

**San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas) (Applicants) Responses  
A.15-09-013 Proposed Pipeline Safety & Reliability Project (Proposed Project)  
Clarifications to California Public Utilities Commission (CPUC) Deficiency/Data Request 03 – April 29, 2016**

Item #	Resource Area/Topic	Source/ Proponent's Environmental Assessment (PEA) Page	CPUC Request No. 1 October 30, 2015	CPUC Request No. 2 December 30, 2015	CPUC Request No. 3 April 29, 2016	CPUC's Clarifications to Request No. 3 May 23, 2016/June 22, 2016	Applicants' Response to Clarifications on Request No. 3 July 22, 2016
1.2.4-1	Purpose and Need and Land Use	--	N/A	N/A	On December 15, 2015, the San Diego City Council unanimously approved the Climate Action Plan that would move the city to 100% renewables by 2035. Please explain how the proposed project would be affected by the city of San Diego's mandated shift to renewable energy.	CPUC to meet with the City of San Diego to discuss Project consistency with the CAP.  Applicants to provide their perspective on the Proposed Project's consistency with the CAP and need for natural gas to support renewables and fueling of the City's transportation fleet proposed for conversion to natural gas.	The Proposed Project is consistent with both State and local environmental goals and policies, which aim to significantly reduce greenhouse gas (GHG) emissions and improve air quality. The City of San Diego (City) Climate Action Plan (CAP) implements the 2008 City of San Diego General Plan (General Plan), and requires that the City ensure compliance with federal, state, and local laws regarding the reduction of GHG emissions.  The General Plan does not prescribe how the City must ensure compliance, which leaves the City with flexibility in achieving reduction. <sup>1</sup> To that end, the CAP identifies numerous goals, actions, and targets that the City can use to reduce emissions. One of the CAP's many "goals" is to "[a]chieve 100% renewable energy city-wide by 2035." This is not the only provision of the CAP, however. Other "goals" that are directly or potentially facilitated by the Proposed Project include: <ul style="list-style-type: none"> <li>• "Convert existing diesel municipal solid waste collection trucks to compressed natural gas or other alternative low emission fuels";<sup>2</sup></li> <li>• "Increase the use of mass transit";<sup>3</sup></li> <li>• "Divert solid waste and capture landfill methane gas emissions";<sup>4</sup> and</li> <li>• "Capture methane gas from wastewater treatment".<sup>5</sup></li> </ul> It is also worth noting that implementation of the Plan is a work in progress as the CAP expressly contemplates that with additional analysis, the City may need to amend it. <sup>6</sup> The CAP requires that a cost benefit analysis be performed prior to implementation of each measure. <sup>7</sup> The Fiscal Year 2017 Climate Action Plan Budget and Implementation Report, released in May 2016, identified the need to revise previously conducted cost benefit analysis, with further analysis to be conducted as individual actions are developed. <sup>8</sup> In addition, the CAP acknowledges that there are multiple ways to achieve its goals and that flexibility in implementation is necessary to allow the City to evolve its strategies. <sup>9</sup>

<sup>1</sup> Through the Mitigation and Monitoring Reporting Program for the 2008 City of San Diego General Plan (General Plan), the City is obligated to "regularly monitor, update and implement the City's [Climate Action Plan] to ensure, at a minimum, compliance with all applicable federal, state, and local laws." City of San Diego General Plan Update, Conservation Element CE.A.13.

<sup>2</sup> City of San Diego Climate Action Plan, December 2015 (CAP) at 36.

<sup>3</sup> *Id.* at 37.

<sup>4</sup> *Id.* at 40.

<sup>5</sup> *Id.*

<sup>6</sup> *Id.* at 29.

<sup>7</sup> *Id.* at 3.

<sup>8</sup> CAP Fiscal Year 2017 Budget and Implementation Report (May 2016) at 9.

<sup>9</sup> CAP at 29.

