

Complete	Incomplete	Response Under Review	No Applicant Response / NEW
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**Table 1: Rainbow–San Diego (Line 3602) 36-inch Natural Gas Pipeline Project Application Deficiencies (December 30, 2015)**

Def #	Resource Area / Topic	Source / PEA Page	Deficiency Item / Data Gap Question	Request Date	Reply Date	Status	Notes
<b>Deficiency Request #2</b>							
1.1	<b>Summary</b>						
1.1-1	General		Please provide the PEA original files (Word, Excel, jpeg/images, etc.).	10/30/15	11/30/15	Complete	
1.1-2	General - 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.	10/30/15	12/18/15	Incomplete	Update the confidential GIS website provided to include attribute data. At minimum, the attribute data must include pipeline diameter and identification number (e.g., 16 inch, Line 1600) for every pipeline.  Also, this site needs to be available for as long as the proceeding is open at the CPUC. Did SDG&E/SoCalGas establish a site expiration date?
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.	10/30/15	11/30/15	Complete	Updated the projection to a California State Plane
1.1-4	Agency Involvement: Project Description / MCAS Miramar	p. 1-4, 3-68, 3-70, 3-72 (Table 3-9)	Provide the status of the reimbursement agreement with MCAS Miramar.	10/30/15	11/30/15	Incomplete	Update provided by the Applicants but agreement not signed.
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.	10/30/15	11/30/15	Complete	
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's 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.	10/30/15	11/30/15	Incomplete	Acknowledge that the timeline is unknown. Need to know who the lead agency is before scoping. Lead agency also needs to review the PEA.
1.1-7	Agency Involvement: Project Description / 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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Incomplete	Further discussions required.
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 <a href="http://www.dot.ca.gov/hq/env/nepa">http://www.dot.ca.gov/hq/env/nepa</a> ). 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.	10/30/15	11/30/15	Incomplete	Further discussions required.  LLG confirmed that U.S. Route 395 is under County jurisdiction.
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.	10/30/15	11/30/15	Complete	No meeting minutes prepared. Further discussions required but item marked complete.
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.	10/30/15	11/30/15	Complete	

**Table 1: Rainbow–San Diego (Line 3602) 36-inch Natural Gas Pipeline Project Application Deficiencies (December 30, 2015)**

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<b>Deficiency Request #2</b>							
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.	10/30/15	11/30/15	Complete	Applicants provided an update. Additional consultation required throughout the project but item marked complete.
1.1-13	Agency Involvement: Project Description, Alternatives / 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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Incomplete	No consultation letters submitted or comments received to date.
1.1-15	Agency Involvement: Project Description / 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.	10/30/15	11/30/15	Incomplete	No consultation to date.
1.1-16	Agency Involvement: Project Description, Hydrology / 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.	10/30/15	11/30/15	Incomplete	Provide formal wetland delineation report and data once available.
1.1-17	Agency Involvement: Project Description, Bio / 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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Incomplete	No consultation to date.
1.1-19	Agency Involvement: Project Description / 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.	10/30/15	11/30/15	Incomplete	No consultation to date.
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Complete	
1.1-22	Public Outreach	p. 1-42	a. Provide all 49 polling questions asked. b. Provide the complete report prepared by Competitive Edge Research & Communication and submitted to SDG&E/SoCalGas/Sempra.	12/30/15		NEW	
1.1-23	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.	12/30/15		NEW	Addresses were redacted so we will not be able to mail scoping notices to the stakeholders on your mailing list. Suggest sharing mailing list or SDGE can do the mailing to open house attendees.
<b>1.2</b>	<b>Project Purpose and Need</b>						
1.2-1	Purpose and Need	Ch. 2 / New Appendix	The CPUC continues to discuss the parameters for a <b>cost-benefit analysis</b> (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.	10/30/15	11/30/15	Under review	The Applicants state that this is more appropriately addressed in the CPUC's regulatory proceeding. The Applicants expect the CPUC will vet and determine the purpose and need and the project as part of the regulatory proceeding through summer 2016. The Applicants state that after the regulatory proceeding, the alternatives analysis can be more effectively completed, and be included in a DEIR issuance in November 2016. In essence, Applicants claim that the purpose and need and systems alternatives are out of scope of the CEQA/NEPA review. However, the CPUC independently formulates the project objectives used in its CEQA

