San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas) Responses
A.15-09-013 Proposed Pipeline Safety & Reliability Project (Proposed Project)
California Public Utilities Commission (CPUC) Application Completeness Response – October 30, 2015

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.1-1	General		Please provide the PEA original files (Word, Excel, jpeg/images, etc.).	The original PEA files have been uploaded to the FTP site, along with all exhibits to this response table.
1.1-2	General – Geographic Information System (GIS) Data		Provide GIS data for the entire SDG&E/SoCalGas natural gas transmission system within SDG&E's service area. This can be on a web site that is password protected to maintain security.	SDG&E and SoCalGas—hereinafter referred to as "the Applicants"—are in the process of developing access to the natural gas system GIS data for CPUC staff. Access to the GIS data is anticipated to be provided on December 18, 2015.
1.1-3	General – GIS Data		Provide GIS shapefiles for Lines 1600 and 3010 to allow for CPUC/consultant preparation of figures, generating calculations, and comparing alternatives.	GIS shapefiles were sent to the CPUC via Federal Express on October 28, 2015.
1.1-4	Agency Involvement: Project Description / Marine Corps Air Station (MCAS) Miramar	p. 1-4, 3-68, 3-70, 3-72 (Table 3-9)	Provide the status of the reimbursement agreement with MCAS Miramar.	The Applicants submitted a draft reimbursement agreement to MCAS Miramar on October 25, 2015. The Applicants understand that MCAS Miramar is in the process of reviewing the reimbursement agreement.
1.1-5	Agency Involvement: Project Description / MCAS Miramar	p. 1-4, 3-68, 3-70, 3-72 (Table 3-9)	Provide an update on MCAS Miramar review of the Draft Tier 1 application filed in April 2015.	A Draft Committee for Land and Airspace Management Policy Tier 1 Application package was submitted to MCAS Miramar on April 30, 2015, as documented in the correspondence included as Exhibit A: Response to 1.1-5. Minor edits to the Draft Tier 1 Application have since been made for consistency with the PEA that was filed on September 30, 2015. The Final Tier 1 Application was submitted to MCAS Miramar, with copies sent to the CPUC, on November 24, 2015.
1.1-6	Agency Involvement: Project Description / MCAS Miramar	p. 1-4, 3-68, 3-70, 3-72 (Table 3-9)	Provide SDG&E/SoCalGas' anticipated timeline for MCAS Miramar management approval to act as Lead Agency under NEPA. CPUC discussions with MCAS Miramar's Antoinette Perez indicate that acceptance of the Final Tier 1 Application is anticipated to occur before the end of the year. The next step would be to seek management approval of the MOU/MOA with the CPUC for environmental document preparation. Their approval process will include MCAS Miramar management review and approval of the Tier 1 Application and MOU. It appears that this is likely to occur early 2016.	The Applicants are not in a position to speculate as to MCAS Miramar's anticipated timeline for action. However, based on coordination to date between the Applicants and MCAS Miramar, the Applicants anticipate MCAS Miramar will in due course execute two agreements to facilitate its role as Lead Agency under the National Environmental Policy Act (NEPA). These two agreements will likely include a proposed reimbursable costs agreement to facilitate the processing of the Tier 1 Application and all requisite reviews, including NEPA compliance; as well as a Memorandum of Understanding/Memorandum of Agreement (MOU/MOA) with the CPUC that sets forth the agencies' respective roles and responsibilities.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.1-7	Agency Involvement: Project Description / California Department of Transportation (Caltrans) / Alternatives	p. 1-4, 3-68, 3-70, 3-72 (Table 3-9), 4.16-3, Ch 5	Provide a discussion of Caltrans discretionary authority over the proposed project. Chapter 5 states in several places that Caltrans may not permit the proposed route or an alternative. Update the discussion on p. 1-4 and p. 4.16-3 with information about how Caltrans will rely on the EIR/EIS in their permitting processes for the proposed project. Describe possible outcomes and delays if Caltrans finds that the certified EIR/EIS is later found to be deficient for their permitting purposes?	Caltrans' general policy is to allow utilities within conventional rights-of-way (ROWs) subject to reasonable conditions to provide for the safety of the traveling public and to permit the improvement of the highway. By contrast, Caltrans' general policy regarding freeways and expressways is to exclude utilities from within access-controlled highway ROWs to the extent practicable. Requests for utility encroachments or utility access within freeway or expressway ROWs are considered an exception to this policy. Caltrans may grant an encroachment permit for longitudinal installations (i.e., an exception to its general policy) when the following conditions are met: • the encroachment will not adversely affect highway safety and traffic operations; • alternative locations are not available or cannot be implemented at a reasonable costs; • the encroachment will not interfere with or impair the use of the highway (present or future); and • the utility can be serviced, maintained, and operated without being accessed from the through-traffic roadways or ramps, except for special circumstances. New utility installations may also be permitted to cross a freeway or expressway with an encroachment permit. To the extent feasible and practicable, they should cross on a line that is generally normal to, but not less than 60 degrees from the freeway longitudinal alignment, and preferably under the freeway. The utility should be located in such a manner that it can be serviced, maintained, and operated from outside the ROW, except for special cases covered above under "Longitudinal Encroachments." Caltrans' authority to control encroachments in this manner is contained within Section 660 et seq. of the Streets and Highways Code. The Applicants have met with Caltrans on several occasions to solicit preliminary input on the proposed route and various potential alternatives. The Applicants are continuing to coordinate with Caltrans and may revise the encroachments that ultimately are proposed in the Caltrans permit application based on additional agency input, engineering, and the environmental review process. Submittal of an encroachment permit application requires a description of the Proposed Project's environmental status, and the Applicants anticipate that Caltrans will rely on the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for issuance of encroachment permits for the Proposed Project (Caltrans, Specific Project Development Procedures, Chapter 17). As for possible outcomes and delays, should Caltrans determine that the certified EIR/EIS is later found to be deficient for permitting purposes, the Applicants anticipate that the CPUC and Caltrans will follow the process set forth in the California Environmental Quality Act (CEQA) for Lead and Responsible Agencies, which will minimize the potential for disagreement among the agencies and delays. CEQA provisions govern in the unlikely event that Caltrans later finds the certified EIR/EIS to be deficient (See Public Resources Code 15096 Section [e]).

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.1-8	Agency Involvement: Project Description / Caltrans / Alternatives	p. 1-4, 3-68, 3-70, 3-72 (Table 3-9), 4.16-3	Discuss the possibility of a reimbursement mechanism similar to the one in process with MCAS Miramar for Caltrans to take an active role early in the EIR/EIS process to help ensure that the document meets their permitting requirements. It is anticipated that Caltrans may be a signatory on the MOU with Miramar. Caltrans met internally about this project on 10/23/15. The CPUC will follow up with Ann Fox, Amy Vargas, and Bruce April at Caltrans as soon as possible to further discuss the MOU.	The Applicants are amenable to entering into a reimbursement mechanism and/or an MOU with Caltrans.
1.1-9	Agency Involvement: Project Description / Caltrans / Alternatives	p. 1-4, 3-68, 3-70, 3-72 (Table 3-9), 4.16-3, Ch 5	a. FHWA delegated NEPA responsibility to Caltrans in 2012 (see http://www.dot.ca.gov/hq/env/nepa). Discuss the possibility of Caltrans acting as the Lead Agency under NEPA. About 20 miles of the proposed 47-mile pipeline would generally follow the alignment of U.S. Route 395 (PEA cites Old Hwy 395) and Interstate 15. U.S. Route 395, Interstate 15, and several other State Routes would be crossed. 41 miles of the pipeline would be installed within roadways and road shoulders. About 3.5 miles of the pipeline would cross land within MCAS Miramar. b. Confirm whether U.S. Route 395 is a federal/state roadway or if it is now under county jurisdiction and not federal/state jurisdiction along the entire alignment of the proposed pipeline.	The Applicants encourage the CPUC to consult directly with Caltrans regarding the possibility and willingness of Caltrans to serve as the Lead Agency under NEPA. The Applicants note that the Federal Highway Administration (FHWA) made a limited delegation of its NEPA responsibility to Caltrans in 2012, but the delegation is limited to certain classes of "highway projects," which are subject to numerous exceptions. For the purposes of the delegation, a "highway project" is defined as "any undertaking to construct (including initial construction, reconstruction, replacement, rehabilitation, restoration, or other improvements) a highway…or any portion thereof…which is eligible for assistance under title 23 of the United States Code" (Title 23, Section 773.103 of the Code of Federal Regulations [CFR]). The Applicants' proposal to construct a natural gas pipeline does not appear to fit the definition of a "highway project"; therefore, the Applicants do not believe the FHWA delegation of NEPA responsibility to Caltrans applies in the instant case. According to data provided by Caltrans, United States (U.S.) Route 395 appears to be under the jurisdiction of the County of San Diego along the entire alignment of the proposed pipeline.
1.1-10	Project Description / Caltrans / Alternatives	p. 1-4, 3-68, 3-70, 3-72 (Table 3-9), 4.16-3	Provide a list of Caltrans attendees involved at the October 2014, November 2014, February 2015, and June 2015 meetings. Provide meeting minutes if available.	The June 2015 meeting referenced in this item is a typographical error; the meeting actually occurred in July 2015. No meeting minutes were prepared for any of the Caltrans meetings that have occurred to date. Based on recollection of the attendees, which is subject to error, the following Caltrans employees were involved in the following meetings: • October 2014: Malcom Dougherty, Timothy Craggs, Karla Sutliff • November 21, 2014: Ann Fox, Amy Vargas, Marcelo Peinado • February 20, 2015: Ann Fox, Amy Vargas, Marcelo Peinado, Tom Bouquin, Everett Townsend, Bruce April, Cory Binns, Bruce Urquhart • July 21, 2015: See sign-in sheet included as Exhibit B: Response to 1.1-10 • October 23, 2015: Ann Fox
1.1-11	Agency Involvement: Project Description / Caltrans	p. 1-4, 3-68, 3-70, 3-72 (Table 3-9), 4.16-3	Provide a copy of the encroachment permit issued by Caltrans on March 26, 2015 for survey activities and all associated permit documentation.	The Caltrans encroachment permit has been provided as Exhibit C: Response to 1.1-11.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.1-12	Agency Involvement: Project Description / Caltrans	p. 1-4, 3-68, 3-70, 3-72 (Table 3-9), 4.16-3	Provide an update on all Caltrans engagement activities with respect to the proposed project.	The Applicants participated in a meeting with Caltrans on October 23, 2015. No formal meeting minutes were prepared; however, based on the SDG&E attendees' recollection, the following points were discussed: • Reimbursement and MOU for Caltrans' design review efforts. • Caltrans' project review process and project team/point-of-contact. • The Local Design Division was recently granted authority from Sacramento to grant exceptions to standard Caltrans requirements when adequately justified by applicants. • A permit would be issued by the Permit Division as an administrative action. • Review of the Proposed Project's Caltrans crossings, including discussion of potential issues and solutions associated with the following crossings: – Location #1: Rainbow Valley Boulevard open-cut beneath Interstate (I-)15 underpass – Location #2 and #3: Highway 76/horizontal directional drill (HDD) area – Location #4: HDD at I-15 near Milepost (MP) 12 – Location #5: Highway 78 on-ramp for the Line 1600 Cross-Tie – Location #6: Centre City Parkway open-cut beneath I-15 No other meetings have occurred since the PEA was filed.
1.1-13	Agency Involvement: Project Description, Alternatives / United States (U.S.) Fish and Wildlife Service (USFWS)	p. 1-4, 1-5, Ch. 4, Ch. 5	Estimate how many miles of critical habitat are crossed by the proposed route, Line 1600, and Line 3010.	As provided in Chapter 5 (pages 5 to 21) of the PEA, the Proposed Project will cross approximately 16 miles of USFWS-designated critical habitat, and Line 3010 will cross approximately 9.1 miles of USFWS-designated critical habitat. Line 1600 will cross approximately 9.6 miles of USFWS-designated critical habitat.
1.1-14	Agency Involvement: Project Description / USFWS	p. 1-4, 1-5	Provide a contact list of the USFWS representative(s) contacted by SDG&E/SoCalGas and Insignia. Provide the contact letters or point to the location in the PEA where these are located. The PEA states on p. 1-5 that no comments from USFWS about the proposed project have been received.	All correspondence to the USFWS regarding the Proposed Project has been directed to Stacey Love, Recovery Permit Coordinator with the Carlsbad Fish and Wildlife Office. The 15-day notification reports for both Quino checkerspot butterfly and coastal California gnatcatcher surveys were sent by Lee Ripma of Rocks Biological Consulting on January 30, 2015. The 45-day report for Quino checkerspot butterfly was sent by Lee Ripma on July 10, 2015. The 45-day report for coastal California gnatcatcher was sent by Lee Ripma on September 10, 2015. USFWS transmittals for the Quino checkerspot butterfly and coastal California gnatcatcher 15-day notifications and survey reports have been provided as Exhibit D: Response to 1.1-14 and 1.4.4-4.
1.1-15	Agency Involvement: Project Description / California Department of Fish and Wildlife (CDFW)	p. 1-4, 1-5	PEA Section 1.4 does not indicate that CDFW has been contacted. Please explain. If CDFW has been contacted, provide a contact list of the CDFW representative(s) contacted by SDG&E/SoCalGas and Insignia regarding the proposed project and contact dates. Update PEA Section 1.4 with and a discussion of these contacts.	The CDFW has not been contacted to discuss the Proposed Project. The Applicants will coordinate and consult with the CDFW as part of the Section 2081 Incidental Take Permit application process and the Section 1600 Lake or Streambed Alteration Notification to address potential impacts to state-listed wildlife species and jurisdictional waterbodies.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.1-16	Agency Involvement: Project Description, Hydrology / U.S. Army Corps of Engineers (USACE), CDFW	p. 1-4, 1-5, Ch. 4, Ch. 5, Table 4.9-2.	Which of the 11 water features identified in Table 4.9-2 are expected to be (1) federal jurisdictional or (2) state jurisdictional? Update Table 4.9-2 with this information.	Table 4.9-2 only includes the U.S. Geological Survey's (USGS's) blue-line streams and was intended as a summary of the larger drainage features observed within the Biological Resources Survey Area (BRSA). By definition, all USGS blue-line streams are jurisdictional under federal and state regulations. Additional detail on the jurisdiction of all drainages within the BRSA is provided in the Wetlands and Waters Assessment, which is included as Attachment C to the Biological Resources Technical Report. All water features were considered to be under the jurisdiction of both the USACE and Regional Water Quality Control Board (RWQCB).
1.1-17	Agency Involvement: Project Description, Biological Resources / USACE, CDFW	p. 1-4, 1-5, Ch. 4, Ch. 5, Table 4.4-10, 4.4-11	Update Tables 4.4-10 and 4.4-11 with the specific number of unique features that would be impacted. Add a column to each table. For example, state X number of ephemeral drainages would be impacted along the proposed alignment.	Tables 4.4-10 and 4.4-11 have been updated with the number of impacted water features, and are provided in Exhibit E: Response to 1.1-17.
1.1-18	Agency Involvement: Project Description / USACE	p. 1-4, 1-5	Provide a contact list of the USACE representative(s) contacted by SDG&E/SoCalGas and Insignia. Provide the contact letters or point to the location in the PEA where these are located.	The Applicants have not contacted the USACE to discuss the Proposed Project. The Applicants will consult with the USACE as part of the Section 404 permitting process to address potential impacts to waters of the U.S.
1.1-19	Agency Involvement: Project Description / State Water Resources Control Board (SWRCB), RWQCB	p. 1-4, 1-5	Provide a contact list of the SWRCB and RWQCB representative(s) contacted by SDG&E/SoCalGas and Insignia. Provide the contact letters or point to the location in the PEA where these are located.	The Applicants have not contacted the SWRCB or RWQCB to discuss the Proposed Project. The Applicants will consult with these agencies during the Section 401 and Section 402 permitting processes.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.1-20	Public Outreach	p. 1-42	Provide a summary of outreach efforts to date including media press releases, notifications, and newspaper ads; stakeholder meetings; emails and other stakeholder communication methods; summary of attendance at the open houses and comments. Discuss the strategies employed for determining the locations of open houses including initial polling efforts.	The Applicants provided a summary of the pre-filing outreach efforts in Section 1.8 of the PEA. Since the submittal of the PEA on September 30, the Applicants have continued outreach efforts by issuing a media press release announcing the application filing, meeting with Caltrans and California High Speed Rail Authority representatives, community planning groups, environmental organizations and school districts. The Applicants have not run additional newspaper ads since the PEA's submittal. Email communication was sent to the following: • approximately 140 interested parties on or near September 11, 2015, informing them of the upcoming open houses; • approximately 1,400 interested parties on or near September 15, 2015, informing them about the Proposed Project; and • approximately 1,500 interested parties on or near September 30, 2015, informing them of the application filing. As of November 13, 2015, the Applicants have received 169 phone calls on the Proposed Project's toll-free information line. The majority of callers were asking for project maps, seeking employment, or requesting web page assistance. As of November 20, 2015, the Applicants have not received any emails via the Proposed Project's email address. The Applicants' strategy for the open houses was to locate the open houses within close proximity of communities along the proposed route. The venues were chosen based on the anticipated audience size, as well as the venue's availability and proximity to the proposed route corridor. Four locations were identified, each with a four-hour window to accommodate various schedules. Polling efforts indicated that residents of Poway and Scripps Ranch may question the Proposed Project more than customers in other communities within the proposed pipeline corridor. Therefore, the Applicants included these communities in outreach efforts, including the open houses. An open house summary is provided as Exhibit F: Response to 1.1-20. Open house comment forms were included as Attachment 1-B to the PEA.