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							<p>For example, the CAP expressly notes that the City may not be able to procure sufficient large-scale renewable electricity supply and in such case, the City would explore the option of utilizing renewable energy credits (RECs) to contribute towards the 100% renewable energy target.<sup>10</sup> In relying on RECs, the City would still consume energy that is generated locally by natural gas-fired power plants to maintain grid stability, especially at peak usage hours in the evenings.</p> <p>With this in mind, Applicants believe the Proposed Project facilitates implementation of State goals and the CAP in three significant ways: 1) by ensuring that adequate resources are available to maintain and stabilize the grid as the City relies more on renewable energy; 2) by supporting the CAP's goal to reduce transportation-based GHG emissions, including those associated with single-occupancy and municipal vehicles; and 3) by supporting methane capture and other low carbon technologies in the future, such as biogas transmission and/or power-to-gas technology.</p> <p>1) <u>Support the Grid in San Diego and Beyond as More Renewables are Integrated.</u> The City's goal of 100% renewable electricity does not eliminate the need for a safe and reliable natural gas transmission system in the region. Integration of more renewable energy onto the grid—whether it is 50% to meet state requirements or 100% for the City of San Diego – is dependent on natural gas-fired electric generation to offset the intermittency of renewable generation, stabilize the grid, and ensure the ability to meet peak electric demands. The City does not operate its own electric grid, and will be relying on CAISO to balance supply and demand. RECs may be used in order for the City to claim “100% renewable electricity”, but there remains an unequivocal need for in-basin natural gas generation, per CAISO reliability requirements, to meet the electric demand of SDG&amp;E customers and those that self-generate through natural gas distributed generation. While renewable power “plays a critical role in greening the grid, it also adds a layer of complexity to the important job of ‘keeping the lights on.’”<sup>11</sup></p> <p>2) <u>Provide Infrastructure Necessary to Reduce Transportation Based GHG Emissions.</u> According to the 2010 Community-wide emissions inventory in the CAP, “the transportation sector contributes the largest output of GHG emissions”—55%.<sup>12</sup> This is also true in the broader San Diego region, where the transportation sector is responsible for approximately 43% of the region's existing GHG emissions.<sup>13</sup> On a statewide basis, approximately 38% of diesel particulate matter (PM) emissions are attributable to</p>

<sup>10</sup> *Id.* at 35.

<sup>11</sup> California ISO, *Powering the New Grid: Integrating Renewables Reliably*.

<sup>12</sup> CAP at 19.

<sup>13</sup> University of San Diego & Energy Policy Initiative Center, *San Diego County Undated Greenhouse Gas Inventory* at 3 (2013).

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							<p>on-road diesel-fueled vehicles, with approximately 60% coming from other mobile sources with diesel engines.<sup>14</sup> These transportation-related GHG and criteria air pollutant emissions both can be reduced significantly by utilizing natural gas engines for heavy transportation, mass transit, and shipping because natural gas engines emit substantially reduced volumes of criteria air pollutants than diesel engines and also emit fewer GHG emissions.<sup>15</sup> Accordingly, by replacing traditional vehicles with natural gas and electric vehicles, air quality will improve. With new technology, those improvements will be even more dramatic – by 2018, new “near-zero” vehicle engines will reduce NOx emissions by 90%.</p> <p>The CAP attributes the transportation sector’s status as the largest single contributor to GHG emissions “to the high frequency of single-occupancy vehicles [sic] trips”<sup>16</sup> and establishes an express goal “to increase the use of mass transit.” Much of the mass transit in San Diego has been converted from higher-emitting diesel to compressed natural gas (CNG).<sup>17</sup> As an investment in the safe and reliable operation of the natural gas system in San Diego that fuels those buses, as well as other modes of clean transportation, the Proposed Project is consistent with this CAP goal and facilitates implementation.</p> <p>The CAP also recognizes the opportunity to reduce GHG emissions by converting municipal vehicles to CNG.<sup>18</sup> In furtherance of the CAP’s goal to “convert existing diesel municipal solid waste collection trucks to compressed natural gas or other alternative low emission fuels”, the Mayor of San Diego recently announced that implementation of the CAP will include the conversion of 20 diesel recycling and refuse trucks in the City’s fleet to CNG trucks in the year 2017.<sup>19</sup> The Proposed Project will assist the City by providing the infrastructure necessary to fuel municipal CNG vehicles to reduce the region’s dependence on diesel fuels.</p> <p>3) <u>Provide Infrastructure to Support Methane Capture and Other Low Carbon Technologies.</u> The CAP identifies opportunities to reduce methane emissions associated with solid waste and wastewater treatment through methane capture. To this end, two of the CAP’s goals are to “Divert solid waste and capture landfill methane gas emissions” and “Capture methane gas from wastewater treatment.” The methane that is captured from landfill and wastewater</p>

