



December 16, 2014

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

Sent Via Sempra EDT System Only

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

Re: SXPQ <u>ED03</u>-SDGE Partial Response No. 4: Questions 1, 2, 7, 8, 11(partial), 15, 19, 20, 22-25, 28, 31 & 38.

Dear Ms. Blanchard:

Attached please find SDG&E's Partial Response Number 4 to ED's Data Request 3 issued on November 17, 2014. Included in this submittal are responses to Questions 1, 2, 7, 8, 11(partial) 15, 19, 20, 22-25, 28, 31, 38

In summary, SDG&E has provided to the ED the following responses:

Submittal 4 – 12/16/14 Q1, 2, 7, 8, 11(partial), 15, 19, 20, 22-25, 31, 28, 38

Submittal 3 – 12/12/14 Q4, 9, 12, 18 & 21

Submittal 2 – 12/05/14 Q3, 10, 13, 14, 17, 27, 34 & 35

Submittal 1 – 11/25/14 Q5, 6, 16, 29, 30, 32, 33, 36 & 37

Confidential Q19a, 20, 31a-b, 32, 33

Pending Status Q11, 26 & 28 – Final responses pending survey and study

results. (i.e. Q11 – EMF Study, Q26 – Bio Survey and

Q28/ED02 Q104 – Burrowing Owl Survey)

Please note that attachments to DR3 Q19a, 20, 31a-b, 32 and 33 contain information considered confidential under the provisions of PUC Section 583 and General Order 66-C as well as under the North American Electric Reliability Corporation's Rules of Procedure, Section 1500 et seq. and other

applicable Federal and State Laws and Regulations. These documents were appropriately marked confidential and should be treated as such.

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

Elizabeth Cason – SDG&E

Bradley Carter – SDG&E

Central Files – SDG&E

Peter Allen – CPUC

Darryl Gruen - ORA

Jeff Thomas – Panorama Environmental Consulting

Susanne Heim – Panorama Environmental Consulting

Mary Jo Borak – CPUC Infrastructure Permitting and CEQA

Molly Sterkel - CPUC Infrastructure Planning and Permitting

Christine Hammond – CPUC Attorney

William Stephenson – CPUC Consultant

Frank Ghazzagh - ORA

Q#	Data Needs Sections	Summary of SDG&E Response Submittals	Status as of 12/16/14
1-21	Project Description	11/25/14 Submittal: Q5 , 6 , & 16 12/5/14 Submittal: Q3 , 10 , 13 , 14 , 17 12/12/14 Submittal: Q4 , 9 , 12 , 18 , 21 12/16/14 Submittal: Q1 , 2 , 7 , 8 , 11 , 15 , 19 , 20	Q11
22-25	Air Quality/GHG Emissions	12/16/14 Submittal: Q22 - 25	Completed
26-30	Biological Resources	11/25/14 Submittal: Q29 & 30 12/5/14 Submittal: Q27 12/16/14 Submittal: Q26, 28	Q26 & 28
31-33	Cultural Resources	11/25/14 Submittal: Q 32 & 33 12/16/14 Submittal: Q31	Completed
34	Hazards	12/5/14 Submittal: Q34	Completed
35	Noise	12/5/14 Submittal: Q35	Completed
36-38	Traffic	11/25/14 Submittal: Q36 & 37 12/16/14 Submittal: Q38	Completed

Pending Responses (Estimated completion dates provided herein):

- Q11 (Existing Condition Magnetic Field Modeling) Anticipated to be completed February 2015.
- Q26 (Biological Surveys for un-surveyed areas) Final focused surveys (wetlands, rare plants, burrowing owl, coastal California gnatcatcher) anticipated by late summer of 2015.
- Q28 (Burrowing owl project-specific habitat assessment report) Anticipated to be completed by February 1, 2015.

CONFIDENTIAL ATTACHMENTS: Q19(a), Q20, Q31(a), Q31(b), 32 & 33.

SDG&E Response a. Minor vegetation removal would be required for the areas within each

