



Rebecca Giles
Regulatory Case Manager
San Diego Gas and Electric Company
8330 Century Park Court
San Diego, CA 92123-1530

October 17, 2016

Reg.12-10/A.16-04-022
SDG&E TL695and 6971 PTC

Sent Via Sempra EDT and CPUC FTP

Mr. Will Maguire
Project Manager Energy Division, CEQA Unit
California Public Utility Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

Re: SDG&E Response to EDDR-1 Qs 2-21, 23-37. Permit to Construct the TL 695 and 6971 Reconductoring Project – Application No. A.16-04-022

Dear Mr. Maguire:

Attached please find SDG&E's responses to Energy Division's Data Request 1 Qs 2-21 and 23-37 dated September 19, 2016. Please note that the responses to Questions 1 and 22 are still in development. The response to Q1 will be provided by October 31 and the response to Q22 will be provided by November 18.

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: Elizabeth Cason – SDG&E
Brian Roppe – SDG&E
Tania Treis, Project Manager, Panorama Environmental
Susanne Heim, Project Manager, Panorama Environmental

**San Diego Gas & Electric Company (SDG&E) Response
A.16-04-022 TL 695 and 6971 Reconductoring Project (Proposed Project)
California Public Utilities Commission (CPUC) Request for Additional Data #1 Dated 9/19/2016**

#	Data Need	SDG&E Response to Request for Additional Data #1
1.	<p>Review the attached draft Project Description and provide track change edits and comments as necessary to address identified data needs, and verify information is accurately presented. Attachment B contains the draft Project Description for the environmental document.</p>	<p><i>SDG&E is still revising the CEQA project description and will provide the edits under separate cover by October 31, 2016.</i></p>
2.	<p>Does SDG&E intend to remove the existing TL 695 from power poles between San Mateo Junction and San Mateo Substation? Figure 3-2 and the GIS data provided by SDG&E indicates that power poles will be topped and TL 695 will be removed from existing poles between the approximate location of San Mateo Substation and Basilone Substation. The maps and GIS data do not show any activity or removal of the existing TL 695 between the approximate location of San Mateo Substation and San Mateo Junction. The Magnetic Field Management Plan in SDG&E's Application includes an EMF reduction measure for removal of the existing TL 695 power line between Basilone Substation and San Mateo Junction. The current proposed project only includes power line removal between Basilone Substation and San Mateo Substation. Why is SDG&E not implementing this EMF reduction measure as part of the project? Either the Magnetic Field Management Plan or the Proposed Project description and mapping need to be revised to be consistent. If SDG&E is not adopting a no cost or low cost measure or if this measure no longer meets the standards for no cost or low cost, further</p>	<p><i>The Data Need statement to the left erroneously states that the "Magnetic Field Management Plan [FMP] in SDG&E's Application includes an EMF reduction measure for removal of the existing TL 695 power line between Basilone Substation and San Mateo Junction." In fact, the discussion on page 3 of the FMP, identified as Segment 3, TL 695, states "This segment of the present-day TL 695 alignment runs from near the San Mateo Substation to the Basilone Substation. The existing TL 695 will be removed from the structures along this segment...." The only references in the FMP to San Mateo Junction are related to Segments 1 and 2.</i></p> <p><i>The overarching question is whether SDG&E intends to remove TL 695 between San Mateo Junction and San Mateo Substation. SDG&E's original Project Description and the description TL 695 Removal on page 2-12 of the ADMND both state that the scope of pole removal for TL 695 is from Basilone Substation to San Mateo Substation.</i></p> <p><i>SDG&E does not plan to remove the existing TL695 between San Mateo Junction and San Mateo Substation.</i></p>

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	<p>explanation is needed in the Magnetic Field Management Plan consistent with the requirements of SDG&E’s EMF Design Guidelines and D.06-01-042. If SDG&E intends to remove the existing power line between San Mateo Junction and San Mateo Substation, specify the construction activities that would occur in the area (e.g., conductor removal or pole structure removal) and provide updated GIS data to reflect power line removal in this area. This area was considered part of the project and was covered in surveys for biological resources, cultural resources, and the geotechnical investigation.</p>	
3.	<p>Provide a complete and updated list of APMs that reflect survey reports filed in response to Deficiency Report #1 and measures included in the Air Quality Modeling Results (Appendix 4.3-A, Section 3.1 Mitigation Measures Construction).</p> <p>The APMs listed in Section 3.9: Application Proposed Measures of the PEA include APM BIO-01. Supplemental Surveys, APM CUL-02. Supplemental Surveys, and APM HYD-01. Supplemental Surveys. Supplemental surveys were filed in response to Deficiency Report #1. At this time, has SDG&E filed all supplemental survey data to cover all project components? Does SDG&E see a need for APM BIO-01, APM CUL-01, and APM HYD-01, or do these APMs no longer apply? The Air Quality Model Results provided in Appendix 4.3-A list three mitigation measures: <i>Replace Ground Cover</i></p>	<p><i>SDG&E agrees that the biological, wetlands, and cultural surveys specified in APMs BIO-1, HYD-01 and CUL-01 were completed as documented in the response to Deficiency Report 1 and therefore these measures are no longer applicable to the Proposed Project. The other APMs described in Section 3.9 of the Project Description are still applicable.</i></p> <p><i>The mitigation measures listed in CalEEMod model output are three dust suppression measures. “Replace Ground Cover” is consistent with the description of construction related activities in the PEA Project Description: SDG&E will restore all areas that are temporarily disturbed by the Proposed Project activities (including stringing sites, work areas, structure removal sites and staging yards) to approximate preconstruction conditions following the completion of construction. Restoration may include minor grading and restoration of sites to original contours and reseedling, as appropriate and as consistent with fire break clearance requirements (Section 3.7, page 3-17).</i></p> <p><i>“Water Exposed Area” and “Clean Paved Roads” are referenced among the list of standard operating procedures described in Section 4.3, Air Quality: Standard operating procedures include construction practices such as watering disturbed soil areas, minimizing vehicle track-out of dust, and limiting idling time for trucks in queues to five minutes when not in use. (Section 4.3, page 4.3-11).</i></p>