<sup>14</sup> SANDAG, San Diego Forward FEIR, Page 4.3-14, 2015.

<sup>15</sup> [http://www.cngvp.org/About/abou\\_naturalgas.html](http://www.cngvp.org/About/abou_naturalgas.html)

<sup>16</sup> CAP at 19.

<sup>17</sup> To illustrate, San Diego Metropolitan Transit System (MTS) has a bus fleet of approximately 790, with 617 dedicated to fixed-route operations. By the end of summer 2016, all MTS fixed-route buses will be operating on CNG, which they recognize is “more cost effective and run[s] cleaner, reduc[es] greenhouse gas emissions and improv[es] air quality.” <https://www.sdmts.com/inside-mts/mts-express/wheels-bus>

<sup>18</sup> See CAP, Appendix A at 30 [100% conversion of city trash trucks to natural gas by 2035 will result in a net GHG reduction of 10,144 MT CO2e].

<sup>19</sup> See CAP Fiscal Year 2017 Funding and Implementation Report, Appendix A at 2.

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							<p>treatment facilities operated by the City can potentially be transported as biomethane into the natural gas transmission system. In addition, the Proposed Project supports so called "power-to-gas" projects where excess renewable energy is captured and used to create hydrogen or methane, which can then be conveyed through the pipeline system. The CAP cites to work that is already being done at the Point Loma Waste Water Treatment Plant where excess gas is processed, "to produce green gas and inject it into the SDG&amp;E natural gas pipeline, which is being used by the 4.5 MW of ultra clean fuel cells owned by a private contractor."<sup>20</sup> A safe and reliable natural gas system facilitates development of these technologies and implementation of these goals.</p> <p>The Applicants are committed to protecting the environment and reducing GHG emissions in the most cost-effective manner possible, while ensuring the reliability of SDG&amp;E's energy system. SDG&amp;E has a long history of partnering with the City of San Diego to improve air quality in the region. The Proposed Project is yet another step toward that end, which will ensure the availability and reliability of resources necessary to accomplish the laudable goals outlined in San Diego's CAP.</p>
1.3-14	Schedule	--	N/A	N/A	<p>Since Line 3602 would be a new pipeline, please explain why the construction is expected to take 1.5 years, and whether this schedule includes the simultaneous building of multiple spreads.</p>	N/A	<p>While this item is marked as complete, Applicants are providing the following additional information for clarification.</p> <p>Due to the diversity of the route, construction of Line 3602 is anticipated to include four crews over three segments. The production rate for each crew is expected to be between 197 ft/day to 350 ft/day depending on the segment being worked on. The overall average is 247 ft/day per crew for a total of 251 <u>working days</u> or approximately 12 months. <i>See</i> Prepared Direct Testimony of Neil Navin, Attachment A, Table 2.</p> <p>Prior to the completion of Line 3602, one of the four crews constructing Line 3602 will begin work on the Distribution System Modifications described in the Proponent's Environmental Assessment (PEA) Supplement. The remaining three crews will continue working on Line 3602 until it is completed. The Distribution System Modification work is estimated to continue for 2-3 months following completion of Line 3602, making the total estimated project construction schedule 15-21 months. <i>See</i> PEA Supplement, Section 2.5 at page 2-21.</p> <p>The construction schedule for the Proposed Project is based on the information available to Applicants at this time and is subject to change as additional items, such as encroachment permit conditions and mitigation measures resulting from environmental review, may impact the schedule as it gets closer to construction.</p>

<sup>20</sup> CAP at 24.