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<b>Deficiency Request #2</b>							
							<p>analyses. The CPUC must independently evaluate the applicant-proposed objectives in order to ensure that the EIR reflects the lead agency’s independent judgment and analysis, and must select objectives that allow for analysis of a reasonable range of alternatives.</p> <p>The lead federal agency will also need to develop a purpose and need under NEPA.</p> <p>Waiting for the regulatory proceeding’s determination of purpose and need could result in:</p> <ol style="list-style-type: none"> <li>1) Additional rounds of data requests focusing on alternatives after the regulatory proceeding,</li> <li>2) Alternatives analyzed in the CEQA/NEPA document that should have been dismissed and/or not analyzed, and</li> <li>3) The proposed schedule for the DEIR in November 2016 would no longer be realistic.</li> </ol>
1.2-2	Purpose and Need	Ch. 2	<p><b>Past Discussions with the CPUC:</b></p> <p>a. Provide a comprehensive discussion that cites specific CPUC proceedings, rulings, gas capacity filings, other documents, and ex parte communications regarding SDG&amp;E/SoCalGas’s dialogue with the CPUC since the 1990s (or longer if applicable) regarding SDG&amp;E/SoCalGas’s redundancy concerns associated with lines 3010 and 1600 and gas supply to SDG&amp;E service area. Include in the discussion any reference to gas supply to SDG&amp;E’s service area from Otay Mesa.</p> <p>b. Provide a copy of all SDG&amp;E Gas Capacity Planning filings filed pursuant to OII .I-11-002 since CPUC Decision 02-11-073.</p>	10/30/15	11/30/15	Under review	
1.2-3	Purpose and Need	p.2-1	Add the Marine Corps’ purpose and need for the project under NEPA.	10/30/15	11/30/15	Incomplete	CPUC to coordinate with Marine Corps. Need the lead federal agency’s purpose and need.
1.2-4	Purpose and Need	p.2-1	<p>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).</p> <p>Please explain how the proposed project would be needed with the increase in use of renewable energy.</p> <p>In addition, on December 16, 2015, the City of San Diego committed to 100% renewable energy by 2035. Describe how this project will be consistent with that goal.</p>	10/30/15	11/30/15	Under review	
1.2-5	Purpose and Need	p.2-1	<p>The Secretary of the Navy established renewable energy goals for the Navy and Marine Corp’s shore-based installations to be met by 2020. In addition, the federal government has renewable energy policies contained in the following:</p> <ul style="list-style-type: none"> <li>- Executive Order (EO) 13514, Federal Leadership in Environmental, Energy, and Economic Performance (2009)</li> <li>- Energy Policy Act of 2005 (EPAAct) (42 United States Code [U.S.C.] 15852</li> <li>- Title 10 U.S.C. 2911(e)</li> </ul> <p>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 EPAAct 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</p>	10/30/15	11/30/15	Under review	

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			<p>2018.</p> <p>In support of the EAct 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.</p> <p>Please explain how the proposed project would be consistent with these renewable energy goals.</p>				
1.2-6	Purpose and Need (Project Objectives) / Alternatives	Ch. 2, 5	<p>The CPUC proposes the following revisions to clarify Objectives 1, 2, and 3 as unique project objectives. If SDG&amp;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.</p> <ol style="list-style-type: none"> <li><b>Implement Pipeline Safety Requirements for Existing Line 1600 and Modernize the System with State-of-the-Art Materials:</b> 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.</li> <li><b>Improve System Reliability and Resiliency by Minimizing Reducing Dependence on a Single Pipeline:</b> Simultaneously Improve the reliability and resiliency of the integrated SDG&amp;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&amp;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.</li> <li><b>Enhance Operational Flexibility to Manage Stress Conditions by Increasing System Capacity:</b> 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 increased pipeline capacity that would give flexibility to operate the SDG&amp;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.</li> </ol>	10/30/15	11/30/15	Incomplete	The CPUC must independently evaluate the applicant-proposed objectives in order to ensure that the EIR reflects the lead agency's independent judgment and analysis, and must select objectives that allow for analysis of a reasonable range of alternatives. Waiting for the regulatory proceeding's determination of purpose and need to guide the definition of project objectives will likely make the Applicants' proposed November 2016 DEIR circulation unrealistic.
1.2-7	Purpose and Need (Project Objectives) / Alternatives	Ch. 2, 5	<p><b>Redundancy:</b> 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</p>	10/30/15	11/30/15	Incomplete	See 1.2-6 notes, above

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<b>Deficiency Request #2</b>							
			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.				
1.2-8	Purpose and Need (Project Objectives) / Alternatives	Ch. 2, 5	<b>Operational Flexibility/Capacity:</b> 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?	10/30/15	11/30/15	Incomplete	See 1.2-6 notes, above
1.2-9	Purpose and Need (Project Objectives) / Alternatives	Ch. 2, 5	<b>Cost of Gas to Ratepayers:</b> 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.	10/30/15	11/30/15	Incomplete	See 1.2-6 notes, above
1.2-10	Purpose and Need (Project Objectives) / Alternatives	Ch. 2, 5	<b>Underlying Project Purpose/Objectives:</b> 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 <i>PSEP</i> —Pipeline Safety Enhancement Plan (A.11-11-002, D.14-06-007)—as required by the CPUC.	10/30/15	11/30/15	Incomplete	See 1.2-6 notes, above
1.2-11	Purpose and Need (Project Objectives) / Alternatives	Ch. 2, 5 / Response from Neil Navin on 9.29/15 (proposed 200 MMcf capacity increase)	<b>System Capacity:</b> 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 MMcf?  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.	10/30/15	11/30/15	Incomplete	See 1.2-6 notes, above
1.2-12	Purpose and Need (Project Objectives) / Alternatives	Ch. 2, 5	<b>Recorded and Forecast Peak Gas Demand.</b> 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.	10/30/15	11/30/15	Incomplete	See 1.2-6 notes, above
1.2-13	Purpose and Need (Project Objectives) / 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.	10/30/15	11/30/15	Incomplete	See 1.2-6 notes, above
1.2-14	Purpose and Need (Project Objectives) / 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	10/30/15	11/30/15	Incomplete	See 1.2-6 notes, above