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	<p><i>Water Exposed Area</i> <i>Clean Paved Roads</i> Include any Air Quality measures as indicated from #24, below.</p>	
4.	<p>The following information is required to determine impacts from helicopter use:</p> <ul style="list-style-type: none"> • Maximum duration of helicopter use • Maximum number of helicopters that will be used concurrently • Types of helicopters that will be used to construct the project 	<p><i>The maximum duration, the maximum number, and the types of helicopters to be used will be determined by the construction contractor. For the purposes of the PEA, SDG&E assumed that the maximum duration of light-duty helicopter use for conductor stringing operations during construction will be approximately 6 hours, including 8 landing and take-off operations. An additional 6 hours plus 8 landing and take-off operations was assumed for heavy-duty helicopters to complete further construction related activities as described below in the response to Comment #15. The duration of helicopter use may be increased or decreased based on factors, such as inclement weather, training exercises at MCB Camp Pendleton, contractor methods, and other considerations. It was assumed that no more than one helicopter will be in use at any given time. SDG&E assumed a Hughes 500E as a representative light-duty helicopter and a Sikorsky Skycrane helicopter as a representative heavy-duty helicopter. No representative medium-duty helicopters were identified for emissions calculations in the PEA.</i></p>
5.	<p>Provide GIS data for poles that would be “removed from service”. Will SDG&E physically remove the poles that are “removed from service”, or will the conductor be removed and the pole structures remain in place? The GIS data provided by SDG&E with the PEA did not include the locations of pole structures that would be removed during construction of the Proposed Project. The locations are needed to define all Proposed Project work areas. The PEA does not specify whether removing a pole structure from service means that the pole structure will be removed from the ground or whether the conductor would be removed and the pole structure would remain in place. Provide the applicable work area for the pole removal.</p>	<p><i>The GIS data includes pole structures that will be removed from services, including pole structures 11, 20, 36, and others. Section 3.7.1.7 describes the process for removing existing pole structures. As noted, “Wood pole structures to be removed will either be removed to full depth or cut off approximately 2 feet below grade depending upon environmental constraints at specific locations.” As also discussed in this section of the PEA, no new impact areas are anticipated to be required for removals as work would occur within existing work areas.</i></p>
6.	<p>Identify the types of structure that would be installed in the GIS data. The GIS data provided by SDG&E with</p>	<p><i>The GIS data includes the following types of pole structures to be installed, including Direct Bury, Cable Pole, and Pier Foundation pole structures. The type of pole structure to be installed or the type of activity proposed (e.g. overhead work or remove from service) is defined in the GIS data using a code (e.g., “DB” refers to direct bury).</i></p>

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	the PEA did not specify the type of pole structure that would be installed at each location. Please provide this information in the attribute table of the GIS data.	<i>Attachment EDDRI Q06 provides a definition of each of the pole structure types and proposed activity at each of the pole structure sites.</i>
7.	<p>Provide the area of temporary and permanent impact for proposed poles and helicopter landing areas (see Attachment B). Provide GIS data for work areas around poles and work areas around guard structures.</p> <p>The GIS data for work areas is needed to evaluate impacts on biological and cultural resources and define the Proposed Project's permanent and temporary impact areas.</p>	<i>GIS shapefiles and impact calculations for permanent and temporary work areas are provided in Attachment EDDRI Q07.</i>
8.	<p>Define the construction activities associated with overhead work.</p> <p>The PEA states that "overhead work" would be performed at several pole locations but does not specify the construction activities that would occur during overhead work. A description of the construction activities that would occur is needed to define the Proposed Project and analyze all impacts that could occur as a result of those activities.</p>	<i>Overhead work consists of both conductor stringing and power line removal/pole topping activities. Construction activities associated with conductor stringing are discussed in Section 3.7.1.6, while power line removal/pole topping actions are described in Section 3.7.1.8.</i>
9.	<p>Provide SDG&E's easement for distribution line infrastructure, and confirm that "possible direct-bury locations" located outside of the TL 695 and 6971 corridors are distribution poles. Describe how work on these distribution lines is needed for the proposed project.</p> <p>Proposed pole structure 104 and existing poles 111, 112, 114, 115, 117, 118, 119, 120, 121, 122, 123, 128, 131, and 172 are located outside of the TL 695 and 6971</p>	<p><i>The Navy contract regarding land rights for distribution line infrastructure was provided to Energy Division and Panorama on September 12, 2016 by email of Stacie Atkinson.</i></p> <p><i>All the poles referenced are in fact distribution poles. All these structures are adjacent to the transmission corridor and support distribution buck spans originating from transmission structures that will be replaced during the project. Although these poles replacement is not required they were listed as potential job sites as they may temporarily need to be guyed or supported when we remove distribution spans during construction. The PEA evaluated all buck pole spans as involving direct bury pole structure installation in order to evaluate a worst-case scenario in terms of impacts.</i></p>