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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.	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.	<p>CPUC has not received kmz files containing all KOP locations and points of each photograph location; provide the kmz files described.</p> <p>Three additional visual simulations were requested during a teleconference held January 21, 2016. The visual simulations were requested for the following locations : 1) Location #3, Photograph #6; 2) Location #9, Photograph #27; and 3) Location #14, Photograph #36. Simulations were requested for views from these locations showing the appearance of the proposed project at 1 year and 3 to 5 years following construction. In addition, the CPUC's consulting aesthetic resources specialist requested that the three additional visual simulations be prepared as panorama photos to show the surrounding area as context for the proposed project. Provide the additional panorama visual simulations to the CPUC when available.</p> <p><b>CPUC's Notes</b> [Photo locations were provided on 4/14/16] Three additional visual simulations locations are acceptable.</p>	Applicants have agreed to provide simulations in 12 to 14 weeks (August 2016).	As discussed during the June 16, 2016 conference call between the Applicants, Energy Division and their respective consultants, the simulations will be provided in early August 2016.
1.4.5-5	Distribution Systems Modifications – Cultural and Tribal Resources		N/A	N/A	<p>Full Cultural Resources Letter Report was not provided; letter report (dated March 10, 2016) for record search was provided.</p> <ul style="list-style-type: none"> <li>- Will need to include description of planned field methodology, correspondence with agencies/tribes, discussion of previously identified resources, findings, etc.</li> <li>- Will need to include graphics/maps to account for the APE (and the Project area), resources, etc.</li> </ul> <p>o maps within the provided letter report are difficult to understand; the APE is only depicted with regard to the indirect APE</p>	<p>Only a Cultural Resources Letter Report has been prepared. A full report will need to be provided when available.</p> <p>APM-CUL-06 commits the Applicants to conducting cultural resources surveys and associated consultation for the Line 1600 derating.</p> <p>Provide the date that the report will be submitted to CPUC.</p>	<p>ASM Affiliates conducted a pedestrian survey of the work areas that are anticipated to be utilized for the Distribution System Modifications on June 22, 2016. A Cultural Resources Survey Report summarizing the results is included as Confidential Exhibit YY: Response to 1.4.5-5.</p> <p><b>This exhibit contains confidential information provided pursuant to P.U. Code § 583 and G.O. 66-C.</b></p>

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					o additional description will be needed to account for the indirect APE – as it is stated, it seems that the indirect APE is only around known above-ground features, but it is not clear what these are referring to (historic, non-historic, components of the project, etc.). - Current section (3.5) does not account for a historic structures survey or indirect 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.	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.	Provide GIS data for the alternatives analyzed in the PEA, including conceptual centerlines and locations of any associated infrastructure.	N/A	Although this item is marked complete, since the time of submittal, Applicants discovered the kmz file for the infrastructure alternative only included the segment that deviates from the proposed route. To eliminate any confusion, Applicants have posted a kmz file that includes the entire length of the infrastructure alternative. See Exhibit WW: Response to 1.5-2.
1.5-4	Existing Line 1600 Alignment Alternatives		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.	<i>The CPUC indicated that this item is under review.</i>	While temporary lateral pipelines may be placed within the Applicant's existing ROW, a figure showing the locations of these laterals as well as a table similar to Table 5-1 is still needed to compare environmental impacts across all alternatives. Provide a map and table.	The Applicants have agreed to respond to 1.5-4.1 by July 22, 2016. Applicants will submit additional information. See comment clarification in 1.5-4.1.	See response to Item 1.5-4.1 below.
1.5-4.1	Clarification of 1.5-4 on May 23, 2016		N/A	N/A	N/A	Provide the locations of any temporary lateral pipelines the Applicants would construct to maintain service to existing customers if one of the three Line 1600 In-Kind Replacement Alternatives is implemented. Include a separate analysis of each of the three construction options if the location of the temporary laterals would vary by construction technique: <ul style="list-style-type: none"> <li>a. Removal and Replacement by Segments,</li> <li>b. Remove then Replace Pipeline as a Whole, and</li> <li>c. Construct then Remove Pipeline as a Whole.</li> </ul> The analyses should identify if any lateral would be outside of the	Applicants' February 12, 2016 response to Item 1.5-4 indicates that Applicants would install bypasses on existing laterals; temporary lateral pipelines would not be necessary and the bypasses would be located within existing rights-of-way. Before responding to this item, it is important to highlight the distinction between a "lateral pipeline" and a "bypass on a lateral pipeline." A lateral pipeline is an appendage of a main pipeline that feeds a customer or a pressure limiting station that feeds multiple customers. Whereas a bypass is an appendage off of a main pipeline that feeds a lateral pipeline, allowing the lateral pipeline to be isolated from the main pipeline. The Remove then Replace Pipeline as a Whole Alternative would put the entire Line 1600 out of service during construction and the Construct then Remove Pipeline as a Whole Alternative would be constructed while Line 1600 is in-service. As such, bypasses would only be applicable to the Removal and Replacement by Segments Alternative. Bypasses for the Removal and Replacement by Segments Alternative