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			<p>basis,” SDG&amp;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.</p> <p>However, Table 1 indicates that daily peak gas demand will decline from the forecast for 2015/16 of 607 MMcf to 589 MMcf in 2024/2025. The table does not forecast that any day in the next 10 years will experience total gas demand exceeding 590 MMcf. Total demand is then shown to increase after 10 years, starting in 2025/26 (591 MMcf).</p> <p>Explain why the forecast shows an increase that begins 10 years from 2015 and reaches 617 MMcf in 2035/36. Note that natural gas demand for Electrical Generation (EG) is expected to consistently decrease from 199 MMcf in 2015/16 to 174 MMcf in 2035/36. The only increase through the planning period is in Core demand, which jumps from 354 MMcf to 382 MMcf in the 10-year period after 2025 that leads to 2035/36. Please explain and include supporting data.</p> <p>b. 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&amp;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).</p>				
<b>1.3</b>	<b>Project Description</b>						
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).	10/30/15	11/30/15	Under review	
1.3-2	Design	p. 3-10	Explain the rationale for determining that a 36-inch pipeline (precisely this diameter) is needed.	10/30/15	11/30/15	Under review	
1.3-3	Project Description	p. 3-41	Estimate the type and number of generators that will be required for power at contractor yards.	10/30/15	11/30/15	Complete	
1.3-4	Project Description	p. 3-42	<p>Provide a draft blasting plan that describes:</p> <ul style="list-style-type: none"> <li>- the types of blasting that may be used during construction of the proposed project</li> <li>- methods to be used to minimize hole-to-hole propagation</li> <li>- types of explosives/initiation system that may be used</li> <li>- anticipated drill and blast pattern</li> <li>- charge weights and delays</li> <li>- methods for controlling flyrock</li> <li>- selection of blasting products and methods</li> <li>- monitoring, reporting, and controlling ground cracking and displacement</li> <li>- explosives storage and transportation procedures</li> <li>- peak particle velocity monitoring and control</li> <li>- fire prevention</li> <li>- methods and protocols to protect human health and safety and</li> <li>- APMs to minimize impacts on sensitive receptors, wildlife, aquatic features, and paleontological resources</li> </ul>	10/30/15	11/30/15	Incomplete (supplemental response due by week of 1/11/16)	Preliminary blasting plan to be submitted to CPUC in 6 weeks. Final plan developed in accordance with APM NOI-02, will include conformance to state and local laws related to blasting, including noticing of potentially affected residents and other sensitive receptors. The plan will include a description of the planned blasting methods, an inventory of receptors potentially affected by the planned blasting, a schedule, requirements for noticing and measures to minimize noise related to blasting, and safety precautions to be implemented.
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	10/30/15	11/30/15	Complete	

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			disposal facility. Provide the total miles required to transport export soil to each potential soil disposal facility.				
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.	10/30/15	11/30/15	Complete (but further response pending)	Applicants still need to prepare frac-out contingency plan and consult with USACE in accordance with CWA Section 404. Applicants will need to incorporate additional mitigation measures, as required by USACE. Plan required but item marked complete.
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Complete	
1.3-10	Project Description	p.3-21	Update Table 3-1 with the other I-15 crossing (at approximately MP 3).	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Complete	Applicant provided an update. Additional consultation required throughout the project.
<b>1.4</b>	<b>Environmental Impact Assessment</b>						
<b>1.4.1</b>	<b>Aesthetics</b>						
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: <ul style="list-style-type: none"> <li>- County Scenic Highways and other eligible or designated scenic roads;</li> <li>- Scenic vistas identified in the PEA and other scenic features identified in local plans or related documents;</li> <li>- Municipal, county, and other administrative boundaries;</li> </ul>	10/30/15	11/30/15	Incomplete	County Scenic Highways and other eligible or designated scenic roads are shown with the same symbol and not distinguished clearly from one another on the maps (Exhibit K). Clarify the various designations for scenic roads (i.e., distinguish the various levels of state and county designations) and show these clearly on the maps. Provide a table that

**Table 1: Rainbow–San Diego (Line 3602) 36-inch Natural Gas Pipeline Project Application Deficiencies (December 30, 2015)**

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<b>Deficiency Request #2</b>							
			<ul style="list-style-type: none"> <li>- Any trails, parks, or other recreation or open space facilities within 0.5 mile of the proposed ROW;</li> <li>- All locations where mature trees and/or large shrubs will be removed for construction; and all project features for construction or operation.</li> </ul>				shows all of the roads and highways with scenic designations within 3 miles of the proposed project and identify the status of each. It appears that at least some trails, parks, or other recreation or open space facilities within 0.5 mile of the proposed ROW are not shown and labeled on the maps in Exhibit K. Some of the maps do not extend out 0.5 mile from the proposed project. Show and label on the maps the extent of the 0.5-mile buffer and all trails, parks, or other recreation or open space facilities within 0.5 mile of the proposed ROW, work areas, and construction laydown areas. Some of the areas identified as parks on the maps in Exhibit K are not clearly identified (i.e., it's not clear whether these are public parks, public open space areas, or other types of facilities [e.g., SLC on Map 9, Reidy Canyon Creek on Map 20, and Poway Holding and Meadowbrook ER on Map 33]). Clarify the status of all areas identified as parks on the maps in Exhibit K in a table that also references the map number(s) on which the parks or other facilities are shown. Label all major landscape features on the maps in Exhibit K (e.g., San Luis Rey River on Map 8 and various golf courses and other areas of various maps). Provide a key map or maps that show the location and extent of each map in Exhibit K. Need to check with the local jurisdictions to verify that no specific vistas are identified in their general plans.
1.4.1-2	Visual Simulations	Figure 4.1-1	<p>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.</p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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.</li> <li>- View from the vicinity of the trailhead at Highland Valley Road and Pomerado Road showing the proposed ROW with grading and vegetation removal.</li> </ul> <p>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.</p>	10/30/15	11/30/15 12/21/15	Under review (supplemental response due by week of 3/7/16)	<p>Key observation point (KOP) character photographs document, which provide photographs and a description of each KOP based on field-gathered observations, were submitted on 12/21/15. A corresponding KOP locations map and kmz files containing points of each photograph location were also provided. These photographs and documents are under review.</p> <p>New visual photographs will be submitted to CPUC. Locations of any additional simulations will be provided in 12 to 14 weeks.</p>
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.	10/30/15	11/30/15	Incomplete	The Applicants state that the visual impact will only be temporary because the ROW restoration will be successful in 5 years. That goal is rarely achieved in arid climates. Visual simulations are required for the DEIR illustrating the view at construction, 1 year, 5 years, and 15 years.
1.4.2	Agriculture and Forest Resources		No Deficiencies	10/30/15		Complete	