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	<p>corridors. SDG&E explained on a conference call with the CPUC on September 9, 2016 that these poles are distribution poles and distribution lines are covered by a blanket agreement with MCB Camp Pendleton. The distribution line easement is needed to understand if there are any conditions or limitations on the type of work that can be conducted at distribution poles. Please provide the activities that would be conducted on these distribution circuits and the work area required at each pole.</p>	<p>9-29-16 - See Attachment EDDRI Q09Buck Pole Information.</p>												
10.	<p>Does SDG&E proposed to install new poles at “possible direct-bury locations”? Several pole structure locations on the detailed route maps are labeled “possible direct-bury locations.” Explain why these locations are marked as “possible.” The work areas for these pole structure locations will be included in the summary of impact areas unless the pole structure locations are removed from the project by SDG&E.</p>	<p><i>No. These poles were identified because they will require temporary guying and tension adjustments. There is also the outlier chance that conductor will need to be replaced if existing wire and tensions cannot be properly adjusted to attach to new transmission structures. The PEA evaluated these pole structures as involving direct bury pole structure installation in order to evaluate a worst-case scenario in terms of impacts.</i></p> <p><i>See Attachment EDDRI Q09 .</i></p>												
11.	<p>Provide approximate diameters for pole bases and tops for all pole structures proposed for use in the Proposed Project. Approximate dimensions for tangent, H-frame, and 12-kV structures were provided in Appendix 3-C to the PEA; however, dimensions for dead end and cable pole structures were not provided. This information is helpful in calculating total area of permanent impacts.</p>	<p><i>Dimensions of engineered poles cannot be accurately determined until the final design as they are dependent on multiple variables. Based on prior projects, approximate diameter ranges expected for each pole type are listed in the table below.</i></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Pole Type</th> <th>Base Dia. [in]</th> <th>Top Dia. [in]</th> </tr> </thead> <tbody> <tr> <td>69kV Double Circuit Dead-End</td> <td>48”-60”</td> <td>24”-40”</td> </tr> <tr> <td>69kV Dead End 3 Pole</td> <td>32”-48”</td> <td>12”-24”</td> </tr> <tr> <td>69kV Modified Dead End</td> <td>48”-72”</td> <td>24”-48”</td> </tr> </tbody> </table>	Pole Type	Base Dia. [in]	Top Dia. [in]	69kV Double Circuit Dead-End	48”-60”	24”-40”	69kV Dead End 3 Pole	32”-48”	12”-24”	69kV Modified Dead End	48”-72”	24”-48”
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			3-Way		
			69kV Double Circuit Cable Pole	48"-72"	24"-48"
12.	<p>Clarify whether the proposed conductors would be non-specular. The PEA does not specify whether conductors used for TL 695 and TL 6971 would be non-specular. The information is needed to assess visual impacts of the project.</p>	<p><i>All conductor for TL695/6971 will be specular.</i></p>			
13.	<p>Provide the depth of the splice vault that will be installed along the underground alignment. The PEA provides the length and width of the splice vault along the underground segment of the project but does not provide the depth. The depth is needed to evaluate impacts with underground utilities and verify cut-and-fill quantities.</p>	<p><i>The manhole depth is a total of 13 ft. including 11 ft. for the manhole and 2' for the neck section and cover. An additional 1 ft. of excavation depth for bedding material such as crushed rock is used below the vault, requiring a 14 ft. of total excavation depth.</i></p>			
14.	<p>Provide a typical diagram of the proposed underground duct bank with a single-circuit configuration. Appendix 3-C provides a diagram of a double-circuit 69-kV underground duct bank, but the project proposes to underground a single-circuit 69-kV underground duct bank.</p>	<p><i>Standard 69kV trench includes 6 – 6" diameter 69kV power ducts plus one 4" Telecom duct. Initial installation requires 3 -6" ducts and the 3 additional ducts proposed, per standard, are for future use for either additional capacity on the existing line (bundled conductors), or to add a new 69 kV power line.</i></p>			
15.	<p>Define the excavation and construction methods for pole structure sites where only footpaths are proposed for access. Update access road GIS data to reflect proposed construction access routes. Vehicles and equipment are proposed for installation of direct-bury pole structures; however, several pole structures sites (i.e., 15, 16, 20, 25, 29, 36, 57, 76, 124, 125, 176, 135, 136, 165, 157, 158, 160) only</p>	<p><i>The following types of pole structures that do not have direct access via existing access roads:</i></p> <ul style="list-style-type: none"> • Pole structures 15, 16, 29, 176: direct bury pole structures • Pole structures 20, 25, and 36: removal from service • Pole structure 57 and 76: pier foundation pole structure • Pole structure 124, 125, 135, 136, 156, and 157: pole topping • Pole structures 158 and 160: overhead work only. <p><i>As discussed in 3.7.1.8, pole topping activities for existing poles located outside of the MCB Camp Pendleton fence line (e.g., pole structures 156 and 157) will be accessed using either a bucket truck or a line truck via the existing access road within MCB Camp Pendleton that runs along the western perimeter fence of the Base. As noted in this</i></p>			