1.1-21	Public Outreach	p. 1-42	Provide a report of the results, methodology, participation numbers, and timing of all polling conducted by SDG&E/SoCalGas for the proposed project.	A summary of the objectives, methodology, and result of the polling conducted by the Applicants is provided as Exhibit G: Response to 1.1-21.
1.1-22	Public Outreach	p. 1-42	Provide a mailing list in Excel that contains all land owners within 300 feet of the proposed pipeline right-of-way, all federal, state, and local agency contacts (both contacts already made and those anticipated), and updates from returned postcards and additions from the SDG&E open houses and other stakeholder outreach efforts. Group the mailing list by color code or some other clear identifier (e.g., a new column) to identify where the address originated.	The public outreach mailing list is included as Exhibit H: Response to 1.1-22. This included a mailing list of property owners within 300 feet of the Proposed Project, as well as federal, state, and local agencies; open house attendees; other stakeholders; and school districts. Due to Applicants' duty to prevent disclosure of customer information, the Applicants have included the names of open house attendees and other potential stakeholders, but has redacted addresses that may have been submitted directly to the Applicants and/or its contractors. Returned postcards were inadvertently discarded.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.2-1	Purpose and Need	Ch. 2 / New Appendix	The CPUC continues to discuss the parameters for a cost-benefit analysis (economic analysis) for the proposed project. It is not clear at this time to what extent all or part of such an analysis may be required as part of the PEA. This is a placeholder for a deficiency item.	The Applicants do not believe that a cost-benefit analysis (economic analysis) for the Proposed Project constitutes a deficiency. The Applicants anticipate, however, that the costs and benefits will be considered pursuant to Public Utilities Code Sections 1001 et seq. within the scope of the regulatory proceeding, as will be established by the Assigned Commissioner's Scoping Memo and Ruling. The Applicants believe that public convenience and necessity for the Proposed Project and a reasonable cost cap are material factual issues that are best dealt with in discovery, testimony, and hearings, and not during the CEQA/NEPA review. Several of the intervenors have raised similar questions or issues in their protests that they deem appropriate for hearings related to the need for the Proposed Project, which further underscores the fact that, to the extent that these issues are contested by parties, evidentiary hearings are needed on these issues, and will be addressed in litigation. The Applicants have proposed that the proceeding address the purpose and need for the Proposed Project prior to completion of CEQA/NEPA review. This sequence would allow parties an opportunity to identify any proposed alternatives that should be addressed in the environmental review document. The Applicants believe that once the purpose and need is determined in the regulatory proceeding and the potential environmental impacts of the Proposed Project are identified by the CEQA Unit, the alternatives analysis required by CEQA and NEPA can be more effectively and efficiently completed. The schedule proposed in the Application calls for a Proposed Decision on Purpose and Need, and Project Design in July 2016, three to four months in advance of the issuance of a Draft EIR in November 2016.
1.2-2	Purpose and Need	Ch. 2	**Past Discussions with the CPUC:** a. Provide a comprehensive discussion that cites specific CPUC proceedings, rulings, gas capacity filings, other documents, and ex parte communications regarding SDG&E/SoCalGas's dialogue with the CPUC since the 1990s (or longer if applicable) regarding SDG&E/SoCalGas's redundancy concerns associated with lines 3010 and 1600 and gas supply to SDG&E service area. Include in the discussion any reference to gas supply to SDG&E's service area from Otay Mesa. b. Provide a copy of all SDG&E Gas Capacity Planning filings filed pursuant to OII .I-11-002 since CPUC Decision 02-11-073.	As noted in Response to Item 1.2-1, the Applicants anticipate that the Proposed Project's purpose and need will be carefully scrutinized in the regulatory proceeding. The analysis to be carried out in the regulatory proceeding may or may not require a comprehensive discussion of historical CPUC proceedings, rulings, gas capacity filings, other documents, and ex parte communications spanning more than a quarter-century, some of which may not be retained by or available to the Applicants. For these reasons, the requested information is premature and unduly burdensome at this time. To the extent such inquiry may be relevant to the EIR/EIS, the following are examples of proceedings that discuss capacity or reliability concerns: • R.04-01-025, Order Instituting Rulemaking to Establish Policies and Rules to Ensure Reliable, Long-Term Supplies of Natural Gas to Californians; • A.04-12-004, Authority to Integrate Gas Transmission Rates, Establish Firm Access Rights, and Provide Off-System Gas Transportation Services; • A.06-10-034, Authorization to Support Reliable Deliveries at Otay Mesa; • A.10-03-028, Firm Access Rights (FAR) Update; • A.11-11-002, 2013 Triennial Cost Allocation Proceeding (TCAP); and • R.11-02-019, Pipeline Safety Enhancement Plan (PSEP). Electronic or hard copies can be provided at a future date. The Gas System Expansion Study: Receipt Point Expansion can be found at the following web addresses: • https://socalgas.com/regulatory/documents/2014-gas-system-expansion-study.pdf • http://www.sdge.com/sites/default/files/documents/1830424206/SoCalGas-SDGE-System-Expansion-Study-2014-Web-version.pdf?nid=2646.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.2-3	Purpose and Need	p.2-1	Add the Marine Corps' purpose and need for the project under NEPA.	The MCAS Miramar purpose is to authorize the construction of a natural gas transmission pipeline and associated facilities needed to continue the safe and reliable delivery of natural gas service to a variety of users within and adjacent to MCAS Miramar and throughout the San Diego region. This action is needed because a portion of the pipeline route crosses MCAS Miramar. Approval by MCAS Miramar is needed because a ROW grant pursuant to Title 10, Section 2668 of the U.S. Code (U.S.C.) is required for the construction and operation of the Proposed Project. To the extent a more elaborate statement of the MCAS Miramar purpose and need is required and MCAS Miramar requires assistance in drafting it, the Applicants will provide any support as appropriate.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.2-4	Purpose and Need	p.2-1	The growth of renewable energy in California is projected to be 50% by 2030 along with reduction of greenhouse gas emissions as required under SB 350. In addition, projections of natural gas use have not increased but have remained flat or decreased (CEC). Please explain how the proposed project would be needed with the increase in use of renewable energy.	Chapter 2 of the PEA describes the purpose and need of the Proposed Project, the objectives of which include implementing safety requirements for an existing high-pressure pipeline that is located in populated areas and was constructed in 1949, improving system reliability and resiliency, and enhancing operational flexibility to manage stress conditions by increasing capacity. As noted in response to Item 1.2-1, the Applicants anticipate that the Proposed Project's purpose and need will be carefully scrutinized in the regulatory proceeding. The Applicants believe that investments in the safety, reliability, and flexibility of the natural gas transmission system are necessary and prudent even with the growth of renewable energy for purposes of electric generation because of the role that natural gas currently plays and will continue to play for decades to come in meeting California's energy needs. The Applicants note that natural gas, as a cost-effective and clean-burning source of energy, can play a key role in advancing the state's energy and environmental policies—not just the policies that promote renewable energy, but also policies aimed at reducing petroleum dependence and improving air quality, for example. The Applicants believe that a safe, reliable, and flexible natural gas system is needed for decades to come because natural gas is a critical component of an equitable and sustainable energy policy. Although this question focuses on the renewable portfolio standards (RPS) for electric generation, the Applicants note that natural gas has many applications beyond electric generation. In fact, millions of residents and businesses throughout California rely on natural gas for space heating, cooking food, heating water, doing laundry, fueling clean fleets (e.g., transit buses, school buses, refuse trucks, and freight trains), and a variety of commercial and industrial applications. According to the California Department of Finance, the population of the state is anticipated to increase by more than 10 million people and reach nearly 50 million people by 2050 (http://www.dof.ca.gov/research/demographic/projections/). The Applicants anticipate that even with increases in energy efficiency, demand response, renewable energy (including renewable natural gas), and energy storage, natural gas will continue to serve as a reliable and cost-effective foundational fuel to meet the diverse energy needs of a growing population. A safe, reliable, and flexible natural gas system is needed to help meet those needs. In terms of electric generation and RPS, natural gas has played a key role in integrating renewable resources, which are often intermittent, onto the grid. Natural gas has enabled SDG&E to be the first California utility to meet the 2020 RPS of 33 percent at the same time that contracts for coal and nuclear have been eliminated from SDG&E's portfolio. Without natural gas, SDG&E would not have reached this significant milestone. As various renewable energy sources increasingly penetrate the grid, the California Independent System Operator Corporation (CAISO) is relying on grid-stabilizing energy sources (e.g., natural gas peaker plants) that can quickly ramp up to meet demand and ramp down when renewable energy is available. The Applicants believe that natural gas electric generation will remain an important resource for ensuring reliability throughout Southern California and the state, even as more and more renewable resources and energy storage solutions are developed and integrated. A safe, reliable, and flexible natural gas system is needed to continue to integrate increasing amounts of renewable resources onto the electric grid. Natural gas has also played a significant role in reducing greenhouse gas (GHG), toxics, and other emissions associated with the transportation sector and reducing dependence on petroleum. By switching to natural gas (compared to diesel), vehicle GHG emissions can be reduced by 20 percent.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
				With new technology, those improvements will be even more dramatic; by 2018, new "near-zero" vehicle engines will reduce nitrogen oxide emissions by 90 percent. A safe, reliable, and flexible natural gas system is needed to continue to use natural gas to displace petroleum-based fuels to reduce air quality impacts and reduce GHG emissions.
1.2-5	Purpose and Need	p.2-1	The Secretary of the Navy established renewable energy goals for the Navy and Marine Corps' shore-based installations to be met by 2020. In addition, the federal government has renewable energy policies contained in the following: • Executive Order (EO) 13514, Federal Leadership in Environmental, Energy, and Economic Performance (2009) • Energy Policy Act of 2005 (EPAct) (42 United States Code [U.S.C.] 15852 • Title 10 U.S.C. 2911(e) In December 2013, President Obama signed a presidential memorandum that requires federal agencies to produce or procure from renewable sources 20 percent of electricity consumed by facilities by FY 2020 and each FY thereafter, an amount that represents a more aggressive goal than under the EPAct or 10 U.S.C. 2911(e). The memorandum also establishes interim goals of 10 percent by 2015, 15 percent by 2016, and 17.5 percent by 2018. In support of the EPAct and 10 U.S.C. 2911(e) renewable energy goals, the Secretary of the Navy created the 1 Gigawatt (GW) Initiative—named for the amount of renewable energy generation capacity to be deployed by 2020 (Navy 2012), either on or near Navy and/or Marine Corps installations. Please explain how the proposed project would be consistent with these renewable energy goals.	Please refer to response to Item 1.2-4. Natural gas is a foundational fuel that has helped to advance renewable energy policies, as well as federal and state directives, to improve air quality and reduce GHG emissions.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.2-6	Purpose and Need / Alternatives	Ch. 2, 5	The CPUC proposes the following revisions to clarify Objectives 1, 2, and 3 as unique project objectives. If SDG&E/SoCalGas objects to any of the following revisions, provide a reasoned explanation. See also Deficiency Items 1.2-7 and 1.2-8 regarding redundancy and operational flexibility/capacity. 1. ***Implement Pipeline Safety Requirements for Existing Line 1600*** ~~and Modernize the System with State-of-the-Art Materials~~: ~~Enable the Applicants to~~ comply with the CPUC approved PSEP ~~by replacing Line 1600 with a new gas transmission pipeline~~ as soon as ~~is~~ practicable by either hydrotesting and repairing Line 1600, replacing Line 1600 without hydrotesting, abandoning Line 1600 in place, or permanently lowering the pressure of Line 1600 for use as a distribution line instead of a transmission line. ~~Construction of the new line will enable the use of Line 1600 for distribution while operating at a lower pressure. This replacement will not only comply with the PSEP, but it will also add a greater margin of safety by replacing Line 1600's transmission function with a new pipeline by using modern, state-of-the-art materials. In addition, replacement would avoid any potential customer impacts associated with pressure testing Line 1600.~~ 2. ***Improve System Reliability*** ~~and Resiliency~~ ***by*** ~~Minimizing~~ ***Reducing Dependence on a Single Pipeline:*** ~~Simultaneously~~ Improve the reliability ~~and resiliency~~ of the integrated SDG&E and SoCalGas natural gas transmission system (Gas System) by replacing Line 1600 ~~with a 36-inch-diameter gas transmission pipeline~~ so that core and noncore customers will continue to receive gas service in San Diego in the event of a planned or unplanned service reduction ~~or outage~~ of the existing 30-inch-diameter Line 3010 or the Moreno Compressor Station. San Diego County ~~is essentially completely reliant~~ relies on the compressor station in the City of Moreno Valley and Line 3010 to~~,~~ ~~which together~~ provide approximately 90 percent of SDG&E's capacity. ~~The Applicants are not aware of any other major metropolitan area that is so dependent on a single pipeline. A system outage on Line 3010 or the Moreno Compressor Station would constrain available capacity in San Diego, which may lead to gas curtailments. This would be alleviated with the new 36-inch-diameter line providing resiliency for both Line 3010 and the Moreno Compressor Station.~~ 3. ***Enhance Operational Flexibility to Manage Stress Conditions by Increasing System Capacity:*** ~~Simultaneously~~ Increase ~~the~~ ~~transmission~~ capacity of the Gas System in San ~~Diego County by approximately 200 million cubic feet per day (MMcfd) as a result of the PSEP compliance replacement line being 36 inches in diameter so that~~ to enable the management of ~~the Applicants can reliably manage the~~ fluctuating peak demand ~~of core and noncore customers, including electric generation and clean transportation. The new line would provide incremental~~	Chapter 2 of the PEA describes the purpose and need of the Proposed Project, including the Applicants' objectives. As stated in response to Item 1.2-1, the Applicants believe that the purpose and need for the Proposed Project will be addressed in the regulatory proceeding, not in the environmental review process. The Applicants have proposed that the proceeding address the purpose and need for the Proposed Project prior to completion of CEQA/NEPA review to allow parties an opportunity to identify any proposed alternatives that should be addressed in the environmental review document. The Applicants believe that once the purpose and need is determined in the regulatory proceeding and the potential environmental impacts of the Proposed Project are identified by the CEQA Unit, the alternatives analysis required by CEQA and NEPA can be more effectively and efficiently completed. The schedule proposed in the Application calls for a Proposed Decision on Purpose and Need, and Project Design in July 2016—three to four months in advance of the issuance of a Draft EIR in November 2016. The Applicants believe that it is most appropriate to address this item at that time.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
			~~Increased pipeline capacity that would give flexibility to operate the SDG&E system by expanding the options available to handle stress conditions on a daily and hourly basis that put system integrity and customer service at risk~~.	
1.2-7	Purpose and Need / Alternatives	Ch. 2, 5	**Redundancy:** If providing system redundancy is an objective of the proposed project, please state this as an objective separate from the reliability objective. Reliability and redundancy as objectives have very different implied costs, and there are alternatives to the proposed project that would likely meet the reliability objective but would not meet a redundancy objective.	Please see the response to Item 1.2-6.
1.2-8	Purpose and Need / Alternatives	Ch. 2, 5	**Operational Flexibility/Capacity:** Discuss the potential for separating the Operational Flexibility objective from the Capacity Increase objective. To what extent and in what ways can the proposed project provide operational flexibility separate from the provision for increased capacity?	Please see the response to Item 1.2-6.
1.2-9	Purpose and Need / Alternatives	Ch. 2, 5	**Cost of Gas to Ratepayers:** To what extent would the project, as proposed, reduce the cost of natural gas to ratepayers in SDG&E's service area? If the project would increase access to inexpensive natural gas, provide a discussion that considers this as an objective to the proposed project.	Please see the response to Item 1.2-6.