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<b>Deficiency Request #2</b>							
<b>1.4.3</b>	<b>Air Resources</b>						
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., <a href="http://www.arb.ca.gov/research/aaqs/aaqs2.pdf">http://www.arb.ca.gov/research/aaqs/aaqs2.pdf</a> )	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	NEW	Applicability of the General Conformity Rule, as adopted by the SDAPCD in Rule 1501 (Conformity of General Federal Actions) needs to be evaluated. Present the comparison of estimated emissions with the applicable de minimis thresholds.
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.	10/30/15	11/30/15	Complete	
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).	10/30/15	11/30/15	Complete	
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	10/30/15	11/30/15	Complete	

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<b>Deficiency Request #2</b>							
			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).				
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.	10/30/15	11/30/15	Complete	
<b>1.4.4</b>	<b>Biological Resources</b>						
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Incomplete but will be submitted to CPUC	To be completed March 15 through July 1, 2016.
1.4.4-3	Survey updates	p. 4.4-8	Please provide survey results for the QCB at the Elliot Field Station.	10/30/15	11/30/15	Incomplete but will be submitted to CPUC	To be completed February 15 through second Saturday in May 2016.
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.	10/30/15	11/30/15	Incomplete Limited consultation	Additional surveys may be required upon consultation with USFWS.
1.4.4-5	Marine Corps Air Station 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?	10/30/15	11/30/15	Incomplete Limited consultation	Additional surveys may be required upon consultation with USFWS.
1.4.4-6	GIS Data	p. 4.4-6	Please provide GIS data for the vegetation communities mapped during surveys.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Incomplete	Data will be submitted by early summer 2016.
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.	10/30/15	11/30/15	Incomplete	Need to consult with USACE and develop mitigation plan.
1.4.4-9	Wetlands and Waterbodies	p. 4.4-32	Discuss construction and restoration methods proposed for crossing wetlands.	10/30/15	11/30/15	Incomplete	Will be updated once consultation with USFWS begins.
1.4.4-10	Wetlands and Waterbodies	p. 4.4-32	Describe typical staging area requirements at waterbody and wetland crossings.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Incomplete	Will be updated after field work.
<b>1.4.5</b>	<b>Cultural, Tribal, and Paleontological Resources</b>						
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.	10/30/15	11/30/15	Incomplete	This comment has not been fully addressed – per the Applicants, some information is missing, as full surveys will not be completed until a preferred alternative is selected, and government-to-government consultation has begun.

**Table 1: Rainbow–San Diego (Line 3602) 36-inch Natural Gas Pipeline Project Application Deficiencies (December 30, 2015)**

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<b>Deficiency Request #2</b>							
			<p>This methodology (i.e., lack of identification of historic properties) also would not satisfy the requirements of Section 106.</p> <ul style="list-style-type: none"> <li>- APE does not consider indirect effects (visual, auditory, etc.).</li> <li>- Potential for listing not evaluated.</li> <li>- 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.</li> <li>- Field methodology is not specific and pertains only to archaeological remains; nothing done to evaluate potential historic structures.</li> <li>- Methodology is missing information on collection/evaluation of artifacts, how sites were delineated, how recording accomplished, etc.</li> <li>- A map with mileposts showing the boundaries of all survey areas was not provided.</li> <li>- 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.</li> <li>- Table B3 indicates if outside the survey corridor, but does not indicate location in reference to the APE.</li> </ul> <p>To address these deficiencies:</p> <ul style="list-style-type: none"> <li>- Explain why a survey for architectural/built/aboveground resources was not conducted concurrent with the archaeological survey.</li> <li>- 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.</li> <li>- 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.</li> <li>- Provide revised maps that indicate the APE, the survey area, MPs, areas of prior disturbance, etc.</li> <li>- 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).</li> </ul>				<p>In order to be complete, the following still will need to be provided:</p> <ul style="list-style-type: none"> <li>- Description of the agreed upon APE (both for evaluating direct and indirect effects) by the SHPO, tribes, and other consulting parties. If agreed to, this will need to show the 1-parcel boundary and the radius, as well as all other areas identified for blasting at minimum.</li> </ul> <p>The APE was also inconsistent between information provided to respond to the deficiency request – one document indicated 70 feet and the other 75 feet for the indirect APE radius. Please reconcile difference.</p> <ul style="list-style-type: none"> <li>- Description of field methodology, including both archaeological and historic structures (see below regarding the historic structures report).</li> <li>- Description of methodology for archaeological field collections and evaluation of artifacts.</li> <li>- References to location of resources within the APE (not just within the survey corridor) for Tables B2 and B3. This will also apply to Table B1 (although this was not provided as a revision).</li> </ul> <p>NRHP eligibility information was provided as part of the updated Appendix B. However, this appendix will still need to show which resources are located within the APE (direct/indirect) and not just the survey corridor. The survey corridor still is not adequately explained.</p> <p>Table B2 should be double-checked to confirm correct information was included. Some discrepancies were noted in the explanation of resources. (i.e., in final report – P-37-014275 was noted as military property, in revision of Table B2 – noted as trash scatter).</p> <p>Need to know more details about the sites and not just what artifacts were found, such as size of site, potential for listing, condition/state of site, etc. Please make clear that National Historic Landmarks (NHLs) were also evaluated.</p> <p>Make sure to note locations of traditional cultural properties (TCPs) on maps (already marked</p>

