



Rebecca Giles
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San Diego Gas and Electric Company
8330 Century Park Court
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August 18, 2014

Reg.12-10/A.14-04-011
SDG&E Sycamore-Penasquitos
230kV Transmission Line CPCN

Sent Via Sempra EDT System

Billie Blanchard
Project Manager
Energy Division, CEQA Unit
505 Van Ness Avenue
San Francisco, CA 94102-3298

Re: SXPQ ED01-SDGE Partial Response No. 1

Dear Ms. Blanchard:

Attached please find SDG&E's partial response to ED's Data Request 1 issued on August 6, 2014.

Included in this submittal are responses to **Questions 1,3, 5, 7-9, 11-18, 20-47, 50-53, 55-56, 58-63, and 64-67**. Also provided are attachments in responses to Questions 21, 24, 25 and 26.

The remaining responses to Questions **2, 4, 6, 7, 10, 19, 34, 37, 48, 49, 54, 57 & 64** are anticipated to be submitted in approximately one month.

If you have any questions or require additional information, please feel free to contact me by phone at (858) 636-6876 or e-mail: RGiles@semprautilities.com.

Sincerely,

Signed

Rebecca Giles
Regulatory Case Manager

Enclosures

cc: Allen Trial – SDG&E
Adrianna Kripke – SDG&E
Bradley Carter – SDG&E
Central Files - SDG&E
Peter Allen – CPUC

Jeff Thomas – Panorama Environmental Consulting
Charlotte Terkeurst – CPUC Inter Chief of Staff
May Jo Borak – CPUC Infrastructure Permitting and CEQA
Molly Sterkel - CPUC Infrastructure Planning and Permitting

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#	Description/Data Needed	SDGE Response
A	PEA Project Description (Q1-20)	
1	Confirm that the information provided in Deficiency Report #1, Item 1 describes the full scope, location and access needed for activities at Chicarita, San Luis Rey and Mission Substations.	For the Chicarita, San Luis Rey and Mission substations, no additional work is expected beyond what was described in the response to Item 1 of the Deficiency Report.
2	Provide maximum heights and layouts for proposed retaining walls.	PENDING - The response to this data request will be provided in approximately one month.
3	Provide GIS shape files for existing operation and maintenance work pads that would be used for pole removal activities.	As previously discussed during the site visit on July 15, 2014, SDG&E is evaluating the feasibility of locating the eastern cable pole further north. The design of the alternative eastern cable pole location could potentially modify other Proposed Project design elements within the immediate vicinity. Therefore, submittal of data responses that cannot be finalized until the alternative cable pole design is complete are not included within this partial response. The response will be provided following completion of the alternative cable pole design in approximately one month.
4	Verify the proposed alignment and work area for Segment B.	Pending further analysis of the alternative cable pole location in Black Mountain Ranch Community Park, the Proposed Project Segment B work areas are yet to be finalized. The response will be provided following completion of the alternative cable pole design in approximately one month.

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

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5	Provide the peak number of workers that will be working on the project during construction.	As indicated in the schedule provided in Table 3-11 of the PEA, it is anticipated that there will be simultaneous construction activities across the project segments. In general, construction on Segment B will occur at the same time as construction activities on at least one other segment; and during the peak of construction, various activities will be occurring simultaneously on all segments. During a peak construction workday, there will be approximately 100 construction workers on site. This does not include biological, cultural or other specialty monitors retained by the CPUC, SDG&E or the construction contractor.
6	Verify the access roads and length of each access road that will be used during construction.	Pending further analysis of the alternative cable pole location in Black Mountain Ranch Community Park, the anticipated access roads and associated length are yet to be finalized. The response will be provided following completion of the alternative cable pole design in approximately one month.
7	Identify alternate staging yards that SDG&E may use to replace the Carmel Mountain Staging Yard. Submit the revised GIS with updated staging yards to CPUC.	Due to recent development, the Carmel Mountain Road Staging Yard is being removed from the project description as a potential staging yard. All three substations within the project area (Sycamore Canyon, Penasquitos and Chicarita) may be used as staging yards. Two additional staging yards are also being proposed: the Rancho Penasquitos Staging Yard located adjacent to the Chicarita Substation and the SR-56 Staging Yard. The SR-56 Staging Yard is currently being mass graded for future development and a portion of this area may be available for use as a staging yard at the time of construction. The GIS shapefiles for these staging yards will be submitted later with the rest of the project related GIS shapefiles. PENDING GIS shapefiles.
8	Identify where trenchless installation may take place in Segment B, and describe the work areas, installation methodology, equipment and materials to be used, safety procedures, and any other guidelines that would be employed.	No trenchless installations are anticipated to be required other than the bridge crossing, which is described on PEA page 3-33.

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

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9	Identify the location of existing H-frame and wooden poles that would be topped and left in place. How tall is the portion of the H-frame pole that will be left in place?	Pending further analysis of the alternative cable pole location in Black Mountain Ranch Community Park, the number of H-Frames that will be topped in addition to what was originally proposed in the PEA project description is yet to be finalized. The response will be provided following completion of the alternative cable pole design in approximately one month.
10	Describe terminal splitting activities for TL 23011 at the Encina Hub and San Luis Rey Substations.	PENDING - The response to this data request will be provided in approximately one month.
11	Describe the equipment that would be used to install and place underground prefabricated vaults, such as cranes.	A crane will be used to set vault sections. Typically, these cranes have a 30-foot by 30-foot footprint and fall within the temporary Segment B work areas. The crane will take each section from a semi-truck and trailer for hauling the vault sections and stationed adjacent to the excavated vault area and the crane. After the vault is set, a concrete truck will be used for backfill and grouting.
12	Describe and identify any associated hardware for structures that would be anchored in the ground, such as temporary or permanent guy poles or wires.	Installation of temporary or permanent guys and anchors is not currently anticipated to be required at any structure locations; however, if Caltrans requires netting for any freeway crossings during stringing activities, the netting may require temporary anchoring.
13	Confirm the amount of soil that will be cut and the amount of soil that will be	The cut (21,620 cubic yards) and fill (3,720 cubic yards) estimated volumes listed in the PEA project description are accurate; however, the net volume should have been listed as approximately 17,900 cubic yards of cut.