1.2-10	Purpose and Need / Alternatives	Ch. 2, 5	**Underlying Project Purpose/Objectives:** To what extent does any one of the three objectives presented in the PEA reflect the underlying purpose of the proposed project? The CPUC understands, for example, that the project would not have been proposed but for the need for Line 1600 to comply with *PSEP*—Pipeline Safety Enhancement Plan (A.11-11-002, D.14-06-007)—as required by the CPUC.	Please see the response to Item 1.2-6.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.2-11	Purpose and Need / Alternatives	Ch. 2, 5 / Response from Neil Navin on 9.29/15 (proposed 200 MMcfd capacity increase)	**System Capacity:** a. With regard to the response on 9/29/15 (see attached image in the notes column), explain whether the capacities shown on the table assume that the North-South pipeline project, including increased compression, is operating. If the table capacities are calculated assuming that no North-South project would exist, including added compression, please provide revised capacity numbers including the North-South project and associated compression. b. With regard to the "hard limit" of the pipeline capacities shown on the table, please explain in more detail why this hard limit exists. c. Please also explain whether increased compression capacity at Rainbow (or elsewhere on the SoCalGas/SDG&E system) would increase the pipeline capacities shown on the table. d. Please explain in greater detail why additional capacity would not be available from Line 1600 even though it is de-rated. Assuming some capacity would be provided, regardless of how small the additional capacity may be, provide an estimate for the additional capacity for (1) de-rated Line 1600; and (2) distribution Line 1026. In prior presentations to the CPUC, for example, SDG&E/SoCalGas indicated that less than 1% of the gas supply to SDG&D's service area comes from Line 1026. What is this amount in MMcfd? e. Your response indicates that each pipeline individually has a larger capacity alone than when operating as part of the system. There is no "lost" capacity on Line 3010 if Line 3602 is installed. Provide the maximum design delivery capacities individually of Lines 1026, 1600, 3010, and the proposed 3602.	Please see the response to Item 1.2-6.
1.2-12	Purpose and Need / Alternatives	Ch. 2, 5	**Recorded and Forecast Peak Gas Demand.** Complete the attached Table 2-1, which was originally sent to SDG&E/SoCalGas for completion and inclusion in the PEA on 8/10/15.	Please see the response to Item 1.2-6.
1.2-13	Purpose and Need / Alternatives	Ch. 2, 5	Provide an explanation of the increase (spike) in natural **gas demand for electric generation on July 2, 2015**. Also provide a thorough discussion of this type of event with estimates of how often it has, and is expected to, occur. Include historical data of actual events and the resultant power loss to various types of customers as well as forecast data used to estimate the probability of reoccurrences. See attached slide presented to CPUC Energy Division management on 8/20/15.	Please see the response to Item 1.2-6.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.2-14	Purpose and Need / Alternatives	Ch. 2, 5	Address the following points based on the latest **Gas Capacity Forecast (October 2015)** filing to the CPUC: a. The filing states that "despite predicted declines in natural gas demand on an annual basis," SDG&E/SoCalGas is not forecasting declines on a peak-day design standard as shown in Table 1. Table 1 identifies Peak Daily Demand forecasts pursuant to the adopted Peak Day design standard. However, Table 1 indicates that daily peak gas demand will decline from the forecast for 2015/16 of 607 MMcfd to 589 MMcfd in 2024/2025. The table does not forecast that any day in the next 10 years will experience total gas demand exceeding 590 MMcfd. Total demand is then shown to increase after 10 years, starting in 2025/26 (591 MMcfd). Explain why the forecast shows an increase that begins 10 years from 2015 and reaches 617 MMcfd in 2035/36. Note that natural gas demand for Electrical Generation (EG) is expected to consistently decrease from 199 MMcfd in 2015/16 to 174 MMcfd in 2035/36. The only increase through the planning period is in Core demand, which jumps from 354 MMcfd to 382 MMcfd in the 10-year period after 2025 that leads to 2035/36. Please explain and include supporting data. The filing states that sudden changes in an operating day are not typically considered in the development of a formal demand forecast but that this consideration is anticipated to become more common. Who anticipates this? When would this become more common? Discuss when and how SDG&E/SoCalGas plans to file requests with the CPUC for such additional considerations in formal forecasts. If a proceeding(s) is already underway, identify the proceeding(s).	Please see the response to Item 1.2-6.
1.3-1	Design	p. 3-10	Explain why 800 psig is the designated Maximum Allowable Operating Pressure? Modern natural gas pipeline design standards allow for much larger pressures to be achieved (i.e., greater than 1000 psig).	The Proposed Project will tie into and operate in common with the rest of the Applicants' natural gas system, which has 800 pounds per square inch gage (psig) as the highest Maximum Allowable Operating Pressure. Pressures higher than this are not necessary or needed in San Diego, and would be difficult to achieve without further system improvements.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.3-2	Design	p. 3-10	Explain the rationale for determining that a 36-inch pipeline (precisely this diameter) is needed.	Sizing a new pipeline requires a review of how the pipeline will interact with the system, forecast demand, system capacity and operational requirements, and recognition that the sizing cannot be changed. A 36-inch-diameter pipeline provides sufficient gas flow to provide resiliency to the system to address outages on Line 3010, as well as at the Moreno Compressor Station. A 36-inch-diameter pipeline also provides additional capacity to the system, which has been potentially capacity constrained and subject to open seasons for the past 12 years. The Applicants use standard pipe sizes that are both consistent with the pipeline industry and support ongoing maintenance and in-line inspection of the system with standard-sized maintenance and inspection tools. The next smaller pipe size would be a 30-inch-diameter pipe. A 30-inch-diameter pipeline addresses outages on Line 3010, but not at the Moreno Compressor Station. Because the incremental costs and environmental impacts between a 30- and 36-inch-diameter pipeline are relatively little and primarily material-related, the Applicants chose the larger diameter because it provides additional benefit to the system. Because of the lifespan of natural gas pipelines, it is prudent to add sufficient resiliency and capacity for the system to operate safely and reliably for years to come. Installing yet another pipeline in the future to parallel this new line is not a reasonable option. For these reasons, a 36-inch-diameter pipeline is appropriate.
1.3-3	Project Description	p. 3-41	Estimate the type and number of generators that will be required for power at contractor yards.	It is anticipated that two of the generators listed in Attachment 3-B: Typical Construction Equipment List in the PEA will be used at the contractor yards where offices will be stationed.
1.3-4	Project Description	p. 3-42	Provide a draft blasting plan that describes: • the types of blasting that may be used during construction of the proposed project • methods to be used to minimize hole-to-hole propagation • types of explosives/initiation system that may be used • anticipated drill and blast pattern • charge weights and delays • methods for controlling flyrock • selection of blasting products and methods • monitoring, reporting, and controlling ground cracking and displacement • explosives storage and transportation procedures • peak particle velocity monitoring and control • fire prevention • methods and protocols to protect human health and safety and • APMs to minimize impacts on sensitive receptors, wildlife, aquatic features, and paleontological resources	A blasting plan has not yet been developed. Blasting plans are typically prepared by or in conjunction with a licensed blasting contractor. Retention of a blasting contractor is not anticipated to occur until approximately six months prior to the start of construction. However, the Applicants will prepare and submit to the CPUC a preliminary blasting plan within six weeks of this submittal. Applicants-Proposed Measure (APM-) NOI-02 requires the development of a blasting plan, which will address conformance to state and local law related to blasting, including noticing of potentially affected residents and other sensitive receptors. As stipulated in the APM, the blasting plan will include a description of the planned blasting methods, an inventory of receptors potentially affected by the planned blasting, a schedule for blasting activities, requirements for noticing, and measures to minimize noise related to blasting. The plan will also address the safety concerns listed in this item.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.3-5	Project Description	p. 3-47	Identify potential disposal facilities for export soil. Estimate the total number of truck trips required to transport export soil to each potential disposal facility. Provide the average one-way mileage from the source that the export soil is generated to the potential disposal facility. Provide an estimate of the duration of the soil export generating activities associated with each potential disposal facility. Provide an estimate of the number of truck trips per day to transport export soil from the locations that the export soil is generated to each potential disposal facility. Provide the total miles required to transport export soil to each potential soil disposal facility.	As stated in Section 4.17 Utilities and Service Systems, exported spoils will be taken to area landfills, including the Sycamore Landfill, Miramar Landfill, and Otay Landfill. Exhibit I: Response to 1.3-5, 1.3-7 to 1.3-9, and 1.4.17-1 provides the estimated volume of trench spoils that will be exported and the estimated number of truck trips required to export the trench spoil, as well as the one-way and total mileage required for exporting activities, the facilities the trench spoils will be exported to, and the duration of trench spoil export activities associated with construction of the Proposed Project.
1.3-6	Project Description	p. 3-55	Describe the process for detecting and avoiding frac-out during HDD operations. Provide additional detail on measures that the frac-out contingency plan will include.	Section 3.6.7 Horizontal Directional Drilling in Chapter 3 – Project Description discusses the potential for an unanticipated release of drilling mud or frac-out. As noted in this section, it is anticipated that a frac-out contingency plan will be prepared prior to construction and in coordination with the USACE and in accordance with Section 404 of the Clean Water Act requirements. In Section 4.9.4 Hydrology and Water Quality, APM-HYD-01 provides for the preparation of a frac-out plan and identifies the measures that the frac-out plan will include. More specifically, this APM states: "Prior to Horizontal Directional Drilling operations at the San Luis Rey River and Lake Hodges crossings, the Applicants will prepare a Frac-out Plan to address procedures for containing an inadvertent release of drilling fluid (frac-out). The plan shall contain specific measures for monitoring frac-outs, containing drilling mud, and notifying agency personnel. The plan shall also discuss spoil stockpile management, hazardous materials storage and spill cleanup, site-specific erosion and sediment control, and housekeeping procedures, as described in the Storm Water Pollution Prevention Plan." Monitoring requirements to detect a frac-out during HDD operations will include notifying the Environmental Inspector if there is a sudden drop in pressure, conducting reconnaissance surveys along the drill path multiple times per day, and training construction workers to identify a frac-out.
1.3-7	Project Description	p. 3-62	Identify potential sources of imported rock-free sand for pipeline padding. Estimate the volume of sand that will be needed for pipeline padding. Estimate the total number of truck trips required to transport the sand from each potential source. Provide the average one way mileage from each potential sand source to the locations that it will be used. Provide an estimate of the duration of sand padding activities for each location of the pipeline that will use sand from each potential source. Provide an estimate of the number of truck trips per day to transport the sand from each potential source to the portion of the pipeline that will use sand from that potential source. Provide the total miles required to transport sand from each potential source to the portions of the pipeline that may use that potential source.	Rock-free sand for pipeline padding is anticipated to be obtained from Robertson's Ready Mix, located at 215 Cypress Lane, El Cajon, California, 92020, or another similar facility. Exhibit I: Response to 1.3-5, 1.3-7 to 1.3-9, and 1.4.17-1 provides the volume of sand to be imported, the estimated number of truck trips required to import the sand, the one-way and total mileage required for import activities, the locations where the sand will be used, and the duration of sand import activities associated with construction of the Proposed Project.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.3-8	Project Description	p.3-62	Identify potential sources of sand/slurry mixture needed for backfill in urban areas. Estimate the total volume of sand/slurry backfill that will be needed for pipeline construction. Estimate the total number of truck trips required to transport the sand/slurry mixture from each potential source. Provide the average one way mileage from each potential sand/slurry mixture source to the locations that it will be used. Provide an estimate of the duration of sand/slurry backfill activities for each location of the pipeline that will use sand/slurry mixture from each potential source. Provide an estimate of the number of truck trips per day to transport the sand/slurry mixture from each potential source to the portion of the pipeline that will use sand/slurry from that potential source. Provide the total miles required to transport sand/slurry from each potential source to the portions of the pipeline that may use that potential source.	The sand/slurry mixture is anticipated to be obtained from Robertson's Ready Mix, located at 1310 Simpson Way, Escondido, CA, 92029, or from Roberston's Ready Mix at 5692 Eastgate Drive, San Diego, CA, 92121, or another similar facility. Exhibit I: Response to 1.3-5, 1.3-7 to 1.3-9, and 1.4.17-1 provides the volume of sand/slurry mixture to be imported, the estimated number of truck trips required to import the sand/slurry mixture, the one-way and total mileage required for import activities, the locations where the sand/slurry mixture will be used, and the duration of sand/slurry mixture import activities associated with construction of the Proposed Project.
1.3-9	Project Description	p.3-65	Identify potential disposal and/or recycling facilities for construction materials and debris (e.g., concrete, asphalt, other construction materials) to be disposed of, other than export soil. Estimate the total number of truck trips required to transport construction materials and debris to each potential recycling and/or disposal facility. Provide the average one-way mileage from the source of the construction materials and debris to the potential disposal and/or recycling facility. Provide an estimate of the duration of construction materials and debris-generating activities associated with each potential disposal and/or recycling facility. Provide an estimate of the number of truck trips per day to transport construction materials and debris from the locations that the materials or debris are generated to each potential disposal and/or recycling facility. Provide the total miles required to transport construction materials and debris to each potential disposal and/or recycling facility.	As stated in Section 4.17 Utilities and Service Systems, broken concrete and asphalt will be exported to area landfills, including the Sycamore Landfill, Miramar Landfill, and Otay Landfill. Exhibit I: Response to 1.3-5, 1.3-7 to 1.3-9, and 1.4.17-1 provides the estimated volume of broken concrete and asphalt that will be exported, the estimated number of truck trips required to export the broken concrete and asphalt, the one-way and total mileage required for exporting activities, the facilities where the broken concrete and asphalt will be exported to, and the duration of broken concrete and asphalt export activities associated with construction of the Proposed Project.
1.3-10	Project Description	p.3-21	Update Table 3-1 with the other I-15 crossing (at approximately MP 3).	At approximately MP 2.3, the Proposed Project will be installed within Rainbow Valley Boulevard, which crosses under an I-15 overpass at this location. Because the Proposed Project will not require drilling under or excavation of I-15, it was not included in Table 3-1: Major Road, Utility, and Resource Crossings. In response to this request, Table 3-1 has been updated to include MP 2.3 with a footnote clarifying the type of crossing. The revised table is provided as Exhibit J: Response to 1.3-10.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.3-11	Project Description		At our meeting on 10/28/15, Estela de Llanos discussed consultation with CALTRANS and the potential for changes in the proposed I-15 crossings and pipeline alignment. Provide her response in writing including further discussion of next steps and timing for coordination with Caltrans.	The Applicants have been meeting with Caltrans about the Proposed Project since October 2014. The proposed I-15 crossings and the need to obtain exceptions to Caltrans policies have been a primary focus of these meetings. Although the Applicants' preference is to comply with Caltrans policies, this may not be feasible in some locations. Prior to issuing a policy exception, Caltrans must first consider and exhaust any alternatives that would be consistent with its policies. The Applicants are continuing to investigate alternatives and to solicit input from Caltrans staff, and anticipate the potential for changes to the Proposed Project as part of the consultation and permitting process with Caltrans. This coordination may continue over many months and may result in modifications to the design or alignment of the Proposed Project up to and including the time that a formal Caltrans approval is received, which will not occur until after the CPUC issues a Final EIR. As a result, the crossing locations and/or configurations are subject to change pending completion of Caltrans' evaluation and further consultation with the Applicants. The Applicants understand that the CPUC as Lead Agency will consult with Caltrans as the Responsible Agency, but will endeavor to advise the CPUC of any changes in the Proposed Project design as they become known.