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<b>Deficiency Request #2</b>							
							<p>confidential). May also consider providing any NRHP forms or other documentation for previously identified TCPs.</p> <p>On tables – please include header for each page. The attachment provided as the historic structures survey report needs additional information to document the survey, including photographs, background research, research methodology, clear definitions for the contents of Table 1, findings, recommendations, etc.</p> <p>Maps will need to be revised as new information is acquired by SHPO, tribes, and other consulting parties. New maps will need to be provided to the tribes as part of the consultation packages to show the APE, as well.</p> <p>As indicated by Applicant, new information regarding correspondence will be provided in subsequent versions. As an updated cultural resource report was not provided, no comments can be made as to the recommendations for site eligibility or management options. This will need to be included in subsequent submittals to CPUC.</p>
1.4.5-2	APE	Section 4.5	<p>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.”</p> <p>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.”</p> <p>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.<sup>1, 2</sup></p>	10/30/15	11/30/15	Incomplete	<p>The Applicants will need to make clear what the direct and indirect APEs are. Typically, when this terminology is used, the direct APE is the survey corridor. Additional information will be needed as the consultation continues and is formalized. The APE must be clearly defined as part of the Section 106 proceedings.</p> <p>If a separate survey corridor is used, this must be clearly defined and documented both within the text and within the maps.</p>
1.4.5-3	Surveys	Section 4.5 and Attachment 4.5-A	<p>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</p>	10/30/15	11/30/15	Incomplete	<p>As noted in the Applicant’s response, additional information will be included as the consultation formally begins. This information will need to be provided to support survey work and findings.</p>

<sup>1</sup> 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.

<sup>2</sup> 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.”

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<b>Deficiency Request #2</b>							
			<p>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.</p> <p>To address this deficiency:</p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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).</li> <li>- 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)</li> <li>- 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.</li> </ul>				Documentation (when received) may consist of formal letters, records for phone calls, emails, etc.
1.4.5-4	Correspondence	Attachment 4.5-A	<p>Letters and documentation of Native American consultation were provided as Appendix C. Please provide the following:</p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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).</li> <li>- No documentation of phone calls with Pechanga Band of Luiseno Indians.</li> </ul>	10/30/15	11/30/15	Incomplete	<p>Per Applicants, notes were added for the Pechanga. However, as the report itself was not provided as an update, cannot confirm if the discrepancy of what was written and what was provided in the appendix has been revised.</p> <p>As noted by Applicants, additional information will be provided when formal consultations are started.</p>
<b>1.4.6</b>	<b>Geology, Soils, and Seismicity Regulatory Setting</b>						
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	10/30/15	11/30/15	Complete	
1.4.6-2	Impacts	p. 4.6-8	Discussion about induced seismicity (or lack thereof)	10/30/15	11/30/15	Complete	
<b>1.4.7</b>	<b>Greenhouse Gas Emissions</b>						
1.4.7-1	Greenhouse Gas Emissions	p. 4.7-8	<p>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.”</p> <p>Table 4.7-3 includes a footnote indicating that estimated GHG construction emissions do not include purging the pre-lay segment.</p> <p>Provide estimated GHG emissions associated with the release of 1.02 MMcf of natural gas associated with purging the pre-lay segment.</p>	10/30/15	11/30/15	Complete	
1.4.7-2	Greenhouse Gas Emissions	p. 4.7-8, 4.7-9 Attachment 4.3-A	<p>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.</p> <p>Provide the methodology, assumptions, and calculations made to estimate GHG emissions from Cold Tie-In construction and blowdown operations.</p>	10/30/15	11/30/15	Incomplete	<p>Provide reference for Table 1: Natural Gas Compound Constants, provided in Exhibit T: GHG Emissions from Natural Gas Releases.</p> <p>Following the methodology explained in Exhibit T: GHG Emissions from Natural Gas Releases, CO2 emissions from pre-lay activities result is ten times lower than the reported value in Table 2 of Exhibit T.</p>

**Table 1: Rainbow–San Diego (Line 3602) 36-inch Natural Gas Pipeline Project Application Deficiencies (December 30, 2015)**

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<b>Deficiency Request #2</b>							
							Clarify this discrepancy.
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.	10/30/15	11/30/15	Incomplete	Provide reference of the report used for "the mileage data and metering/regulatory station count data that were previously reported to the California Air Resources Board (CARB) for the 2013 reporting year."
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Complete	
<b>1.4.8</b>	<b>Hazards and Hazardous Materials</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	10/30/15	11/30/15	Incomplete (supplemental response due week of [Applicants to	Applicants to prepare Preliminary Draft Hazardous Materials Business Plan and provide to the CPUC. Applicant to provide volumes and container sizes for hazardous wastes estimated from previous projects.

