

SDG&E TL 6975 San Marcos to Escondido Project (A.17-11-010)
Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

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REPORT OVERVIEW

On March 16, 2018, the CPUC deemed the application and PEA for the TL 6975 San Marcos to Escondido Project (A.17-11-010) complete. The Energy Division has required additional data to prepare a complete and adequate analysis of the potential environmental effects of the Project, in accordance with the requirements of CEQA.

Request No.	DATA REQUEST	SDG&E RESPONSE
1	The last sentence of PEA Project Description Section 3.5.3, Poles/Towers, on page 3-9 refer to “current SDG&E standards, including design standards for avian protection”. What standards or documentation does this refer to? Provide this information to support the CEQA administrative record. (ESA is in possession of the document, <i>Reducing Avian Collisions with Power Lines</i> by the Edison Electric Institute and Avian Power Line Interaction Committee. If this document is an inferred reference in this statement, there is no need to submit it with your response.)	Yes, this is the document referenced in this statement, therefore, no further documents are required for submittal.
2	Table 3-2 on page 3-8 of the PEA Project Description counts a total of 31 direct-bury poles and 26 pier foundation poles. Based on ESA’s review of the Project’s GIS information, mapbook, and updated height above ground (HAG) table provided by SDG&E in T. Lyons’ e-mail of May 25, 2018, ESA counts a total of 32 direct-bury poles and 25 pier foundation poles. Confirm this count.	There will be a total of 26 foundation poles and a total of 32 direct bury poles.
3	PEA Project Description Section 3.5.4.2, Below-Ground Installation, at the top of page 3-12, a reference is made to the AC Interference Analysis & Mitigation System Design Report by ARK Engineering (2017). Provide this document for the CEQA administrative record.	Please see Attachment 1, AC Interface Analysis & Mitigation System Design Report.

SDG&E TL 6975 San Marcos to Escondido Project (A.17-11-010)
Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

Request No.	DATA REQUEST	SDG&E RESPONSE
4	PEA Project Description Section 3.5.4.2, Below-Ground Installation, the discussion states “The report recommends additional AC mitigation methods. Two sections of AC mitigations are proposed to be installed to reduce the pipeline AC density.” What are they? Are these Applicant Proposed Mitigations? Provide more clarification.	The AC Interface Analysis & Mitigation System Design Report does propose safety and AC mitigation system recommendations; however these recommendations are not currently engineered to be project-specific are and therefore, these are not applicant proposed measures. SDG&E will continue to work with ARK Engineering to develop design-level and project-specific AC mitigation options and will communicate these to the CPUC when they are available
5	PEA Project Description Section 3.5.4.2, Below-Ground Installation, the discussion states “In addition, two coupon test stations to monitor the pipeline AC density [are] also recommended.” Describe coupon test station. Will these stations be part of the Project? If so, provide descriptive information sufficient for CEQA analysis.	Please see refer to response 4 above.
6	In SDG&E’s Response 16 to Data Request #1, it stated that substation work could occur anytime throughout the construction of the tie line, but would be timed to avoid outages. Once started, what would be the duration of construction activities at the substations?	Construction will take place over the course of 4 months for each substation. Actual days of construction will be about 10 - 12 weeks.
7	PEA Project Description Section 3.7.1.6, Staging Yards, pages 3-17 and 3-18, it is stated that “The staging areas may be used ... for parking and lighting.” Describe the anticipated lighting requirements and use at staging yards. If lighting may be used for any other aspect of the Project, please describe those requirements and usage, as well.	Staging yards will typically be used during daytime hours. If night work is required at these staging areas, lighting would be required. Night lighting at staging yards is typically similar to lighting used at parking lots or for street lighting. In addition, minimal security lighting at night may be required at project staging yards. If night work is required for the Proposed Project due to outage and traffic requirements, lighting at night for safety would be required. SDG&E would comply with all applicable night work permits. Typical lighting for night time construction includes the use of a

SDG&E TL 6975 San Marcos to Escondido Project (A.17-11-010)
Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

