conference rooms, avoids the need for employees to leave our campus for off-site locations or accommodations, and improves employee morale, recruitment and retention.
- d. We erroneously included reference to the original CP Annex project, which only included improvements to the 1st floor, when the only applicable project is the planned improvements to the CP Annex, 2nd floor. This is forecast as a single tenant improvement project at \$232/sf multiplied by the area of 18,441 sf.

DATE RESPONDED: FEBRUARY 21, 2018

- 2. In response to data request ORA-SDGE-030-LMW Q.2 f./g., SDG&E responded "The Miramar facility is 40-plus years old and if SDG&E was to stay in that location the annual rent was expected to increase 4 times what SDG&E is currently paying to market rates because SDG&E signed the original lease in 1975. This is an estimated average net increase of \$800,000 annually just for Miramar. Additionally, SDG&E responded "This is not an increase in square footage to SDG&E's portfolio given the uses for the space provided herein. SDG&E's intentions are to vacate/relocate to Greencraig, Miramar 75,000 square feet. Based on this, please provide/answer the following:
 - a. Why is SDG&E expanding the Miramar Welding room if the intentions are to consolidate Miramar activities to Greencraig?
 - b. When does SDG&E plan to commence and finish the expansion of the welding room?

SDG&E Response 02:

- a. Not all operations are relocating to our Greencraig facility. Our Miramar location consists of a leased portion ("Miramar B"- 75,000 sf) and a portion of property that SDG&E owns (approximately 11 acres). The operational groups staying at Miramar will move into the property we own at the site. The welding school is located on this SDG&E-owned property.
- b. The design of the project has commenced. Programming has been completed and schematic design options are under development for consideration by the end users. We anticipate submitting for construction permits by the end of 2018 and completing construction by the end of 2019.

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 21, 2018

- 3. In response to data request ORA-SDGE-030-LMW Q.1b, SDG&E responded that \$4M is for the expansion of the Mission Skills Training Facility. Based on this, please provide/answer the following:
 - a. Where is the Training Facility located?
 - b. Why does the Facility need to be expanded?
 - c. What are the specific commencement and completion dates for this project?
 - d. The plans for the project that ties out to the forecasted project cost.
 - e. A breakout of costs by activity type (e.g. see SDG&E's response to data request ORA-SDGE-030-LMW Q.2d) that ties out to the forecasted project cost.

SDG&E Response 03:

- a. The Mission Skills Training Facility is located at our Mission Control Facility.
- b. The facility footprint, which has not changed since 2004, is no longer adequate to serve the needs of our classroom requirements for training. Specifically, this project will provide additional space for instructor workstations, training classes and conference rooms to adjust for growth of required training for compliance and new technologies.
- c. The design of the project is tentatively scheduled to start in the 3rd quarter of 2018 and construction is anticipated to be completed in the 4th quarter of 2019.
- d. This project has not been designed at this time.
- e. The project was estimated as a 10,000 sf expansion at a unit cost of \$500/sf for ground-up construction.

DATE RESPONDED: FEBRUARY 21, 2018

- 4. In response to data request ORA-SDGE-035-LMW Q.13d., related to the Rancho Bernardo Data Center Reliability project, SDG&E responded, "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." Based on this, please provide/answer the following:
 - a. How long has the project been delayed?
 - b. Specifically, how much, and what type of costs, have been incurred to date?
 - c. If the first phase is delayed does that delay the second and redundant phases?
 - d. An updated timeline providing milestones and completion dates for the project by Phase 1, Phase 2, and Redundant Phases.

SDG&E Response 04:

- a. The project's first phase has been delayed by 6 months, leading to a projected completion by the end of the 2nd quarter, 2018.
- b. Through 2017, roughly \$2.72M in loaded cost has been expended on the project. Included in this total are design costs, with the exception of the ongoing and specific method of procedure development to support implementation within this critical facility. Construction is also well underway and associated costs realized and recorded.
- c. No. We have accelerated the 2nd phase to be completed by the end of the 4th quarter, 2018. It will also not delay the design and construction of the second set of redundant UPS', which we have forecasted to be completed by the end of the 4th quarter, 2019.
- d. Per the response to Question 4.a above, we anticipate Phase 1 to be completed by the end of the 2nd quarter, 2018. Per the response to Question 4.c above, we anticipate Phase 2 to be completed by the end of the 4th quarter, 2018, and the implementation of the second set of redundant UPS' by the end of the 4th quarter, 2019.