1	property owner documenting that SDG&E may use each site for the proposed uses. Provide additional information regarding staging area use and activities. The following information is needed to define use and impacts within each staging yard: a. Vegetation removal needed b. Grading needed	b. c.	propose constru were pr It is anti The pote in the Pr below o	ed staging yard, as dictaction. Potential staging eviously grubbed (vege cipated that approximatel ential staging yard area of coject. Therefore, the entitutlines potential areas of	ted by current site conditions at yards were chosen, in part, becaptation removed) and graded related 2,500 CYs cut/fill for the yards. If use cannot be known with certain repotential area of use was assume use for each of the currently identities are shown in the updated GIS dat	the time of ause they atively flat. ty at this point ed. The table fied potential
	c. Acreage of each staging yard that is to be used, and the location of the area of proposed use within the larger staging area in GIS			staging Yards. These areas ent ED03 – Q15.	Approximate Area if Use	a provided as
	d. Verification letter from landowner indicating their			Stowe	4.0 acres	
	understanding of intended staging yard use and providing permission for such use			Stonebridge	9.0 acres	
	e. Description of how staging area would be used			Chicarita South	5.2 acres	
	f. Vehicle entrance/exit location and description of			Torrey Santa Fe	19.9 acres	
	potential construction of new or improved vehicle access			SR-56	14.7 acres	
	SDG&E's response to Data Request #2 was incomplete and did not address the information needed to define use and impacts at each staging yard. It also failed to provide landowner verification that each of the proposed staging yards may be used for Project staging. The two landowner letters that were submitted by SDG&E only authorize non-invasive surveys of the site and do not describe the staging activities that may be conducted on the site. Furthermore, neither letter provides a commitment of the proposed staging yard for construction purposes. If SDG&E cannot obtain landowner approval in writing at this time, the staging	e.	SDG&E EIR. SD yards was from all inclusion yard will Staging storage activitie • Local	is investigating addition. G&E would like to include thin the CPUC's environ the land owners have not not staging yards within a be available at the time. Area/Laydown Yard Use of construction materials is:	with CPUC and Panorama on Decer al staging yard options to be included all 5 locations currently identifi- mental analysis even though writted been received. SDG&E understant the CEQA review does not guarant of construction. (Fenced and or Security patrolled and equipment) could include the follower proximity to construction acti- tion building(s), including, but not	led within the ed as staging en approval eds that tee the staging area for secure following vities.
		D	2 of 17			

Question #

Question Description

Provide letters of permission from each staging yard

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	yard can be considered in the EIR analysis; however, any staging yard location changes in the future will require filing of a Petition for Modification and some type of additional CEQA work.	 office/meeting space. Temporary water storage for construction activities. Temporary parking, storage, staging and refueling of vehicles and equipment. Helicopter incidental landing areas (ILAs) used for pick-up and re-fueling. Staging construction materials, facilitating Vendor delivery and distribution to the construction Crews and sites. Sanitary facilities for Construction Employees as required. Reporting Headquarters for Construction Employees. Secure parking for Construction Employee vehicles. f. Approximately 2,100 SF of veg clearing and roughly 100 CYs of cut/fill will be required for temporary improved access to the yards.
2	Provide GIS polygon data and acreage of proposed staging areas within Sycamore Canyon Substation, Peñasquitos Substation, Chicarita Substation, Mission Substation, and San Luis Rey Substation and substation access roads. Show the areas that would be used for staging at the substations and any access road segments that would be used for staging.	Correct, only roads shown within the Project access road layer would apply to the statement provided concerning temporary staging and laydown of materials. In addition, any cleared areas within existing SDG&E substation properties could also be used for temporary staging of materials during construction at the approval of SDG&E substation staff. No materials would be stored at an existing substation (or associated roadway) where such activity would interfere with the continued operation of the substation.
	SDG&E's response to Data Request #2 did not provide the requested GIS data showing where staging could occur in the substations or acreage of staging areas available within the substations. These substations are mostly built out and these substations may not provide adequate space for staging of materials. More definition of the staging area within the substations is needed to understand whether these are feasible staging yards. SDG&E's response to Data Request #2 states that "any of	

Question #	Question Description	SDG&E Response
	the identified and mapped substations (and surrounding roads) could be used" for temporary materials laydown/storage during construction. Clarify if the only roads that would be used have been identified as a project access road and are owned by SDG&E. If additional roads would be used for laydown/storage, identify those roads and the areas of use.	
7	Identify the locations of overland access routes and describe the activities to be performed within overland routes. SDG&E's response to Data Request #2 states that no overland access is currently anticipated; however, this response conflicts with a later response to DR#2, Item19 which discusses overland access at 30 locations for vehicle passing. This also conflicts with the GIS data provided which includes potential temporary access routes outside of SDG&E's access road network. There are two road segments in the GIS data provided on November 3 that are described as "proposed" and "temporary". One route is located southeast of P21, and the other is south of GS62. The latter no longer leads to a work area (refer to Attachment 1). Clarify if the access route southeast of P21 is an overland and temporary route, and if the route south of GS62 is still needed. Define overland access routes including a) where they will be located (GIS); b) their anticipated dimensions; and c) what activities would be conducted within them (e.g., vegetation removal, vehicle transit or parking, etc.).	SDG&E previously responded with a high level estimate of 30 potential "passing locations" that may be required once construction begins (see detailed description below). SDG&E did not interpret these vehicle passing locations as overland travel, but understands that they can be viewed as such. However, SDG&E views this as difference of terminology and not an inaccurate or false response. Additionally, the specifics of these types of details are not fully known at this time and they are being included to conservatively detail options during the environmental review period and are ultimately included to retain some level of flexibility during construction while more accurately assessing and disclosing potential impacts within the CEQA process. SDG&E typically utilizes the term overland travel for locations where a direct access is being provided to a specific location (such as transmission line structure) and not for vehicle passing locations. Access roads are typically maintained in accordance with SDG&E's NCCP. However, during construction, it may be necessary for construction vehicles to pass each other in certain instances. Passing locations would be sited within existing roadway forks (locations where multiple roads intersect creating large bareground areas), proposed work pads, stringing sites, and turn-around areas, as practicable. To accommodate passing vehicles outside of previously identified work areas or access roads, SDG&E estimates that approximately 30 passing locations (outside of those areas noted above) may occur during project construction. Passing areas would involve minimal direct ground disturbance (no grading or other improvement), directly adjacent an existing access road. The passing lanes would have typical dimensions of approximately 15 feet by 30 feet (450 sq. ft. per location, 13,500 sq. ft. total). Passing would primarily occur in disturbed, ornamental, or non-native grassland areas and would be a minor temporary impact and is likely to recover on its own.