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						<p>existing right-of-way. If outside of the right-of-way, include the following information so that environmental impacts can be evaluated:</p> <ul style="list-style-type: none"> <li>a. Length (miles) of temporary pipeline laterals and the total;</li> <li>b. Acreage of the construction rights-of-way;</li> <li>c. Size and location of any non-typical work areas required;</li> <li>d. Number of residences within 50 feet of the edge of the construction right-of-way;</li> <li>e. Environmental features that would be temporarily impacted, if any.</li> </ul> <p>In addition, provide the map requested in Deficiency #1.5-4 illustrating where the laterals would be located.</p>	<p>would occur at the beginning and end of each segment and within the temporary construction right-of-way (ROW). A conceptual map showing the approximate location of the bypasses are provided in Confidential Exhibit ZZ: Response to 1.5-4.1 Because the bypasses are anticipated to be completely within the construction right-of-way, the impacts related to bypasses are included in the Removal and Replacement by Segment Alternative response in Item 1.5-5.1 below.</p> <p><b>This exhibit contains confidential information provided pursuant to P.U. Code § 583 and G.O. 66-C.</b></p>
1.5-5			<p>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.</p>	<p>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.</p>	<p><i>The CPUC indicated that this item is incomplete but no further request at this time.</i></p>	<p>The Applicants have agreed to respond to 1.5-5.1 by July 22, 2016. Applicants will submit additional information. See comment clarification in 1.5-5.1.</p>	<p>See response to Item 1.5-5.1 below.</p>
1.5-5.1	Clarification of 1.5-5 on May 23, 2016		N/A	N/A	N/A	<p>Provide environmental analyses of the alternatives identified in the PEA as the Line 1600 In-Kind Replacement Alternative and the Installation of a New 36-Inch Pipeline Parallel to Line 1600 Alternative. Include a separate analysis of each of the three construction options:</p> <ul style="list-style-type: none"> <li>a. Removal and Replacement by Segments,</li> <li>b. Remove then Replace Pipeline</li> </ul>	<p>As described in PEA Chapter 5 – Discussion of Significant Impacts and Project Alternatives, the Line 1600 In-Kind Replacement Alternatives were not carried forward since they do not meet the Proposed Project objectives of resiliency or operational flexibility. With a diameter of 16 inches, the new pipeline would not meet the capacity and reliability provided by the Proposed Project to manage stress conditions in the system. Installation of a New 36-Inch Pipeline Parallel to Line 1600 Alternative was also dismissed due to the potential for resident displacement, ROW acquisition requirements, and environmental impacts.</p> <p>In order to respond to this Item 1.5-5.1 and pursuant to the direction provided by Energy Division on May 23, 2016, the Applicants prepared</p>