DATE RESPONDED: FEBRUARY 21, 2018

- 5. In response to data request ORA-SDGE-035-LMW Q.13c., related to the Rancho Bernardo Data Center Reliability project, SDG&E responded, "the scope and phases of the projects covered by this budget code capture all improvements to the operating reliability of this critical facility." Based on this please provide/answer the following:
 - a. How long has operating reliability, requiring this project, been impaired?
 - b. Specifically, to what extent has operating reliable been impaired?

SDG&E Response 05:

- a. Fortunately, the operational reliability of the facility has not been lost or impaired yet. The project scope includes decommissioning equipment (emergency generators) that is more than twenty-five years old and is nearing its useful life; the risk of failure continues to increase the longer the cutover of UPS circuits to the new generators is delayed.
- b. See response to 5a above. Due to the age of the equipment/systems, the risk of potentially impairing our operational reliability increases the longer we delay the project; hence, we have been proactive in enhancing the existing infrastructure and replacing equipment that poses risk to the 24/7 critical operations of this facility.

DATE RESPONDED: FEBRUARY 21, 2018

6. In response to data request ORA-SDGE-035-LMW Q.13b., related to the Rancho Bernardo Data Center Reliability project, SDG&E responded, "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." Based on this please provide/answer the following:

- a. With the delay in Phase 1 does SDG&E still consider 3 years a conservative estimate? If yes, then why? If no, how much of a delay does SDG&E expect?
- b. Does the redundant phase follow the completion of Phase 2? If no, then how are the phases coordinated?

SDG&E Response 06:

- a. Yes, three (3) years is still a conservative estimate because we have accelerated the 2nd phase to overlap with the 1st phase, given the risk posed by the aged existing equipment.
- b. As originally planned, yes, but as currently scheduled, no, since we have accelerated the 2nd phase to overlap with the 1st phase. We coordinated the buss and cabling work between the existing UPS modules, located in the same room, and the new generators, which exist in a common exterior area, to occur in parallel. Cutovers from each of the UPS modules to the new generators, which will involve ATS replacements and necessary power outages within the facility, will occur separately as described in the response to Question #4 above.

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

Exhibit Reference: SDG&E-22 - Capital

SCG Witness: Tattersall

Subject: Real Estate, Land Services & Facilities

Please provide the following:

- 7. In relation to the Cuyamaca Peak Energy Plant please provide/answer the following:
 - a. When does SDG&E plan to start and finish the project?
 - b. Cost breakout by activity identifying the major cost components, that ties out to the forecast.

SDG&E Response 07:

- a. SDG&E plans on starting the design of the facility in the 1st quarter of 2019 and completing construction by the end of the 4th quarter, 2019.
- b. The project was estimated as a 2,000 sf expansion at a unit cost of \$500/sf for ground-up construction.

DATE RECEIVED: FEBRUARY 5, 2018
DATE RESPONDED: FEBRUARY 28, 2018

8. In relation to the SDG&E Skills Training Center upgrades (under the structures and improvements response to data request ORA-SDGE-035-LMW Q.1) have these upgrades been started? If yes, what are the costs to date? If no, why has the project not started?

SDG&E Response 08:

Yes, these upgrades were started in 2017. Costs were incurred across two separate projects in 2017. One project provided site improvements to support field-based training for underground electric distribution work. The other involved design and permitting, only, of improvements to support testing and training on new field-based equipment and technologies for electric distribution engineering. 2017 financial information is anticipated to be available in late Q1 of 2018.

SDG&E RESPONSE

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

- 9. In response to data request ORA-SDGE-035-LMW Q.1b., related to the structures and improvement blanket, please provide/answer the following:
 - a. The calculation and how derived for the estimated \$2.217 million allowance shown on the table for 2018.
 - b. Why could SDG&E indicate the specific projects for 2019 (without an allowance), but not 2018?
 - c. Could SDG&E start some of the projects noted in 2019 in 2018? If no, please explain why?