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		However, temporary impacts from these passing locations that do not recover would be quantified in a post-construction report and mitigated for as required by the SDG&E NCCP. Passing areas would not be located where sensitive resources are present such as (but not necessarily limited to) vernal pools, cultural resources sites, and jurisdictional water ways.
		In reference to the two temporary road locations shown in the project GIS data:
		 Page 13 of Panorama map book – the new (temporary) road is proposed to provide access to P21. The road is identified as a temporary construction road, not Overland Travel. Page 38 of Panorama map book – the Guard Structure was previously located on the hillside and the road provided access to the Guard Structure (GS 62) that has been moved adjacent to the road. Therefore, the road is no longer needed and will be removed from the map book/GIS shape files. Updated GIS data for access roads have been included within Attachment ED03 – Q8_Access Roads.
8	Prepare an Access Road Plan to include revised access road GIS data.	Revised GIS data for Project access roads has been provided as Attachment ED03 – Q8_Access Roads GIS. Additional fields have been added to the road attributes to
	SDG&E's response to Data Request #2 was incomplete. SDG&E has claimed to have identified 30 overland route passing locations. Provide the GIS showing where these 30 overland routes occur, or the likely locations for passing routes that would be in the project alignment. Additionally, provide GIS attribute data indicating proposed road work (i.e., where grading and vegetation	distinguish those SDG&E unpaved access roads and road segments where grading would not occur. Note that paved and graveled portions of existing SDG&E access roads would also not be regarded as part of the Proposed Project. Existing unpaved access roads are also no anticipated to be graded during construction activities for the Proposed Project. The existing access road north of Structure P41A (i.e. north of the proposed Black Mountain Ranch Community Park stringing site) has been reduced to show the likely project use only.
	removal would occur) in the project alignment. This information is needed to address agency concerns about impacts to vernal pools and habitats.	SDG&E has identified two areas (located on existing access road to Structures P46 and P47) where temporary roads may be created and used during construction activities to avoid existing disturbed basins that are located within existing SDG&E access roadway
	Additionally, there continue to be what appear to be errors in the extent of access roads included in the GIS.	(refer to attached GIS data in ED03 – Q8 and ED03 – Q15). These basins are road ruts that have developed over time from use of the access roads, and at one point in the past were
	In particular, define the intended use of the access road	identified as potential vernal pool features. However, a focused vernal pool assessment for