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#	Description/Data Needed	SDGE Response
	placed as fill during project construction.	
14	Describe how excavated soils would be “re-used” on work areas and existing ROWs, and identify locations where soil would be “re-used”. Describe proposed excavated material spreading practices, and any differences in the treatment of rock vs. soil spoils.	<p>On segments A, C, and D, the soil excavated during foundation installation will be used to re-contour and restore the structure work areas after foundation construction is complete. If excess soil remains after site restoration, it will be spread and compacted over the existing access roads to fill in ruts. If rock or otherwise unsuitable soils are excavated from the new structure, the material would be transported offsite or utilized for berms along the access roads.</p> <p>There are no plans to re-use excavated soils from Segment B at this time. Use of fluidized thermal backfill (FTB) to achieve the required cable ratings as well as a concrete encasement for protection of the cabling is required.</p>
15	Identify anticipated duct types described in Appendix 3-C that would be installed at specific underground locations, and provide GIS shapefiles of the associated work areas that would be needed to trench and install ducts and vaults.	<p>The duct configurations used will vary based on conflicting utilities along the alignment. The standard duct configuration (3 tall by 2 wide) 8” ducts with 4-2” telecom ducts in the center will be utilized along the majority of the alignment. A horizontal configuration of 6 8-inch ducts wide with 4- 2-inch telecom ducts in the center will be required to maintain vertical clearances between, over, or under conflicting utilities where required to maintain General Order 128 clearances. Pending further analysis of the alternative cable pole location in Black Mountain Ranch Community Park, the Proposed Project Segment B work areas are yet to be finalized. A GIS shape file will be provided following completion of the alternative cable pole design in approximately one month.</p>
16	Confirm stringing sites are accurate and would be sufficient in size to achieve all proposed conductor construction activities.	<p>The currently mapped stringing sites provided within the PEA are sufficient for both the removal of existing and installation of new overhead conductor and shield wire. At structures P30 and P31, it is anticipated that the temporary work area shown around both structures will be sufficient for stringing into the Chicarita Substation. Stringing operations will occur inside the Chicarita Substation but will be within the existing footprint of the substation.</p> <p>Any required revision to stringing sites resulting from the alternative cable pole design will be provided along with the cable pole</p>

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

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17	Confirm the permanent work area acreage for splice vault man holes.	design in approximately one month. Future operation and maintenance activities would require an area approximately 100 feet longitudinally by 20 feet in width (approximately 0.05 acre) for work at each splice vault location. These work areas would be located within existing or future roadway ROW and no permanent work area is anticipated to be required.
18	State whether the new poles and towers will meet raptor safety requirements.	All new poles will be designed to meet raptor safety requirements in accordance with avian protection plan guidelines provided by Edison Electric Institute's Avian Power Line Interaction Committee (APLIC) and the U.S. Fish and Wildlife Service.
19	Provide information on the location and construction techniques of the alternate cable pole location in Black Mountain Park.	As previously discussed during the site visit on July 15, 2014, SDG&E is evaluating the feasibility of locating the eastern cable pole further north. The response will be provided following completion of the alternative cable pole design in approximately one month. (PENDING)
20	Provide records or correspondence with the City of San Diego or other local groups regarding the tree removal concerns in the project underground area and any SDG&E plans to address this issue.	On May 6, 2014, SDG&E's project team met with individuals from the Park and Recreation Department of the City of San Diego. No formal agenda or meeting minutes were included but the meeting focused on the underground segment of the Proposed Project and how SDG&E would attempt to minimize impacts to trees within the median as well as access to parks. SDG&E agreed to further evaluate and minimize potential impacts to existing trees by adjusting the underground alignment as much as possible while still minimizing potential impacts to traffic. SDG&E also agreed to continue communication and coordination with the City in regards to potential disruptions and/or impacts to the park. To address the City's concerns, SDG&E revised the Proposed Project Segment B underground alignment. The revised Segment B alignment was submitted as part of Deficiency Response dated July 7, 2014.
B.	AESTHETICS (Q21-22)	
21	Provide all original baseline photographs and simulations (24 KOPs) used for the analysis at full resolution (CD/DVD)	Original photos and simulations are attached, and will be sent on compact disc as well.

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

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	preferred).	
22	Provide any additional analysis or matrices used in the determination of significance in the PEA analysis of aesthetic impacts.	SDG&E has nothing further to provide concerning the visual impact assessment.
C.	AIR QUALITY AND GREEN HOUSE GASES (Q23-33)	
23	Provide the volume of insulating oil and sulfur hexafluoride that would be used during operation and maintenance of the proposed project.	A total volume of approximately 450 gallons of insulating oil will be used for equipment installed on the proposed project. A total of approximately 644 pounds of sulfur hexafluoride (SF6) will be required during operation and maintenance of the proposed project.
24	Clarify the method that was used to calculate air pollutant emissions. Provide documentation to support the use of spreadsheets to calculate emissions rather than direct application of CalEEMod modeling.	CalEEMod is a land use tool that was developed to assist lead agencies with land use development projects. Its application to transmission line construction, however, is limited. One of the biggest deficiencies in the CalEEMod Model is the means in which it treats trucks used in construction of the transmission line. Reviewing the equipment list provided by SDG&E for construction of the Proposed Project indicates that the majority of the equipment that would be used during construction consists of on-road diesel trucks. The CalEEMod model treats trucks either as off-road trucks, if listed as construction equipment, or by assuming vehicle trips. Neither approach is appropriate for the trucks that SDG&E will use to construct the Proposed Project. The trucks that will be used are certified for on-road use, and are therefore on-road trucks. Use of the off-road truck assumption within the CalEEMod model therefore inaccurately represents emissions from these vehicles. Also, the trucks will be used at the site, and were assumed to run for approximately 2 hours per day. The CalEEMod model does not allow the user to specify idle