Request No.	DATA REQUEST	SDG&E RESPONSE
		portable light plant which typically includes 4 LED or sodium lights on a retractable boom powered by a generator.
8	In Table 3-5 on pages 3-18 and 3-19 of the PEA Project Description, a superscript reference “2” is included in the “Size” column for the Monteil and Rock Springs site and the South Andreasen site, but no Note 2 is included at the bottom of the table. Provide the missing information.	Please disregard the “2” as this was a carryover from when there was more than one note but all numbers with a superscript should note: “acreage is approximate because sensitive habitats within the staging yards would be avoided.”
9	It is noted in Project Description Section 3.7.5, Vegetation Clearance, and Table 3-7 on page 3-22 that retaining walls would be installed on an as-needed basis. The same is mentioned in Section 3.7.8.1, Site Preparation for Structure Foundations on page 3-24. As this would involve earth-disturbing activities and permanent impact, provide more information on retaining walls including approximate wall width and heights, depth of foundation, construction methods, and proximity to foundations.	Retaining walls may be required at Locations 55, 60, and 61. The retaining wall at Location 55 would be 16 feet in height, with a 4-foot foundation depth. The retaining wall at Location 60 would be 20 feet high, with a 4-foot foundation depth. The retaining wall at Location 61 would be 19 feet in height, with a 4-foot foundation depth.
10	Section 2.5.1: Is this an accurate characterization?	This is not an accurate characterization. “Work activity” is too broad of a statement to generalize a one-week timeframe for construction activities. Unforeseen conditions (i.e., weather, environmental constraints, etc.) could also affect the construction timeframes. The previous sentence is an accurate characterization that demonstrates how construction will be conducted for a linear project.
11	In SDG&E’s Response 10 to Data Request #1, data was provided describing pier foundation excavations. The data indicated the range of excavation would be from 48 cubic yards for each 8-foot foundation to 167 cubic yards for each 12-foot foundation. However, PEA Project Description Section 3.7.8.2, Concrete Pier	The pier foundation depths will depend on final engineering, which has not yet been conducted for the Proposed Project. The PEA Project description provided typical ranges while the response to Data Request #1 quantified each size (conservatively). Upon review of the

SDG&E TL 6975 San Marcos to Escondido Project (A.17-11-010)
Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

Request No.	DATA REQUEST	SDG&E RESPONSE
	Foundations, pages 3-24 and 3-25, states that typical foundations would require approximately 45 to 90 cubic yards of excavation. Which is the more accurate and current data?	latest data, the following may be used for the purpose of this evaluation: 12 ft diameter x 40ft deep (4 pier foundation poles) 167 cubic yards 10 ft diameter x 34 ft deep (11 pier foundation poles)99 cubic yards 8ft diameter x 26 ft deep (11 pier foundation poles) 48 cubic yards
12	PEA Project Description Section 3.7.8.2, Concrete Pier Foundations, pages 3-24 and 3-25, makes mention of cable pole foundations. This is the first use of this term in the Project Description. Provide more information/detail on these features.	No new transmission cable pole foundations are anticipated for the Proposed Project.
13	In the PEA Project Description’s discussion of Steel Pole Installation for Concrete Pier and Micropile Foundations on page 3-26 indicates that “Helicopters ... would be used for installation at Poles 61, 63, 64, and 65.” SDG&E’s Response 13 to Data Request #1 [and Response #10 in Deficiency Response #2], indicates the potential area for helicopter use is between Poles 63 and 65. Response 13 also indicates that a helicopter could be used in the area of Poles 52 to 54.3. The map book indicates no work would occur at Poles 54.1, 54.2, and 54.3. Confirm where helicopter use could occur.	At this time, SDG&E anticipates that all poles and towers where work is proposed would be accessible with truck and/or crane. However, once the construction contractor selected for the Proposed Project conducts a constructability review, there may be the need to install structures or string sock line to facilitate conductor installation via helicopter. Locations where helicopter may be necessary include: <ul style="list-style-type: none"> • Location 52 to location 55 • Locations 61-65 No work is proposed at locations 54.1, 54.2, or 54.3, including helicopter work. These poles are included for information purposes only
14	In the final paragraph of the PEA Project Description’s discussion of Conductor Stringing at top of page 30, it is indicated that it would take “half a day” to pull in three phases of conductor. Be more specific in this use of “half a day”. Does this infer 4 hours, 12 hours, etc.?	The general estimate for a work day is 10 hours, therefore, 5 hours is an accurate estimation for a half day of work.