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	north of the proposed Black Mountain Ranch Community Park stringing site, or correct the GIS provided.	indicator species has not been conducted. Therefore, to be conservative, SDG&E is exploring potential temporary road access. SDG&E anticipates working with the City of San Diego (landowner adjacent to the existing roads) to discuss/finalize access options at these location.
11	Provide existing EMF data at the edge of the right-of-way by transmission line segment (e.g., Segment A West). SDG&E did not provide the requested EMF data in response to Data Request #2. Baseline EMF data (modeled EMF for existing conditions) is needed to address public comments and interest in the changes in EMF levels along the alignment. GO 131-D does not exempt utilities from providing this data and the CPUC has the authority to require submittal of this information. SDG&E has provided this information to CPUC in the past. By example, the baseline EMF levels were included in the Sunrise Powerlink EIR.	SDG&E did not model existing conditions as part of the <i>Detailed Magnetic Field Management Plan</i> (MFMP) for the proposed Sycamore to Peñasquitos 230 kV Transmission Line Project. Such modeling is not required pursuant to SDG&E's <i>EMF Design Guidelines for Electrical Facilities</i> , CPUC General Order 131-D, or CPUC Decisions 93-11-013 and 06-01-042. It is not SDG&E's practice to model magnetic fields for existing conditions, and SDG&E objects to the practice principally on these bases: (1) It is clearly in conflict with D.06-01-042, in which the CPUC stated that "Our review of the modeling methodology provided in the utility design guidelines indicates that it accomplishes its purpose, which is to measure the relative differences between alternative mitigation measures. Thus, the modeling indicates relative differences in magnetic field reductions between different transmission line construction methods, but does not measure actual environmental magnetic fields [emphasis added];" (2) As the data resulting from the modeling do not "measure actual environmental magnetic fields," they can be misleading to readers, and easily misinterpreted to suggest consistently higher magnetic field values along the alignment than actual field values that may be present on average. In the comparative models for the project MFMP, SDG&E used a "2017 heavy summer" load case, conditions of
		which would seldom be achieved. In order to make a proper comparison of "existing" values with the "proposed" values from the MFMP used by the CPUC in Table 2.7-1 of the draft EIR, SDG&E must use a similar "heavy summer" load case to calculate existing conditions. Both sets of calculated values could be misleading and misinterpreted. However, SDG&E will comply with the CPUC Energy Division's directive to model
		existing magnetic fields for segments A, C and D of the Project alignment; no modeling is necessary for underground Segment B in which there are no existing power or transmission lines. SDG&E anticipates that this modeling will be completed by February 13, 2015.

Question #	Question Description	SDG&E Response
15	Provide structure relocation, access and final work pad design details in GIS for all proposed Project refinements. SDG&E provided updated GIS attribute data, but did not provide pole relocations in GIS as described in the PRR submitted with Data Request #2 responses. Specifically, the location shifts are not detectable at structures: P4, P14, P23, P25, P32, P44, P59, and P60. Additional information is needed to analyze the impacts of the project refinements in the EIR. Provide the following data: a. Updated GIS data with completed attributes for all the structures identified in Table 4, affected work areas, as well as work area details such as proposed grading limits and cut-and-fill areas. b. Updated GIS data for any other associated project components that are affected, such as transmission lines or access roads. In addition, provide supplemental biological and cultural resources surveys and evaluations for any relocated facilities, new or refined access or grading improvements, or other activities that occur outside of previously surveyed project areas. Provide a specific date when this information will be provided if this information cannot be provided by December 16, 2014.	Revised impact areas GIS data with completed attributes has been provided as Attachment ED03 – Q15_Work Area GIS. In reference to the structures that were relocated as described within the Project Refinement Report, the following describes the required changes made: • The work area and grading design has been revised for structures P4, P14, P44, P59, and P60 (refer to attachment ED03 – Q15). • Structures P23 and P32 are located in paved areas and require no grading or pad design. • The relocated Structure P25 does not require a re-designed structure pad. No changes were made to access roads, other transmission lines, or other relocated facilities. Additional resource surveys (for the relocated structures listed above) are not required as all structure re-locations took place within the existing corridor.
19	Provide a detailed description for proposed improvements and work at Encina Hub. The detailed description needs to include: a. Identification of all structural modifications	a. The work description of the proposed reconfiguration options at Encina Hub were identified in the previous data request response (refer to Attachment ED03 – 19(a)_Encina Hub [CONFIDENTIAL]). SDG&E is currently in the process of acquiring current LiDAR survey data for this area.

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b. c. d. e. f.	structural improvements, temporary work areas, access, and staging; Description of construction process including equipment and materials required, location and use of staging and laydown areas, and timing relative to construction in other project segments; Description of how this activity relates to the proposed Project purpose and need; Cultural and biological surveys and technical reports for additional work areas and access roads; and	C.	For both options identified in the previous data request submittal, the structural adequacy of the towers and the feasibility of maintaining clearances will be determined during detailed design which SDG&E anticipates to have completed by the middle of 2015 based upon the forthcoming current LiDAR data. However, based on preliminary analysis it is expected that minor modifications, if any, including but not limited to addition of redundant members, and/or replacement of existing members with new angle members could be required to strengthen the existing towers. In the event that minor modifications are inadequate, replacement of the tower E35 with a new structure within the impact areas identified in the GIS maps (Attachments ED03 – Q15) may be required. At the present time without having detailed design completed, SDG&E cannot confirm the details of the structure proposed to be used as a replacement. Work areas (impact areas) are provided with the GIS data included as Attachment ED03 – Q15. Updated Structure GIS data is included as Attachment ED03 – Q19(b)_Structure GIS and access roads have been included within Attachment ED03 – Q8. A general description of the potential construction process is included as Attachment ED03 – Q19(a)_Encina Hub (CONFIDENTIAL). This work is necessary for the SX-PQ project to meet Objective #2 as described in the PEA. Specifically, this work will allow the new SX-PQ 230 kV line to reuse part of an existing 230 kV double-circuit tower line that currently extends between San Luis Rey substation in North San Diego County to Mission substation near Mission Valley in San Diego. In order to accomplish this, one of the existing San Luis Rey-Mission (SA-MS) 230 kV lines (TL23001) will be removed from service. The SX-PQ line will re-use the position occupied by TL23001 on the tower line between Carmel Valley Road and Penasquitos (PQ) Junction. The work at Encina Hub will reconfigure the remaining portion of TL23001 and another 230 kV line (TL23011) to maintain the same number of 230 kV