**Table 1: Rainbow–San Diego (Line 3602) 36-inch Natural Gas Pipeline Project Application Deficiencies (December 30, 2015)**

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<b>Deficiency Request #2</b>							
			upset conditions.			<u>insert here)</u>	Estimates from the construction contractor will be provided too late in the CEQA/NEPA process.
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.	10/30/15	11/30/15	Incomplete (supplemental response due week of <u>Applicants to insert here)</u> )	Applicants to prepare Preliminary Draft Hazardous Materials Business Plan and provide to the CPUC. Applicant to provide volumes and container sizes for hazardous wastes estimated from previous projects. Estimates from the construction contractor will be provided too late in the CEQA/NEPA process.
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.	10/30/15	11/30/15	Complete	
<b>1.4.9</b>	<b>Hydrology and Water Quality</b>						
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.	10/30/15	11/30/15	Complete	
<b>1.4.10</b>	<b>Land Use and Planning</b>		No Deficiencies	10/30/15		Complete	
<b>1.4.11</b>	<b>Mineral Resources</b>		No Deficiencies	10/30/15		Complete	
<b>1.4.12</b>	<b>Noise</b>						
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Complete	
<b>1.4.13</b>	<b>Population and Housing</b>		No Deficiencies	10/30/15		Complete	
<b>1.4.14</b>	<b>Public Services</b>		No Deficiencies	10/30/15		Complete	
<b>1.4.15</b>	<b>Recreation</b>		No Deficiencies	10/30/15		Complete	
<b>1.4.16</b>	<b>Transportation and Traffic</b>						
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?	10/30/15	11/30/15	Incomplete	The request was for a Level of Service (LOS) analysis of segments and intersections and details showing how the analysis was completed. This is a standard analysis in any traffic study. The traffic analysis prepared by Kimley Horn (9/15/15) contains no LOS analysis for roadway segment or intersections. The only LOS analysis is contained in Table 4.16.5 of the PEA. It is only for segments and it is not clear if it covers all segments where construction will occur. For instance, Section 2.1 of the Kimley Horn traffic study states Champagne Boulevard, Rainbow Glen Road, and Highland Valley Road would have construction along them. They are not analyzed in Table 4.16.5.  In addition, Table 4.16.5 does not show the roadway capacity and the with and without construction traffic levels of service, standard components of a LOS analysis table. The <b>attached table</b> shows a typical street segment table that is necessary.
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	10/30/15	11/30/15	Incomplete Clarification	Table 4.16-5 adds 254 ADT of traffic to the road system. The only way this can be accurate is if there

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<b>Deficiency Request #2</b>							
			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?			required.	are 300 personal vehicle inbound trips for a total of 600 personal vehicle trips (300 in and 300 out) and 52 inbound truck trips for a total of 104 truck trips. Are the 300 inbound and 52 inbound amounts accurate?  Footnote 1 of Exhibit W states “600 total personnel”, not 300 personnel. If there are 600 personnel, that equals to 1,200 ADT (600 personnel in / 600 personnel out). If 600 is a round trip amount, Footnote 1 of Exhibit W should state 75 personnel per crew, not 150.
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Incomplete	The response correctly identified the County of San Diego and San Diego Traffic Engineers Council as the source for capacities. But there is no LOS analysis showing what capacities were used for each roadway. See the <b>attached table</b> for a typical roadway analysis table, clearly showing the utilized roadway capacity.
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.	10/30/15	11/30/15	Incomplete	It is understood that identification of roads that will have lane closures is not available at this stage of the design. Absent that data, the traffic section of the environmental document will need to assume lane closures on each roadway where the pipeline is being constructed.  Please provide updates on roadway lane closures as they become available.
<b>1.4.17</b>	<b>Utilities and Service Systems</b>						
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Complete	
<b>1.4.18</b>	<b>Cumulative Analysis</b>						
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.	10/30/15	11/30/15	Incomplete	Marine Corps or other federal agency to update.
1.4.18-2	Cumulative Analysis – Sycamore - Penasquitos	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.	10/30/15	11/30/15	Incomplete	If the transmission line is the environmentally preferred alternative going forward, CPUC will prepare a data request for a quantitative assessment of cumulative impacts.
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.	10/30/15	11/30/15	Incomplete	Under NEPA, “cumulative effects must be evaluated along with the direct effects and indirect effects (those that occur later in time or farther removed in distance) of each alternative”.

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<b>Deficiency Request #2</b>							
1.5	<b>Significant Impacts and Alternatives</b>						
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.	10/30/15	11/30/15	Incomplete	If the transmission line is the environmentally preferred alternative going forward, CPUC will prepare a data request for a quantitative assessment of cumulative impacts.
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.	10/30/15	11/30/15	Incomplete	The Applicants’ response to Item 1.5-2 is not sufficient. For the alternatives that were not developed to a point of identifying specific location, illustrate the general alignment.
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.	10/30/15	11/30/15	Incomplete	The Applicants’ response to Item 1.5-3 is not sufficient. The information requested is necessary to support the Applicants’ determination to not carry this alternative forward.
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.	10/30/15	11/30/15	Under review	
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.	10/30/15	11/30/15	Incomplete	The Applicants’ response to Item 1.5-5 is only partly complete. Provide a table similar to PEA 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. This information presents a full estimate of the potential impacts of constructing on the existing Line 1600 right-of-way. CPUC will comply with the California disclosure law to not show specific parcels in a public document.
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.	10/30/15	11/30/15	Complete	
1.5-6.1	Existing Line 1600 Alignment, Safety, and Integrity Management	p. 5-8, Section 4.8	a. Energy Division management requests a discussion about whether sections of Line 1600 would be rerouted after being de-rated to a distribution-line pressure to reduce potential safety concerns or to be in compliance with distribution-line ROW requirements. Identify applicable distribution-line ROW-width and ROW-maintenance requirements in the discussion. b. If the proposed project is not approved and Line 1600 remains in operation at a transmission pressure, discuss sections of Line 1600 that would be rerouted to reduce potential safety concerns or to be in compliance with transmission-line ROW requirements. Identify applicable transmission-line ROW-width and ROW-maintenance requirements in the discussion. c. Discuss other applicable safety programs, e.g., Gas Transmission and Distribution Integrity Management programs, that would ensure the safe operation of Line 1600 at any approved operating pressure. Discuss the status and implementation schedule for programs that are still in development.	12/30/15		NEW	
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.	10/30/15	11/30/15	Incomplete	The Applicants’ response to Item 1.5-7 is not sufficient. It is necessary to consider the scale of the additional potential impacts associated with building an LNG facility in a rural area. Although the Applicants have not selected a specific location for such a facility, provide the parameters/characteristics of a suitable location and an estimate of the length of