SDG&E TL 6975 San Marcos to Escondido Project (A.17-11-010)
Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

Request No.	DATA REQUEST	SDG&E RESPONSE
15	How tall would temporary poles be?	The temporary poles would be approximately 40-60 feet height above ground (HAG).
16	In the discussion of Guard Structure Installation on page 3-27 of the PEA Project Description, road crossings are discussed and a distinction is made as to which would have guard structures and which would have traffic control (i.e., flaggers). In reviewing the Project’s GIS and mapbook, our count of road crossings did not match that of the PEA. To assist in the analysis, provide a map of road crossings indicating where guard structures or traffic control would be used. Also, would the overcrossing between Poles 6 and 7 be a guard structure or traffic control site?	<p>For public safety, temporary wood poles (guard structures) may be installed at each location where the Proposed Project alignment crosses a road and are shown on the Appendix 3-A Map Book of the PEA and in the Attached Traffic Control Mapbook. A total of 50 guard structures may be installed at a total of 29 intersections along the Project Alignment. The overcrossing between Poles 6 and 7 (Segment 1) would be completed using a guard structure. Traffic control will be required at all public roadway intersections regardless of the need for guard structures. Please see Attachment 2 for a map of all road crossing guard structures and potential traffic control plan locations.</p> <p>These temporary poles may be located outside of SDG&E’s ROW, but appropriate permissions would be obtained from applicable property owners prior to utilization of the area for a temporary pole. The timeframe for “temporary poles” would be limited to the construction timeframe listed in Attachment #6, PEA Corrected Tables 3-10 and 3-12, provided in response to Data Request #1.</p>
17	PEA Project Description discussion of Existing Facilities Removal, second paragraph, page 3-28, states the “individual steel members would be cut into smaller sizes”. Describe how this would be done. Would it require use of a torch, etc.? Where would it be done?	No torches are anticipated to be required. If they are required, the use of torches would be accounted for in the project-specific wildfire plan. Individual steel member cutting (pole dismantling) is anticipated to be completed off-site. Lattice tower removal is not required as part of the Proposed Project
18	PEA Project Description Section 3.7.3, Helicopter Access, on page 3-21, states that “SDG&E Best Management Practices (BMPs) would be implemented at the helicopter landing areas to reduce potential impacts ...” The only landing area known at this time is	SDG&E will comply with its Aviation Operations Manual that all helicopter operators must follow. This manual covers safety, roles & responsibilities, general flight operations, and training.

SDG&E TL 6975 San Marcos to Escondido Project (A.17-11-010)
Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

Request No.	DATA REQUEST	SDG&E RESPONSE
	Palomar Airport. BMPs addressing helicopter use and air quality, hazards, and noise were not found in the respective PEA analysis sections. Describe what BMPs would be deployed at that site. Also, if there is a document describing these BMPs, provide it for the CEQA administrative record.	
19	The second paragraph of the discussion of Duct Bank Installation in the PEA Project Description, at the top of page 3-31, states that “All work would be done in conformance with SDG&E’s current construction and operating practices.” Provide a copy or documented summary of these practices for inclusion in the CEQA administrative record.	Trenches will be dug from the intercept point of the existing duct bank to the new structure. Conduit will be placed in the new trench (separated by spacers) as required and if there is a spare unused conduit in the existing duct bank the conduit may be cut into and intercepted at that time and the trench would be backfilled with concrete, slurry or native soil (depending on the location of the trench); however, if no spare conduit exists for use the trench will be left open until the day of the outage and covered over with a large steel plate. Duct banks vary and can be a typical (8) 5” diameter PVC conduits to a single 2” PVC conduit for housing the electrical cables. The dimensions of the duct banks could be as large as approximately 1.5 feet wide by 2.7 feet tall for a vertical configuration and would go down in size as there are less conduits being utilized. Each conduit could consist of a single 12kv circuit down to a lower 600 volts or less cable. The day of the outage the electrical cable will be removed from the existing conduit after which the conduit will be cut and intercepted (unless there was a spare conduit utilized the day the trench was dug) and back filled with concrete, slurry or native soil (depending on the trench location. There may be a period of waiting for the concrete to set before the new cable is installed. Once the new cable is installed, terminations on both ends will be made, after which the cable will be tested and re-energized.
20	The discussion of Cable Pulling, Splicing, and Termination in the PEA Project Description, on page 3-31, mentions a “communication cable”. This appears to be the first mention of this	No new fiber/communication cable proposed. Existing communication cables will be transferred, but no new fiber/communication cable is proposed at this time.