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						<p>as a Whole, and</p> <p>c. Construct then Remove Pipeline as a Whole.</p> <p>The analyses should include the following information so that a quantitative comparison can be made with the proposed route:</p> <ul style="list-style-type: none"> <li>a. Length (miles) of pipeline by segment and the total;</li> <li>b. Acreage of both the permanent and construction rights-of-way;</li> <li>c. Acreage of existing and new rights-of-way;</li> <li>d. Size and location of any non-typical work areas required;</li> <li>e. Number of residences within 50 feet of the edge of the construction right-of-way;</li> <li>f. Total number of residences that would need to be purchased and/or relocated (specific parcels should not be identified);</li> <li>g. Number of waterbodies and wetlands crossed, and the length of each crossing; and</li> <li>h. Acreage of riparian corridors and oak woodlands cleared.</li> </ul> <p>Provide typical construction right-of-way cross section diagrams of each of the three Line 1600 In-Kind Replacement Alternatives and the New 36-Inch Pipeline Parallel to Line 1600 Alternative. The diagrams should show the following:</p> <ul style="list-style-type: none"> <li>a. Existing Line 1600 right-of-way;</li> <li>b. The construction right-of-way of each alternative in relation to the Line 1600 right-of-way, including any overlap of the existing right-of-way; and</li> <li>c. The widths of the temporary and new permanent rights-of-way.</li> </ul> <p>In addition, provide the map requested in Deficiency #1.5-5 illustrating existing Line 1600 along with the locations of any constraints that could</p>	<p>a Line 1600 Alternatives Screening Matrix, set forth in Exhibit AAA: Response to 1.5-5.1, with the criteria listed in Item 1.5-5.1 for each of the Line 1600 In-Kind Replacement Alternatives, as well as the New 36-Inch Pipeline Parallel to Line 1600 Alternative.</p> <p>The information provided in the Line 1600 Alternatives Screening Matrix (Screening Matrix) is the result of a high-level quantitative analysis, similar to the study conducted in the PEA Chapter 5 – Discussion of Significant Impacts and Project Alternatives and depicted in PEA Table 5-1: Alternatives Screening Matrix. Both Table 5-1 in the PEA and the Screening Matrix set forth in Exhibit AAA: Response to 1.5-5.1 were based primarily on publically available GIS data; however, the PEA compared each alternative, including the Proposed Project's route, and quantified potential resources that would be crossed. Each alternative was assessed on the same criteria and the analysis did not include a spatial component. The information in the Screening Matrix (Exhibit AAA: Response to 1.5-5.1) is based on a high-level conceptual design requested by the Energy Division that adds spatial data, including workspace limits, so that acreage of impacts could be estimated. Therefore, the information in the Screening Matrix (Exhibit AAA: Response to 1.5-5.1) may not be directly comparable to the data presented in Table 5-1 in the PEA.</p> <p>In addition, the data for the No Project Alternative in the PEA and the Line 1600 In Kind Replacement Alternatives presented in Exhibit AAA: Response to 1.5-5.1 may differ slightly as a result of the differing ROW criteria as well as the different pipe lengths, as explained in Footnote 2 in Exhibit AAA: Response to 1.5-5.1. For instance, the number of residences that would be purchased and/or relocated differs slightly for this Screening Matrix analysis and the PEA because this Screening Matrix analysis is based on a conceptual design, which includes temporary and permanent workspaces and varied ROW widths depending on topography, while the Feasibility Report was based on a static ROW configuration assumption. The conceptual design included more specific ROW widths based on location, which resulted in narrower or larger ROW widths, depending on location, than was used for the Feasibility Report. Footnotes were added to the Screening Matrix to clarify where discrepancies may have resulted when compared to the information in the PEA or where the criteria was different than the analysis in Table 5-1.</p> <p>The Screening Matrix includes the following information:</p> <ul style="list-style-type: none"> <li>a. Length (miles) of pipeline by segment and the total can be found in the rows titled Length (miles) of pipeline and Length (miles) of pipeline segments on page 1. The reasoning for analyzing 45 miles of pipeline can be found in Footnote 2. A depiction of the pipeline segments and a list of the individual segment lengths for the Removal and Replacement by Segments Alternative can be found in Footnote 4 and depicted in Confidential Exhibit BBB-A: Response to 1.5-5.1.</li> </ul> <p><b>This exhibit contains confidential information provided pursuant to P.U. Code § 583 and G.O. 66-C.</b></p>