1.4.1-1	Aesthetics	Maps 1-5	Show and label the locations of the visual character photos on project maps at the scale of maps provided as Attachment 3-A (Detailed Route Map). In addition, show and label on these maps the following: • County Scenic Highways and other eligible or designated scenic roads; • Scenic vistas identified in the PEA and other scenic features identified in local plans or related documents; • Municipal, county, and other administrative boundaries; • Any trails, parks, or other recreation or open space facilities within 0.5 mile of the proposed ROW; • all locations where mature trees and/or large shrubs will be removed for construction; and all project features for construction or operation.	Detailed route maps have been provided in Exhibit K: Response to 1.4.1-1 and include the requested information at the scale of the maps that were included as Attachment 3-A of the PEA. The locations of scenic vistas identified in the PEA are shown as a point in this exhibit. Scenic vistas are discussed generally in the general plan policies of the local jurisdictions and are not mapped; therefore, no specific vistas from general plans are called out in the exhibit.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.1-2	Visual Simulations	Figure 4.1-1	Provide additional visual simulations showing the appearance of the ROW and any other project features 1) immediately following construction and 2) 3-5 years after construction. These additional visual simulations are to be prepared as panoramas to show the context of the views and are to be prepared for the following locations identified below where the grading and vegetation removal would be required. If, for any of these locations, the proposed pipeline would be placed within an existing paved roadway and no existing vegetation removed, an additional visual simulation would not be required for that location. • View from Mission Road (a County-designated Scenic Highway) in the vicinity of Photo Location 5 showing the proposed ROW with grading and vegetation removal. • Views from I-15 (a County-designated Scenic Highway and Eligible State Scenic Highway) in the vicinity of Photo Locations 3, 4, 6, and 13 showing the proposed ROW with grading and vegetation removal in locations where views of the ROW would not be screened by existing vegetation or terrain. • View from the vicinity of the trailhead at Highland Valley Road and Pomerado Road showing the proposed ROW with grading and vegetation removal. • View looking south toward MLV 7 from the vicinity of the trail and parkway showing the proposed MLV and ROW with grading and vegetation removal.	The Applicants provided a visual simulation in Figure 4.1-1: Visual Simulation – Line 1600 Cross-Tie on page 4.1-3 of the PEA and characterization photographs in Attachment 4.1-B: Visual Character Photographs of the PEA. Exercising their professional judgment, the Applicants' visual resource specialists identified the Line 1600 Cross-Tie location to simulate pre- and post-construction conditions. Other aboveground facilities were determined to be too small to result in any significant impact to a public view and, in many cases, would only be visible for a very brief period of time due to vehicle speeds on I-15 or Old Highway 395, where the views are obstructed. Many of the public views in these areas are already impacted by infrastructure and buildings; therefore, the small amount of aboveground permanent infrastructure associated with the Proposed Project will not have a significant incremental negative impact on public views. Other locations along the route, such as where the alignment is in franchise, will have temporary and short-term impacts, and therefore were not simulated. Additionally, work areas on MCAS Miramar were not simulated because they will not be visible to the public. In response to this request, the Applicants have initiated discussions with the CPUC's visual resource specialist to determine if additional simulations should be developed and possible methodologies that could be used to present the data. Based on the initial discussion, it was determined that photographs depicting a wider viewpoint will be prepared at locations that are representative of the Proposed Project and depict Proposed Project changes, such as vegetation removal and/or aboveground facilities. The new photographs, along with kmz files of their locations, will be provided to the CPUC's visual resource specialist for additional input and to determine if any additional visual simulations are appropriate. It is currently estimated that this will occur within the next three weeks. The Applicants will work closely with the CPUC and/or the CPUC's consultant to ensure that the visual simulations are comprehensive enough to adequately analyze significant impacts and are completed in a timeframe that does not delay the release of a Draft EIR/EIS. Once any simulation photograph locations have been agreed upon, preparation of additional simulations is estimated to take 12 to 14 weeks, assuming that no encroachment permits are necessary to obtain simulation-grade photographs.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.1-3	Aesthetics	p. 4.1-8	Under the heading "Potentially Affected Public Views", the PEA states: "Because the Proposed Project is predominantly located underground, only the aboveground facility locations will be visible to the public." In addition to describing and assessing aesthetic impacts for above-ground project elements, describe the appearance and assess the aesthetic impacts of the proposed ROW for all locations where grading and vegetation removal and reclamation would occur and the ROW may be visible to viewers from parks, trails, roadways, residential areas, open space areas, and other areas accessible to the general public.	Page 4.1-8 of the PEA describes the Existing Conditions and therefore does not include a discussion of appearance of the ROW during the different phases of construction. However, in the response to CEQA Question 4.1c – Visual Character Degradation, short-term impacts associated with construction are described. Additional detail is provided in the paragraphs that follow. In addition to impacts related to aboveground facilities that will be constructed as part of the Proposed Project, construction of underground portions of the Proposed Project will result in temporary impacts associated with grading and vegetation removal within the ROW and associated work areas, such as laydown yards and HDD entry and exit sites. Where the ROW is not within or adjacent to a roadway prism, impacts of grading and vegetation removal may be noticeable from public areas, particularly where the Proposed Project will cross previously vegetated areas or where laydown yards or HDD work areas will require grading and vegetation removal. During construction, motorists will see work areas denuded of vegetation where vegetation was previously present, with workers and moving equipment present during work hours. During non-working hours, motorists will see parked equipment; construction materials, including joints of pipe; and erosion and sediment control devices. Traffic control devices, such as barriers and signs, will also be visible during working and non-working hours. Exhibit L: Response to 1.4.1-3 lists the major ROW and construction work areas along the Proposed Project alignment that will be restored. Small work areas within roadway ROWs will also require similar restoration. Immediately after construction, work areas within the ROW will be stabilized in accordance with SDG&E's Water Quality Construction Best Management Practices Manual and the Storm Water Pollution Prevention Plan for the Proposed Project. Straw or other stabilizing materials characterized by a temporary lighter color when viewed from distant roadways (e.g., I-15 and Old Highway 395) will be evident. However, views will generally be experienced by motorists for short durations at high speeds of travel. In the area between MP 3.3 and MP 3.8, where the Proposed Project is cross-country, a few residences are located on the east side of I-15, and farther from the Proposed Project. Their views may be experienced for longer durations, but the ROW will be perceived as slimmer and less distinct due to distance. Areas that are closer to the viewer, such as the HDD construction area adjacent to Mule Hill Trail (between MP 29.3 and MP 29.8), will appear wider and longer, including greater visual contrast, as they are closer to the viewer. In addition, recreational viewers will be traveling at non-motorized speeds and will experience the visual impact for longer periods at each viewing. Finally, at the southern end of the Proposed Project, where the pipeline will be cross-country between MP 43.2 and MP 43.5, views of the ROW from Thurgood Marshall Middle School may be available for longer viewing periods. After construction has been completed, the ROW and temporary construction areas in non-urban areas, such as on MCAS Miramar, will be recontoured to pre-construction conditions to the degree possible and restored according to permit conditions, property owner direction, and a Habitat Restoration Plan (HRP), which is proposed under APM-BIO-03. The HRP will include restoration procedures, success criteria for areas that have been restored, and monitoring to ensure that that the success criteria are being achieved. After construction in a particular area is completed, temporary erosion control materials will be removed, and topsoil that was removed and retained prior to construction will be returned to the ROW. The areas will be seeded with a seed mixture appropriate to the native habitat, and areas that are hydroseeded may appear bright green due to the tackifier used to keep seeds in place. Plant material that was salvaged during clearing will be spread evenly across

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
				the ROW. Visual impacts associated with areas requiring restoration will be most visible immediately following restoration when the visual contrast is greatest between the newly seeded ROW or other work area and the surrounding land exhibiting mature vegetation. If restoration is meeting the HRP success criteria, each growing season will bring the restored area closer in appearance to the surrounding area. Within one year, seedlings will take the appearance of a lighter green mat during the rainy season, but may only be slightly visible during the dry season. At the three- to five-year mark, depending on rainfall and plant survival, small shrubs will begin to dominate, but there may be a spotty character to the restoration areas in some places where revegetation is not as vigorous and plant heights have not reached the typical plant heights of the surrounding areas. Plants maturing will change in color from a lighter green to darker green or brown, depending on the vegetation community type. After five years, green and green-brown shrubs will dominate the planted areas, similar to the surrounding vegetation.
1.4.2	**Agriculture and Forest Resources**		No Deficiencies	
1.4.3-1	Air Resources	p. 4.3-4, Table 4.3-1	The Table for Ambient Air Quality Standards needs to be updated. Federal Annual mean for PM10 should be N/A; Update SO2 and Lead according to designation: 'The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.' 'The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.' (e.g., http://www.arb.ca.gov/research/aaqs/aaqs2.pdf)	A revised version of Table 4.3-1: State and Federal Ambient Air Quality Standards that has been prepared to include the latest standards is provided as Exhibit M: Response to 1.4.3-1. The revisions are shown in underline and strikeout text.
1.4.3-2	Air Resources	p. 4.3-1	Chapter 3 (Project Description) indicates that the Rainbow Metering Station is located at the Riverside-San Diego county line. In this case, both the San Diego County Air Basin (SDAB) and the South Coast Air Basin (SCAB) would be involved. The portion of the project within the SDAB would be subject to the San Diego County Air Pollution Control District (SDAPCD) rules and regulations, and the northern portion of the Rainbow Pressure-Limiting Station will be subject to the South Coast Air Quality Management District (SCAQMD) rules and regulations.	The Proposed Project is located entirely south of the Riverside-San Diego county line; therefore, only the SDAPCD Rules and Regulations apply.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.3-3	Air Resources	Note 2, p. 4.3-14	The analysis does not include air quality impacts associated with purging the pre-lay segment of existing pipe, or with providing a temporary portable natural gas system for the existing distribution pipelines connected to the pre-lay segment. It is stated that these activities are not anticipated to affect the significance findings of the section. The additional impacts above should be accounted for as a conservative estimate, or a more detailed assessment of why the additional impacts are not affecting the results should be given, and supported.	The temporary portable natural gas system will be composed of a 400,000 btu heater, water tank, and heat exchanger. The heater will operate on natural gas and is used to heat the water. The water is then piped to the heat exchanger which will vaporize or de-gasify the liquefied natural gas (LNG). An ambient vaporizer will also be onsite, but will only operate if a backup to the primary system is required. This system will operate for 24 hours per day, 7 days per week, for approximately 2 months. LNG will be delivered to the site by tanker trucks. Approximately 60 truck trips will be required to supply LNG to the temporary natural gas system. As shown in Exhibit N: Response to 1.4.3-3, criteria air pollutant emissions associated with the temporary portable natural gas system will be less than 1 percent of the anticipated construction emissions.
1.4.3-4	Air Resources	p. 4.3-16	Construction emissions of PM10, CO, and NOx would exceed the applicable SDAPCD thresholds even after applying the proposed mitigation measures. Other forms of mitigation beyond those already proposed or available in CalEEMod should be considered.	The Applicants are proposing to include the following additional APMs to further reduce particulate matter emissions during construction. • APM-AIR-06: Rock aprons or rattle plates will be installed, as needed, at the intersection of dirt access roads and paved public roadways to clean the tires of equipment prior to leaving the site. • APM-AIR-07: All public streets will be swept or cleaned with mechanical sweepers if visible soil is carried onto them by construction activities or vehicles. Cleaning will occur at the end of each workday or as soon as possible if the track out extends for a cumulative distance of greater than 50 feet in either direction. • APM-AIR-08: Exposed stockpiles (e.g., spoil, sand, etc.) will be covered and/or watered or stabilized with non-toxic soil binders as needed to control fugitive dust. • APM-AIR-09: Soil or other bulk material will be stabilized prior to handling or at the point of transfer with the application of sufficient water, chemical stabilizers, or by sheltering from the wind. During soil or bulk material movement or transfer, drop heights will be minimized to the extent feasible while maintaining safe operating conditions to reduce fugitive dust. • APM-AIR-10: During high-wind episodes (where wind speeds are deemed to be in excess of 25 miles per hour [mph]), water application will be increased as a contingency measure. If the further application of water is unable to control dust plumes, clearing and earthmoving activities will be halted until the dust plumes can be controlled or wind speeds drop below 25 mph. Mitigation strategies available from the California Emissions Estimator Model (CalEEMod) that were considered are provided in Exhibit O: Response to 1.4.3-4.
1.4.3-5	Fugitive Dust Emissions	p. 4.3-18	Impacts from fugitive dusts need to be quantified, in order to state that they are less than significant. Simple implementation of mitigation measure APM-AIR-01 does not determine the level of impact.	The anticipated particulate matter emissions due to fugitive dust are presented in Attachment 4.3-A: CalEEMod Reports in the PEA and are also summarized in Exhibit P: Response to 1.4.3-5. The SDAPCD does not have a numerical threshold for fugitive dust emissions to compare the modeling results. As a result, compliance with Rule 55 from the SDAPCD and the implementation of multiple APMs designed to reduce fugitive dust on- and off-site have been used to justify a less-than-significant impact determination. Additional measures, as described in the response to Item 1.4.3-4, will also be implemented to reduce the potential impacts from fugitive dust.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.3-6	Construction Equipment and Worker Vehicle Exhaust	p. 4.3-18	Since impacts associated with construction will be potentially significant, other mitigation measures should be explored. Depending on the local District's regulations, a plan may have to be proposed to further mitigate or offset the emissions in exceedance of the thresholds. Also, because of the exceedances, and depending on the effects of the additional mitigation, dispersion modeling may be necessary to establish compliance with the State and Federal Ambient Air Quality Standards (Table 4.3-1).	The response to Item 1.4.3-4 contains additional APMs that will be implemented to reduce emissions during construction. Dispersion modelling is typically used to evaluate the potential localized concentrations resulting from a CAP source. While the Proposed Project's emissions do exceed the applicable SDAPCD thresholds, these emissions will be distributed between four separate construction crews that will be spread out along the approximately 47-mile-long Proposed Project's alignment. As a result, it is unlikely that any one sensitive receptor would be affected by multiple crews simultaneously. When the expected project emissions are distributed evenly to each crew, the per-crew emissions fall below the applicable SDAPCD thresholds. As a result, dispersion modeling is not necessary to evaluate compliance with ambient air quality standards.
1.4.3-7	Toxic Air Contaminants	p. 4.3-18	The impacts on sensitive receptors need to be quantified. The rate of progress of construction activities, the fact that the mobile fleets are expected to be compliant with the ATCMs, and that pollutant emissions in diesel engine exhaust would not exceed applicable federal or state air quality standards do not imply less than significant impacts on sensitive receptors. There are a number of sensitive receptors that will be exposed to pollution concentrations during construction. The pipeline would be located through dense residential communities within the incorporated cities and along smaller isolated residential areas, such as mobile home parks, in the unincorporated areas of San Diego County. In addition a number of schools, parks, ecological preserves, hospitals and other care facilities would be located in the immediate vicinity of the Pipeline. Criteria pollutants and toxic air contaminants produced by ground disturbance and diesel-fueled vehicles and equipment may create an impact on these receptors although the exposure would be transient and temporary during construction. The closest sensitive receptors should be identified and located (As described in Section 4.3.2 Existing Conditions, sensitive receptors have been identified directly adjacent to the Proposed Project alignment). A Health Risk Assessment should be conducted corresponding to the worst case scenarios. The Air Toxics Hot Spots Program Risk Assessment Guidelines of the California Office of Environmental Health Hazard Assessment recommend using the CARB Hotspots Analysis and Reporting Program (HARP2).	The majority of the Proposed Project route is within existing roadways along an urban corridor where sensitive receptors are located, such as dense residential areas, schools, hospitals, and care facilities. Diesel equipment and vehicle emissions associated with the Proposed Project will result in air emissions from local traffic that are beyond what is generally experienced on a daily basis along these roadways ; however, these increases will be of short duration. Because pipelines are constructed in a linear fashion, the increased emissions will move once a section of pipe has been installed or a road or resource crossing has been completed. Typically, Health Risk Assessments are appropriate where construction activities or the introduction of a new emission source expose sensitive resources for prolonged periods of time; for example, six months or longer in one location. However, the Proposed Project will result in increased diesel and vehicle emissions along the route only during construction and for much shorter periods of time. In addition, Health Risk Assessments have historically not been requested by the CPUC on similar linear SDG&E projects. For these reasons, a Health Risk Assessment was not conducted and the Applicants do not believe that one is warranted.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.3-8	Odor and Regulatory Background	Question 4.3e, p. 4.3-20, p. 4.3-2	Please provide the local District and County regulations for odors. Odor impacts need to be assessed according to local regulations, which may include a screening level analysis based on evaluating Project-specific odor impacts according to District's complaint records, and/or application of dispersion modeling. The impacts of releasing 65,800 standard cubic feet of natural gas at the four planned cold tie-ins also need to be assessed. Depending on the meteorological conditions, the odors may quickly dissipate in the atmosphere, but under certain conditions (e.g., stable turbulent boundary layer, low inversion height) the persistence of odors may well create objectionable odors affecting a substantial number of people (Question 4.3 e). Local regulations regarding permissions to release greenhouse gases into the atmosphere should also be checked and presented.	The local District and County regulations were reviewed for regulations for odors. The Applicants found no local regulations regarding permission to release GHGs into the atmosphere; however, two regulations regarding odor were identified and are described in the paragraphs that follow. The San Diego Municipal Code lists Article 2: General Development Regulations Section 142.0710 Air Contaminant Regulations states the following: "Air contaminants including smoke, charred paper, dust, soot, grime, carbon, noxious acids, toxic fumes, gases, odors, and particulate matter, or any emissions that endanger human health, cause damage to vegetation or property, or cause soiling shall not be permitted to emanate beyond the boundaries of the premises upon which the use emitting the contaminants is located." The SDAPCD's Rule 51 states the following: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations in the growing of crops or raising of fowls or animals." As discussed in Section 4.3 Air Quality of the PEA, odor impacts or nuisances are not anticipated to result from the Proposed Project. Even under adverse meteorological conditions, the Applicants anticipate that the odors from the short-term release of natural gas will dissipate quickly and are not anticipated to affect a substantial number of people. The release of natural gas will range from as few as 10 seconds to up to 3.5 minutes, with the exception of the pre-lay segment which will take up to 14 minutes. Further reducing the risk of odor impacts associated with the Proposed Project is the fact that the blowdown locations are relatively removed from significant populations. Three of the four cold tie-in locations are either in sparsely populated areas or in open space (i.e., Rainbow, Line 1600 Cross-Tie on the north side of Lake Hodges, and on MCAS Miramar). The Line 1601 Cross-Tie is in a more urban area, immediately adjacent to State Route 78 and Old Highway 395/Centre City Parkway with a mix of land uses nearby. The blowdown for the pre-lay segment is just north of Scripps Poway Parkway, approximately 25 feet west of Pomerado Road with the nearest business located approximately 200 feet south, on the opposite side of Scripps Poway Parkway. The launcher/receiver blowdowns will occur approximately once every seven years at the Rainbow Pressure-Limiting Station and MCAS Miramar, which are relatively remote locations. Prior to a natural gas release at any of these locations, the Applicants will provide notice to the appropriate law enforcement agencies, local fire departments, and MCAS Miramar flight operations.