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<b>Deficiency Request #2</b>							
							pipeline necessary to interconnect with the existing infrastructure.
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.	10/30/15	11/30/15	Under review	The Applicants refer to the regulatory proceeding for the North-South Project where this alternative was considered. They also refer to the response at Item 1.2-1, stating that this is more appropriately addressed in the CPUC’s regulatory proceeding.
1.5-9	LNG Alternative / Storage Facilities Near Load	p. 5-13	<p>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.</p> <p>b. Provide the name and location of all major natural gas generation and peaker facilities in SDG&amp;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.</p> <p>c. Identify all Natural Gas Generators and their capacity in MW that are seen by SDG&amp;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.</p> <p>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.</p>	10/30/15	11/30/15	Under review	The Applicants refer to the regulatory proceeding for the North-South Project where this alternative was considered. They also refer to the response at Item 1.2-1, stating that this is more appropriately addressed in the CPUC’s regulatory proceeding.
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Under review	
1.5-11.1	Northern Baja Alternative Feasibility	p. 5-15	For SDG&E’s “Core” Customers, explain if the high-delivery costs identified by the PEA could be reduced if SDG&E entered into a long-term agreement for firm capacity on the pipelines. Although this might increase costs to core customers, it would avoid the cost of an expensive new 36-inch pipeline and avoid the environmental and social impacts of the Proposed Project identified in the PEA. PEA p. 5-15 indicates that this alternative would not be feasible unless, “capacity on all three pipeline systems could be contracted on a long-term basis by SDG&E OR its customers.” The response should address long-term contracts entered into by SDG&E.	12/30/15		NEW	
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.	10/30/15	11/30/15	Under review	
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?	10/30/15	11/30/15	Under review	
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	10/30/15	11/30/15	Under review	

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<b>Deficiency Request #2</b>							
			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.				
1.5-14.1	Northern Baja Alternative Feasibility	p. 5-15	For the following deficiency item, if SDG&E and SoCalGas do not have access to the required information or expertise due to affiliate rules, provide a contact at the parent company, Sempra/Sempra International, or at Sempra LNG/INova LNG or the appropriate Sempra affiliate who can respond.  It is the CPUC’s understanding that the regulations in Mexico regarding the release of subscribed capacity to the secondary market changed in 2015 per COMISION REGULADORA DE ENERGIA RESOLUCIÓN Núm. RES/684/2015. The change allows available capacity to be assigned to other users on a temporary basis or on a permanent basis through an open-season process. Please discuss the accuracy of this finding and to what extent this change in regulation would make the Northern Baja Alternative feasible.	12/30/15		NEW	
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.”	10/30/15	11/30/15	Under review	
1.5-15.1	Northern Baja Alternative Feasibility	p. 5-15	In the attached Gasoducto Rosarito (GR) pipeline example for 11/29/2015 (11/30/15), how much of the available capacity (268,836 MMbtu per day / Dth per day) was under contract to Sempra Energy LNG Marketing Mexico?  If SDG&E and SoCalGas do not have access to the required data due to affiliate rules, provide a contact at the parent company, Sempra, or at Sempra LNG/INova LNG or the appropriate Sempra affiliate who could assist with this deficiency item.  In addition, identify the specific affiliate rules by number and provide the regulatory document or documents that establish the affiliate rules that prevent SDG&E and SoCalGas access to the data needed to respond. In this response, make note of all exceptions to the affiliate rules that allow for CPUC access to this data given the nature and cost of the Proposed Project and the critical relevance of Sempra’s capacity data with respect to the feasibility of the PEA’s Northern Baja Alternative.	12/30/15		NEW	Attachment 2015-1129 Available Capacity GRO Secondary Market <a href="http://www.gasoductorosarito.com/english/information.aspx">http://www.gasoductorosarito.com/english/information.aspx</a>
1.5-15.2	Northern Baja Alternative Feasibility	p. 5-15	<b>Background:</b> The data available from INova’s GR pipeline website indicate that Sempra LNG/INova LNG acquired an additional 190,000 Decatherms (Dth) in April/May 2014 of capacity on the GR pipeline. The acquisition occurred just two quarters prior to its subsidiaries (SDG&E/SoCalGas) began pre-filing discussions with Energy Division for the Proposed Project. This acquisition brought Sempra’s capacity holdings to 400,000 Dth through 2022. As shown in Deficiency Item, 1.5-15.1, as of 11/29/15, 268,836 Dth of capacity remained unused on the GR pipeline.  Sempra (INova LNG) already owned 540,000 Dth of capacity on the TGN line through 2022 according to data available from INova’s TGN pipeline website at the time of the April/May 2014 GR pipeline capacity acquisition. On 11/29/15, 462,596 Dth of capacity remained unused on the TGN pipeline.  Data retrieved from TransCanada’s North Baja Pipeline website on 12/10/15 show that 185,200 Dth of unsubscribed firm capacity is available. Hence, the only limitation to the capacity required for the Northern Baja Alternative to be feasible appears to be on the GR pipeline and that limitation appears to be in place because a Sempra affiliate company is holding the required capacity.  <b>Question:</b> To what extent and in what way could the additional 190,000 Dth of capacity	12/30/15		NEW	See <a href="http://www.gasoductorosarito.com/english/information.aspx">http://www.gasoductorosarito.com/english/information.aspx</a> and <a href="http://www.tgndebajacalifornia.com/english/information.aspx">http://www.tgndebajacalifornia.com/english/information.aspx</a> and <a href="http://www.tplus.com/North%20Baja/UnsubscribedCapacity">http://www.tplus.com/North%20Baja/UnsubscribedCapacity</a>