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	<p>have footpath access designated with no route for large equipment. How would excavation and foundation construction be performed at these pole locations? Does SDG&E propose delivery of equipment and poles to these areas via helicopter? Figure 3-B12 of Appendix 3-B shows an access road that would cross San Onofre Creek; however, conversations with SDG&E on September 9, 2016 indicate that the creek would not be crossed and poles would be access from either side of the creek. Would creek crossing occur? If not, provide revised access road GIS.</p>	<p><i>section, topping activities may also be completed using hand tools brought into the construction area by foot, with the top portion of the pole structure being cut into sections that can be carried by hand off-site. However, SDG&E may elect to remove portions of the topped poles via helicopter. Access for overhead work at pole structures 158 and 160 is provided via overland travel from the San Mateo Staging Yard. Therefore, it will not be necessary to bring in heavy equipment by helicopter for these pole structures.</i></p> <p><i>Construction activities for direct bury pole structures accessible by footpath only do not require direct vehicle access and are expected to involve excavation by hand, although a pneumatic drill/jackhammer (with hose run along the footpath) may need to be employed if rock is encountered. A helicopter may be used to remove the existing pole structure, set the new pole structure, string conductor, and attach conductor to the new pole structure.</i></p> <p><i>Construction activities for pier foundation pole structures accessible by footpath only will require the delivery of a mini excavator (via helicopter) to dig the hole for the pier foundation. A helicopter will be used to remove the existing pole structure and to deliver the concrete, the reinforcing steel cage, and the pole structure. Helicopters may also be used to string conductor and to attach conductor to the new pole structure.</i></p> <p><i>Construction activities for poles designated to be removed from service but are accessible by footpath only will involve hand excavation and a helicopter will be used to remove the existing pole structure, or the pole will be cut into sections that can be carried by hand off-site.</i></p>
16.	<p>Describe the construction and operation and maintenance activities that would require the use of water. Identify the total amount of water that would be used for each phase of the project and where SDG&E would obtain water for the Proposed Project.</p>	<p><i>Water will be used for dust control on existing construction roads and wash pen (for concrete clean-out). There will be little to no grading at pole locations so water use for those locations will be at a minimum. The water will come from the City of San Clemente; they do not have capacity to provide reclaimed water at the site. The expected water use, based on past project averages, will be eight million gallons.</i></p>
17.	<p>Identify the facilities where waste materials would be recycled or disposed.</p> <p>The PEA states that vegetation, excavated material, construction materials and debris and potentially groundwater would be disposed of off-site, but does not specify potential locations for disposal and the distance from the facility. The disposal facility locations are needed for both hazardous and non-hazardous materials to verify air quality emissions assumptions.</p>	<p><i>As discussed in Section 4.17, solid waste from the Proposed Project will be transported to the Otay Landfill, which is located in southern San Diego County, approximately 74 miles to the south of the Proposed Project. It is anticipated that this waste will include construction, demolition, and non-hazardous waste, including vegetation, excavated material, treated wood products, and potentially ground water. Retired materials to be recycled, including copper, steel, and/or aluminum conductor, will be transported by SOS Metals to their facility in southern San Diego County, approximately 69 miles to the south of the Proposed Project. SDG&E is updating the CalEEMod emissions calculations to address haul and vendor truck mileage as discussed above.</i></p>
18.	<p>Describe the construction activities associated with the use of temporary</p>	<p><i>The only instances of temporary poles use would be where guard structures are proposed. Section 3.7.1.5 describes the uses and construction activities associated with guard structures. The Proposed Project would involve a total of</i></p>

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19.	<p>Define equipment that will be used for construction. The following equipment is not listed in Table 3-3, but is listed in the air quality model: jackhammer, concrete saw, vacuum truck, rock drilling machine, hoe ram, scraper, welder, generator, and bulldozer. Provide the quantity of each piece of equipment and construction activity it would be used for if the equipment would be used or revise the air quality model for consistency.</p> <p>Tables 4.12-3, 4.12-4, and 4.12-5 and Appendix 4.3-A contain different equipment than those listed in Table 3-3 of the Project Description. Equipment listed in the Project Description, Noise analysis, and Air Quality analysis need to be consistent.</p>	<p><i>The equipment listed in Table 3-3 correctly represents the equipment that will be used during construction, and the CalEEMod has been re-run to reflect the equipment listed in this table.</i></p>
20.	<p>Provide high resolution images for all visual characterization photographs.</p> <p>The photographs provided in Appendix 4.1-A are highly pixelated and hard to view. The original high resolution photos are needed to characterize the baseline visual quality and scenery.</p>	<p><i>High resolution images for all visual characterization photographs are provided in Attachment EDDR1 Q20.</i></p>