1.4.4-1	No survey locations	p. 4.4-51	Please provide a map showing the no survey areas for agricultural land. Please include a justification for not conducting burrowing owl surveys within agricultural areas.	Burrowing owl was not observed during biological surveys for the Proposed Project, but as stated in the PEA, burrowing owl was determined to have a moderate potential to occur within the BRSA. No burrowing owl breeding season surveys were conducted within the BRSA. Given the results of the habitat assessment and the Proposed Project construction schedule, it is appropriate to conduct take avoidance (i.e., pre-construction) surveys as specified in Appendix D of the Staff Report on Burrowing Owl Mitigation (CDFW 2012) prior to construction activities. Agricultural areas will be included within burrowing owl take avoidance surveys because this habitat could potentially support burrowing owls.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.4-2	Survey updates	p. 4.4-10	Please provide updated survey results for the arroyo toad at Sites 2 and Site 7.	The survey window for the arroyo toad is March 15 through July 1. As a result, surveys for arroyo toad are expected to be completed by late June or July 1, 2016. A survey report will be provided to the CPUC following the completion of the surveys.
1.4.4-3	Survey updates	p. 4.4-8	Please provide survey results for the QCB at the Elliot Field Station.	The survey window for the Quino checkerspot butterfly (QCB) is February 15 through the second Saturday in May. As a result, surveys for within the Elliot Field Station are expected to be completed by the second Saturday in May 2016. A survey report will be provided to the CPUC following the completion of the surveys.
1.4.4-4	USFWS	p. 4,4-11	Please provide a summary of communication with the USFWS regarding concurrence of T&E survey results, and pending areas to be surveyed.	USFWS transmittals for the OCB and coastal California gnatcatcher 15-day notifications and survey reports have been provided as Exhibit D: Response to 1.1-14 and 1.4.4-4. No other communication with the USFWS has occurred.
1.4.4-5	MCAS Miramar	p. 4.4-9	Are additional surveys for the least Bell's vireo and the southwestern willow flycatcher proposed? Will the USFWS accept the 2011 survey results?	Through Section 7 of the Endangered Species Act, the Applicants will consult with the USFWS prior to construction to determine if additional surveys for the least Bell's vireo and southwestern willow flycatcher will be required. Least Bell's vireo has been documented on MCAS Miramar near or within the BRSA and is therefore presumed to be present.
1.4.4-6	GIS Data	p. 4.4-6	Please provide GIS data for the vegetation communities mapped during surveys.	The GIS data layer for vegetation communities has been provided as Exhibit Q: Response to 1.4.4-6.
1.4.4-7	Wetlands and Waterbodies	p. 4.4-32	Provide formal wetland delineation report and data once available. Provide a copy of the Wetland Delineation and supporting documentation (i.e., data sheets). If verified, provide supporting documentation. Additionally, GIS data of the wetland features should be provided.	A formal wetland delineation will be completed in the spring or early summer of 2016. The CPUC will be provided with the report and supporting documentation once complete.
1.4.4-8	Wetlands and Waterbodies	p. 4.4-65	Provide additional detail on conceptual mitigation and restoration of temporary impacts to wetlands and waterbodies.	Section 3.6.9 Wetland and Waterbody Crossing Procedures in Chapter 3 – Project Description of the PEA provides an overview of construction techniques that involve minimizing impacts to wetlands and drainages, as well as restoration methods anticipated for temporary impacts to wetlands and waters. In addition, the HRP (*see* APM-BIO-03) will provide additional detail on restoration of wetland and upland habitats. The Applicants will consult with the USACE as part of the Nationwide 12 Section 404 permitting process and will comply with any additional mitigation requirements required for that permit.
1.4.4-9	Wetlands and Waterbodies	p. 4.4-32	Discuss construction and restoration methods proposed for crossing wetlands.	Section 3.6.9 Wetland and Waterbody Crossing Procedures in Chapter 3 – Project Description of the PEA describes the typical waterbody crossing procedures that will be followed during construction of the Proposed Project.
1.4.4-10	Wetlands and Waterbodies	p. 4.4-32	Describe typical staging area requirements at waterbody and wetland crossings.	For conventional wetland and waterbody crossings, no additional workspace for staging, other than what is depicted in Attachment 3-A: Detailed Route Maps in the PEA, is anticipated at this time. Additional workspaces associated with waterbody crossings that will be completed using the horizontal boring or HDD methods are discussed in Section 3.6.7 Horizontal Directional Drilling and are depicted in Attachment 3-A: Detailed Route Maps of the PEA.
1.4.4-11	Wetlands and Waterbodies	p. 4.4-32	Provide a table identifying all wetlands, by milepost and length, crossed by the project and the total acreage and acreage of each wetland type that would be affected by construction.	This information is provided in the Wetlands and Waters Assessment, which is included as Attachment C to the Biological Resources Technical Report.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.5-1	Historic Properties	Section 4.5, Attachment 4.5-A	Recommendation for eligibility to NRHP and CRHR were not made for all of the resources. Guidance by CA SHPO indicates that this is a first step in determining the potential for impacts under CEQA. For instance, if an archaeological site, building, structure, etc. is not considered an historical resource, effects would not be considered significant. This methodology (i.e., lack of identification of historic properties) also would not satisfy the requirements of Section 106. • APE does not consider indirect effects (visual, auditory, etc.). • Potential for listing not evaluated. • The APE was not explained with sufficient detail to understand where evaluation was conducted and why the APE was depicted as being smaller than the surveyed areas. Maps in Appendix A are not entirely clear, although APE is depicted on it. • Field methodology is not specific and pertains only to archaeological remains; nothing done to evaluate potential historic structures. • Methodology is missing information on collection/evaluation of artifacts, how sites were delineated, how recording accomplished, etc. • A map with mileposts showing the boundaries of all survey areas was not provided. • Results of the literature search were provided as tables within Appendix B. Table B2; while indicating the location of all sites, the table does not indicate eligibility or importance of the site locations. • Table B3 indicates if outside the survey corridor, but does not indicate location in reference to the APE. To address these deficiencies: • Explain why a survey for architectural/built/aboveground resources was not conducted concurrent with the archaeological survey. • Provide information for the NRHP-eligibility of each resource (e.g., NRHP-listed, including NR number and date listed; previously determined NRHP-eligible; previously evaluated and determined not NRHP-eligible; further evaluation or information necessary to determine NRHP-eligibility; unknown; etc.). Without this information for NRHP-eligibility, it will not be possible to suggest management options for these resources under Section 106, NEPA or CEQA. Similarly information for CRHR-eligibility and any local or civic designations (i.e., City of Escondido or City of San Diego) should also be provided.	No formal National Register of Historic Places (NRHP) or California Register of Historic Resources (CRHR) evaluations or artifact collections of any kind have been conducted for the Proposed Project to date. Because the lead CEQA agency had not selected a preferred alignment at the time of the initial record search review and inventory, the archaeological study did not initially include formal impact evaluations (which include excavation) to identify direct impacts to resources. Once a preferred alignment for the Proposed Project is chosen by the lead CEQA agency, formal NRHP, CRHR, and/or Local Listing eligibility will need to be conducted. The eligibility status for all resources within the currently proposed direct-impact Area of Potential Effects (APE) of the Proposed Project were provided in Table 2 of Attachment 4.5-A: Cultural Resources Technical Report (Confidential), as were all historic addresses currently submitted to the California Historical Resources Information System (CHRIS) and within one mile of the currently Proposed Project. To fulfill this request, the eligibility status of all other resources within one mile of the Proposed Project has been provided in Exhibit R: Response to 1.4.5-1 and 1.4.5-4 (CONFIDENTIAL). All information from the National Park Service Database was provided through the CHRIS record search request and was reviewed for the Proposed Project. The Luiseño Ancestral Origin Landscape Traditional Cultural Property (TCP) has been added to the Appendix B tables so that is reviewed as both a TCP and historic property for the Proposed Project. As no agency involvement (to provide formal government-to-government consultation regarding the cultural resources direct/indirect APE) occurred prior to the record search and direct impact surveys, a survey for specific indirect effects was not conducted. ASM Affiliates, Inc. (ASM) has since conducted an informal consultation with the State Historic Preservation Officer (SHPO) on November 16, 2015, regarding the need for and limits of the indirect APE for visual, auditory, and atmospheric impacts to any cultural resources (including architectural, built environment, and aboveground resources). The SHPO's guidance was that a one-parcel survey buffer around any proposed aboveground features (creating a discontiguous indirect effect APE for visual) would suffice to determine any visual impacts to those resources. Additionally, the SHPO recommended that the Noise/Vibration studies conducted for the Proposed Project be reviewed and that any known resources that fall within those APEs be considered for evaluation of effect. The Noise/Vibration study identified a 70-foot-radius APE, so any resources potentially susceptible to these effects were identified in the previous survey coverage by ASM and will need to be evaluated if this proposed alignment is chosen as the preferred route. Additionally, any areas identified for bedrock blasting will need to be reviewed during or after the pre-blast walk and blasting plan are prepared. If possible, quiet dynamite will be recommended in areas where historic resources may be present. This will be accomplished by review and comparison of the blasting areas to cultural resources identified in the record search and historic aerials. If quiet dynamite cannot be used in specific locations, a cultural resources survey will be required in the area for potential indirect vibration and noise impacts, and formal CRHR/NRHP evaluation will need to be conducted. A supplemental survey to address those parcels and potential visual effects was conducted on November 18 and 19, 2015. The results of the supplemental survey will be included as Attachment 2 in Exhibit R: Response to 1.4.5-1 and 1.4.5-4 (CONFIDENTIAL). Attachment 2 of Exhibit R: Response to 1.4.5-1 and 1.4.5-4 will also include updated cultural resources maps with the indirect visual effects APE/survey coverage, as well as a revised version of Appendix A of Attachment 4.5-A: Cultural Resources Technical Report to provide clarity on the relationship between the APE and

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
			• Confirm that NPS's databases for NRHP-listed historic properties and National Historic Landmarks have been consulted for the project. Include the relevant information for NRHP-listed historic properties and/or properties designated National Historic Landmarks, such as NR numbers and dates listed and/or designated NHLs for management and treatment purposes under Section 106, NEPA and CEQA. For example, the second paragraph of Section 2.5.4 of the CR report suggested that the Luiseno Ancestral Origin Landscape TCP is an NRHP-listed property. A search of National Park Service's (NPS) database confirmed that it was listed in the NRHP on October 30, 2014 (NR # 14000851). Therefore, while this is a Native American resource, it is also a historic property that will need to be addressed for management and treatment purposes under Section 106, NEPA and CEQA. • Provide revised maps that indicate the APE, the survey area, MPs, areas of prior disturbance, etc. • Recognizing that the Applicants are not a federal agency, provide documentation (correspondence, meeting minutes, etc.) that the APE was defined in consultation with the CA SHPO, such that the definition of the APE would be consistent with 36 CFR 800.4(a)(1).	survey coverage, as well as milepost references and previously disturbed areas. Attachment 2 will be provided on or before December 11, 2015. ASM also reached out to David Boyer with the Department of Defense (DOD) (Federal Lead) on November 19, 2015, to determine if the direct and indirect APEs recommended by the SHPO are acceptable. Mr. Boyer confirmed the general approach and recommended APEs.
1.4.5-2	APE	Section 4.5	The APE was not correctly defined. As stated on page 29 of the Draft CR report, "The Proposed Project's APE was delineated to ensure the identification of significant cultural resources and historic properties that may be directly or indirectly affected by the Proposed Project and that are listed in or eligible for inclusion in the NRHP, the CRHR, or any local ordinances." However, as stated later on page 29 of the Draft CR report, the APE is defined as "areas that could be affected by the maximum extent of the Proposed Project-related ground disturbance, including all construction, all staging areas, and any temporary construction easements." This appears to suggest that the APE has been defined as the areas within which physical impacts and effects as a result of construction are expected, but does not appear to address areas outside the construction footprint, within which visual or auditory impacts and effects as a result of construction or operation may occur; and does not appear to address areas within which indirect and cumulative impacts and effects may occur.[1, 2]	The survey APE for the initial study only focused on identifying resources that may have direct physical impacts; however, the larger one-mile record search area was requested to identify any previously recorded historic properties that may be indirectly affected as part of the Proposed Project. Attachment 2 in Exhibit R: Response to 1.4.5-1 and 1.4.5-4 (CONFIDENTIAL), which will be provided by December 11, 2015, covers the indirect APE, as recently recommended by the SHPO and DOD.

[1] 36 CFR 800.2(c) is the regulatory citation that identifies the parties that have consultative roles in the Section 106 process. This is not relevant to the APE. 36 CFR 800.16(d) is the correct regulatory citation that defines "area of potential effects:" "*Area of potential effects* means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

[2] While "cumulative effects" are not well defined in the regulations for implementing Section 106, 800.5(a)(1) states that "Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative." Additionally, the ACHP's 2013 handbook for integrating NEPA and NHPA compliance requirements indicates that the CEQ regulation definition of cumulative impact is "analogous and instructive."

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.5-3	Surveys	Section 4.5 and Attachment 4.5-A	This comment recognizes that the Proposed Project consists of a buried pipeline primarily located within or immediately adjacent to existing linear corridors, and that aboveground appurtenant facilities are relatively small and generally in locations with similar existing facilities. However, for the purposes of management and treatment of cultural resources and historic properties under Section 106, NEPA and CEQA there is no explanation for how the appropriate level of effort to identify and evaluate cultural resources and historic properties was determined and why additional investigations, such as an architectural survey or a traditional cultural property survey, were not conducted or needed. To address this deficiency: • Provide documentation (correspondence, meeting minutes, etc.) for consultation with the CA SHPO and federally recognized Indian tribes, regarding the type of surveys needed for the Proposed Project, and as appropriate under CEQA, local governments that maintain their own registers of locally significant historic resources. • Clarify whether the CA SHPO was consulted regarding the need for a survey or inventory to identify architectural/built/aboveground resources that may be affected by the Proposed Project, such that identification and evaluation efforts would be consistent with 36 CFR 800.4(b) and (c). • Clarify whether federally recognized Indian tribes, including but not limited to the Pechanga Band of the Luiseño Indians, were consulted regarding the need for a survey or inventory to identify additional TCPs that may be affected by the Proposed Project, such that identification and evaluation efforts would be consistent with 36 CFR 800.4(b) and (c) Whether such consultation did/did not occur, explain why surveys to identify historic architectural/built/aboveground resources and TCPs that may be visually or auditorily affected by construction or operation of the Proposed Project were not conducted.	Please see the responses to Items 1.4.5-2 and 1.4.5-2 regarding informal outreach to the SHPO and DOD. In summary, as a preferred alignment for the Proposed Project had not been chosen by the lead CEQA agency, and no agency involvement occurred during the PEA phase of the Proposed Project to formally concur on a direct/indirect APE with the SHPO and local government entities. The need for additional survey studies to identify TCPs will need to be identified through formal government-to-government consultation. Documentation regarding potential indirect effects to any tribal resources or TCPs gained through informal discussions with federally recognized tribes was provided. As these discussions occurred prior to agency involvement, formal government-to-government consultations with these entities has not occurred.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.5-4	Correspondence	Attachment 4.5-A	Letters and documentation of Native American consultation were provided as Appendix C. Please provide the following: • Do not see "areas of concern" from Pechanga on Pages 1-7 (see page 45 of Report/Attachment of 4.5) or any meeting notes. • Emails noted in report, but letters are provided – are some forms missing? (e.g., Pala Band of Missouri Indian, Viejas Band of Kumeyaay, and Pauma Band of Luiseno). No documentation of phone calls with Pechanga Band of Luiseno Indians.	An updated list of responses showing the areas of concern and emails received from tribal groups is provided in Attachment 3 of Exhibit R: Response to 1.4.5-1 and 1.4.5-4. A call list and meeting notes with the Pechanga Band of Luiseño Indians is also provided.