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						<p>require either a larger construction right-of-way or a route deviation from the existing pipeline right-of-way. Show the proposed route deviations on the map so the total environmental impact can be evaluated. CPUC will comply with the California disclosure law to not show specific parcels in a public document.</p>	<p>b. Acreage of both the permanent and construction rights-of-way can be found in the row titled Acreage of construction ROW on page 1. The methodology for how the ROW was calculated and what the acreage includes can be found in Footnote 5. The acreage for permanent ROW was broken up into existing permanent ROW and new permanent ROW, which was requested in the following item c.</p> <p>c. Acreage of existing and new rights-of-way can be found in the rows titled Acreage of existing permanent ROW and Acreage of new permanent ROW on page 2. More information on the existing permanent ROW can be found in Footnote 6.</p> <p>d. Size and location of any non-typical work areas required can be found in the row titled Acreage of non-typical work areas on page 2 and depicted in Confidential Exhibit BBB-A: Response to 1.5-5.1 through Confidential Exhibit BBB-D: Response to 1.5-5.1. <b>These exhibits contain confidential information provided pursuant to P.U. Code § 583 and G.O. 66-C.</b></p> <p>e. Number of residences within 50 feet of the edge of the construction right-of-way can be found in the row titled Number of residences within 50 feet of the edge of the construction ROW on page 2. The methodology for how the number of residences was calculated can be found in Footnotes 9 and 10.</p> <p>f. Total number of residences that would need to be purchased and/or relocated can be found in the row titled Number of residences that would be purchased and/or relocated on page 2. The methodology for how the number of residences was calculated can be found in Footnote 11.</p> <p>g. Number of waterbodies and wetlands crossed, and the length of each crossing can be found in the rows titled Number of waterbodies crossed, Number of wetlands crossed, and Acreage of wetlands crossed on page 3. Descriptions of the datasets used to calculate these numbers can be found in Footnotes 14 and 15.</p> <p>h. Acreage of riparian corridors and oak woodlands cleared can be found in the rows titled Acreage of riparian corridors cleared and Acreage of oak woodlands cleared on page 3. A comparison to the Proposed Project and a description of the dataset used to calculate these numbers can be found in Footnotes 16 and 17.</p> <p>Cross-sectional drawings showing the ROW widths and construction configurations are provided as Exhibit CCC-A: Response to 1.5-5.1 through Exhibit CCC-D: Response to 1.5-5.1. Maps of each alternative depicting the temporary and permanent ROW are provided as Confidential Exhibit BBB-A: Response to 1.5-5.1 through Confidential Exhibit BBB-D: Response to 1.5-5.1 and include potential route deviations and locations where additional temporary workspace may be required. As discussed in PEA section 5.5.2 Initial Alternatives Considered, the existing permanent ROW for Line 1600 is 20 feet wide and covers 86.5 acres. The Construct then Remove as Whole Alternative and the New 36-inch Parallel to Line 1600 Alternative</p>