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

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		<p>time. To address this deficiency, the EMFAC2011 model was run to calculate both on-road emissions associated with truck trips, and idling emissions associated with use of the trucks at the site. CalEEMod would not represent the use of these types of trucks accurately and is therefore not an appropriate tool for use in this instance.</p> <p>Because the San Diego Air Pollution Control District, which is the regulatory agency that governs air quality within San Diego County, does not provide input into CEQA analyses, they do not provide instructions for whether or not CalEEMod is appropriate. Agencies including the California Department of Transportation, which also evaluates linear projects that are more similar to transmission lines than shopping centers or residential developments, recognize that CalEEMod is not a universally useful tool. As stated on their website (http://www.dot.ca.gov/hq/env/air/main_sections/analysisistools.htm) “CalEEMod is not ideal for road construction emission analysis – it is oriented mainly at general land development analysis”. Thus CalEEMod is not universally accepted by every agency for every project within the State of California.</p> <p>The Air Resources Board (ARB) has prepared a guidance document entitled “Handbook for Project-Level Analysis”, which provides guidance on the use of EMFAC2011 emission factors to model heavy-duty vehicles such as those that will be used in the construction of the Proposed Project. This guidance was follows in calculating emissions for the trucks.</p> <p>Another problem with using CalEEMod is that the model does not allow the user to identify a mix of Tier 2 and Tier 3 equipment. SDG&E has committed to using Tier 2 and Tier 3 equipment, and will use 70 percent Tier 2 equipment and 30 percent Tier 3 equipment in construction of the Proposed Project. There is no means of accounting for this within CalEEMod. Tier 2 and Tier 3 emission factors are provided in Table A-29 (attached). These emission factors were used for the calculations for NOx, CO, and PM emissions.</p>
25	Provide the source for emissions factors used in the model and additional information on the activity data and emissions calculations.	The spreadsheets (attached) have been annotated so that the CPUC can see exactly which line the data were obtained from within the CalEEMod appendix for heavy equipment. In addition, spreadsheets showing the emission factors for truck operation and idling have been provided. Excerpts from the CalEEMod Model User’s Guide, Appendix D, have been provided, as well as emission factors from EMFAC2011. For conservative purposes, 2016 emission factors were used as it was assumed that the equipment would not necessarily change out during the construction of the Proposed Project.
26	Provide documentation for diesel and off-road truck	The spreadsheets have been annotated so that the CPUC can see exactly which line the data were obtained from within the CalEEMod Appendix D for heavy equipment. In addition, spreadsheets showing the emission factors for truck operation and

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
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	emissions factors used in Appendix 4.3-A	idling have been provided. With regard to the example cited in the comment, the incorrect emission factors from Appendix D were used and have been corrected. The original horsepower rating of the generator was updated by SDG&E and the emission factor should have been updated as well. The spreadsheets and Tables 4.3-8 through Table 4.3-11 (attached) have been updated to reflect this change.
27	Clarify emissions factor units.	To clarify emission factors used in the analysis, the spreadsheets have been divided into two sheets depending on which units are used (the spreadsheets are attached).
28	Please provide evaporative, starting and idling emissions for on-road trucks.	As discussed under the response to Item 24 above, idling emissions are included in the worksheets that present emissions for use of trucks on site. The CalEEMod Model algorithms for calculating emissions from vehicles utilize the EMFAC2011 model emission factors. EMFAC2011 does not calculate starting emissions, diurnal evaporative emissions, hot soak emissions, running loss emissions, or resting loss emissions from diesel vehicles. We have attached the EMFAC2011 output files obtained from ARB's website to demonstrate this. The EMFAC2011 emission factors obtained from the ARB's website further highlight the difficulty in using the CalEEMod Model for all applications. The trucks that will be used in constructing the Proposed Project's transmission line will be diesel trucks. However, the CalEEMod Model aggregates EMFAC2011 emission factors and includes gasoline trucks in the overall calculations for on-road emissions. For heavy-duty trucks, the vehicle miles traveled within the San Diego Air Basin for the gasoline portion of this category is only 1.5 percent. It is not appropriate, therefore, to calculate evaporative or starting emissions from diesel vehicles.
29	Update the CO2 emission factor for helicopter GHG emissions to be consistent with the cited emissions factors.	The emission factor has been updated and the table has been revised and is attached.
30	Address the inconsistency between Tables A-32 and B-9 in Appendix 4.3-A.	Paved road fugitive PM10 and PM2.5 emissions should have been included for truck trips. The tables have been updated and are attached.

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#	Description/Data Needed	SDGE Response
31	Address the error in formulas in Table B-4, cells I-69 through J-71, J-69 through J-71, and K-69 through K-71.	The error has been corrected and the tables have been updated and are attached.
32	Add N2O helicopter emissions to the summary GHG emissions table.	The column was inadvertently hidden and has been unhidden from the spreadsheet, and is attached.
33	Provide SOX helicopter emissions in Table 4.3-8.	The EDMS model does not provide emission indices for SOx because the sulfur content of fuel is not specified. The U.S. Navy uses an assumption that aviation fuel contains no more than 0.4 percent S. Accordingly, an emission index of 0.4 g/kg fuel was used to estimate emissions from helicopters. SOx emissions have been added to the tables (attached).
D.	CULTURAL RESOURCES (Q34-36)	
34	Provide GIS Data for the Cultural Resources Survey Area.	Pending further analysis of the alternative cable pole location in Black Mountain Ranch Community Park, the cultural resources survey area may change slightly. The response will be provided following completion of the alternative cable pole design in approximately one month.
35	Provide documentation on consultation efforts with Native Americans.	No additional consultation has occurred.
36	Address the potential impacts from micropiles on significant paleontological resources.	Based upon preliminary engineering to date, no micropile foundations are anticipated for the Proposed Project. Once geotechnical investigations conducted and final engineering is complete, the full utilization of micropile foundations will be known.
E.	GEOLOGY AND SOILS (Q37)	

**ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67**

Q#	Description/Data Needed	SDGE Response																			
37	Provide information on the presence or absence of expansive soils and the erodibility of soils present within the project area.	PENDING - The response to this data request will be provided in approximately one month.																			
F. NOISE (Q38-46) 38	Provide distance planning contours from the line right-of-way, with specific noise impact distance circles around a new pole and a replacement pole. The distance planning contours should include cumulative noise impacts from use of multiple pieces of construction equipment simultaneously.	<p>SDG&E has identified the equipment that would typically be used simultaneously during the three stages of pole construction. The stages and equipment use during each are as follows:</p> <ul style="list-style-type: none"> - Stage 1 – Pole removal: typical simultaneous equipment usage would be one crane, one backhoe, and one portable generator; - Stage 2 – Pole installation (foundation): typical simultaneous equipment usage would be one drill rig/auger and one dump truck; - Stage 3 – Pole installation (structure erection): typical simultaneous equipment usage would be one crane, one line truck, and one air compressor. <p>The sound level for each stage was calculated by adding together the sound level generated by each respective piece of equipment operating at full throttle. Table 38, Typical Cumulative Operational Sound Levels by Stage, below provides the maximum sound level as measured from the approximate center of the noise generating equipment.</p> <p>Table 38: Typical Cumulative Operational Sound Levels by Stage</p> <table border="1" data-bbox="1195 44 1406 1583"> <thead> <tr> <th rowspan="2">Construction Stage</th> <th colspan="4">Maximum Noise Level (dBA)</th> </tr> <tr> <th>50 feet</th> <th>100 feet</th> <th>200 feet</th> <th>500 feet</th> </tr> </thead> <tbody> <tr> <td>Stage 1</td> <td>84</td> <td>78</td> <td>72</td> <td>64</td> </tr> <tr> <td>Stage 2</td> <td>88</td> <td>82</td> <td>76</td> <td>68</td> </tr> </tbody> </table>	Construction Stage	Maximum Noise Level (dBA)				50 feet	100 feet	200 feet	500 feet	Stage 1	84	78	72	64	Stage 2	88	82	76	68
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ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#		Description/Data Needed		SDGE Response				
				87	81	75	67	60
39	Provide data on peak single-hour noise generation.	<p>Overhead line construction will include pole removal, clearing of the pole sites, foundation excavation, grading, concrete placement, steel pole installation, and wire stringing. The construction equipment to be used is similar to that used during typical public works projects. Table 39, Maximum Construction Sound Levels by Equipment, provides the maximum sound level that would be generated by each piece of equipment when operating at full throttle for an entire hour. The equipment presented could potentially be utilized in all Segments of the Project. However, it is important to note that the equipment would not generally be operated continuously, nor would the equipment always operate at full load. Expected sound levels in the field will therefore often be much lower than those presented in Table 39.</p>						