1.4.6-1	Geologic Setting	p. 4.6-6	Add mileposts to Table 4.6-1 to 4.6-4 to relate to locations of particular geologic formations and soil types, respectively	MPs have been added to Table 4.6 -1: Geological Formations within the Proposed Project Area and Table 4.6-4: Soils in the Proposed Project Area of the PEA, and updated versions are provided in Exhibit S: Response to 1.4.6-1. In addition, a map showing the geological formations with the Proposed Project facilities and MPs is also provided.
1.4.6-2	Impacts	p. 4.6-8	Discussion about induced seismicity (or lack thereof)	Induced seismicity refers to minor earthquakes and tremors that are caused by human activity that alters the stresses and strains on the Earth's crust. Demonstrating that an earthquake has been triggered by human activity is difficult; it requires showing that the stress change caused by humans is sufficiently large, in the right direction, and at the right time to have caused the earthquake. Typically induced seismicity does not occur in areas free of an existing geologic fault system. Induced earthquakes are triggered when the natural stress is already close to failure, the point at which an existing fault becomes active and causes an earthquake. A very small fraction of certain energy technologies—including shale gas recovery, carbon capture and storage, geothermal energy production, and conventional oil and gas development—have been linked to induced seismicity at levels noticeable to the public. Typical pipeline construction activities, including HDD, are much different than those energy technologies linked to induced seismicity. By design, HDDs are not intended to inject fluid or fracture the surrounding geologic formations along the drill path. Fluid pressures are tightly monitored during HDD drilling activities to avoid formation fracturing.
1.4.7-1	Greenhouse Gas Emissions	p. 4.7-8	Page 3-12 of the PEA states "the existing distribution pipelines will be cut and capped, and the pre-lay segment will be purged of natural gas resulting in the release of approximately 1.02 million cubic feet of natural gas to the atmosphere." Table 4.7-3 includes a footnote indicating that estimated GHG construction emissions do not include purging the pre-lay segment. Provide estimated GHG emissions associated with the release of 1.02 MMcf of natural gas associated with purging the pre-lay segment.	Purging the pre-lay segment of pipe would result in the release of approximately 1.02 million standard cubic feet of natural gas. This release would result in approximately 386.7 metric tons of carbon dioxide (CO_2) equivalent (CO_2e). As described in the response to Item 1.4.7-2, the methodology, assumptions, and calculations used to evaluate this release are included in Exhibit T: Response to 1.4.7-1 and 1.4.7-2.
1.4.7-2	Greenhouse Gas Emissions	p. 4.7-8, 4.7-9 Attachment 4.3-A	Tables 4.7-3 and 4.7-4 include GHG emissions estimates for Cold Tie-In and Blowdown operations, respectively. The calculation methods and assumptions for these emissions are not included in Attachment 4.3-A. Provide the methodology, assumptions, and calculations made to estimate GHG emissions from Cold Tie-In construction and blowdown operations.	The methodology, assumptions, and calculations for the cold tie-in and blowdown GHG emissions are presented in Exhibit T: Response to 1.4.7-1 and 1.4.7-2. Exhibit T: Response to 1.4.7-1 and 1.4.7-2 also includes updated versions of Table 4.7-3: Estimated Greenhouse Gas Construction Emissions and Table 4.7 4: Estimated Greenhouse Gas Operation and Maintenance Plus Construction Emissions. The revisions are shown in underline and strikeout text.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.7-3	Greenhouse Gas Emissions	p. 4.7-6, 4.7-9	Provide source for the following statement included in page 4.7-6 of the PEA: "SDG&E's overall methane emissions rate, the key component of natural gas, was approximately 0.04 percent of the total delivered through the system in 2013." Clarify if these operational emissions are included in Table 4.7-4. Justify assumptions made for operational GHG emissions.	SDG&E estimated the methane-leak rate based on the mileage data and metering/regulatory station count data that was previously reported to the California Air Resources Board (CARB) for the 2013 reporting year. The operational emissions that were considered for GHG only included blowdowns.
1.4.7-4	Greenhouse Gas Emissions	p. 4.7-3, 4.7-9	On October 22, 2015, the EPA released a revision to the Greenhouse Gas Reporting Rule, which includes the addition of calculation methods and reporting requirements for greenhouse gas (GHG) emissions blowdowns of natural gas transmission pipelines between compressor stations. a. Clarify whether the existing SDG&E's gas transmission system is subject to the Greenhouse Gas Reporting Rule. If applicable, provide recent operational GHG emissions reported to EPA's Greenhouse Gas Reporting Program. b. Clarify if blowdown emissions estimates reported in Table 4.7-4 are consistent with the recent revisions of the EPA's Greenhouse Gas Reporting Rule.	The Environmental Protection Agency's (EPA's) GHG Reporting Program applies to SDG&E's gas transmission system under Title 40, Part 98, Subpart W of the CFR. Exhibit U: Response to 1.4.7-4 provides the reports on SDG&E's gas transmission system that were submitted to the EPA since 2010. Starting reporting year 2015, the rule will require reporting emissions/blowdowns from transmissions pipelines as well. However, as indicated in the rule, transmission pipeline emissions will be exempt from reporting if the CO_2e emissions are below the 25,000 metric ton threshold. Based on a review of recent blowdown data from SDG&E's transmission system and the conservative estimates for the Proposed Project presented in the PEA, the emissions will be well below that level and would be exempt from the transmission reporting requirement. Therefore, blowdown emissions estimates reported in Table 4.7-4 are consistent with the recent revisions of the EPA's GHG Reporting Rule.
1.4.7-5	Greenhouse Gas Emissions	p. 4.7-6, 4.7-9	The proposed project would provide natural gas supply, consistent with SANDAG's Regional Energy Strategy. Discuss the estimated benefit of the proposed Project in terms of avoided CO2 emissions from other energy sources.	According to the San Diego Association of Governments' (SANDAG's) Regional Energy Strategy, the San Diego region can "improve air quality, promote public health … reduce GHG emissions, and benefit the economy substantially by improving the transition to alternative fuel vehicles in this region," including compressed natural gas, LNG, and hybrid technologies. (SANDAG, Regional Energy Strategy 2014, p.93-96) SANDAG's Regional Energy Strategy does not directly quantify the benefits associated with avoided CO_2 emissions from increased natural gas use. The Proposed Project will enhance safety, reliability, and flexibility of the natural gas system, which will enable an unspecified reduction in CO_2 emissions through a reduction in petroleum use and transition to greater natural gas use.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.7-6	Greenhouse Gas Emissions	Attachment 4.3-A Attachment 4.16-B	Pages 531 to 634 of Attachment 4.3-A provide modeling results associated with APM-PUS-01, which assumes emissions from three activities: HDD, Hydrotest, and Pipe Installation. Attachment 4.16-B indicates that four construction activities would require reclaimed water: Pipeline Installation, Laydown Yards, HDD, and Hydrostatic Testing. Total number of truck trips per activity in Attachment 4.16-B: Pipeline Installation: 646 trips Laydown Yards: 396 trips HDD: 407 trips Hydrostatic testing: 939 trips Total number of hauling truck trips per activity in Attachment 4.3-A: <u>Year 2018</u>: Pipeline Installation: 997 trips HDD: 407 trips Hydrotest: 878 trips <u>Year 2019</u>: Pipe Installation: 46 trips Hydrotest: 62 trips Clarify the apparent discrepancies in the number of activities and number of truck trips associated with pipeline installation and hydrostatic testing.	To simplify modeling within CalEEMod, multiple construction activities that shared the same start and end dates were combined into a single phase. The activities associated with laydown yard use were combined with pipeline installation. As a result the 646 trips from pipeline installation were added to the 396 trips for laydown yard use. In order to model the project in CalEEMod and ensure the appropriate distribution of hauling trucks, separate input files for 2018 and 2019 were developed. The hauling trucks that were associated with phases that occur in 2018 and 2019 were split based on the number of working days occurring within each year. Because fractional truck trips are not allowed, trips were rounded up to the next integer. This rounding resulted in one extra truck trip in the pipe installation and hydrostatic testing phases of the CalEEMod model when compared to Attachment 4.16-B.
1.4.8-1	Hazards and Hazardous Materials	4.8-30 4.8a	PEA indicates temporary storage sites will be utilized for hazardous materials. Please provide a list of the substances, quantities of each, and largest container size that will be present and the locations of those storage sites. This information is needed to assess the potential impacts of transportation, use, and disposal as well as to evaluate reasonably foreseeable accident and upset conditions.	Table 4.8-3 in the PEA lists the typical hazardous materials that are anticipated to be used during construction; however, it is not possible to predict the quantities at this time. As stated on page 4.8-32 of the PEA, no storage or use of large quantities of any hazardous materials will be required within the Proposed Project ROW. Volumes and container size will be provided by the construction contractor at the time of construction. Prior to construction, the Applicants will prepare and provide the CPUC with a Preliminary Draft Hazardous Materials Business Plan, as described in Section 4.8 Hazards and Hazardous Materials of the PEA, which will include an initial hazardous materials inventory.
1.4.8-2		4.8-31 Table 4.8-3	Please provide the quantities of hazardous materials that will be used in the project area during construction and the maximum container size that will be used to store each substance in the project area. This information is needed to evaluate reasonably foreseeable accident and upset conditions.	Please see the response to Item 1.4.8-1.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.8-3		4.8-35, 4.8c	Please provide the quantity of natural gas and frequency of emission events that will occur through blow-down activities related to pipeline start-up and routine operations and maintenance. This information is needed to evaluate anticipated emissions near schools.	The quantity and frequency of natural gas emission events is presented in Table 4.7-4: Estimated Greenhouse Gas Operation and Maintenance Plus Construction Emissions in Section 4.7 Greenhouse Gas Emissions of the PEA.
1.4.9-1	Surface Waters	p. 4.12-23	For each surface water body crossed by the project, list its water quality classification, if applicable. Identify any waterbodies with special status such as designated surface water protection areas.	This information is provided for all applicable drainage crossings in Table 4.9-4 and 4.9-5 of Section 4.9 Hydrology and Water Quality. No other designated surface water protection areas, such as the State Water Quality Protection Areas, occur within the BRSA.
1.4.10	**Land Use and Planning**		No Deficiencies	
1.4.11	**Mineral Resources**		No Deficiencies	
1.4.12-1	Noise Mitigation	p. 4.12-23	PEA states "Applicant will incorporate noise attenuation measures into the final design to the extent feasible to reduce operational noise levels from pressure-limiting equipment and to achieve one-hour average sound levels at or below the existing limits provided in the current applicable noise ordinances for the locations of these facilities" Specific information is need on what noise attenuation methods will be employed and what the resulting noise levels will be at the nearest NSAs to the Pressure-limiting Stations.	Noise attenuation methods that can be employed include placing regulating valves in vaults or burying them lower than the proposed 42-inch cover, providing two-stage regulation, installing sound walls in addition to the perimeter wall, and/or using valve types and appurtenances that will minimize audible noise during operation. The resulting noise levels will be determined during the design of the appurtenant facilities. Once the actual noise levels are determined, further design will include the previously noted noise attenuation methods until noise levels are reduced to acceptable levels. The final design will include the necessary noise attenuation.
1.4.12-2	Construction Equipment	p. 4.12-23	A more specific construction equipment list is needed for pipeline construction and construction of the pressure-limiting facility.	Maximum noise levels associated with the construction equipment anticipated to be used during construction of the Proposed Project are provided in Exhibit V: Response to 1.4.12-2**.**
1.4.13	**Population and Housing**		No Deficiencies	
1.4.14	**Public Services**		No Deficiencies	
1.4.15	**Recreation**		No Deficiencies	

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.16-1	Traffic and Transportation	p. 4.16-21	Impact discussion does not adequately address impacts from construction traffic. Please provide a traffic analysis that determines level of service (LOS) for roadway segments and intersections that are likely to be impacted by construction workers and construction vehicles traveling to and from laydown sites. This analysis should compare changes in LOS to significance thresholds from County of San Diego Guidelines for Determining Significance and Report and Content Requirements; City of San Diego Traffic Impact Manual; and City of Escondido Traffic Impact Analysis Guideline. (i.e., measurable increases in vehicle delay, reductions in road speed, changes in volumes/capacity). Please provide methodology for how traffic impacts were analyzed. For example, how was "Potential Temporary LOS Change…" in Table 4.16-5 determined?	Potential changes in levels of service (LOS) were determined by obtaining the most recent Average Traffic Volume data from SANDAG for roadway segments where the Proposed Project will be constructed, as well as roadways that will be used to access Proposed Project work and laydown areas from area freeways. Additionally, roadway classification data for each applicable roadway were obtained from each jurisdiction's general plan. LOS was then determined by comparing the Traffic Volume data and roadway classifications to the applicable LOS thresholds in the City of San Diego Traffic Impact Study Manual Table 2 Roadway Classifications, Levels of Service and Average Daily Traffic (ADT) and the City of Escondido Traffic Impact Analysis Guideline Table. Page 4.16-26 of Section 4.16 Transportation and Traffic states that a majority of vehicle trips from local freeways to the Proposed Project will be via the 17 arterials, major roads, and collectors listed in Table 4.16-5 of Section 4.16 Transportation and Traffic of the PEA. Analysis of potential traffic impacts is provided in this table, including potential temporary changes to LOS and increased traffic volumes on these roadways resulting from vehicle trips to the Proposed Project route and its associated laydown areas. As shown in Table 4.16-5, construction-related traffic traveling to laydown areas may result in an increase of up to 254 additional vehicle trips per day on the roadways listed in the table. These additional vehicle trips may result in a temporary decrease in LOS from LOS B to LOS C on some segments of Citricado Parkway and Felicita Parkway in the City of Escondido. This potential temporary decrease in LOS as a result of construction will not trigger the significance thresholds stated in the City of Escondido Traffic Impact Analysis Guideline. As shown in Table 4.16-5, potential increases in vehicle trips will—as a result of construction—will not decrease LOS on any streets in the City of San Diego or within the County of San Diego; therefore, the Proposed Project will not trigger significance thresholds in the County of San Diego Guidelines for Determining Significance and Report and Content Requirements or the City of San Diego Traffic Impact Manual. Additionally, the County of San Diego Guidelines for Determining Significant and Report and Content Requirements are intended to evaluate potential long-term traffic impacts resulting from development and road improvement projects. The Proposed Project will not result in any additional development or road improvements, and all areas of construction will be returned to their original conditions following construction. As stated in Section 4.16 Traffic and Transportation, all traffic impacts will be temporary, lasting only as long as it takes to construct the pipeline in any one roadway segment.
1.4.16-2	Traffic and Transportation	p. 4.16-23	Table 4.16-5 footnote states that peak ADT was calculated assuming all 600 personnel would drive their own personnel vehicles to and from proposed project for an aggregate total of 600 personal vehicle trips. Please clarify if this is 600 round trips (to and from), or if this should be 1,200 personal vehicle trips (one-way). Please provide a trip generation table showing how increase of 254 ADT was calculated. Please provide types of trucks that would be used and clarify if truck trips use a passenger car equivalent factor to account for slower speed and larger size?	For the purposes of the analysis, all vehicle trip counts are for round trips. One vehicle trip is the combination of one outbound leg to the Proposed Project area at the beginning of the workday, and one return leg from the Proposed Project area at the end of the workday. As stated in the response to Question 4.3b – Air Quality Standard Violations in Section 4.3 Air Quality of the PEA, the on-road trucks used to construct the Proposed Project will include street-legal haul trucks for materials import and export and heavy haul trucks used for materials and equipment delivery. For this calculation, the number of truck trips was taken from Section 4.3 Air Quality and did not use a passenger-car-equivalent factor to account for speed and size. Therefore, existing ADT volumes were not adjusted for truck trips. Exhibit W: Response to 1.4.16-2 includes a table of the truck-trip-generation assumptions.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.16-3	Traffic and Transportation	p. 4.16-22	Please provide additional discussion on parking impacts in regards to road segments that have on street parking and potential segments where on-street parking may be disrupted during construction or access to off-street parking may be temporarily closed.	A majority of the Proposed Project will be constructed within existing roadways that do not have established on-street parking. Two roadways in the City of Escondido—17th Avenue and Encino Drive—have on-street parking, which extends from approximate MP 26.1 to MP 27.0. On-street parking for the rest of the route is either prohibited due to existing bike lanes or is allowed on a case-by-case basis for emergency or temporary parking. Impacts to on-road parking and restricted driveway access to businesses and residents are addressed in APM-TRA-04. APM-TRA-04 requires the notification of businesses and residents for which access could be blocked by construction activities no less than four weeks prior to construction. The APM also requires the Applicants to post signage a minimum of two weeks prior to construction in areas where on-road parking may be restricted.