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		same number of 230 kV outlets at San Luis Rey Substation once TL23001 is removed form service and partially converted to the new SX-PQ line. San Luis Rey is a critical import gateway for the San Diego load center, so it is desirable from an operational standpoint to maintain the same number of 230 kV connections south from San Luis Rey. This addition to the SX-PQ scope was identified following a discussion of the impact of the project with SDG&E's Electric Grid Operations department. It was determined that it would be desirable to reconfigure the 230 kV lines south of San Luis Rey as a part of the SX-PQ project, and also appeared that the cost and environmental impact would be minimal. e. Additional surveys have been conducted. Refer to the response to Q26 for biological resources and the response to Q31 for cultural resources. f. Refer to Attachments ED03 – Q8, ED03 – Q15 and ED03 – Q19(b) for GIS data for the Encina Hub work.
20	Provide a detailed description including locations for proposed improvements and work associated with transposition of phasing on circuits TL 23001 and TL 23004. The detailed description needs to include: a. Description of all structural modifications proposed including any new or temporary tower installations with type and heights, all activities that would be conducted during transposition (e.g. vegetation clearing) and all temporary and permanent impacts; b. Site plans showing the locations of proposed structural improvements, temporary work areas, access, and staging; c. Description of construction process including equipment and materials required, location and use of staging and laydown areas, and timing	 a. The work description of the proposed phasing transposition options at Mira Mesa were identified in the previous data request response (Project Refinement Report) and have been included here for reference (see attachment ED03 – Q20 [CONFIDENTIAL]). SDG&E is currently in the process of acquiring current LiDAR survey data in this area. For both options identified in the previous data request submittal, the structural adequacy of the towers and the feasibility of maintaining clearances will be determined during detailed design which SDG&E anticipates to have completed by the middle of 2015 based upon the forthcoming current LiDAR data. However, based on preliminary analysis it is anticipated that no structural modifications apart from temporary guying of existing wood poles will be required. The GIS data of impact areas is provided separately as attachment ED03 – Q15. b. Work areas (impact areas) are provided with the GIS data included as Attachment ED03 – Q15. Updated Structure GIS data is included as Attachment ED03 – Q19(b). Access road data is provided within Attachment ED03 – Q8. c. A general description of the potential construction process is included as Attachment ED03 – Q20_Mira Mesa (CONFIDENTIAL). d. This work is necessary for the SX-PQ project to meet Objective #2 as described in the PEA. Specifically, this will allow the new SX-PQ 230 kV line to reuse part of

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	relative to construction in other project segments; d. Description of how this activity relates to the proposed Project purpose and need; e. Cultural and biological surveys and technical reports for additional work areas and access roads; and f. All associated GIS data.	an existing 230 kV double-circuit tower line that currently extends between San Luis Rey substation in North San Diego County to Mission substation near Mission Valley in San Diego. By reusing a portion of this existing tower line, it will allow the project to meet the objective of locating the proposed project within existing transmission and power line corridors. In order to accomplish this, one of the existing San Luis Rey-Mission (SA-MS) 230 kV lines (TL23001) will be removed from service. The SX-PQ line will reuse the position occupied by TL23001 on the tower line between Carmel Valley Road and Penasquitos (PQ) Junction. The work referred to specifically in this question (transposition of phasing on circuits TL 23001 and TL 23004) will re-use several of the remaining segments of TL23001 to "split-bundle" parallel segments of TL23004, which occupies the other position on the tower line. A "split-bundle" arrangement is where two sets of conductors on opposite sides of a tower line are tied together electrically, to form a single transmission line with multiple conductors. This work was identified as a way to keep the segments of TL23001 that will not be used for SX-PQ energized and useful, and to increase the current-carrying capability of the remaining San Luis Rey-Mission 230 kV line. It also appears that this could be done with minimal cost and environmental impact. e. Additional surveys have been conducted. Refer to the response to Q26 for biological resources and the response to Q31 for cultural resources. f. Refer to Attachments ED03 – Q8, ED03 – Q15, and ED03 – Q19(a) for GIS data for the Mira Mesa work.
22	Update the air quality modeling to reflect the increased travel distance to staging yards. Verify all other assumptions in the air quality model are consistent with the Project Description as currently proposed. SDG&E's response to Data Request #2 was incomplete and inaccurate stating both that vehicle travel was estimated at 31 miles per day and 31 miles per trip. These two measurements are incompatible. Travel estimates	SDG&E has reviewed the trip lengths provided for truck trips and has updated the trip lengths. These trip lengths have been updated in the calculations for all segments (refer to Attachments ED03 – Q22(a)_Emissions Spreadsheets and ED03 – Q22(b)_Revised Tables. The following assumptions have been made to estimate trip lengths for truck trips. Assumptions: Segment A:

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	appear to only include updates for the increased travel to staging yards; however, there are numerous refinements to the project that could affect air emissions including the total amount of cut-and-fill (import and export of material), locations of landfills (identified by SDG&E as 40 miles round trip), locations of water sources, and duration and type of use of helicopters. Assumption inconsistencies need to be resolved, after which the truck traveling distance in Table B-2 needs to be changed to reflect the correct miles (be it 35.7 miles as indicated or another value).	 For equipment trips, it was assumed that construction equipment would either be temporarily stored onsite during construction, or would travel from a project staging yard. Project staging yards (Stowe, Stonebridge, Chicarita South, and Torrey Santa Fe) are located between 0 and 3 miles from the ROW. To be conservative, the larger distance of 3 miles was used. Finally, an additional 14 miles was added to account for potential travel of equipment along the Segment A ROW (Segment A is 8.3 miles in length). Therefore, a total of 20 miles (6 miles to and from the alignment and 14 miles along the alignment) was assumed.
		 ◆ For equipment trips, it was assumed that construction equipment would either be temporarily stored onsite (e.g. at a structure site) during construction, or would travel from a project staging yard. Project staging yards (Chicarita South, SR-56, and Torre Santa Fe) are located between 1.5 and 4.5 miles from the Segment B alignment. To be conservative, the larger distance of 4.5 miles was used. Finally, an additional 11 miles was added to account for potential travel of equipment along the Segment B alignment (Segment B is 2.8 miles in length), or to account for multiple trips to staging or other uses. Therefore, a total of 20 miles (up to 9 miles to and from the alignment and up to11 miles along the alignment) was assumed.
		 Segment C: For equipment trips, it was assumed that construction equipment would either be temporarily stored onsite (e.g. at a structure site) during construction, or would travel from a project staging yard. Project staging yards (SR-56 and Torrey Santa Fe) are located between 0.5 and 5 miles from the Segment C alignment. To be conservative, the larger distance of 5 miles was used. Finally, an additional 10 miles was added to account for potential travel of equipment along the Segment C alignment (Segment C is 2.2 miles in length). Therefore, a total of 20 miles (up to 10 miles to and from the alignment and up to 10 miles along the alignment) was assumed.

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		 Segment D: For equipment trips, it was assumed that construction equipment would either be temporarily stored onsite (e.g. at a structure site) during construction, or would travel from a project staging yard. Project staging yards (SR-56 and Torrey Santa Fe) are located up to 4 to 5 miles from the Segment D alignment. To be conservative, the larger distance of 5 miles was used. Finally, an additional 10 miles was added to account for potential travel of equipment along the Segment D alignment (Segment D is 3.3 miles in length). Therefore, a total of 20 miles (10 miles to and from the alignment and up to 10 miles along the alignment) was assumed.
		Mobile fuel trucks: • It was assumed that fuel would be sourced within 5 miles of the alignment. An additional 20 miles was added to allow for potential travel along the alignment during potential refueling activities. Therefore, a total of 30 miles (10 miles to and from the source and 20 miles for travel along the alignment) was assumed.
		 Water trucks: It was assumed that potable water sources would either be from existing sources (such as hydrants) located adjacent (within 1 mile) to the ROW or from staging yards (located 0 to 5 miles from alignment). Potential reclaimed sources were assumed to be located within 5 miles of the ROW. An additional 20 miles was added to account for potential travel of water trucks along the alignment. Therefore, a total of 30 miles (up to 10 miles to and from the source and 20 miles for travel along the alignment) was assumed.
		Hauling Trips: As a worst case, all waste, soil, and recycling hauling was assumed to go to the Otay Landfill, located approximately 30 miles south of the Project. Therefore, 60 miles was assumed for all hauling trips to be conservative.
23	Provide vehicle exhaust emissions factors for on-road trucks. SDG&E's response to Data Request #2 was incomplete and	Refer to Attachments ED03 – Q22(a) and ED03 – Q22(b).