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21.	<p>Provide high resolution images for all visual simulations. The visual simulations provided in Appendix 4.1-B are highly pixelated and hard to view. The original visual simulations photos are needed to evaluate the visual change and impact on visual quality.</p>	<p><i>High resolution images for all visual simulations are provided in Attachment EDDR1 Q21.</i></p>																																																
22.	<p>Provide visual simulations of proposed TL 695 and TL 6971 from Viewpoints 1 and 2 in Appendix 4.1-A. I-5 is an eligible state scenic highway. Visual simulations are needed from I-5 to evaluate impacts of the TL 695 and 6971 reconductoring and substation activities on the eligible state scenic highway. Viewpoints 1 and 2 provide representative viewing location for travelers on I-5.</p>	<p><i>Response to this comment will necessitate additional modeling. The visual simulations will be provided by November 18.</i></p>																																																
23.	<p>Provide full CalEEMod output spreadsheets for both unmitigated and mitigated air quality emissions in tons/year (annual) and pounds/day. Provide helicopter emissions modeling using the Federal Aviation Administration Environmental Design Tool, or equivalent. Include helicopter emissions in the total annual and peak daily emissions estimates for the project, including fugitive dust emissions from helicopter take-off and landing activities. Update equipment use, if needed (see item 19 above). Appendix 4.3-A does not include the full CalEEMod outputs. The appendix does not include peak daily emissions to support estimated daily emissions (lbs/day) in table 4.3-5, nor does the appendix include air quality emissions from helicopter use.</p>	<p><i>Full CalEEMod construction emissions have been provided DREQ Q23A. CalEEMod was revised in response to other questions and comments contained in this Request for Additional Data #1, including mitigation measures (Comment #3 and #24); the mileage of haul and vendor trips (Comment #17); equipment used (Comment #19); haul truck trips (Comment #25); and construction work week (Comment #26). SDG&E is also providing the emissions calculations for light- and heavy-duty helicopters using fuel flow rate factors, emission factors and time in operating mode inputs from the FAA's Emissions and Dispersion Modeling System (EDMS). This is provided in DREQ Q23B. The PEA assumed that light-duty helicopters would be used 50% of the time and that heavy-duty helicopters would be used the remaining 50%. It was further assumed emissions from medium-duty helicopters would lie between those of the light- and medium-duty helicopters and as such are included within the overall emissions calculations. The updated emissions calculations are summarized in the table below:</i></p> <p style="text-align: center;">Table 4.3-5. Annual Estimated Emissions from the Proposed Project within the San Diego County APCD and SCAQMD with Comparison against Threshold Standards</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="background-color: #D3D3D3;">Emission Source</th> <th colspan="6" style="background-color: #D3D3D3;">Emissions (tons/year)</th> </tr> <tr> <th style="background-color: #D3D3D3;">VOCs</th> <th style="background-color: #D3D3D3;">NO_x</th> <th style="background-color: #D3D3D3;">CO</th> <th style="background-color: #D3D3D3;">SO₂</th> <th style="background-color: #D3D3D3;">PM₁₀</th> <th style="background-color: #D3D3D3;">PM_{2.5}</th> </tr> </thead> <tbody> <tr> <td colspan="7" style="background-color: #D3D3D3;">Proposed Project Emissions within the San Diego County APCD</td> </tr> <tr> <td>Construction Emissions</td> <td>1.170</td> <td>12.221</td> <td>7.561</td> <td>0.019</td> <td>0.851</td> <td>0.632</td> </tr> <tr> <td>Helicopter Emissions</td> <td>12.263</td> <td>6.105</td> <td>28.672</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>Total Emissions (tons/year)</td> <td>13.432</td> <td>18.326</td> <td>36.233</td> <td>0.019</td> <td>0.851</td> <td>0.632</td> </tr> <tr> <td>Total Emissions (lbs/day)</td> <td>73.602</td> <td>100.418</td> <td>198.537</td> <td>0.105</td> <td>4.662</td> <td>3.464</td> </tr> </tbody> </table>	Emission Source	Emissions (tons/year)						VOCs	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}	Proposed Project Emissions within the San Diego County APCD							Construction Emissions	1.170	12.221	7.561	0.019	0.851	0.632	Helicopter Emissions	12.263	6.105	28.672	0.000	0.000	0.000	Total Emissions (tons/year)	13.432	18.326	36.233	0.019	0.851	0.632	Total Emissions (lbs/day)	73.602	100.418	198.537	0.105	4.662	3.464
Emission Source	Emissions (tons/year)																																																	
	VOCs	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}																																												
Proposed Project Emissions within the San Diego County APCD																																																		
Construction Emissions	1.170	12.221	7.561	0.019	0.851	0.632																																												
Helicopter Emissions	12.263	6.105	28.672	0.000	0.000	0.000																																												
Total Emissions (tons/year)	13.432	18.326	36.233	0.019	0.851	0.632																																												
Total Emissions (lbs/day)	73.602	100.418	198.537	0.105	4.662	3.464																																												