SDG&E Response 09:

a. Please see our response to Question 1.c. from ORA-SDGE-035-LMW. Below is the relevant excerpt from this response, for your convenience.

"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."

Referencing the response to Question 1.c. from ORA-SDGE-035-LMW, the values of the (4) planned projects are \$775K, \$700K, \$466K and \$65K, totaling \$2,006K. Subtracting this value from the 3-year average of \$4,223K yields the allowance value of \$2,217K.

	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

- b. Due to budgetary constraints and relative prioritization of structures and improvements projects within the real estate and facilities department, SDG&E has planned to implement specific known projects in 2019, but not in 2018. The scoping and development of these 2019 projects will take place in 2018. It will also be necessary to engage additional resources in 2018 to prepare to deliver the project volume forecasted for 2019. While there are no specific projects planned in 2018, SDG&E has reserved some blanket funds in 2018 for unanticipated, necessary projects that are more urgent than the planned 2019 projects.
- c. Yes, we could start some of the 2019 projects in 2018, if the particular project(s) was/were (a) given the proper, internal budget allocation, (b) approved on an enterprise wide basis, and (c) not exceedingly complex, such that we would have the ability to scope, plan, design, permit (subject to agency approval timelines) and build the particular project(s) in 2018.

SDG&E RESPONSE

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

- 10. In response to data request ORA-SDGE-035-LMW Q.2b., related to RAMP Incremental Environmental/Safety Blanket please provide/answer the following:
 - a. The calculation and how derived for the estimated \$1.463 million allowance shown on the table for 2018.
 - b. Why could SDG&E indicate the specific projects for 2019 (without an allowance), but not 2018?
 - c. Could SDG&E start some of the projects noted in 2019 in 2018? If no, please explain why?
 - d. Why are there various projects for the Miramar facility if that facility is going to be consolidated into Greencraig?
 - e. Identify the projects that are RAMP related, and why they are considered RAMP projects.
 - f. Why does the first line item say "2016 Environmental Blanket"?

SDG&E Response 10:

- a. Please see our response to Question 2.c. from ORA-SDGE-035-LMW. Below is the relevant excerpt from this response, for your convenience.
- "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

b. Due to budgetary constraints and relative prioritization of environmental/safety projects within the real estate and facilities department, SDG&E has planned to implement specific known projects in 2019, but not in 2018. The scoping and development of these 2019 projects will take place in 2018. It will also be necessary to engage additional resources in 2018 to prepare to deliver the project volume forecasted for 2019. While there are no specific projects planned in 2018, SDG&E has reserved some blanket funds in 2018 for unanticipated, necessary projects that are more urgent than the planned 2019 projects.

SDG&E RESPONSE

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

SDG&E Response 10 Continued:

- c. Yes, we could start some of the 2019 projects in 2018, if the particular project(s) was/were (a) given the proper, internal budget allocation, (b) approved on an enterprise wide basis, and (c) not exceedingly complex, such that we would have the ability to scope, plan, design, permit (subject to agency approval timelines) and build the particular project(s) in 2018.
- d. Not all operations are relocating to our Greencraig facility. Our Miramar location consists of a leased portion ("Miramar B"- 75,000 sf) and a portion of property that SDG&E owns (approximately 11 acres). The operational groups staying at Miramar will move into the property we own at the site.
- e. Please see our response to Question 2.b. from ORA-SDGE-035-LMW. Below is a tabular list of projects from this response, for your convenience. We consider that all of these projects mitigate safety risk to employees, contractors, or the public.

	For	ecast \$ (000)	
Project Name - Workpaper Detail 000703A.001	2017	2018	2019
2016 Environmental Blanket	0	1463	(
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	(
Kearny OWS Improvements	0	0	250
Kearny Stormwater Improvements	0	0	150
Miramar Gas Ops Stormwater Mgmt Improvements	376	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	(
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	(
EIC External Drainage Improvements	0	0	30
Subtotals	453	1493	2130
Vacation & Sick	3	11	16
Totals	456	1504	2146

f. The use of "2016" in the blanket project description is a typographical error. We budget allowances on an annual basis and inadvertently carried forward the title for our 2016 allocation in to our TY2019 forecast template. Given the opportunity to correct this, the table entry would more appropriately be titled "2017-2019 Environmental Blanket".