Table 39: Maximum Construction Sound Levels by Equipment

Equipment ¹	Maximum Noise Level (dBA)				
	50 feet	100 feet	200 feet	500 feet	1,000 feet
Air Compressor	80 ⁽¹⁾	74	68	60	53
Aerial Bucket Truck	75 ⁽²⁾	69	63	55	48
Backhoe	80 ⁽²⁾	74	68	60	53
Crane	81 ⁽²⁾	75	69	61	54
Bulldozer	82 ⁽²⁾	76	70	62	55
Drill Rig/Truck-mounted augur	85 ⁽²⁾	79	73	65	58
Grader	85 ⁽¹⁾	79	73	65	58
Helicopter at Takeoff	90 ⁽³⁾	84	78	70	63
Mower	88 ⁽⁴⁾	82	76	68	61

ED01-SDGE 08/18/2014 Partial Response No. 1
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Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

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Description/Data Needed		73 ⁽²⁾	67	61	53	46	81 ⁽²⁾	75	69	61	54	84 ⁽²⁾	78	72	64	57	80 ⁽⁴⁾	74	68	60	53																							
		Portable Generator					Rock Drill/rock drilling equipment					Truck (Dump Truck, Flatbed Truck)					Wire Pulling Machine (pulling rig)																											
		<p>Notes:</p> <p>¹ Noise levels listed are for typical equipment used during construction, and not all potential equipment used for the Proposed Project is listed herein. The equipment used is considered to be representative of the equipment that will be used during construction of the Proposed Project.</p> <p>Sources: (1) <i>BBN 1971, 1977</i>; (2) <i>Federal Highway Administration, 2006</i>; (3) <i>TRC, 2001</i>; (4) <i>Ebasco, 1989</i>.</p>																																										
40	Provide data on helicopter noise generation including the distance between the helicopter use and nearest sensitive receptors, duration of helicopter use in any given location, and rationale to support this assessment.	<p>Helicopter work would potentially occur at any point along the line, depending on conditions in the field during construction. Helicopter operation could occur as close as approximately 100 feet to any residence. Table 40, Maximum Helicopter Sound Levels, provides the maximum sound levels at various distances for helicopter use. Helicopter use at any one location will be very brief as the lines are being strung.</p> <p>Table 40: Maximum Helicopter Sound Levels</p> <table border="1"> <thead> <tr> <th rowspan="2">Equipment</th> <th colspan="5">Maximum Noise Level (dBA)</th> </tr> <tr> <th>100 feet</th> <th>200 feet</th> <th>500 feet</th> <th>1,000 feet</th> <th>2,000 feet</th> </tr> </thead> <tbody> <tr> <td>Light/Medium Helicopter at Takeoff ⁽¹⁾</td> <td>84</td> <td>78</td> <td>70</td> <td>62</td> <td>55</td> </tr> <tr> <td>Sikorsky S61 ⁽²⁾</td> <td>100</td> <td>94</td> <td>88</td> <td>80</td> <td>73</td> </tr> </tbody> </table>																				Equipment	Maximum Noise Level (dBA)					100 feet	200 feet	500 feet	1,000 feet	2,000 feet	Light/Medium Helicopter at Takeoff ⁽¹⁾	84	78	70	62	55	Sikorsky S61 ⁽²⁾	100	94	88	80	73
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ED01-SDGE 08/18/2014 Partial Response No. 1
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41	Please provide specific measurements of time and duration to support the data in Table 4.10-5: Summary of Ambient Noise Levels.	Sikorsky Skycrane S64 ⁽²⁾	102	96	90	82	75	<p><u>Notes:</u> Note that Sikorsky S61 and S64 (heavy lift) helicopters are not currently anticipated to be used on the Proposed Project. Although it is not anticipated, heavy lift helicopters could be used to transport steel poles to the right-of-way if the proposed access roads cannot be used by vehicles that would normally deliver this material. Sources: (1) TRC, 2001; (2) FAA</p> <p>Additional information regarding the time, duration, and noise sources experienced for each measurement are provided below in Table 41, Summary of Ambient Noise Measurements. Additional information regarding the sound levels measured at each location is provided below in Request 44, Table 44, Summary of Measured Ambient Noise Levels (dBA).</p>				
Table 41: Summary of Ambient Noise Measurements												
		Location	Date/Time of Measurement	Distance to ROW (ft)	Audible Noise Sources							
		Fortino Point	10/25/13 2011-2018	150	Dominant noise sources were traffic on Stonebridge Parkway and distant traffic on Scripps Poway Parkway and Spring Canyon Road. Other sources included some corona noise, minor insect noise, and aircraft overflights.							
		Cypress Canyon Park Drive	10/25/13 2026-2035	250	Dominant noise source was distant traffic on Scripps Poway Parkway and Spring Canyon Road. Other sources included some corona noise, minor insect noise, and aircraft overflights. Measurement was paused as cars passed immediately next to meter.							
		Ivy Hill Drive	10/25/13 2042-2052	100	Dominant noise source was traffic on Scripps Poway Parkway. Other sources included corona noise, pedestrians, and occasional traffic on Ivy Hill Drive. Measurement was paused as cars passed immediately next to meter.							

**ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
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		Calle de los Ninos	10/25/13 2059-2108	500	Dominant noise source was traffic on Route 15. Other sources included aircraft overflights and occasional animal sounds. Existing transmission line was visible but not audible. Measurement was paused as cars passed immediately next to meter.
		Paseo Montalban	10/25/13 2116-2123	50	Dominant noise source was traffic on distant highways. Other sources included corona noise, dogs, and aircraft overflights. Measurement was paused as cars passed immediately next to meter.
		Mediatrice Lane	10/25/13 2131-2139	300	Dominant noise source was traffic on distant highways. Other sources included barely audible corona noise, and aircraft overflights. Measurement was paused as cars passed immediately next to meter.
		Celome Way	10/25/13 2255-2302	100	Dominant noise source was traffic on distant highways. Other sources included insect noise and aircraft overflights. Corona noise was not audible. Measurement was paused for exceedingly low aircraft overhead.
		Duck Pond Lane	10/25/13 2326-2335	2,000	Dominant noise source was traffic on distant highways. Other sources included pedestrians and aircraft overflights. Corona noise was not audible. Measurement was paused as cars and pedestrians passed immediately next to meter.
		Hunters Glen Drive	10/25/13 2350-2357	500	Dominant noise source was traffic on distant highways. Other sources included insect noise and aircraft overflights. Existing transmission line was visible but not audible.
		Manor Gate Drive	10/26/13 0004-0011	200	Dominant noise sources were traffic on distant highways and corona noise emanating from a transmission line tower in a field nearby.
		Source: TRC, 2013.			
42	Provide cumulative	Corona noise varies depending on relative humidity and precipitation, with sound levels increasing as the weather			

**ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67**

Q#	Description/Data Needed	SDGE Response
	<p>coronal noise emissions for the existing and proposed lines at distance contours from the line.</p>	<p>turns more humid. Typical corona noise levels from 230 kV lines are in the range of only 15 dBA at a distance of 100 feet during dry weather. This can increase to up to 35 dBA at a distance of 100 feet during humid or rainy weather. Segment areas A, C, and D experience a minimal level of corona noise due to existing lines, which are as follows:</p> <ul style="list-style-type: none"> • Segment A: 69 kV, 138 kV and 230 kV • Segment C: 138 kV and 230 kV • Segment D: 69 kV and 138 kV <p>The contribution of sound from the 69 kV and 138 kV power lines is negligible when compared to the 230 kV transmission line sound. For that reason, cumulative effects in each Segment will be a factor of the number of 230 kV transmission lines present. One additional 230 kV line is planned for each Segment, which will result in either one or two 230 kV lines at all locations.</p> <p>Table 42, Expected Cumulative Corona Sound Levels (dBA), below provides the expected sound levels for one and two lines, in dry and wet conditions. A more conservative 3 dBA reduction with doubling of the distance from source to receiver was utilized as opposed to the 6 dBA reduction typically used for point sources.</p>
43	Provide the proposed	Construction will generally be limited to the hours of 7 a.m. to 7 p.m. by the City of San Diego Noise Code, and 7 a.m. to 5 p.m.

Table 42: Expected Cumulative Corona Sound Levels (dBA)

Equipment		Maximum Noise Level (dBA)				
		100 feet	200 feet	500 feet	1,000 feet	2,000 feet
Segment D One 260 kV Transmission Line	Dry Conditions	15	12	9	5	2
	Wet Conditions	35	32	29	25	22
Segments A and C Two 260 kV Transmission Lines	Dry Conditions	18	15	12	8	5
	Wet Conditions	38	35	32	28	25

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#	Description/Data Needed	SDGE Response																																													
	construction hours and define any activities that may take place outside of the standard proposed construction hours.	<p>by the City of Poway Noise Code, except as may be directed by the local agency (city) where restricted work hours or night work (9:00 p.m. to 4:00 a.m.) may be required. Traffic control requirements will be determined once the final alignment is complete. An example would be the removal and installation of conductor across I-15 and State Route 56. This work typically occurs early on Sunday mornings due to Caltrans requirements for freeway crossings. Another example would be where portions of underground construction are conducted at night (at the direction of the City) to minimize potential impacts to traffic.</p> <p>Other potential construction support activities that could occur outside of these hours include:</p> <ul style="list-style-type: none"> • Arrival and departure of workers at the staging yards. • Yard operations including maintenance of equipment and material deliveries. • Security operations in yards and at locations where equipment/material is stored on the right-of-way overnight. <p>Although it is not anticipated at this time, additional construction activities may be required to occur outside of normal construction hours; however, any such work would be completed in accordance with local noise ordinances.</p>																																													
44	Provide measured data logs for L1, L25, and L50 sound levels (A-weighted noise levels exceeded 1 percent, 25 percent, and 50 percent of the time, respectively).	<p>Table 44, Summary of Measured Ambient Noise Levels (dBA), below provides the sound levels measured during the ambient program. The L_{eq}, L_{max}, L_{min}, L_1, L_{10}, L_{50}, L_{90}, and L_{99} were logged. The L_{25} data was not measured. The data provided well defines how the noise environment changed over time.</p> <p>Table 44: Summary of Measured Ambient Noise Levels (dBA)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Location</th> <th>L_{eq}</th> <th>L_{max}</th> <th>L_{min}</th> <th>L_1</th> <th>L_{10}</th> <th>L_{50}</th> <th>L_{90}</th> <th>L_{99}</th> </tr> </thead> <tbody> <tr> <td>Fortino Point</td> <td>43.5</td> <td>61.9</td> <td>37.2</td> <td>49.6</td> <td>45.2</td> <td>42.3</td> <td>40.1</td> <td>38.2</td> </tr> <tr> <td>Cypress Canyon Park Drive</td> <td>42.2</td> <td>54.1</td> <td>37.7</td> <td>47.0</td> <td>43.5</td> <td>41.8</td> <td>40.1</td> <td>38.6</td> </tr> <tr> <td>Ivy Hill Road</td> <td>47.0</td> <td>69.1</td> <td>43.1</td> <td>51.9</td> <td>47.9</td> <td>46.2</td> <td>44.6</td> <td>43.8</td> </tr> <tr> <td>Calle de los Ninos</td> <td>47.2</td> <td>63.6</td> <td>42.1</td> <td>56.3</td> <td>48.9</td> <td>44.6</td> <td>43.5</td> <td>42.9</td> </tr> </tbody> </table>	Location	L_{eq}	L_{max}	L_{min}	L_1	L_{10}	L_{50}	L_{90}	L_{99}	Fortino Point	43.5	61.9	37.2	49.6	45.2	42.3	40.1	38.2	Cypress Canyon Park Drive	42.2	54.1	37.7	47.0	43.5	41.8	40.1	38.6	Ivy Hill Road	47.0	69.1	43.1	51.9	47.9	46.2	44.6	43.8	Calle de los Ninos	47.2	63.6	42.1	56.3	48.9	44.6	43.5	42.9
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45	Provide estimated	RMS is 0.707 of the peak particle velocity PPV for a single sinusoidal frequency. The relationship for the range of																																													

**ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67**

Q#	Description/Data Needed	SDGE Response																								
	vibration impacts using the Root Mean Square (RMS) method.	<p>frequencies generated by transient sources such as drilling is complex. Nonetheless, the same reference cited in the comment notes that “The RMS value is always positive and always less than PPV...” Therefore, the assessment of impacts would be the same. To provide an estimate of RMS values in response to the comment, the following data from the PEA has been updated.</p> <p align="center">Update PEA Table 4.10-2 as follows: Table 4.10-2 (updated): Human Response to Transient Vibration</p> <table border="1" data-bbox="829 548 1057 1520"> <thead> <tr> <th>Human Response</th> <th>PPV (inches/second)</th> <th>RMS (inches/second)</th> </tr> </thead> <tbody> <tr> <td>Severe</td> <td>2.0</td> <td>1.4</td> </tr> <tr> <td>Strongly Perceptible</td> <td>0.9</td> <td>0.6</td> </tr> <tr> <td>Distinctly Perceptible</td> <td>0.24</td> <td>0.17</td> </tr> <tr> <td>Barely Perceptible</td> <td>0.035</td> <td>0.025</td> </tr> </tbody> </table> <p>Source: Caltrans, 2004. RMS based on single frequency.</p> <p>Based upon the above revised Table 4.10-2, vibration is barely perceptible to humans with an RMS of 0.025.</p> <p>PEA Table 4.10-10 would be updated as follows:</p> <p align="center">Table 4.10-10 (updated): Vibration Source Levels for Construction Equipment at 50 Feet</p> <table border="1" data-bbox="1276 495 1442 1465"> <thead> <tr> <th>Equipment¹</th> <th>PPV at 50 Feet</th> <th>RMS at 50 Feet</th> </tr> </thead> <tbody> <tr> <td>Caisson Drill (drilling rig)</td> <td>0.031</td> <td>0.022</td> </tr> <tr> <td>Loaded Truck (flatbed)</td> <td>0.027</td> <td>0.019</td> </tr> </tbody> </table>	Human Response	PPV (inches/second)	RMS (inches/second)	Severe	2.0	1.4	Strongly Perceptible	0.9	0.6	Distinctly Perceptible	0.24	0.17	Barely Perceptible	0.035	0.025	Equipment ¹	PPV at 50 Feet	RMS at 50 Feet	Caisson Drill (drilling rig)	0.031	0.022	Loaded Truck (flatbed)	0.027	0.019
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**ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67**

Q#		Description/Data Needed		SDGE Response			
				Bulldozer (small)	0.001		0.0007
				Notes: ¹ Vibration levels listed are for typical equipment used during construction, and not all potential equipment used for the Proposed Project is listed herein. The equipment used is considered to be representative of the equipment that will be used during construction of the Proposed Project. Source: FTA, 2006. RMS values based on single frequency.			
46	Define the activities that are associated with rock blasting (e.g. drilling) and provide the noise levels at distance contours for those associated activities.			SDG&E has identified the ancillary equipment to be used if rock blasting is utilized. Equipment would include a rock drill, a water truck for any fire suppression or dust mitigation, loaders and backhoes to move loose material, a dump truck to transport material, and a mixer to slurry the hole. Table 46, Rock Blasting Ancillary Equipment Construction Sound Levels, provides the expected sound levels for this equipment at various distances from the site.			

Table 46: Rock Blasting Ancillary Equipment Construction Sound Levels

Equipment ¹	Maximum Noise Level (dBA)				
	50 feet	100 feet	200 feet	500 feet	1,000 feet
Loader/Backhoe	80	74	68	60	53
Bulldozer	82	76	70	62	55
Drill Rig/Truck-mounted Augur	85	79	73	65	58
Rock Drill/Rock Drilling Equipment	81	75	69	61	54
Truck (Dump Truck, Water Truck)	84	78	72	64	57

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#		Description/Data Needed		SDGE Response						
				Mixer Truck	85	79	73	65	58	
				Source: <i>Federal Highway Administration, 2006</i>						
G.		POPULATION & HOUSING (Q47)								
47		Clarify discrepancy in number of workers.		During peak construction, there will be approximately 100 construction workers on site per day. This does not include biological, cultural or other specialty monitors retained by the CPUC, SDG&E or the construction contractor.						
H.		RECREATION (Q48-49)								
48		Identify the location and duration of all potential park and trail closures resulting from project construction.		PENDING - The response to this data request will be provided in approximately one month.						
49		Expand on impacts discussion and mitigation to the Trans-County Trail and Cara Way (Class I bike path).		PENDING - The response to this data request will be provided in approximately one month.						
I.		TRANSPORTATION & TRAFFIC (Q50-62)								
50		Clarify a discrepancy regarding increases in ADT.		The range on PEA page 4.14-14 should read that, assuming a project-generated traffic of 220 daily trips, the project-generated traffic would represent approximately 0.07 to 0.5 percent of average daily traffic on the CMP designated roadways within the Proposed Project area, as shown in the table below:						

**ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67**

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Q#	Description/Data Needed																												
		Table 50: CMP Roadway																											
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		<p><u>Notes:</u> ¹ Average traffic taken from PEA Table 4.14-2. ² Range given in the PEA represented only the 4 CMP highways.</p>																											
51	Describe the proposed methods to maintain vehicle access on Carmel Valley Road during construction of Segment B.	<p>Standard traffic control methods will be employed to minimize traffic impacts during construction along Carmel Valley Road. These may include but are not limited to, flagging, signage, detours, type II barricades, K rails, cones and adjusted working hours. The final alignment will consider both traffic impacts during construction as well ongoing operations and maintenance activities. A traffic control plan will be completed once the final alignment is determined and will be approved by the local agency prior to the start of any portion of construction of Proposed Project Segment B that requires traffic control.</p>																											
52	Identify proposed traffic detours in the GIS data.	<p>The final alignment will consider both traffic impacts during construction as well ongoing operations and maintenance activities. A traffic control plan will be completed once the final alignment is determined and will be approved by the local agency. Therefore, GIS data is not available.</p>																											
53	Please provide a table that shows the maximum trips	<p>The maximum trips provided as part of the partial Response to Deficiency Report No. 1 (dated July 7, 2014) should be used in place of data presented within the PEA. Data was updated and presented by project segment as part of response to Question 38 in</p>																											