Question #	Question Description	SDG&E Response
Question #	inaccurate. SDG&E did not include the following emission factor files: a. 2017 PM ₁₀ and PM _{2.5} Tire/Brake Wear Emission Factors b. 2016 LDT1 all emission factors (including Running Exhaust, Hot Soak, Running Evaporative, etc.) c. 2016 On-Road Truck at 30 mph d. 2017 On-Road Truck at 30 mph Please make sure that all calculations associated with the emission factors in these files are fully verified in the next data submittal. There also is an error in all worker trip emission calculation worksheets for running evaporative loss emissions. For running evaporative loss emissions, the emission factors in grams per mile should be multiplied by the vehicle miles traveled (VMT) per day to derive emissions in grams per day.	 a. The ARB has designed the EMFAC2011 model such that tire wear and brake wear emission factors do not change with year because they are not dependent on model year and are not subject to regulation. However, to verify this and clarify for the CPUC's consultant, 2017 PM10 and PM2.5 emission factors are provided. b. All emission factors for 2016 were provided to the CPUC's consultant in the previous response to comments. To make it clear, we have highlighted the emission factors in yellow and included arrows and notations as to what emission factors were provided for LDT1 vehicles. In addition, running exhaust emission factors for LDT1 vehicles were provided in the previous response to comments. To make it clear, these emission factors are highlighted in yellow with an arrow indicating that these are the emission factors for LDT1 vehicles for running exhaust. c. These emission factors were provided to the CPUC's consultant in the previous response to comments. To make it clear, we are providing the same spreadsheet that was provided in the previous response to comments with all rows hidden except the row in which the 2016 on-road truck emission factors appear, and arrows and notations have been included in the spreadsheet. d. For conservative purposes for the calculations provided, it was originally assumed that the worker vehicle fleet and truck fleet used during the construction of the SX-PQ project would not change for the duration of the project. The vehicle emission
24	Update the PM ₁₀ and PM _{2.5} paved-road fugitive dust emissions	factors for 2016 were therefore used for 2017 to provide a conservative estimate of emissions. The calculations have been verified. Minor changes in brake wear have been made to the calculations, as well as the correction for running exhaust emissions (refer to Attachment ED03 – Q22(a)). The emission calculations were updated (refer to Attachment ED03 – Q22(a)) based on the
21	for on-road vehicles and trucks to reflect the updated emissions factors in the EPA's updated AP-42 (2011).	AP-42 emission factors for paved roads from 2011. The equations in the cells in column B were correctly entered. The typed version of the equation in column A, which was not used in the calculation but provided to indicate how the calculations were conducted had a
	SDG&E's response to Data Request #2 was inaccurate. SDG&E incorrectly used the AP-42	used in the calculation but provided to indicate how the calculations were conducted, had a typo in the silt loading power. The power should have been typed as 0.91 rather than 0.01.

Question #	Question Description	SDG&E Response
	Paved Road fugitive dust emission factor equation. SDG&E did not enter the equation correctly in its calculations. This error needs to be corrected throughout all paved road fugitive dust emissions worksheets.	The typographic error has been corrected. This did not affect the calculations.
25	Fix errors in materials handling fugitive dust emissions calculations. SDG&E's response to Data Request #2 was inaccurate. SDG&E incorrectly entered equations in all fugitive dust worksheets. These corrections need to be made. a. There is no calculation for PM2.5 emissions from material handling on all related worksheets. b. In Revised Summary Table 4.3-8 of the PEA report, the category of "Fugitive Dust (Unmitigated)" should be "Fugitive Dust (Mitigated)." c. The total "Fugitive Dust (Unmitigated)" emissions from Segment D were not added accurately. The total "Fugitive Dust (Unmitigated)" would be approximately 86.81 lbs./day, which is not 8.86 lbs./day. The "Fugitive Dust (Mitigated)" emissions from Segment D would be approximately 33.86 lbs./day.	 a. Based on the South Coast Air Quality Management District's Final –Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds (October 2006), "For mechanical dust generating sources, e.g., construction, the PM2.5 fraction of PM10 is 21 percent and for combustion sources the PM2.5 fraction of PM10 is 99 percent." For conservative purposes, it was assumed that 21% of the PM10 generated from construction fugitive dust sources was PM2.5. This is conservative because other sources assume the fraction of PM2.5 in fugitive dust is as low as 10%. A calculation has been added to the fugitive dust calculation spreadsheets to show this assumption, source, and calculation. b. "Unmitigated" has been revised to "Mitigated". c. The purpose of the analysis was to provide an estimate of the maximum daily emissions, taking into account the simultaneous activities occurring during construction. Based on the construction schedule provided by SDG&E, the following activities would occur simultaneously in 2016: Segment A Foundation Excavation Foundation Concrete Segment B Trenching Backfill/Paving