1.4.16-4	Traffic and Transportation	p. 16	Please clarify how lane capacities were estimated (i.e., using standards from Highway Capacity Manual, or municipal traffic manuals?), and if estimated capacity considers likely need for lower speed through construction zones.	Lane capacities were estimated based on County of San Diego and San Diego Traffic Engineers Council/Institute of Traffic Engineers roadway capacities, as described on Page 16 of the Traffic Study, which is included in the PEA as Attachment 4.16-B: Traffic Analysis. The lane capacity calculations did not account for adjustments to speeds.
1.4.16-5	Traffic and Transportation	p. 15	Please provide clarification on which roads would have lanes closed or would be closed completely and an additional discussion of vehicle capacity of identified detour routes.	This information will not be determined until encroachment permits are issued. The traffic analysis, which was presented in Attachment 4.16-B: Traffic Analysis of the PEA, provides potential conservative scenarios.
1.4.17-1	Drilling Mud	p. 3-53 and 4.17-16	Page 3-53 (Project Description) states that where it cannot be reused, excess drilling mud will be disposed of at an appropriate waste facility. Please provide the volume of drilling mud that would be generated by construction of the proposed project and may require disposal at a waste facility. It is unclear if the number on page 4.17-16 includes drilling mud.	Approximately 1,282,118 gallons of drilling fluid will be utilized during HDD activities associated with the Proposed Project. A majority of the drilling fluid will remain underground to stabilize the walls of the borehole; however, up to approximately 911,800 gallons may require disposal at an appropriate waste facility. Calculations and assumptions used to determine the amount of drilling mud required for the Proposed Project are included as Exhibit I: Response to 1.3-5, 1.3-7 to 1.3-9, and 1.4.17-1. The solid waste estimate for the Proposed Project on page 4.17-16 of the PEA does not include drilling fluid. As stated in the response to Question 4.17f, drilling fluid will be recycled or disposed of at a facility permitted to accept waste with elevated moisture content or provided to an entity that accepts bentonite, and the waste will be disposed of separately from solid waste generated by the Proposed Project. The estimated quantity of soil cuttings generated as a result of HDD activities have been included in the refined estimated quantities of export spoils provided in the response to Item 1.3-5.
1.4.17-2	Solid Waste	p. 4.17-17 – 4.17-18	Please provide the volume of solid waste/year that would be generated during operation and maintenance of the proposed project.	Any solid waste generated during operation and maintenance of the Proposed Project will be the result of an unanticipated repair. As such, it is not possible to calculate the exact volume of solid waste from operation and maintenance activities because it would result from unanticipated and undefined activities. Yearly averages are expected to be negligible and will be disposed of in accordance with all federal, state, and local statutes and regulations related to solid waste.
1.4.18-1	Cumulative Analysis – Federal Projects	Table 4.18-1: Planned and Proposed Projects within one Mile of the Proposed Project	Please add the potential Marine Corps projects occurring at MCAS Miramar that could pose cumulative impacts.	On November 10, 2015, Insignia spoke with Kristen Grunn, Asset Management Director at MCAS Miramar, who confirmed that there is no planned development at MCAS Miramar. A planned housing development was proposed in 2010, but the project has since been canceled. The Applicants anticipate that MCAS Miramar as the NEPA Lead Agency will update this information as necessary during the environmental review process.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.4.18-2	Cumulative Analysis – Sycamore - Peñasquitos	Note 3 on Table 4.18-1	Note 3 on Table 4.18-1 discusses the CPUC environmentally preferred alternative for the Sycamore –Penasquitos Transmission Line. Provide findings of the analysis currently being undertaken to determine if both projects can be constructed or an appropriate alternative to address cumulative impacts.	SDG&E submitted comments to the CPUC on November 16, 2015 regarding the CPUC's environmentally preferred alternative for the Sycamore-Peñasquitos Transmission Line. The preliminary constructability review suggests that both projects can be accommodated. The Applicants' pipeline and electrical engineers continue to assess the constraints associated with installing two utilities within Pomerado Road.
1.4.18-3	Pardee Parcels	p. 1-42	Public comments indicated potential single family home development planned for the Pardee parcels in Bonsall, CA. These residential developments would impact an alternative route. Address these potential cumulative projects as well as Identify other potential cumulative projects in the vicinity of other route alternatives/deviations.	CEQA requires that applicants discuss cumulative impacts of the project when the project's incremental effect is cumulatively considerable. (See Guidelines 15130.) CEQA does not require applicants to discuss the cumulative impacts of project alternatives. As a result, a cumulative analysis was not conducted for alternatives in the PEA. The Applicants do not believe that the Route Segment Alternatives presented in the PEA on pages 5-37 through 5-52 will be advanced within the EIR/EIS for the reasons noted in the PEA. Nonetheless, in response to Item 1.5-19, desktop-level research was conducted to identify various existing features crossed by the Route Segment Alternatives, and the results are provided as Exhibit DD: Response to 1.5-19.
1.5-1	Alternatives	Ch. 5	Provide a discussion of issues associated with the proposed route along Pomerado Road and the Sycamore Penasquitos Project's Environmentally Superior Alternatives alignment identified by the CPUC. In addition, Verify whether it would be feasible to construct both projects along Pomerado Road.	Please see the response to Item 1.4.18-2
1.5-2	Alternatives Initially Considered But Not Carried Forward	p. 5-6	Provide a map or maps of suitable scale that include all of the alternative alignments and sites initially considered but not carried forward as well as the proposed route. In addition, provide applicable GIS data layers for these routes and sites.	Figure 5-1: Alternatives Map in the PEA provides all of the alternative alignments carried forward, as well as the Proposed Project. Alternatives that were not carried forward were considered, but deemed infeasible or did not meet the Proposed Project objectives. As a result, these alternatives were not developed to a point where a specific location was identified.
1.5-3	Offshore Alternative	p. 5-6	Provide a discussion of the Offshore Alternative that identifies the following: 1) the beginning and end points; 2) the total length of the alternative; 3) the length of each onshore portion of the alternative - at both the north and south ends; 4) the length of offshore portion of the alternative; and, 5) any sensitive environmental features crossed by the onshore portion of the alternative. Provide a table similar to Table 5-1 that presents the quantitative estimate of impacts on the environmental features crossed by this alternative.	The Applicants believe that this alternative should not be carried forward for reasons described in Chapter 5 of the PEA. CEQA requires that applicants describe a range of reasonable alternatives to the project, which would feasibly attain the basic objectives of the project and avoid or substantially lessen any of the significant effects of the project (see Guidelines 15126.6). After an initial review, the Applicants determined that the Offshore Alternative is infeasible and would not meet the basic objectives of the Proposed Project. The Applicants' initial review identified the potential for significant impacts, including several that are not posed by the Proposed Project, such as significant disturbance along the surface water and seafloor; resuspension of seafloor sediment into the water column and impacts on turbidity levels; impacts on marine wildlife, mammals, submerged aquatic vegetation and fish habitat; impacts on public recreation; potential hazardous materials spills or leaks into water resources; noise impacts on marine species; and visual impacts during construction. In addition, due to the substantial additional engineering and regulatory review associated with this alternative, the Applicants determined that the Offshore Alternative would be significantly more complex and costly than the Proposed Project and could not be accomplished within a reasonable period of time; therefore, it should not be carried forward as a fully evaluated alternative. Accordingly, a more detailed description and analysis of this alternative was not prepared and is not required under CEQA.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.5-4	Existing Line 1600 Alignment Alternatives	p. 5-8	Provide a map showing the probable locations of the numerous temporary lateral pipelines necessary to maintain service to the customers served by Line 1600 in the event one of the existing alignment alternatives is selected. Provide a table similar to Table 5-1 presenting data on the temporary laterals including the number and length of the laterals and the quantitative estimate of impacts on the environmental features crossed.	The Applicants believe that this alternative should not be carried forward for reasons described in Chapter 5 of the PEA. A map showing the probable locations of the temporary lateral pipelines necessary to maintain service to Line 1600 is provided as Exhibit X: Response to 1.5-4. The environmental constraints associated with Line 1600 can be found in the "No Project Alternative" column of Table 5-1: Alternatives Screening Matrix in the PEA. For the existing Line 1600 Alignment Alternatives, the laterals would be approximately 30 feet long because these alternatives involve the use or partial use of the existing Line 1600 ROW. Therefore, the data presented in Table 5-1: Alternatives Screening Matrix would not change.
1.5-5	Existing Line 1600 Alignment Alternatives	p. 5-8	Provide a map of Line 1600 that identifies the locations of constraints along the existing right-of-way. The map should also show where expansion of the existing right-of-way for a new pipeline could address each constraint and where the constraint is severe enough to require a route deviation from the existing right-of-way. Include a table similar to Table 5-1 that presents the quantitative estimate of impacts on the environmental features crossed by the expanded right-of-way and by the route deviations.	The Applicants understand the reason for requesting a map, which plots the parcels that would be affected by expanding the existing Line 1600 ROW to incorporate an additional pipeline. However, the Applicants are reluctant to make this information public as it may affect the value or desirability of a subject property. If a property owner finds that his or her property is potentially affected by an expansion of the Line 1600 ROW, the property owner may have to disclose this information to a potential buyer of such property under the California disclosure law, and this could reduce the value of the property. As a result, the Applicants will provide a map of the existing Line 1600 ROW that shows the structural constraints with the understanding that it will be treated as confidential, non-public information. In addition, the Applicants believe that the Feasibility Report will provide staff with necessary information on the parcels impacted by expansion of existing ROW. Based on the Feasibility Report, approximately 125 parcels along the Line 1600 ROW have homes and other primary structures that may result in an acquisition of an entire parcel due to the proximity to the expanded ROW, as shown in Exhibit Y: Response to 1.5-5 (CONFIDENTIAL). Further, 125 parcels represents a conservative number of acquisitions because, among other factors, the report is estimating that SDG&E will only need an additional 20 feet of ROW. The environmental features crossed by Line 1600 can be found in the "No Project Alternative" column of Table 5-1: Alternatives Screening Matrix in the PEA. Though the hydrostatic testing of Line 1600 would not impact all features along the route, the features crossed by Line 1600 were provided in Table 5-1: Alternatives Screening Matrix. Table 5-1: Alternatives Screening Matrix presents the environmental features crossed by or, in some cases, within a specific buffer from the alternative alignments; therefore, the expanded ROW necessary for the Line 1600 Existing Alignment Alternatives would not change the data presented.
1.5-6	Existing Line 1600 Alignment Alternatives	p. 5-8	Provide a copy of the Feasibility Report prepared acquiring right-of-way for a route parallel to Line 1600.	The Feasibility Report will be provided as Exhibit Z: Response to 1.5-6 (CONFIDENTIAL) by December 11, 2015.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.5-7	LNG Alternatives	p. 5-13	The PEA includes an LNG alternative that would entail constructing a liquefaction facility in a highly urbanized area. Provide an LNG alternative that considers constructing an LNG facility in a more appropriate location (i.e., rural area) and include the lengths of pipeline necessary to connect the existing pipeline system to the facility.	CEQA requires that applicants describe a range of reasonable alternatives to the project, which would *feasibly attain the basic objectives of the project* and avoid or substantially lessen any of the significant effects of the project (*See* Guidelines 15126.6.). The Applicants considered the possibility of locating the LNG facility in a rural area, but determined that such an alternative was even less desirable than a liquefaction facility in a highly urbanized area due to the need for additional pipeline infrastructure to and from a rural liquefaction facility. A discussion of this analysis and its conclusion can be found on page 5-13 of Chapter 5 – Discussion of Significant Impacts and Alternatives in the PEA and is provided as follows: "...However, placing an industrial aboveground facility of this size (i.e., likely in excess of 40 acres) in a highly urbanized area would result in substantial construction-related noise and dust impacts—as well as operational noise impacts—to nearby residences. <u>If placed outside of the existing pipeline network, the U.S. – LNG Alternative would require the construction of new pipeline infrastructure either to deliver natural gas to the storage site, or to deliver LNG to the storage site to be gasified and distributed</u>. Due to the requirement of additional infrastructure construction for the facility, the environmental impacts associated with this U.S. – LNG Alternative option would be greater than that of the Proposed Project. The time required to identify and secure land for the facility and ROW for the connecting pipeline and the cost and impact of property acquisition would likely make this alternative infeasible to complete in a reasonable timeframe." (Emphasis added.)
1.5-8	LNG Alternative	p. 5-13	Describe the viability of an LNG alternative that would consist of a LNG peak-shaving facility that would include LNG storage tanks supplied by truck from existing LNG plants. See also Def. Item 1-5.9.	CEQA requires that applicants describe a range of reasonable alternatives to the project, which would feasibly attain the basic objectives of the project and avoid or substantially lessen any of the significant effects of the project (See Guidelines 15126.6). This alternative would not meet the basic objectives of the Proposed Project. This alternative was brought forward by intervenors in the North-South Project proceeding (A.13-12-013) and may be brought forward by parties in the regulatory proceeding for the Proposed Project as well. The Applicants believe that the proponents of this alternative, if any, are in the best position to describe its design and viability. The Applicants' initial review identified an increase in significant impacts and in the severity of impacts associated with this alternative in comparison to those of the Proposed Project. In addition, the alternative does not meet the objectives of the Proposed Project (i.e., redundancy, resiliency, and flexibility). Accordingly, a more detailed description and analysis of this alternative is not required under CEQA. Chapter 5 of the PEA describes alternatives to the Proposed Project. As stated in response to Item 1.2-1, the Applicants anticipate that the purpose, need, and Proposed Project alternatives will be considered pursuant to Public Utilities Code Sections 1001 et seq. within the scope of the regulatory proceeding, as will be established by the Assigned Commissioner's Scoping Memo and Ruling. The Applicants believe that public convenience and necessity for the Proposed Project are material factual issues that are best dealt with in discovery, testimony, and hearings, and not during the CEQA/NEPA review. The Applicants have proposed that the proceeding address the purpose and need for the Proposed Project prior to completion of CEQA/NEPA review to allow parties an opportunity to identify any proposed alternatives that should be addressed in the environmental review document. The Applicants believe that once the purpose and need is determined in the regulatory proceeding and the potential environmental impacts of the Proposed Project are identified by the CEQA Unit, the alternatives analysis required by CEQA and NEPA can be more effectively and efficiently completed. The schedule proposed in the Application calls for a Proposed Decision on Purpose and Need, and Project Design in July 2016—three to four months in advance of the issuance of a Draft EIR in November 2016.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.5-9	LNG Alternative / Storage Facilities Near Load	p. 5-13	a. Provide a thorough discussion of an alternative that would site aboveground (LNG) natural gas storage at or near one or more major natural gas generation facilities or peaker facilities. Discuss other high-demand facilities/load centers (if any) for which aboveground storage may be appropriate to address sudden changes in gas demand. b. Provide the name and location of all major natural gas generation and peaker facilities in SDG&E's service area on a map of suitable scale (e.g., Pio Pico, Carlsbad, Encina, Otay Mesa, Palomar, Escondido-Pala area, Miramar area, South Bay area, El Cajon area, Kearny Mesa area, others). Also provide the status of these facilities (e.g., operational, scheduled to close in 20XX, total MW, proposed, etc.). Identify the cutoff for the term "major" (e.g., facility groups by area above 90 MW). Include proposed facilities (if publically known) and those under construction. c. Identify all Natural Gas Generators and their capacity in MW that are seen by SDG&E/SoCalGas as high-demand users (or potential high-demand users) that are expected to put the system at risk of curtailment during peak periods. If the facilities are only proposed, already have a firm construction schedule, or already have an online date scheduled, provide this information. d. Identify natural gas generation facilities that could best accommodate aboveground natural gas storage based on available land, their overall location, and other relevant siting criteria. Address the CPUC's assumption that a few large gas containment facilities would be more desirable than many small facilities.	The Applicants believe that this alternative should not be carried forward for reasons described in Chapter 5 of the PEA. As stated in response to Item 1.2-1, the Applicants anticipate that the purpose, need, and Proposed Project alternatives will be considered pursuant to Public Utilities Code Sections 1001 et seq. within the scope of the regulatory proceeding, as will be established by the Assigned Commissioner's Scoping Memo and Ruling. The Applicants believe that public convenience and necessity for the Proposed Project are material factual issues that are best dealt with in discovery, testimony, and hearings, and not during the CEQA/NEPA review. The Applicants have proposed that the proceeding address the purpose and need for the Proposed Project prior to completion of CEQA NEPA review to allow parties an opportunity to identify any proposed alternatives that should be addressed in the environmental review document. The Applicants believe that once the purpose and need is determined in the regulatory proceeding and the potential environmental impacts of the Proposed Project are identified by the CEQA Unit, the alternatives analysis required by CEQA and NEPA can be more effectively and efficiently completed. The schedule proposed in the Application calls for a Proposed Decision on Purpose and Need, and Project Design in July 2016—three to four months in advance of the issuance of a Draft EIR in November 2016. Nonetheless, the Applicants will provide a map of the major natural gas generation and peaker facilities in SDG&E's service territory and an Excel spreadsheet that indicates the majority of units within SDG&E's service territory and each facility's capacity, operational status, and expected retirement date. Each of these facilities contributes to the potential for gas curtailment. The map and Excel spreadsheet will be provided as Exhibit AA: Response to 1.5-9 by December 11, 2015. There is no physical space available at any of the SDG&E natural gas generation or peaker facilities to accommodate an LNG facility.