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

11. In response to data request ORA-SDGE-035-LMW Q.3b., related to Miscellaneous Equipment Blanket (Metro Garage Hoist Improvement project) please provide/answer the following:

- a. Has this project commenced?
- b. Why does it take 3 years to complete the project?
- c. A detail description of the composition of project and why the project is necessary?

SDG&E Response 11:

- a. Yes, we have completed preparing a scoping document and we intend to commence design of the project by the end of the 2nd quarter 2018.
- b. The line item budget for the Metro Hoist Replacement is a 3-year forecast for ongoing replacement of hoists that have either reached end of useful life or can no longer support new truck loads. The Metro hoist project is the top priority for our Fleet Services department. However, the schedule is predicated on coordination between Facilities and Fleet to determine other hoist replacements and requisite access to the garages.
- c. The project replaces hoists in our garages that are used to service Fleet vehicles. It is necessary for the following reasons: some hoists have reached the end of their useful lives or can no longer support the needs of our changing Fleet, and some hoists no longer provide safe access or protection for mechanics utilizing the lifts.

SDG&E RESPONSE

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

- 12. In response to data request ORA-SDGE-035-LMW Q.3b., related to Miscellaneous Equipment Blanket (Fleet Fuel Management System Upgrades) please provide/answer the following
 - a. The calculation and how derived for the estimated \$2 million funding allowance shown on the table for 2018.
 - b. A description how the infrastructure is aging and the actual age of the infrastructure
 - c. A description how the software is outdated and unsupported.

SDG&E Response 12:

a. The below table shows the various cost components and calculation of Facilities' funding allowance for Fleet Fuel Management System Upgrades.

Cost Component	Qty.	Unit Cost		Totals	
On Board Vehicle Modules	2100	\$	550	\$	1,155,000
Fuel Island & Tanker Modules	18	\$	22,250	\$	400,500
Trench & Conduit (Garages to FI's)	8	\$	55,563	\$	444,500
				\$	2,000,000

- b. The current fuel management system was first installed in 2003 and is now more than 15 years old.
- c. SDG&E's existing fuel management system and accompanying IT infrastructure are no longer supported by the vendor, which puts SDG&E at risk of a system failure as there are no server or operating software security patches or updates available. The new fuel management system will provide security for the fueling infrastructure as well as provide accurate vehicle mileage reads which increases Fleet Services reporting and decision-making capabilities.

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

- 13. In response to data request ORA-SDGE-035-LMW Q.4b., related to RAMP Incremental Security Blanket please provide/answer the following:
 - a. The calculation and how derived for the estimated \$2.626 million 2018 funding allowance and the estimated \$2.367 million 2019 funding allowance. Please also show the RAMP projects that were removed in calculating the allowances.
 - b. Identify the projects that are RAMP related, and why they are considered RAMP projects.
 - c. Why does the third line item say "2016 Security Improvements Blanket"?
 - d. Why is there a project for the Miramar Base Security Camera upgrades if that facility is going to be consolidated into Greencraig?

SDG&E Response 13:

- a. Please see our response to Question 4.b. from ORA-SDGE-035-LMW. Below is the relevant excerpt from this response, for your convenience.
 - "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."
 - Per Workpaper Detail 00707A.001-RAMP (p.37 of 132), our RAMP forecasts were \$3,001K and \$3,091K for 2018 and 2019, respectively. The two projects were budgeted internally at roughly \$1.1M. Because the projects were accelerated to proceed in 2017 due to security concerns, we subtracted \$375K and \$725K from 2018 and 2019, respectively.
- b. Please see our response to Question 4.b. from ORA-SDGE-035-LMW. Below is the tabular list of projects from this response, for your convenience. We consider that all of these projects mitigate the risk of workplace violence to improve the security and safety of our employees, customers, and contractors.