Question #	Question Description	SDG&E Response
		Segment C Road/Pad Maintenance
		Segment D ■ Build Retaining Wall
		Based on this scenario, it was assumed for Segment D that the project would involve material handling for construction of the retaining wall, as indicated in the spreadsheet, in the amount of 11,370 cubic yards of material to build the retaining wall. The remaining fugitive dust-generating activities on Segment D would not occur simultaneously with the activities identified for the maximum day; therefore, it is not correct to sum all of the activities provided within the spreadsheet.
		SDG&E has provided updated information on earthmoving activities associated with all segments. Segment C would be undergoing grading of roads and pads during the maximum daily construction activities; therefore, grading activities have been included under Segment C rather than Segment D for the maximum daily construction scenario. Calculations of fugitive dust have been updated.
		The emissions were based on which activities would occur on the maximum day. According to the PEA (and based on preliminary engineering), total excavation for concrete pier foundation structures would be approximately 4,500 cubic yards. Exact foundation excavation size cannot be known until the final design is complete, which requires the completion of geotechnical investigations. Per communications with the CPUC, SDG&E was advised not to proceed with geotechnical investigations until further direction is received from the CPUC.
26	Complete biological surveys in all areas of the Proposed Project that have not been surveyed for biological resources. SDG&E's response to Data Request #2 was incomplete. There remain some project areas that have not been surveyed based on the revised project GIS and updated survey boundaries (See attachment 2). Additionally, supplemental surveys for rare plants and California	Refer to Attachments ED03 – Q26(a)_Vegetation Survey Memo and ED03 – Q26(b)_Biology GIS. Completion of focused surveys is anticipated to following appropriate survey timeframes between early spring 2015 (February/March) to late summer 2015 (August).

Question #	Question Description	SDG&E Response
	gnatcatcher will need to be completed in Spring 2015 as indicated in the response provided. Provide specific dates when these pending submittals will be provided.	
28	Provide GIS data for the burrowing owl (BUOW, Athene cunicularia) habitat assessment. SDG&E did not provide the requested GIS data in response to Data Request #2. SDG&E has indicated that a project-specific habitat assessment report will be provided in early 2015. Provide a specific date when this pending submittal will be provided.	The project-specific habitat assessment report is anticipated to be completed by February 1, 2015.
31	Complete cultural resource surveys in all areas of the Proposed Project that have not been surveyed for cultural resources.	Refer to Attachments ED03 – Q31(a)_Arch Survey Report (CONFIDENTIAL) and ED03 – Q31(b)_Archaeological GIS data (CONFIDENTIAL).
	SDG&E's response to Data Request #2 was incomplete. The following issues were identified with the survey report submitted.	
	1. They surveyed 52 locations in 4 person days (or 6 person days if Brian Williams actually participated in the surveyit is unclear).	
	2. Survey interval is not indicated.	
	3. Surface visibility is not noted, and needs to be documented for each location that was surveyed.	
	Without the specifics of person days of survey effort, the survey interval, and the ground visibility at the different locations it is difficult to evaluate the thoroughness of the effort in response to the data request. These details of effort are standard in archaeological survey reports.	

Question #	Question Description	SDG&E Response
	Provide the cultural survey area in GIS format. Maps in the survey memo provided with the data response illustrate additional project areas that were surveyed: however, no project features are shown for reference and the completion of cultural surveys in all project work areas cannot be verified without the GIS data. Further cultural surveys are required for project areas and access roads that have not been previously surveyed, including those shown in Attachment 3 and those addressed in the PRR.	
38	Verify that construction equipment and vehicles could be transported on public roadways. SDG&E's response to Data Request #2 was incomplete. SDG&E needs to specify the method for delivery of structures and equipment that will be utilized during construction for all locations where existing roadways and ingress/egress have a limited turning radius. If access modifications or new temporary access roads are required, these need to be fully specified at this time including descriptions of: 1) their location, physical extent, and temporary or permanent nature; 2) construction techniques and methods; and 3) materials to be used including quantities of cut/fill and import/export.	All construction deliveries will be on public roadways. There are 3 locations along the alignment where limited turning radii will require temporary improvements to gain access. A summary of the work is below: P14- site access can be achieved utilizing the existing maintenance road with the removal/replacement of approximately 25 feet of existing fence. P16-Construction vehicles will utilize existing maintenance access with the temporary removal of SDG&E gate/wood fence and minor vegetation clearing to the west. Approximately 20 cubic yards of cut/fill will be required as well. Traffic control will be necessary for large vehicles exiting the site. See Attached ED03 – Q15. P33-Construction vehicles will utilize existing maintenance access. Temporary improvements may include removal of veg and wood fence west of entrance (footprint shown in revised GIS data – see Attachment ED03 – Q15) as well as approximately 100 cubic yards of cut/fill. The construction means and methods for this work will be decided by the contractor once one is chosen. A total of approximately 120 CYs of cut/fill be required to perform this temporary access work.