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#	Data Need	SDG&E Response to Request for Additional Data #1						
		Significance Thresholds (lbs/day)	75	250	550	250	100	55
		Exceeds Air Quality Significance Threshold Standards?	No	No	No	No	No	No
		Proposed Project Emissions within the SCAQMD						
		Construction Emissions	0.062	0.643	0.398	0.001	0.045	0.033
		Helicopter Emissions	0.645	0.321	1.509	0.000	0.000	0.000
		Total Emissions (tons/year)	0.707	0.965	1.907	0.001	0.045	0.033
		Total Emissions (lbs/day)	3.874	5.285	10.449	0.006	0.245	0.182
		Significance Thresholds (lbs/day)	75	100	550	150	100	55
		Exceeds Air Quality Significance Threshold Standards?	No	No	No	No	No	No
		<i>Notes: The helicopter emissions assume a 50/50 split between light- and heavy-duty helicopters.</i>						
24.	<p>Describe the mitigation measures applied in the CalEEMod model, and explain why these mitigation measures were not included as applicant proposed measures (APMs).</p> <p>The PEA states that no APMs would apply to air quality; however, Appendix 4.3-A shows that mitigation measures were applied in the CalEEMod model to reduce fugitive dust emissions (see also item 2, above).</p>	<i>Please refer to the response to Comment #3.</i>						
25.	<p>Define all assumptions used in the air quality model including type of equipment (e.g., use of Tier 2 or Tier 3 equipment) and the reason SDG&E believes 5 percent of the construction effort will occur in South Coast Air Quality Management District (SCAQMD) and 95 percent of the construction effort will occur within San Diego County Air Pollution Control District</p>	<i>Unless specified otherwise, the emissions were estimated using the default assumptions in the model (e.g., for equipment engine Tiers, weather data, road characteristics, etc.) These assumptions are detailed in the CalEEMod User's Guide and Appendix A (http://www.aqmd.gov/caleemod/user-s-guide). Only approximately 5% of the construction effort will occur in the SCAQMD because the construction footprint extends slightly into Orange County. Modified assumptions can be reviewed in Attachment EDDR1 Q23A (see Section 1.3 User Entered Comments & Non-Default Data).</i>						
26.	<p>Provide the basis of the estimate for daily haul truck trips during trenching.</p> <p>The PEA Project Description (page 3-18) states that up to 12 truck trips per day will</p>	<i>The volume of daily haul truck traffic was estimated by SDG&E construction personnel based on their experience working on similar projects. The CalEEMod emissions calculations have been updated to reflect 12 truck trips per day.</i>						

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	<p>be required for trenching activities. However, Appendix 4.3-A included eight truck trips per day for trenching activities. Verify the trucking distance is consistent with the hauling distance for disposal of waste materials (see item 17 above)</p>	
27.	<p>Clarify whether project construction would occur five or six days a week. If construction would occur six days a week, revise the CalEEMod model to reflect the appropriate number of days of construction.</p> <p>Appendix 4.3-A shows that construction activities would occur for five days per week. However, the PEA Project Description (Section 3.7.15) states construction activities would occur six days per week. Construction emission estimates should reflect the construction period.</p>	<p><i>The CalEEMod emissions calculations have been updated to address six construction days each week.</i></p>
28.	<p>Provide an estimate of daily lead emissions from helicopter activities, and compare daily lead emissions to the daily construction and operational threshold of significance for lead emissions for the SCAQMD and San Diego Air Pollution Control Board (New Source Review Rule 20.2).</p> <p>Helicopters may include the use of aviation gasoline, which contains lead. An estimate of lead emissions is needed to understand project impacts on air quality.</p>	<p><i>Lead emissions would occur if the helicopters were to use aviation gasoline, rather than JP-5 or other diesel fuel. There are no California Ambient Air Quality Standards for lead concentration, and neither the San Diego County Air Pollution Control District nor the South Coast Air Quality Management District has established significance thresholds for lead and SDG&E believes that the New Source Review Rule 20.2 is not applicable since it refers to stationary sources, rather than non-stationary sources such as helicopters.</i></p>
29.	<p>Provide MCB Camp Pendleton GIS data for plant and wildlife species occurrences and vernal pool locations within the project study area.</p> <p>The Biological Technical Report states that SDG&E queried MCB Camp Pendleton data to develop a list of special-</p>	<p><i>SDG&E acquired updated natural resource data in August 2016 from MCB Camp Pendleton that will be provided via electronic data transfer (EDT) to Susanne.heim@panoramaenv.com.</i></p>