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

SDG&E Response 13 Continued:

	For	recast \$ (000)	0)	
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	C	
2016 Security Improvements Blanket	0	2626	2367	
Eastern Interior Door Installation	25	0	C	
EIC Guard Booth/Panic Button Installation	15	0	C	
EIC Parking Security Improvement	0	0	225	
EIC Security Improvements	0	0	200	
Escondido Branch Office Security Improvements	30	0	C	
Kearny Guard Shack Installation	20	0	C	
Mission Grid Ops Security (Dbl door entry to Grid Control, only)	50	0	C	
National City BO Security System Improvements	30	0	C	
OCCO Security Upgrades	227	0	C	
Miramar Base Security Camera Upgrades	0	0	725	
C&O Site Audit Security Upgrades	750	750	C	
Subtotals	1747	3376	4017	
Vacation & Sick	13	26	31	
Totals	1760	3402	4048	

- c. The use of "2016" in the blanket project description is a typographical error. We budget allowances on an annual basis and inadvertently carried forward the title for our 2016 allocation in to our TY2019 forecast template. Given the opportunity to correct this, the table entry would more appropriately be titled "2017-2019 Security Improvements Blanket".
- d. Not all operations are relocating to our Greencraig facility. Our Miramar location consists of a leased portion ("Miramar B"- 75,000 sf) and a portion of property that SDG&E owns (approximately 11 acres). The operational groups staying at Miramar will move into the property we own at the site.

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

14.In response to data request ORA-SDGE-035-LMW Q.7b., related to Alternative Energy Systems please provide/answer the following:

- a. The calculation and how derived for the estimated \$2.744 million 2018 funding allowance for the Alternative Energy Program Allowance.
- b. The calculation and how derived for the estimated \$2.532 million 2019 funding allowance for the Alternative Energy Program Allowance.
- c. Why is the \$500k forecast for the 2017 Alternative Energy Program Allowance (employee EVs at own cost) so low given this is not a new program?
- d. Why is there no forecast for the 2017 Alternative Energy Program Allowance (Fleet EVs) given this is not a new program?
- e. For the Alternative Energy Program Allowance (employee EVs at own cost), how are the employees converting their personal vehicles to electric/hybrid types and why should ratepayers pay for employees to convert their vehicles when employees may also benefit from the conversion.
- f. For the Alternative Energy Program Allowance (Fleet EVs), how are the vehicles converted to electric and CNG, and what is a general cost per vehicle.
- g. For the 376 fleet vehicles, what types are vehicles are these, and is this the total amount of vehicles covering both 2018 and 2019?
- h. Does any of the allowance go to charging stations? If yes, how much and broken out by year split between fleet and employee EV?

SDG&E Response 14:

a. The proposed 2018 Alternative Energy System allowance of \$2.744M is the proposed funding for providing new vehicle charging infrastructure and equipment in support of two separate programs. These programs aim to provide 1) on-site charging facilities for employee personal vehicles at company properties, and 2) on-site charging facilities for company owned Fleet vehicles at company properties. Per the response to data Request # 35, Question 7.a., the proposed allowances for each program are \$1.469M and \$1.275M, respectively, with a total 2018 allowance of \$2.744M. Note that employees purchase the energy discharged to their personal vehicles.

DATE RECEIVED: FEBRUARY 5, 2018
DATE RESPONDED: FEBRUARY 28, 2018

SDG&E Response 14 Continued:

The forecasts for support of employee vehicles are based on a combination of factors, including the number of employees known to own and commute in electric vehicles, the number of available charging stations., the availability of existing electric infrastructure (many prior installations were designed to expand), the need to provide intermittent charging locations to facilitate travel beyond single-charge range, and anticipated growth of EV owners.

The following table exhibits each of the first two factors. The build-out potential column, which comprises the basis for the forecast, considers the other factors. The table reflects data as of the 4th quarter of 2016. Based on the total build-out potential, a forecasted 176 new charging stations to support employee vehicle charging. The unit cost applied to these chargers was \$25,000/ea. Some sites will require new payment kiosks to enable employee use of the chargers, and it was determined that an additional 5 kiosks would be required at approximately \$10,000/ea. The calculation of the total forecast for employee vehicle chargers and payment kiosks follows in the table below. Lastly, the value of the funding request was prorated across 2018 and 2019 by a ratio of 1/3 to 2/3, or \$1.469M and \$2.982M, respectively.