**Table 1: Rainbow–San Diego (Line 3602) 36-inch Natural Gas Pipeline Project Application Deficiencies (December 30, 2015)**

Def #	Resource Area / Topic	Source / PEA Page	Deficiency Item / Data Gap Question	Request Date	Reply Date	Status	Notes
<b>Deficiency Request #2</b>							
			Sempra acquired in April/May 2014 help ensure supply is available to SDG&E via Otay Mesa should SDG&E/SoCalGas obtain access to this capacity? Provide a detailed discussion that includes the process or processes that SDG&E/SoCalGas could follow to propose to acquire this capacity from an affiliate of their parent company if ordered by the CPUC.				
1.5-15.3	Northern Baja Alternative Feasibility	p. 5-15	Provide a detailed discussion of changes to valves (e.g., upgrade from manual to automatic valve systems) or other facilities that would be necessary (if any) to allow supply to flow north from the Otay Mesa receipt point north into SDG&E's service area.	12/30/15		NEW	
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.	10/30/15	11/30/15	Incomplete	A Hydrostatic Test Failure Mitigation Plan for Line 1600 will be developed by the Applicants and submitted to the CPUC in the event that the proposed project is not approved.
1.5-16.1	No Project/No Action Alternative	p. 5-35	Provide further discussion about the extent or range of a potential high-pressure release during hydrostatic testing of (a) water; and (b) pipeline components or other materials. Within what distance would the evacuation of nearby residences and businesses typically be required? What minimum distance must typically be maintained between facilities being tested and personnel conducting the test?	12/30/15		NEW	
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.	10/30/15	11/30/15	Complete	
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.	10/30/15	11/30/15	Under review	The Applicants refer to the regulatory proceeding for the North-South Project where this alternative was considered. They also refer to the response at Item 1.2-1, stating that this is more appropriately addressed in the CPUC's regulatory proceeding.
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.	10/30/15	12/18/15	Complete	
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.	10/30/15	12/18/15	Complete	
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.  <i>"In R.04-01-025, SoCalGas and SDG&amp;E identified that the capacity of the SDG&amp;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."</i>	10/30/15	12/18/15	Under review	
1.5-22	Energy Conservation (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.	10/30/15	12/18/15	Complete	

**Table 1: Rainbow–San Diego (Line 3602) 36-inch Natural Gas Pipeline Project Application Deficiencies (December 30, 2015)**

Def #	Resource Area / Topic	Source / PEA Page	Deficiency Item / Data Gap Question	Request Date	Reply Date	Status	Notes
<b>Deficiency Request #2</b>							
1.5-23	Energy Conservation (CEQA Appendix F, Section 15126.4, Section 21100(b)(3)) / Growth Inducement	Ch. 5	<p>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.</p> <p>SDG&amp;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&amp;E's service area. See Attachment 3. See also SDG&amp;E's Gas Capacity Planning filings to the CPUC in 2014 and 2015 (attached).</p> <p>Because of the CEC data, which were provided to SDG&amp;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.</p> <p>The draft objective was stated as, "Increase the capacity of SDG&amp;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."</p> <p>One justification for such a large, new gas pipeline in terms of increased capacity explained by SDG&amp;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.</p>	10/30/15	12/18/15	Under review	

**Gasoducto Rosarito - Projected Available Capacity for November 30, 2015**

Path	MMbtu/d
Interconnection with North Baja Pipeline to the Interconnection with Transportadora de Gas Natural de Baja California	268,836

Disclaimer:

- (1) Based on operational conditions of the GB system, assuming a minimum pressure of 710 psig.
- (2) Based on Timely Nominations Cycle. Nominations due at 9:30 am PT and timely confirmation by 2:30 pm PT.  
See Section 11.2 of GB's General Conditions For Natural Gas Transportation Service for a description of the nomination (

SAMPLE

TABLE 9-2  
CONSTRUCTION YEAR STREET SEGMENT OPERATIONS

Street Segment	Capacity (LOS E) <sup>a</sup>	Construction Year Without Project			Construction Year With Project		
		ADT <sup>b</sup>	V/C <sup>c</sup>	LOS <sup>d</sup>	ADT	V/C	LOS
<b>Jackson Drive</b>							
West of Lake Shore Drive	40,000	13,050	0.326	A	13,111	0.328	A
<b>Lake Shore Drive</b>							
Jackson Drive to Laport Street/ El Paso Street	15,000	7,060	0.471	C	7,214	0.481	C
<b>Baltimore Drive</b>							
Laport Street / El Paso Street to Lake Murray Boulevard	15,000	12,900	0.860	D	12,992	0.866	D
<b>Lake Murray Boulevard</b>							
Kiowa Drive to Baltimore Drive	40,000	18,900	0.473	B	18,984	0.475	B

*Footnotes*

- a. Roadway capacity corresponding to Level of Service E based on the City of San Diego Roadway Capacity Standards.
- b. Average Daily Traffic volumes.
- c. Volume to Capacity ratio.
- d. Level of Service.

**9.3 Post-Construction Operational Traffic**

With the completion of the project, there will be no increase in the permanent staff. There will no longer be any construction related truck or employee traffic and roadways would be returned to their current conditions. It is therefore anticipated that the study area intersections and segments will continue to operate at current levels of service, post-construction.