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	status plant and wildlife species; however, the GIS data provided by SDG&E does not appear to include MCB Camp Pendleton data. The Camp Pendleton data includes multiple years of biological resources monitoring and mapping and will provide a rich data set to help evaluate impacts on biological resources																							
30.	<p>Provide records of communication with Native American tribes. The PEA states that SDG&E will contact Native American tribes with an interest in the project area prior to the release of the CEQA document. Records of coordination with the Native American Heritage Commission to obtain a list of Native American tribes in the project area, and communication with Native American tribes is needed to understand SDG&E’s existing coordination with Tribes to-date.</p>	<p><i>SDG&E made contact with MCB Camp Pendleton and the NAHC in regards to initiating communications with Native American tribes in the project area.</i></p> <p><i>MCB Camp Pendleton Cultural Resources Branch indicated that they will take full responsibility as the lead federal agency to carry out any and all Section 106 consultation and tribal consultation for the project on federal lands.</i></p> <p><i>The NAHC provided a response to SDG&E on March 3, 2016 (provided here in Attachment EDDR1 Q30) indicating that the lead public agency is required to conduct the formal tribal consultation. The NAHC response includes a list of tribes within the project area. SDG&E has not sent letters out to the tribes listed, to date.</i></p>																						
31.	<p>Provide revised estimations of greenhouse gas emissions. Changes to the CalEEMod model in response to data needs for Air Quality (see above) may result in changes to estimated emissions of greenhouse gases. Update the greenhouse gas emissions estimates to reflect the revised CalEEMod model outputs.</p>	<p><i>The revised greenhouse gas emissions estimates are provided below:</i></p> <p style="text-align: center;">Table 4.7-2. GHG Construction Emissions within the San Diego County APCD and SCAQMD</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #D3D3D3;">Construction Emission Source</th> <th style="background-color: #D3D3D3;">CO₂e Emissions (metric tons)</th> </tr> </thead> <tbody> <tr> <td colspan="2" style="background-color: #D3D3D3;"><i>San Diego County APCD</i></td> </tr> <tr> <td>Construction Equipment and Activities</td> <td style="text-align: right;">1719.947</td> </tr> <tr> <td>Helicopters</td> <td style="text-align: right;">575.700</td> </tr> <tr> <td>TOTAL</td> <td style="text-align: right;">2,295.647</td> </tr> <tr> <td>Amortized Construction Emissions (amortized over 30 years)</td> <td style="text-align: right;">76.522</td> </tr> <tr> <td colspan="2" style="background-color: #D3D3D3;"><i>SCAQMD</i></td> </tr> <tr> <td>Construction Equipment and Activities</td> <td style="text-align: right;">90.524</td> </tr> <tr> <td>Helicopters</td> <td style="text-align: right;">30.300</td> </tr> <tr> <td>TOTAL</td> <td style="text-align: right;">120.824</td> </tr> <tr> <td>Amortized Construction Emissions (amortized over 30 years)</td> <td style="text-align: right;">4.027</td> </tr> </tbody> </table>	Construction Emission Source	CO ₂ e Emissions (metric tons)	<i>San Diego County APCD</i>		Construction Equipment and Activities	1719.947	Helicopters	575.700	TOTAL	2,295.647	Amortized Construction Emissions (amortized over 30 years)	76.522	<i>SCAQMD</i>		Construction Equipment and Activities	90.524	Helicopters	30.300	TOTAL	120.824	Amortized Construction Emissions (amortized over 30 years)	4.027
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32.	<p>Provide baseline ambient noise levels for each noise environment in the project area.</p> <p>The PEA describes existing noise sources in the area, but does not provide ambient noise levels in the project area.</p>	<p><i>The Range Compatible Use Zone program of MCB Pendleton identifies noise zones within the boundaries of the Base that describe the noise environment associated with aircraft, small arms, and large caliber weapons used in military training exercises. Projected aircraft noise zones and projected heavy weapons noise zones are identified separately. Descriptions of the noise that can be expected in the three zones are as follows.</i></p> <table border="1" data-bbox="711 431 1955 776"> <tr> <td data-bbox="711 431 898 529"><i>Noise Zone 1</i></td> <td data-bbox="898 431 1955 529"><i>This level of noise does not pose any hazard, but it may occasionally interfere with certain activities of some residents, particularly during periods of more intensive operations. Typically, only minor restrictions are associated with Noise Zone 1.</i></td> </tr> <tr> <td data-bbox="711 529 898 683"><i>Noise Zone 2</i></td> <td data-bbox="898 529 1955 683"><i>Noise may at times interfere with speech, sleep, or the ability to hear television or radio shows. Certain commercial and industrial activities are compatible and some other activities may be compatible with the use of sound attenuation measures. Generally, residential development is not recommended within Noise Zone 2. Noise levels between 62 and 70 dB for blast noise and between 65 and 75 for aircraft and small arms noise.</i></td> </tr> <tr> <td data-bbox="711 683 898 776"><i>Noise Zone 3</i></td> <td data-bbox="898 683 1955 776"><i>Land uses that include human occupied facilities or sustained periods of human activity are not recommended. Noise levels are greater than 70 dB for blast noise and greater than 75 dB for aircraft and small arms noise.</i></td> </tr> </table> <p><i>Source: RCUZ 2007</i></p> <p><i>The majority of the Proposed Project is in areas identified as Noise Zone 1. The Proposed Project runs along the property boundaries of residential developments that are located on Avenida Santa Margarita and Avenida Pico. Sensitive receptors located along these roads are within approximately 1 mile from areas identified as Projected Aircraft Noise Zones 2 and 3. The Proposed Project route between the Talega Staging Yard and the San Mateo Junction passes through a Projected Aircraft Noise Zone 1 area. The Basilone Road Staging Yard is approximately 1 mile west of Projected Heavy Weapons Noise Zones 2 and 3. Part of the Proposed Project extends into the City of San Clemente. In the south, there is a proposed power line segment removal in areas zoned Residential. The City of Clemente Residential Zone has allowable exterior noise levels up to 55 dBA from 7:00 a.m. to 10:00 p.m. and 50 dBA from 10:00 p.m. to 7:00 a.m. Construction noise is exempted between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday, between the hours of 8:00 a.m. and 6:00 p.m. on Saturday, and at no time on Sunday or a City-recognized holiday. Other contributions to ambient noise are described in section 4.12.3.2 Existing Noise Sources.