SDG&E TL 6975 San Marcos to Escondido Project (A.17-11-010)
Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

Request No.	DATA REQUEST	SDG&E RESPONSE
	Project component. Describe this component. What is its purpose? Where would it/they be located?	
21	PEA Project Description Section 3.7.6, Erosion and Sediment Control and Pollution Prevention during Construction, on page 3-23 states that “SDG&E would implement its <i>BMP Manual and Operational Protocols</i> .” Provide a copy for inclusion in the CEQA administrative record. (ESA is in possession of SDG&E’s <i>BMPs Manual for Water Quality Construction</i> (revised 2011). If this document is the same document, there is no need to submit it with your response.)	This is the same document as SDG&E’s <i>BMP Manual for Water Quality Construction</i> (revised 2011). Therefore, no further response is required.
22	Provide estimates of water use for Project construction, restoration (e.g. irrigation), and operation.	Please refer to Section 4.18, Utilities and Service Systems, of the Proponent’s Environmental Assessment, section 4.18.4.1 (d). Approximately 3,076,021 gallons of water are estimated to be required for Proposed Project construction activities. SDG&E does not typically install irrigation for its restoration-related activities. For maintenance of the line itself, there should not be water use. The new insulators will not require washing. Some water may be necessary if existing access roads require regrading as part of SDG&E’s standard transmission corridor maintenance program. Water use will not increase in areas where there are existing access roads. Water use would increase marginally for the new spur roads/access roads included as part of the Proposed Project.
23	PEA Project Description Section 3.7.7, Cleanup and Post-Construction Restoration, on page 3-23, states that “SDG&E would conduct a final survey to ensure that cleanup activities have been successfully completed, as requires.” Describe the requirement(s) and the performance standards. How is the survey documented?	SDG&E will verify that the construction plan is consistent with actual construction. Requirements are job-specific and dependent on final engineering. The final survey is documented via as-builts. The construction contractor is required to restore construction work areas to pre-construction condition. Final environmental impacts will be documented in a post-construction report.

SDG&E TL 6975 San Marcos to Escondido Project (A.17-11-010)
Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

Request No.	DATA REQUEST	SDG&E RESPONSE
24	PEA Project Description Section 3.8.1, General Project Operation and Maintenance Activities and Practice, on page 3-40, indicates that aerial inspections would be performed annually. SDG&E's Response 14 in Data Request #1 indicates that a helicopter would be used twice a year for routine inspection work. Rectify these statements.	Helicopters would be used twice per year, once for visual inspection and once for infrared inspection.
25	PEA Project Description Section 3.8.2, Road Maintenance, on page 3-40, states that SDG&E performs road maintenance as necessary and may require use of motor grader, water truck, and pickup trucks. Provide information about how road maintenance is currently conducted along Segments 1, 2, and 3. Does SDG&E's operations and maintenance protocols specify a schedule?	In general, road maintenance occurs every other year, depending on the condition of the road (substantial rain may accelerate erosion and may require more frequent repairs). The Proposed Project would not result in changes to this schedule, except road maintenance/road establishment on the proposed new access roads and new spur roads proposed as a part of the Proposed Project. The proposed new access roads and spur roads would be integrated into the road maintenance program. As a part of the program, roads would be maintained approximately every other year.
26	PEA Project Description Section 3.8.5, Equipment Repair and Replacement, on page 3-41 the text indicates that SDG&E may remove and replace an existing structure with one that is larger and/or stronger. Does SDG&E conduct operations and maintenance pursuant to a separate authority? Would this activity occur as part of this Project? If so, information needs to be provided to adequately describe and assess the activities.	The Proposed Project does not include scope for the addition of equipment or structures that are not included as part of Section 3.0, Project Description, of the PEA. All operations and maintenance (O&M) procedures for the proposed TL 6975 line would be conducted in accordance with General Order 131-D from the California Public Utility Commission (CPUC). If future O&M work associated with the TL 6975 project is not exempted from commission authorization under General Order 131-D, supplemental CEQA review as part of commission authorization would be conducted.
27	In Table 3-13 of the PEA Project Description, note 1 at the bottom of the table does not appear to be tied to any elements of the table. Provide the note.	Please disregard note "1" at the bottom of the table. This footnote was deleted as it is a carryover from when additional agency permits were being considered.

SDG&E TL 6975 San Marcos to Escondido Project (A.17-11-010)
Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

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Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

ATTACHMENT 1: AC Interface Analysis & Mitigation System Design Report

SDG&E TL 6975 San Marcos to Escondido Project (A.17-11-010)
Energy Division Data Request #3 Date June 28, 2018
SDG&E Response #3 Date July 16, 2018

ATTACHMENT 2: Road Crossing Map