1.5-10	Infrastructure Corridor Alternative	p. 5-14	The PEA describes as infeasible the alternative of siting the proposed pipeline in the existing right-of-way of Interstate-15 because of a policy conflict with Caltrans. Provide documentation of an existing policy that prohibits either Caltrans or the USDOT from permitting the proposed pipeline placement within the Interstate Highway easement.	Caltrans' general policy regarding freeways and expressways is to exclude utilities from within access-controlled highway ROWs to the extent practicable (Caltrans, Specific Project Development Procedures, Chapter 17). Please see the response to Item 1.1-7 for a description of applicable Caltrans policies. Because there are numerous feasible alternatives to the Infrastructure Corridor Alternative, the Applicants do not believe Caltrans will issue a policy exception to allow any considerable encroachment within I-15. In addition, the Applicants understand that the California High Speed Rail Authority is considering potential routes that would overlap with I-15. For these reasons, the Infrastructure Corridor Alternative appears to be infeasible.
1.5-11	Northern Baja Alternative	p. 5-15	The PEA states that, currently, SoCalGas/SDG&E only receive natural gas at the existing Otay Mesa receipt point from the North Baja and Baja Norte/Gasoducto Rosarito/TGN pipelines when required by a maintenance outage or in support of maintenance activities due to higher delivery costs. Explain if these high delivery costs would be reduced if SDG&E entered into a long-term agreement for firm capacity on those pipelines.	The Applicants believe that this alternative should not be carried forward for reasons described in Chapter 5 of the PEA. High gas costs at Otay Mesa would not be reduced for customers if SDG&E entered into long-term agreements for firm capacity on the North Baja, Gasoducto Rosarito, and Transportadora de Gas Natural (TGN) pipelines because no effective mechanism like buy/sell is in place to allow SDG&E's customers to use it. Current Federal Energy Regulation Commission regulations, the CPUC's noncore service policy, and SDG&E's tariffs do not allow buy/sell arrangements. Under the current rules, SDG&E's noncore customer suppliers are responsible for procuring gas supply and transporting it on the interstate pipeline systems using their own transportation service agreements to the Applicants' system receipt points (e.g., Otay Mesa) for delivery to their facilities. To date, mostly for economic reasons, SDG&E customers have chosen to

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
				deliver their gas supplies to receipt points located elsewhere on the Applicants' backbone system rather than Otay Mesa.
1.5-12	Northern Baja Alternative	p. 5-15	The PEA states that the Northern Baja Alternative would not meet the project objectives of system reliability and resiliency or operational flexibility unless SDG&E or its customers were able to enter in to a long-term contract for the necessary capacity with all four pipeline systems (North Baja, Baja Norte, Gasoducto Rosarito, and TGN). Discuss the potential for such a long-term contract with these for pipelines.	The Baja Norte pipeline is now Gasoducto Rosarito. Please refer to the response to Item 1.5-11. Noncore customers are responsible for procuring and moving gas supplies to SoCalGas receipt points.
1.5-13	Northern Baja Alternative	p. 5-15	Are there any additional permits required to move gas across the international border using the Northern Baja Alternative?	No, no other permits are required to move gas across the international border using the Northern Baja Alternative.
1.5-14	Northern Baja Alternative	Ch. 5, p. 5-15	Provide substantial evidence that supports SDG&E's claim that pipeline capacity is not available on the pipelines in Mexico that are operated by Sempra or its subsidiaries to supply sufficient natural gas to the Otay Mesa receipt point and serve as a feasible alternative to the proposed project. If SDG&E and SoCalGas do not have access to the required data, provide a contact at the parent company, Sempra, who could assist with this deficiency item.	The Applicants do not have access to Sempra's non-public operational information, which would violate the CPUC's Affiliate Transaction Rules. Please reference Gasoducto Rosarito's website, www.gasoductorosarito.com/english/about-us.html, and the TGN website, www.tgndebajacalifornia.com/english/index.html, for additional information and contact information.
1.5-15	Northern Baja Alternative	Ch. 5, p. 5-15	Provide evidence that supports SDG&E/SoCalGas's claim that "existing capacity on the Gasoducto Rosarito pipeline "appears" to be under contract until at least 2022."	Please reference the North Baja Pipeline website at www.tcplus.com/North%20Baja for information on current customers, expiration dates for current agreements, and the current unavailability of unsubscribed capacity.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.5-16	No Project/No Action Alternative	p. 5-35	Provide an expanded description of the No Project/ No Action Alternative that includes the following: 1) a discussion of the hazards of a hydrostatic pressure test; 2) the potential for a high pressure release of test water and the effects of such a release; 3) a typical plan that pipeline companies implement when hydrostatically testing an existing pipeline near residences (e.g., are temporary evacuations or relocations necessary); and 4) a typical plan that pipeline companies implement when hydrostatically testing an existing pipeline that is in the roadway in an urban area.	The Applicants propose construction of a new pipeline, which would avoid the costs, potential hazards, and release of test water associated with hydrostatic testing Line 1600. The risks associated with hydrotesting pipeline segments are assessed prior to hydrotesting an existing pipeline. The assessment may vary depending on the location of the pipeline, but in general, includes evaluating nearby residences and businesses; major public facilities, including hospitals and schools; and the impact to local streets, railroads, and other infrastructure. Potential impacts the community may experience include construction equipment on the streets, temporary parking reductions, possible street lane reductions and/or road closures, work-related noise, and natural gas odors. In some instances, there may be gas service interruptions. The potential for a high-pressure release of test water during a hydrostatic test varies significantly depending on a number of factors. If a pipeline ruptures during testing, a large amount of water will be released, similar to a water main break. Because water is not compressible like air or gas, its energy dissipates quickly when released. In the event of a water release, the Applicants have plans in place and have repair teams standing by to identify the location of the rupture, deploy a response team to contain the fluid, begin dewatering the pipeline, and set up additional traffic control measures as necessary. A typical plan when hydrostatically testing an existing pipeline involves completing a segment risk assessment to determine the appropriate level of communications and outreach for impacted customers. For pipelines being testing near residences, impacted customers will be notified prior to commencement of fieldwork. In addition, impacted customers will be notified the day of construction mobilization. A Hydrotest Failure Mitigation Plan is created to implement the appropriate activities and responsibilities in the event of a rupture. For a residential area, this will include alerting the community of the impacted area via door-to-door, in-person notification; door-hangers; and the Applicants working with local emergency services personnel. An example of a Hydrotest Failure Mitigation Plan for testing in both residential and urban areas has been provided as Exhibit BB: Response to 1.5-16. Every hydrostatic test is different and each plan is customized to the individual project, so any final Hydrotest Failure Mitigation Plan for Line 1600 in the event the Proposed Project is not approved will likely not be identical to this example plan. For pipelines being testing near or in the roadway of an urban area, the process would be similar to that for residential areas; however, impacted businesses and agencies would also be notified prior to commencement of fieldwork. A Hydrotest Failure Mitigation Plan is created to implement the appropriate activities and responsibilities in the event of a rupture. For a pipeline in an urban road in a residential area, this will include alerting the community of the impacted area via door-to-door, in-person notification; door-hangers; and the Applicants working with local municipalities to determine the most suitable location for equipment and personnel and alternate traffic control in the event of a rupture.
1.5-17	No Project Alternative	p. 5-35	The PEA states that hydrostatically testing Line 1600 would require the construction of 42 bypasses to maintain service to customers during the testing. Provide a map showing the locations of these bypasses/temporary lateral pipelines. Provide a table similar to Table 5-1 presenting data on the temporary laterals including the length of the laterals and the quantitative estimate of impacts on the environmental features crossed.	The 42 bypasses reported on page 5-35 of the PEA represented a preliminary number. After further investigation, it has been determined that 32 bypasses will be required for the hydrostatic testing of Line 1600. Exhibit CC: Response to 1.5-17 includes the table of environmental features crossed by the potential temporary lateral pipelines, as well as a map of the potential temporary lateral pipelines necessary for the hydrotesting of Line 1600.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.5-18	Alternative Energy Sources	p. 5-29	Provide a description of how the predicted energy demand in the project service area could be met by alternative fuels or energy sources.	As stated in response to Item 1.2-4, the Applicants believe that natural gas will continue to play a critical role in meeting the predicted energy demands of a growing population, even as new technologies become available. The California Energy Commission (CEC) considers natural gas as a critical energy source in California and provides funding for public interest energy research relating to natural gas and funding for natural gas vehicle projects. As variable renewable energy sources increasingly penetrate the grid, CAISO is relying on grid-stabilizing energy sources (e.g., natural gas peaker plants) that can quickly ramp up to meet demand and ramp down when renewable energy is available. Similarly, SANDAG takes the position that "[e]ven with the RPS requirements, dispatchable power (most likely natural gas power plants) will provide much of the power supply to the grid. This dispatchable power along with utility-scale renewables to the extent they are equipped with energy storage or hybrid operating characteristics will provide stability and reliability to balance power supplied from renewables that are variable in nature, such as wind and solar." Chapter 5 of the PEA describes alternatives to the Proposed Project. As stated in response to Item 1.2-1, the Applicants anticipate that the purpose, need, and Proposed Project alternatives will be considered pursuant to Public Utilities Code Sections 1001 et seq. The Applicants believe that public convenience and necessity for the Proposed Project are material factual issues that are best dealt with in discovery, testimony, and hearings, and not during the CEQA/NEPA review. The Applicants have proposed that the proceeding address the purpose and need for the Proposed Project prior to completion of CEQA/NEPA review to allow parties an opportunity to identify any proposed alternatives that should be addressed in the environmental review document. The Applicants believe that once the purpose and need is determined in the regulatory proceeding and the potential environmental impacts of the Proposed Project are identified by the CEQA Unit, the alternatives analysis required by CEQA and NEPA can be more effectively and efficiently completed. The schedule proposed in the Application calls for a Proposed Decision on Purpose and Need, and Project Design in July 2016—three to four months in advance of the issuance of a Draft EIR in November 2016.
1.5-19	Route Segment Alternatives	p. 5-37	Provide an expanded description of the route segment alternatives. Provide a Table similar to Table 5-1 showing the length of the preferred and alternative segments, environmental constraints, and a quantitative assessment of impacts so that the routes can be compared.	A table similar to Table 5-1 that includes environmental and other features crossed by the Route Segment Alternatives has been included as Exhibit DD: Response to 1.5-19.
1.5-20	Community Road Route Segment Alternative	p. 5-48	Provide an updated Figure 5-2 to include the Community Road Route Segment Alternative, as well as the associated GIS shapefiles.	The segment is shown, but the label is incorrect. The label is incorrectly identified as El Ku. A revised Figure 5-2: Proposed Project Route Segment Alternatives with the correct label is provided as Exhibit EE: Response to 1.5-20.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.5-21	CEC 2008 Alternatives	Ch. 5	Provide the alignments on maps of suitable scale, brief project descriptions, and brief discussions of the merits of the following two potential alternatives to the proposed project in the attached CEC report on pg. 36: (1) a new 25-mile line (36 inch) identified by SDG&E; and (2) a new line from Moreno Station to Rainbow Station. *"In R.04-01-025, SoCalGas and SDG&E identified that the capacity of the SDG&E system could be expanded by 50 MMcfd year-round by installing 25 miles of 36-inch-diameter pipe between Rainbow Station and Escondido. A preliminary estimate of the cost of this upgrade was $115 million. In addition, it may also be possible to construct an additional pipeline between Moreno Station and Rainbow Station. This option, however, will require additional rights-of-way and would likely be more expensive than a pipeline from Rainbow Station to Escondido."*	The Rainbow Station to Escondido pipeline is the same pipeline as the Proposed Project; however, it does not include the portion of the pipeline between Escondido and Kearny Villa. As stated in R.04-01-025, the Rainbow to Escondido pipeline by itself would provide approximately 50 MMcfd of capacity on the SDG&E system; however, this analysis was based on the assumption that Line 1600 is operating at 800 psig. Without the addition of the Escondido to Kearny Villa segment, this "alternative" would not provide complete redundancy for Line 3010, would not provide the resiliency and operational flexibility required, and would only provide one-fourth of the capacity realized by installing the full 47 miles of 36-inch-diameter pipeline. The preliminary cost estimate was provided over 10 years ago, and is no longer accurate. A Moreno to Rainbow Station pipeline would parallel the existing pipelines in SoCalGas's Rainbow Corridor and could provide redundancy from pipeline and compressor station outages in the Rainbow Corridor while providing some additional capacity to the Rainbow Corridor system. This "alternative" would not provide reliability, resiliency, operational flexibility, or capacity to the SDG&E system because it does not parallel the Line 1600/Line 3010 pipelines. Only an additional pipeline in SDG&E territory can provide these benefits as proposed in the Application. The pipeline proposed in the Application will also provide some resiliency for compressor station outages at Moreno. A Moreno to Rainbow pipeline never progressed beyond the conceptual stage; therefore, no maps were produced.
1.5-22	Energy Conservation (California Environmental Quality Act [CEQA] Appendix F, Section 15126.4, Section 21100[b][3])	Ch. 5	Provide a discussion of Significant Irreversible Environmental Changes that would be caused by the proposed project. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. The discussion should also address the extent to which future energy conservation initiatives and increases in renewable energy uses may be preempted by the additional natural gas capacity that would be available in a 36-inch pipeline. Possible future adjustments to the compression system to make full use of the additional pipeline capacity from a pipeline of that diameter must be discussed.	A discussion of significant irreversible environmental changes is provided in Exhibit FF: Response to 1.5-22.

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	Request	Response
1.5-23	Energy Conservation (CEQA Appendix F, Section 15126.4, Section 21100[b][3]) / Growth Inducement	Ch. 5	Growth Inducement: The potential for a substantial increase in natural gas supply must be discussed with respect to the potential for inducing future growth in residential, industrial, and other sectors. SDG&E staff and the PEA indicate that the need for additional capacity, on its own, is not sufficient justification for the proposed 36-inch diameter pipeline. Indeed, the CEC's final July 2014 gas demand outlooks report does not indicate gas demand will increase on an annual basis in the next 10 years. The demand shown is relatively flat. CEC data since the 1990s indicates that gas demand has dropped considerably through 2013 in SDG&E's service area. See Attachment 3. See also SDG&E's Gas Capacity Planning filings to the CPUC in 2014 and 2015 (attached). Because of the CEC data, which were provided to SDG&E/SoCalGas by the CPUC, the respective project objective was adjusted between the draft and final PEA submittals to indicate that the increase of 200 MMcfd would be a product of a new 36-inch pipeline's installation and that the specific increase of 200 MMcfd is not in itself a project objective. The draft objective was stated as, "Increase the capacity of SDG&E's natural gas transmission system by approximately 200 MMcfd. The final objective now reads, "Simultaneously increase the transmission capacity of the Gas System in San Diego County by approximately 200 million cubic feet per day (MMcfd) as a result of the PSEP replacement line being 36 inches in diameter." One justification for such a large, new gas pipeline in terms of increased capacity explained by SDG&E staff is the ability to pack the line and store natural gas. This explanation, however, fails to take into account possible future adjustments to the compression system to make full use of the additional pipeline capacity rather than for simply packing the line.	The Applicants acknowledge that the CEC's annual demand forecast is declining. That said, there are no future adjustments to the compression system that would be needed to fully use any new pipeline capacity in San Diego. One of the Applicants' objectives is to enhance operational flexibility. The additional capacity that a 36-inch-diameter pipeline would provide will help the Applicants meet the anticipated rapid changes in intraday demand on the SDG&E system. In addition, please see the response to Item 1.2-6.