</i></p>	<i>Noise Zone 1</i>	<i>This level of noise does not pose any hazard, but it may occasionally interfere with certain activities of some residents, particularly during periods of more intensive operations. Typically, only minor restrictions are associated with Noise Zone 1.</i>	<i>Noise Zone 2</i>	<i>Noise may at times interfere with speech, sleep, or the ability to hear television or radio shows. Certain commercial and industrial activities are compatible and some other activities may be compatible with the use of sound attenuation measures. Generally, residential development is not recommended within Noise Zone 2. Noise levels between 62 and 70 dB for blast noise and between 65 and 75 for aircraft and small arms noise.</i>	<i>Noise Zone 3</i>	<i>Land uses that include human occupied facilities or sustained periods of human activity are not recommended. Noise levels are greater than 70 dB for blast noise and greater than 75 dB for aircraft and small arms noise.</i>						
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33.	<p>Provide the calculated cumulative noise level from all proposed construction equipment that will be used simultaneously for each construction activity.</p> <p>Tables 4.12-3 and 4.12-4 only show the noise level from each individual piece of equipment. The cumulative noise level from all construction equipment that will</p>	<p><i>The table below presents noise levels at various distances of the cumulative construction equipment per phase.</i></p> <p align="center"><i>Construction Phase Noise Levels (in L_{eq})</i></p> <table border="1" data-bbox="711 1279 1707 1474"> <thead> <tr> <th data-bbox="711 1279 1045 1320"></th> <th data-bbox="1045 1279 1161 1320">50 feet</th> <th data-bbox="1161 1279 1289 1320">100 feet</th> <th data-bbox="1289 1279 1417 1320">200 feet</th> <th data-bbox="1417 1279 1545 1320">500 feet</th> <th data-bbox="1545 1279 1707 1320">1000 feet</th> </tr> </thead> <tbody> <tr> <td data-bbox="711 1320 1045 1474"><i>Staging Yard Setup, Road Refreshing, Vegetation, Trimming, BMP Installation</i></td> <td data-bbox="1045 1320 1161 1474">87.4</td> <td data-bbox="1161 1320 1289 1474">81.4</td> <td data-bbox="1289 1320 1417 1474">75.4</td> <td data-bbox="1417 1320 1545 1474">67.4</td> <td data-bbox="1545 1320 1707 1474">61.4</td> </tr> </tbody> </table>		50 feet	100 feet	200 feet	500 feet	1000 feet	<i>Staging Yard Setup, Road Refreshing, Vegetation, Trimming, BMP Installation</i>	87.4	81.4	75.4	67.4	61.4
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	be used simultaneously for each construction activity (i.e., excavation, trenching) is needed to assess impacts on sensitive receptors.	<i>Pier Foundation Construction</i>	89.4	83.4	81.8	69.4	63.4																																	
		<i>Direct Bury Construction and Pole Structure Installation</i>	85.5	79.5	73.5	65.5	59.5																																	
		<i>Conductor Stringing</i>	86.2	80.1	74.1	66.2	60.1																																	
		<i>Underground Work</i>	71.8	65.8	59.8	51.8	45.8																																	
		<i>Demobilization</i>	81.9	75.9	69.8	61.9	55.9																																	
34.	Provide estimated noise levels for light-, medium-, and heavy-duty helicopters. Table 4.12-3 only shows one noise level for helicopter take-off at 50 feet (90 dB). The PEA describes that SDG&E anticipates that light-, medium-, and/or heavy-duty helicopters may be required. Noise levels for light-duty and heavy-duty helicopters may be significantly different.	<p><i>Helicopter Noise (Leq dBA)</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>50 ft</th> <th>100 ft</th> <th>200</th> <th>250 ft</th> <th>500 ft</th> <th>1000 ft</th> <th>1500 ft</th> </tr> </thead> <tbody> <tr> <td><i>Light-Duty Helicopter</i></td> <td>95</td> <td>89</td> <td>83</td> <td>81</td> <td>75</td> <td>69</td> <td>66</td> </tr> <tr> <td><i>Medium-Duty Helicopter</i></td> <td>100</td> <td>94</td> <td>88</td> <td>86</td> <td>80</td> <td>73</td> <td>69</td> </tr> <tr> <td><i>Heavy-Duty Helicopter</i></td> <td>110</td> <td>104</td> <td>98</td> <td>96</td> <td>90</td> <td>84</td> <td>81</td> </tr> </tbody> </table> <p><i>Source: Helicopter Association International 1993</i></p>								50 ft	100 ft	200	250 ft	500 ft	1000 ft	1500 ft	<i>Light-Duty Helicopter</i>	95	89	83	81	75	69	66	<i>Medium-Duty Helicopter</i>	100	94	88	86	80	73	69	<i>Heavy-Duty Helicopter</i>	110	104	98	96	90	84	81
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35.	Explain the methodology used to estimate traffic volumes provided in the PEA. Clarify whether the 50 to 60 average daily trips specified in Section 4.16.5 are passenger car equivalents or for construction equipment/delivery trucks. Would these trips occur during peak hours?	<p><i>The volume of construction worker trips was estimated based on the assumption that pier foundation construction and direct bury construction would take place concurrently, and that each worker would have one inbound trip and one outbound trip. SDG&E would like to correct the traffic generation range to be consistent with Table 3-3. Therefore, the volume of construction worker trips should be 58 to 72 daily trips instead of 50 to 60 as described in Section 4.16.5.</i></p>																																						
36.	Identify the distribution of construction trips within the local road network. Clarification on traffic distribution is needed to understand project impacts on traffic within public roadways and within MCB Camp Pendleton.	<p><i>It is anticipated that the distribution of traffic to various roadways will fluctuate over time during construction, based on the nature and the location of construction activities. As discussed above, the maximum volume would range from 58 to 72 daily trips. Therefore, the Proposed Project's traffic volume would be up to 72 daily trips on roadways providing access to and from the construction sites (i.e., Cristianitos Road, Avenida Pico, Basilone Road, and/or El Camino Real).</i></p>																																						
37.	Provide the location of any existing utilities within the underground segment of the Proposed Project.	<p><i>There are no known existing underground facilities in or crossing the proposed underground alignment.</i></p>																																						

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	Provide underground utility locations in GIS to help evaluate conflicts with existing lines.	