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							include new permanent ROW due to the additional ROW required for construction near an existing operational pipeline. The construction ROW for all alternatives ranges from 40 feet to more than 100 feet, depending on the topography, and include new permanent ROW (when relevant), temporary ROW, and temporary additional ROW ( <i>i.e.</i> , non-typical work areas). The ROW acreage in Exhibit AAA: Response to 1.5-5.1 was calculated based on these ROW widths.
1.5-6.1	Existing Line 1600 Alignment, Safety, and Integrity Management	p. 5-8, Section 4.8	N/A	<p>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.</p> <p>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.</p> <p>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.</p>	<p>The Applicants' Cost-effectiveness Analysis includes a brief description of the complexities of hydrotesting Line 1600; however, the Applicants did not provide the specific information requested in Deficiency Request #2.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>Applicants provided limited information. Will need description of TIMP and DIMP and other operations and management procedures in the EIR/EA. Requested that SDG&amp;E provide O&amp;M procedures for the EIR.</p>	<p><u>Transmission Integrity Management Program (TIMP)</u> TIMP was developed in accordance with the requirements of the Department of Transportation's (DOT) Integrity Management Rule, 49 CFR Part 192 Subpart O – Pipeline Integrity Management (Rule). The program includes identification of high consequence areas, an assessment plan, identification of threats to each covered pipeline segment, provisions for remediating conditions found during an integrity assessment, a process of continual evaluation and recordkeeping.</p> <p><u>Distribution Integrity Management Program (DIMP)</u> The Pipeline Integrity, Protection, Enforcement, and Safety Act of 2006 (PIPES) mandated that the Pipeline and Hazardous Materials Safety Administration (PHMSA) prescribe minimum standards for integrity management programs for distribution pipelines. The distribution integrity management plan provides the details of the methodologies, references to work instructions and processes to be used in the execution of its integrity management program and to demonstrate compliance with this regulation. DIMP is focused on identifying conditions that can result in hazardous leaks or other unintended releases of gas and taking the appropriate actions to minimize the likelihood of the occurrence of a hazardous condition and the consequence should a failure occur. Other routine operating and maintenance activities performed include: <u>Leak Survey</u> Leak surveys are performed by Transmission, Distribution and Storage of gas facilities at specified intervals (at least once per year for DOT defined transmission pipeline) by using instruments including but not limited to:</p> <ul style="list-style-type: none"> <li>• Detecto Pak Infrared - is a portable optical-based methane gas detector to sample the atmosphere for gas near the ground surface using Infrared Controlled Interference Polarization Spectrometry.</li> <li>• The Remote Methane Leak Detector – used as a portable “line of sight” laser based methane gas detector to detect gas leaks from a remote distance (up to 100’) by passing a laser through a gas plume.</li> <li>• The Optical Methane Detector method uses an optical-based methane detector mount in front of a vehicle to detect gas that passes between the light transmitter and receiver. The presence of methane is displayed in analog and digital form inside the vehicle.</li> </ul>

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							<p><u>Cathodic Protection</u> A technique to control the corrosion of a metal surface by making that surface the cathode of an electrochemical cell. The technique used includes:</p> <ul style="list-style-type: none"> <li>• Impressed current cathodic protection - A cathodic protection system utilizing a direct current power source (<i>i.e.</i>, rectifier) and an anode ground bed, or</li> <li>• Galvanic cathodic protection - Active metals, because of their position in the galvanic series, provide protection to metals that are more noble (less active) in the series when coupled in an electrolyte. Galvanic cathodic protection systems employ this principle, typically using magnesium or zinc anodes.</li> </ul> <p><u>Valve Inspection and Maintenance</u> DOT jurisdiction valves are inspected and partially operated at intervals not exceeding 15 months, but at least once each calendar year to ensure it is operating per manufacturer's specification. For hydraulic actuated valve, lubrication is added as needed to ensure ease of operation. Pressure regulation valves are also inspected once per year to ensure it is operational.</p> <p><u>Pipeline Patrols</u> The objective of the patrol program is to observe surface conditions on and adjacent to the pipeline right-of-way for indications of leaks, construction activity, and other factors affecting the safety and operation of the pipeline.</p> <p><u>Inspection of pipeline on bridges or spans</u> Inspect for conditions that may affect the safety and operation of the pipeline including but not limited to: Indications of gas leakage, corrosion damage to the pipe, stress on the pipe, deterioration of protective coatings, pipe supports, soil erosion, condition of pipeline markers and stenciling, condition of fencing and personnel barriers, and any visible damage to the pipe.</p> <p><u>Locate and Mark</u> Applicants perform the Locate and Mark function as required under State of California Regulations (Title 1, Division 5, Chapter 3.1, Section 4216) to prevent damage to Company subsurface installations on an as-needed basis. Company personnel performing the Locate and Mark, must undergo annual retesting to maintain the "Qualified Person" designation as defined in Code.</p>