SDG&E 2019 GRC – A.17-10-007 SDG&E RESPONSE

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

SDG&E Response 14 Continued:

Location	EV Owners	EV Chargers	Delta	Build Out Potential	Added Pay Kiosks
Century Park A bldg. 2	45	10	-35	0	
Century Park B bldg. 2	0	10	10	0	
Century Park C bldg. 2	0	8	8	2	
Century Park D bldg. 1	30	8	-22	2	
Century Park E bldg. 3	28	10	-18	0	
Century Park K South Parking	0	6	6	2	
Century Park L Sorth Parking	0	6	6		
Century Park M	0	0	0	10	1
Century Park N	0	0	0	10	1
Century Park O	0	0	0	10	1
Century Park F bldg. 4	37	9	-28	1	
Century Park G bldg. 5	24	10	-14		
Century Park H bldg. 6	10	8	-2	2	
Century Park I North Parking	0	10	10		
Century Park J North Parking	0	10	10	2	
Century Park General	0	6	6	0	
CP Annex	5	6	1	0	
CP East	0	5	0	5	
CP Fleet	0	0	0	2	
Alpine Major Projects	3	1	-2	0	
Alpine Way Escondido ITF	0	4	4	6	
Beach Cities	2	2	0	8	
Eastern	6	2	-4	5	
Energy Innovation Center	1	1	0	0	
Kearny	4	5	1	6	
Lightwave	18	0	-18	0	
Metro	3	6	3	6	
Miramar C&O	5	5	0	6	
Miramar Energy facility	1	1	0	2	
Mission Control	9	5	4	5	
Mission Skills	1	4	3	7	
Mision Telecom	1	0	-1	4	1
Mountain Empire	1	2	1	8	
North Coast	2	2	0	8	1
Northeast	4	8	4	7	
Orange County	3	3	0	7	
Palomar- 2 Hydras	0	1	1	9	
Palomar- 2 Hydras	0	1	1	9	
Ramona	0	2	2		
Rancho Bernardo Data Center	8	5	-3	5	
South Bay DO		2	0		
Total	251	184	-74	176	5

Employee Charging Program Summary

Build-out costs (176 stations @ \$25,000/ea)	\$ 4,400,000
Pay Kiosk Costs (5 units @ \$10,000/ea)	\$ 50,000
Grand Total 2018-2019	\$ 4,450,000
2018 Portion (1/3)	\$ 1,468,500
2019 Portion (2/3)	\$ 2,981,500

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

SDG&E Response 14 Continued:

The forecast for the support of the Fleet EV charging program was based on the Company's anticipated purchase of both electric and plug-in hybrid vehicles for employee business use. Plug-in hybrid vehicles are primarily bucket trucks whose engines are powered by gasoline or diesel, but with boom lifts or other on-board equipment that are powered by stored electricity. Like conventional electric vehicles, the on-board equipment is charged when the vehicles are not in use.

The following table lists the quantities of electric and plug-in hybrid Fleet vehicles anticipated to be purchased in the years 2018 through 2020. The data was provided to Facilities from Fleet in May 2017. The forecasts to support the Fleet EV charging program are based on the total vehicle quantities for years 2018 through 2020, only. The year 2017 was excluded as adequate charging infrastructure and equipment was already in place to support the anticipated 2017 purchases. The total vehicle quantities for years 2018 through 2020 were multiplied by the unit cost per charger of \$25,000. The calculation of the total forecast for Fleet vehicle chargers follows in the table below. Lastly, the value of the funding request was prorated across 2018 and 2019 by a ratio of 1/3 to 2/3, or \$1.275M and \$2.550M, respectively.

VehicleType	2018	2019	2020	Total 2018- 2020
Pickup	43	34	33	110
IMS-Service Body	9	0	0	9
E-PTO Trouble Trucks/Aerials	10	12	12	34
Electric Total:	62	46	45	153

Returning to Question 14.a., then, the derivation of the estimated \$2.744 million 2018 funding is the sum of the 2018 forecast for each of the Employee Personal EV and Fleet EV (electric and plug-in hybrid) on-site charging programs. The estimated 2019 funding is derived in the same way and the calculation for both years is exhibited in the table below.