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#	Description/Data Needed	SDGE Response
	<p>generated during construction for each segment and operation and maintenance of each segment, broken down by trip type (e.g., material or equipment delivery, worker vehicle).</p>	<p>the July 7 deficiency response. Methodology for generating trips is as follows:</p> <ol style="list-style-type: none"> 1. Number of workers, pieces and types of equipment, and number of deliveries were assumed for specific construction activities, per segment, as outlined in the equipment and vehicle use table Data Response 11 (submitted July 7, 2014). 2. Workers and delivery vehicles were assumed to have two trips daily. 3. Worker trips include passenger trips, including work trucks. Worker trips also include specialty monitors (SWPPPP, Biological, etc.) 4. As a worst case, it was assumed that all required equipment would arrive on the day in question, and 1 trip daily trips was used. Equipment would remain on site until work was complete at that location. 5. Hauling trips were assumed to equal 2 daily trips and include waste/soil hauling and material hauling/delivery. 6. Water truck trips were also estimated based upon the activity.
54	<p>Provide additional information regarding roads in the project area to define existing traffic volumes, vehicle speeds, number of lanes, and parking.</p> <p>The PEA did not provide adequate information to characterize baseline traffic on arterial, collector, or local roadways. The following information is needed to complete the analysis:</p> <ol style="list-style-type: none"> 1. Speed limit along underground segment of project 2. Current bi-directional 	<p>PENDING - The response to this data request will be provided in approximately one month.</p>

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#	Description/Data Needed	SDGE Response
	<p>ADT counts on all legs of the following intersections:</p> <ul style="list-style-type: none"> a. Black Mountain Road / Carmel Valley Road b. Camino Del Sur / Carmel Valley Road c. Black Mountain Park Driveway / Carmel Valley Road <p>3. Peak hour turning movement counts, including bikes and pedestrians at the following roads:</p> <ul style="list-style-type: none"> a. Black Mountain Road / Carmel Valley Road b. Camino Del Sur / Carmel Valley Road c. Black Mountain Park Driveway / Carmel Valley Road <p>4. The source and year of each ADT volume provided in Table 4.14-2.</p>	
55	<p>Provide additional data regarding the construction schedule to support the length of road and lane closures for the project.</p>	<p>The final alignment will consider both traffic impacts during construction as well ongoing operations and maintenance activities. A traffic control plan will be completed once the final alignment is determined and will be approved by the local agency.</p>

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#	Description/Data Needed	SDGE Response
56	Define the methods used to control traffic at intersections where the power line will be constructed underground.	The final alignment will consider both traffic impacts during construction as well ongoing operations and maintenance activities. A traffic control plan will be completed once the final alignment is determined and will be approved by the local agency.
57	Provide a typical cross-section detailing the location of the proposed work area for underground Segment B.	Pending further analysis of the alternative cable pole location in Black Mountain Ranch Community Park, the Proposed Project Segment B work areas are yet to be finalized. The response will be provided following completion of the alternative cable pole design in approximately one month.
58	Identify heavy use periods (e.g., tournaments in parks, festivals). What is SDG&E's proposed management of traffic on Carmel Valley Road during heavy use periods (e.g., Shakespeare Festivals, Major Ball games, Balloon festival, etc.)?	SDG&E has reviewed the City of San Diego Parks and Recreation schedule. No major festivals or annual events are currently scheduled at the Black Mountain Community Park. This park is utilized as a sports park only. Carmel Valley Road may be used as a route of ingress/egress from the north to Hilltop Community Park. The only major event scheduled is the Winter Wonderland event held the 1 st Saturday of December. If heavy use periods occur, special traffic control or work provisions, such as additional flagging or night work during the event would be considered. These potential additional measures will ultimately be developed in consultation with the City and implemented through the traffic control plans.
59	Non-existent - no (59)	N/A
60	Define road closures and traffic management methods for Carmel Valley Road. Additional detail is needed	The final alignment will consider both traffic impacts during construction as well ongoing operations and maintenance activities. A traffic control plan will be completed once the final alignment is determined and will be approved by the local agency.

**ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67**

Q#	Description/Data Needed	SDGE Response
61	<p>to define the impacts to traffic.</p> <p>Provide access for staging yards.</p> <p>Identify the access (driveways) to the following staging yards:</p> <ol style="list-style-type: none"> 1. Stowe Staging Yard. 2. Carmel Valley Road Staging Yard. It should be located off Camino Del Sur and as far from intersection with Carmel Valley Road, as possible. 3. Torrey Santa Fe Stating Yard 4. Stonebridge Staging Yard <p>Identify any traffic management measures that are proposed to reduce impacts to travelers on area roads as construction vehicles enter and exit staging yards.</p>	<p>Access to staging yards would be as follows:</p> <ol style="list-style-type: none"> 1. The access for Stowe Staging Yard is off Stowe Drive. 2. Carmel Valley Road Staging Yard access is off of Camino Del Sur approximately 800 feet from the intersection of Carmel Valley Road. 3. Torrey Santa Fe Staging Yard can be accessed by Camino Del Sur or Torrey Santa Fe Road bisects the yard. 4. Stonebridge Staging Yard is accessed via Stonebridge Parkway to an unnamed unpaved road. <p>A detailed traffic control plan will be prepared and approved by the City of San Diego prior to utilizing any proposed staging yards. It is anticipated that signs, signboards, flaggers, and cones could be utilized to alert travelers and control traffic at yard entrances.</p>
62	<p>Provide additional details for proposed crossings of SR 56.</p>	<p>At the SR-56 crossing (span between structures E4 and E5), temporary guard structures are anticipated to be required in the median and on the south side of the east bound lanes. The guard structures are anticipated to be 2-pole H-frames approximately 35-ft. across.</p>

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#	Description/Data Needed	SDGE Response
		<p>Traffic Control Plans will be developed by SDG&E and approved by Caltrans prior to the start of construction for the SR 56 crossing referenced above. Compliance with Caltrans approved Traffic Control Plan and permit conditions will ensure that significant traffic impacts are avoided. Typical measures that could be included within the Traffic Control Plan(s) to reduce impact at these location included:</p> <ul style="list-style-type: none"> Typically, for overhead transmission construction, traffic will be temporarily stopped when the sock line is flown over highway crossings, such as the SR-56 crossing along Proposed Project Segment C. Caltrans may also require temporary traffic stops during the installation of the conductor; however, this is not anticipated at this time. It is anticipated that guard structures will be used on both sides of conductor crossings at the SR 56 during the entire duration of stringing operations at that particular section of the Proposed Project. Netting may also be installed between the guard structures, if required by the approved Caltrans Traffic Control Plan.
J	UTILITIES (Q63)	
63	<p>Provide documentation demonstrating that the City of San Diego Public Utilities Department can supply water for the project, and if not, what are SDG&E's alternatives? Describe how SDG&E estimated the proposed use of 25 million gallons of water during construction.</p>	<p>Water will be used for dust control, increasing moisture content in soil used compacted fill, and irrigation for seeded/planted areas requiring revegetation. The estimated quantity of water is based on an assumed number of water trucks and the frequency of watering that would be required during construction. In general, it was assumed that during construction watering would occur every 2 to 4 hours utilizing approximately three (3) water trucks along the right-of-way and at the staging yards. Note that factors such as wind speed, precipitation, temperature, and moisture content of fill material can impact (increase or decrease) the quantity of water required for the project.</p> <p>SDG&E will be coordinating with the City of San Diego in order to obtain a commitment to provide water for construction of the Proposed Project.</p>
K.	GENERAL (Q64-67)	
64	<p>Clarify that the CAISO functional requirement of at least 1,175 MVA is for the 4-hour emergency capacity. Also identify</p>	<p>PENDING - The response to this data request will be provided in approximately one month.</p>

