

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



March 4, 2015

Ms. Rebecca W. Giles
San Diego Gas and Electric Company
8326 Century Park Court
San Diego, CA 92123-4150

RE: Request for Additional Data #8 – Certificate of Public Convenience and Necessity for the Sycamore-Peñasquitos 230-Kilovolt Transmission Line Project – Application No. A. 14-04-011

Dear Ms. Giles:

The California Public Utilities Commission (CPUC) Energy Division CEQA Unit has completed its review of San Diego Gas and Electric Company's (SDG&E) application (A. 14-04-011) and related Proponent's Environmental Assessment (PEA) for a Certificate of Public Convenience and Necessity (CPCN) for the Sycamore-Peñasquitos 230-Kilovolt Transmission Line Project (Proposed Project).

The CPUC identified data needs that are required to complete the alternatives screening and analysis, and environmental resource assessment for the Environmental Impact Report (EIR). These data needs are identified in the enclosed Request for Additional Data. Included with the Request for Additional Data are the following attachments for SDG&E's reference:

1. Attachment A – Figure illustrating alternative transmission alignments currently under consideration for inclusion in the EIR.
2. Attachment B – Figures illustrating pole relocation alternatives currently under consideration for inclusion in the EIR.
3. Attachment C – Figure illustrating an alternative eastern cable location and associated underground alignments currently under consideration for inclusion in the EIR.

Information provided by SDG&E in response to this Request for Additional Data should be filed as supplements to Application A. 14-04-011. One set of responses should be sent to the Energy Division and one to our consultant, Panorama Environmental, in both hardcopy and electronic format. We request that SDG&E respond to this request no later than March 25, 2015. Please let us know if you cannot provide the information by this date. If you can provide partial responses sooner, please do so for the sake of continuing our work. Delays in responding to these data needs will continue to result in associated delays in preparation of the EIR.

The Energy Division reserves the right to request additional information at any point in the application proceeding and during subsequent construction of the project should SDG&E's CPCN be approved.

Please direct questions related to this application to me at (415) 703-2068 or Billie.Blanchard@cpuc.ca.gov.

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



Sincerely,

Billie Blanchard

Billie Blanchard
Project Manager
Energy Division, CEQA Unit

cc: Mary Jo Borak, Supervisor
Molly Sterkel, Program Manager
Peter Allen, CPUC Attorney
Jeff Thomas, Project Manager, Panorama Environmental
Susanne Heim, Deputy Project Manager, Panorama Environmental
Darryl Gruen, Attorney for ORA
Chris Myers, ORA
Alan Colton, SDG&E Director - Major Projects

REQUEST FOR ADDITIONAL DATA: DATA NEEDS #8 FOR THE SYCAMORE-PEÑASQUITOS 230-KILOVOLT TRANSMISSION LINE PROJECT APPLICATION (A. 14-04-011)

REPORT OVERVIEW

The California Public Utilities Commission (CPUC) has identified several areas where more information is needed to prepare a complete and adequate analysis of the potential environmental effects of a range of alternatives in accordance with the requirements of the California Environmental Quality Act (CEQA). Data needs are identified in bold. Clarifying information is provided below the data need.

Table 1: Application No. 14-04-011 Data Needs #2

#	PEA Section, Page #	Data Need
Alternatives		
1	N/A	<p>Provide supporting assumptions used in the power flow analysis for pre- and post-implementation of the Sycamore-Peñasquitos 230-kV Transmission Line Project.</p> <p>Specifically, provide the following:</p> <ul style="list-style-type: none"> • Study assumptions, including load forecast, specific years studied, generation levels and generation type and location, renewable energy resources and location, import assumptions for each import cut-plane line into San Diego load pocket, and transmission configurations. • Any and all sensitivity studies performed including any analysis associated with alternative options to the Sycamore-Peñasquitos 230-kV Transmission Line Project. • Category B and C contingency files used in the transmission planning analysis for the Sycamore-Peñasquitos 230-kV Transmission Line Project.
2	Data Needs #1, Item 67	<p>Provide validation and clarification and/or preliminary engineering estimates of cost and time for CAISO identified mitigation alternatives to identified area overloads.</p> <p>The CAISO's 2012/2013 Final Transmission Plan identified alternatives to the Proposed Project to mitigate identified high voltage system overloads in the <u>Policy-Driven Powerflow and Stability Assessment Results and Mitigations</u> (Section 4.4.1); and <u>Deliverability Assessment</u> (Section 4.4.2) of the 2012-2013 Transmission Plan.</p> <ol style="list-style-type: none"> 1. Provide an explanation of SDG&E's Transmission Planning Engineering contribution and collaboration with the CAISO's transmission planning process for SDG&E service territory. 2. Confirm that the mitigation for the Cat. A Bay Blvd-Miguel 230 kV line overload (Section 4.4.1) is already mitigated via the Generation