	2018		2019		Program Tota	
Employee Vehicles	\$	1,468,500	\$	2,981,500	\$	4,450,000
Fleet Vehicles	\$	1,275,000	\$	2,550,000	\$	3,825,000
Annual Totals	\$ 2	2,743,500	\$!	5,531,500		

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

SDG&E Response 14 Continued:

- b. The calculation showing the derivation of the estimated \$ 2019 funding for the Alternative Energy Program Allowance is explained in the answer to Question 14.a. above. It appears that there may be a typographical error in the question, as the total 2019 forecasted costs are \$5.532M, not \$2.532 as stated in the question.
- c. The forecast for the 2017 Alternative Energy Program Allowance (employee EV program) is comparatively lower than the 2018 and 2919 forecasts because there were already many specific projects committed to proceed or already being implemented entering 2017. The table provided in our response to DR #35, Question 7.a., lists these projects.
- d. As discussed in our response to Question 14.a. above, we did not foresee a need to implement charging infrastructure for anticipated 2017 Fleet EV purchases. Adequate charging infrastructure and equipment was already in place to support the anticipated 2017 purchases.
- e. Although our response to DR #35, Question 7.c. refers to employees converting their personal vehicles to electric/hybrid types, the reference was intended to mean that the employee would convert to electric/hybrid types through the lease or purchase of a new personal electric/hybrid vehicle. There are no costs in the SDGE-CWP-22 forecasts applicable to the conversion of gas/diesel powered employee vehicles to electric/hybrid.
- f. Although our response to DR #35, Question 7.c & 7.d. refers to the Company converting Fleet vehicles to alternative fuel vehicles (AFVs), the reference was intended to mean that the Company would convert to alternative fuel vehicles (AFVs) through the lease or purchase of new alternative fuel vehicles (AFVs). There are no costs in the SDGE-CWP-22 forecasts applicable to the conversion of gas/diesel powered Fleet vehicles to electric/hybrid alternative fuel vehicles (AFVs).
- g. The 376 fleet vehicles, referenced in our response to DR #35, Question 7.e., was stated in the context of a company goal. The vehicle type breakdown would typically only be known and confirmed by the Fleet department. The quantity of Fleet vehicles used in estimating our forecast is clarified in our response to Question 14.a. above, along with a breakdown by vehicle type.
- h. The allowances were established to fund electric and plug-in hybrid vehicle charging infrastructure programs, exclusively. Costs to purchase, modify or maintain vehicles are not included. The response to Question 14.a. above provides the year by year split of forecasts between Fleet and employee EV programs.

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

15. In response to data request ORA-SDGE-035-LMW Q.7g., related to Alternative Energy Systems, SDG&E responded "the allowances are driven by projected increases in employee EV ownership and electric vehicle additions to the Company fleet." Please provide the projected increases and how those increases are incorporated into the determination of the Alternative Energy Program Allowances for 2018 and 2019.

SDG&E Response 15:

The response to Question 14.a. above provides the projected increases in employee EV ownership and electric vehicle additions to the Company fleet on which the forecast is based. The response also describes how those increases are incorporated into the determination of the Alternative Energy Program Allowances for 2018 and 2019.

DATE RECEIVED: FEBRUARY 5, 2018 DATE RESPONDED: FEBRUARY 28, 2018

16.In response to data request ORA-SDGE-035-LMW Q.5c., related to Infrastructure/Reliability Blanket, SDG&E responded, "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." Based on this, please provide/answer the following:

- a. Could SDG&E start some of the projects noted in 2019 in 2018? If no, please explain why?
- b. Why does SDG&E consider it reasonable to have an allowance for 2019 when it specifies a number of projects that in total exceed the total expenditures for 2017 and 2018?

SDG&E Response 16:

- a. Yes
- b. Over and above the specific projects forecasted for 2019, SD&E considers it reasonable to maintain an allowance for 2019 to cover emergent, unplanned and as-yet unspecified projects for improving or providing new equipment, creating flexibility for addressing future needs that may include addressing equipment failures through replacements or other emergencies involving facilities infrastructure. The 3-year average for blanket budget Code 708, which captures infrastructure reliability projects not exceeding \$1M, is a reasonable approximation for what the annual unplanned cost could be.