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

Q#	Description/Data Needed	SDGE Response
65	<p>what the calculated 4-hour emergency ampacity and minimum continuous ampacity is for the proposed 230 kV circuit for the overhead segments and for the underground segments (i.e., which segment is limiting the overall rating for the new transmission line).</p> <p>Clarify if the rights SDG&E intends to utilize for the underground segment (Segment B) are within the road right-of-way. Also clarify whether SDG&E franchise rights along Carmel Valley Road are limited to an underground line only or does SDG&E also have franchise rights for an overhead line. Does SDG&E have overhead or underground power line franchise rights within the City of San Diego?</p>	<p>Once it leaves the current SDG&E easements at the two cable poles located at each end of the segment, the new underground transmission line will be located in the Carmel Valley Road right of way. SDG&E has a current valid franchise agreement with the City of San Diego. The franchise agreement allows for the installation of overhead and underground facilities. Underground districts and rules enacted by the cities do not apply to transmission lines. An SDG&E circuit of 69kV or more installed in the franchise along Carmel Valley Road could be overhead provided there is adequate room for the poles within the right of way.</p>
66	<p>Describe how Citizens</p>	<p>Assuming a binding transaction between SDG&E and Citizens is consummated and closes in accordance with the existing non-</p>

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

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	<p>Energy Corporation (Citizens) electrically connects with Segment B underground in order to utilize their lease? Would additional facilities be needed? Would SDG&E or Citizens install these facilities, if required?</p>	<p>binding letter of intent between the parties, Citizens would lease for a period of 30 years 50% of the transfer capability on Segment B. Title to the facilities would remain with SDG&E, the other 50% of the transfer capability on Segment B would remain with SDG&E, and SDG&E would be responsible for overseeing and performing all operations and maintenance on the entire Proposed Project, including the 50% interest in Segment B that is expected to be leased to Citizens. Each of SDG&E and Citizens would transfer operational control of its transfer capability to the CAISO. Essentially, the entire Proposed Project would be operated and maintained as a single project with financial responsibility for certain segments split between SDG&E and Citizens. Accordingly, the Citizens portion would be seamlessly connected to the SDG&E portion without any special facilities to delineate ownership interests or electrical interconnection between the parties. No additional facilities would be required to be constructed in order to allow for the connection of Citizen’s Energy.</p>
67	<p>Provide additional information to support the project purpose and need.</p> <p>The following are specific data needs to support the project purpose and need assessment:</p> <ol style="list-style-type: none"> 1) With regard to SDG&E’s 33% RPS goal – what is the present level of energy procured and delivered toward that goal? What additional level of energy is required to meet the 33% target by 2020? 2) With regard to the RPS portfolios studied as part of the CAISO’s 2012/2013 Final Transmission Plan, what 	<ol style="list-style-type: none"> 1) SDG&E has met or exceeded the level of renewable procurement necessary to meet the 33% RPS goal by 2020. 2) The RPS portfolios studied by the CAISO as a part of the 2012/2013 were provided by the CPUC. SDG&E does not have access to the powerflow cases studied by the CAISO and cannot comment on the exact details of the renewable modeling. 3) SDG&E does not have access to the powerflow cases studied by the CAISO and cannot comment on the exact details of the renewable modeling. However, it is our understanding that all of the generation projects represented in the CAISO generation interconnection queue at the time of the study were not modeled in the CAISO’s RPS cases. 4) SDG&E does not have access to the powerflow cases studied by the CAISO and cannot comment on the exact details of the renewable modeling. 5) The CAISO’s plan did not provide sufficient details to determine scope or cost for the SPS necessary to mitigate the overloads on the 230 kV system. Under NERC reliability standards, SPS tripping of load is not allowed as a planning mitigation measure for an N-1 contingency overload. Significant further study would be required to determine the cost associated with the tripping or runback of generation, as the contingency overloads likely to occur under high system load conditions when the generation is needed most. 6) SDG&E does not have access to the powerflow cases studied by the CAISO and cannot comment on the exact details of the renewable modeling. However, it is our understanding that some amount of generation was modeled in the general vicinity of Encina as a proxy for a future repower of the Encina plant.

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

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	<p>level of existing renewable (contracted and operational) energy made up the RPS portfolio quantity? What location or transmission point of interconnection was the additional RPS energy placed to meet the 33% target?</p> <p>3) With regard to the Deliverability assessment, is the presumption that all queued generation projects (CAISO transmission and SDG&E distribution) were included in the study or assessment. Is this presumption correct?</p> <p>4) Further to number 3 above, were the RPS portfolio capacity levels added to the deliverability energy level? Were “proxy” levels used and, if so, where were the injection points?</p> <p>5) The CAISO’s 2012/2013 Final Transmission Plan identifies alternatives to</p>	

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	<p>the Project to mitigate high voltage system overloads identified in the Deliverability assessment such as:</p> <ul style="list-style-type: none"> • Miguel – Bay Boulevard 230 kV line; • Miguel – Mission #1 and #2 230 kV lines; • Mission – Old Town 230 kV line; and • Silvergate – Bay Boulevard 230 kV #1 <p>The CAISO further notes that some of these overloads can be mitigated by way of Special Protection Schemes (SPS). With regard to the CAISO’s identified alternative mitigation, what is the associated cost and time to implement these identified mitigation alternatives?</p> <p>6) For the Deliverability assessment was the Carlsbad Energy Center modeled as replacement for Encina Units 1, 2, and</p>	

ED01-SDGE 08/18/2014 Partial Response No. 1
A.14-04-011 SXPQ 230kV Transmission Line CPCN Project
Energy Division Deficiency Data Request Dated August 6, 2014
Questions 1-67

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3.		