Table 1: Application No. 14-04-011 Data Needs #2

#	PEA Section, Page #	Data Need
		<p>Interconnection process and not dependent on the Proposed Project. Does the identified mitigation apply to the Commercial Interest portfolio given that the renewable levels are essentially the same as the Environmentally Constrained portfolio</p> <p>3. Under the base portfolio (Section 4.4.3) deliverability assessment, Table 4.4.3, the CAISO notes that many of these overloads can be mitigated by way of Special Protection Schemes (SPS) to trip generation for the 230 kV overloads and line upgrades for the 69 kV line overloads. For comparative assessment, provide SDG&E's estimate of the cost and time to implement these identified mitigation alternatives.</p> <p>Failure to provide the requested information will result in delays and additional costs for preparation of the EIR.</p>
3	N/A	<p>Provide preliminary engineering for a Mercy Road Underground Alternative under consideration by the CPUC environmental team.</p> <p>Preliminary engineering is required for an underground alternative from Segment A to Peñasquitos Junction via Mercy Road, Black Mountain Road, and Park Village Drive. The alternative alignment is shown in Attachment A. The alternative follows the proposed alignment of Segment A from Sycamore Substation to Scripps-Poway Parkway. The line would transition to underground and continue west on Scripps-Poway Parkway to Mercy Road. The line would continue on underground west on Mercy Road to Black Mountain Road where the line would remain underground heading north to Park Village Road. The line would remain underground in Park Village Road to SDG&E ROW at Peñasquitos Junction where the line would transition back to overhead in Segment D.</p> <p>Preliminary engineering should include the following:</p> <ul style="list-style-type: none"> • Underground alignment within the roadway • Cable pole approximate locations and heights • Depth and width of the ductbank • Approximate location of underground vaults. • Width of the underground construction area • Additional ROW or easements (if needed) <p>The preliminary design should also identify any utility conflicts and corrosion or cathodic protection systems that may be installed to protect other existing underground facilities.</p> <p>Provide the following information on potential impacts resulting from construction of the Mercy Road alternative:</p> <ol style="list-style-type: none"> 1. Peak daily and annual air pollutant emissions 2. Approximate duration and timing of construction 3. Annual GHG emission estimates 4. Maximum noise emissions
4	N/A	<p>Provide preliminary engineering for a Stonebridge – Mira Mesa Combined Underground and Overhead Alternative under consideration by the CPUC environmental team.</p> <p>Preliminary engineering is required for an alternative extending underground from Stonebridge Parkway in Segment A to Vista Sorrento Parkway (south of Segment D)</p>

Table 1: Application No. 14-04-011 Data Needs #2

#	PEA Section, Page #	Data Need
		<p>and overhead from Vista Sorrento Parkway to the Peñasquitos Substation via Mira Mesa Blvd. The alternative alignment is shown in Attachment A. The alternative follows the proposed alignment of Segment A from Sycamore Substation to Stonebridge Parkway. The alternative would transition to underground in Stonebridge Parkway via a cable pole approximately 340 feet east of Stonecroft Terrace. The alignment would travel west via Stonebridge Parkway to Pomerado Road, then west within Pomerado Road to and continuing within Spring Canyon Road. Where Spring Canyon Road turns north the route would follow Scripps Ranch Blvd to the west to the intersection with Mira Mesa Blvd. The route would continue west in Mira Mesa Blvd to Vista Sorrento Parkway. At Vista Sorrento Parkway the line would transition to overhead and follow an existing SDG&E ROW to the north to Peñasquitos Substation.</p> <p>Provide preliminary engineering, design, and impact information as requested under item 3 above.</p> <p>In addition, identify what circuits are in the existing right-of-way from the area of Vista Sorrento Parkway to Peñasquitos Substation and what types of structures exist in the right-of-way. Identify the width of the existing right-of-way and dimensions between the existing lines and right-of-way boundaries.</p>
5		<p>Provide preliminary engineering for a Pomerado Road – Miramar Area North Combined Underground and Overhead Alternative under consideration by the CPUC environmental team.</p> <p>Preliminary engineering is required for an alternative extending underground from Stonebridge Parkway in Segment A to Vista Sorrento Parkway (south of Segment D) and overhead from Vista Sorrento Parkway to the Peñasquitos Substation via the Miramar Area North commercial roadways. The alternative alignment is shown in Attachment A. The alternative follows the proposed alignment of Segment A from Sycamore Substation to Stonebridge Parkway. The alternative would transition to underground in Stonebridge Parkway via a cable pole approximately 340 feet east of Stonecroft Terrace. The alignment would travel west via Stonebridge Parkway to Pomerado Road, then west within Pomerado Road to I-15. The line would be attached to the Pomerado/ Miramar Road bridge over I-15 or on an overhead structure crossing I-15. The route would continue westward underground beneath Miramar Road, turn north on Kearny Villa Road, west on Black Mountain Road, west on Activity Road to Camino Ruiz. The line would continue underground north under Camino Ruiz, west on Miralani Drive, west on Arjons Drive, south on Trade Place, west on Trade Street, south on Camino Santa Fe, and west on Carroll Road/Carroll Canyon Road to Vista Sorrento Parkway. At Vista Sorrento Parkway the line would transition to overhead and follow an existing SDG&E ROW to the north to Peñasquitos Substation.</p> <p>Provide preliminary engineering, design, and impact information as requested under item 3 above.</p> <p>In addition, identify what circuits are in the existing right-of-way from the area of Vista Sorrento Parkway to Peñasquitos Substation and what types of structures exist in the right-of-way. Identify the width of the existing right-of-way and dimensions between the existing lines and right-of-way boundaries.</p>
6		<p>Provide preliminary engineering for a Pomerado Road – Miramar Road Combined Underground and Overhead Alternative under consideration by the CPUC environmental team.</p> <p>Preliminary engineering is required for an alternative extending underground from Stonebridge Parkway in Segment A to Vista Sorrento Parkway (south of Segment D)</p>

Table 1: Application No. 14-04-011 Data Needs #2

#	PEA Section, Page #	Data Need
		<p>and overhead from Vista Sorrento Parkway to the Peñasquitos Substation via Miramar Road. The alternative alignment is shown in Attachment A. The alternative follows the proposed alignment of Segment A from Sycamore Substation to Stonebridge Parkway. The alternative would transition to underground in Stonebridge Parkway via a cable pole approximately 340 feet east of Stonecroft Terrace. The alignment would travel west via Stonebridge Parkway to Pomerado Road, then west within Pomerado Road to I-15. The line would be attached to the Pomerado/ Miramar Road bridge over I-15 or on an overhead structure crossing I-15. The route would continue westward underground beneath Miramar Road to Carroll Road/Carroll Canyon Road where it would continue west on Carroll Road to Vista Sorrento Parkway. At Vista Sorrento Parkway the line would transition to overhead and follow an existing SDG&E ROW to the north to Peñasquitos Substation.</p> <p>Provide preliminary engineering, design, and impact information as requested under item 3 above.</p> <p>In addition, identify what circuits are in the existing right-of-way from the area of Vista Sorrento Parkway to Peñasquitos Substation and what types of structures exist in the right-of-way. Identify the width of the existing right-of-way and dimensions between the existing lines and right-of-way boundaries.</p>
7	N/A	<p>Provide preliminary engineering for a partial 69-kV underground alternative via Carmel Mountain Road under consideration by the CPUC environmental team.</p> <p>This alternative proposes placing the two 69-kV circuits underground from the area of Del Mar Mesa (Pole 48) to Peñasquitos Substation as shown in Attachment A. The line would transition to underground in the area where a new housing development is being constructed. A short segment of 69-kV underground, approximately 850 feet, would be located along an existing SDG&E access road to Carmel Mountain Road. The underground route would then be located within Carmel Mountain Road to a cable pole near Segment D.</p> <p>Provide preliminary engineering information and impacts as requested under item 3 above. In addition, identify the number and configuration of underground cables. What are the maximum and minimum lengths of roadway that will be disturbed/ blocked during an underground 69-kV ductbank installation?</p>
8	N/A	<p>Provide preliminary engineering for pole relocation alternatives for proposed poles within Segment A and Segment D under consideration by the CPUC environmental team.</p> <p>Preliminary engineering is needed for an alternative pole locations in Segments A and D as shown on Attachment B:</p> <ol style="list-style-type: none"> 1) Pole #5, Segment A – SDG&E’s proposed location of Pole #5 was reviewed due to the extent of retaining wall required. It appears that this pole location could be shifted ahead-line towards the existing H-frame location. This pole shift could reduce the earthwork necessary without further negatively affecting the visual impact of the new 230 kV transmission line. 2) Poles #17 thru #21, Segment A – These poles are shifted 30 feet towards residences and are adjacent to Scripps Poway Parkway within a greenway. It appears there is room between the existing H-frames and the roadway for these poles to be shifted within the greenway 30 feet away from residences, toward Scripps Poway Parkway. In the case of Pole #17 the recommended shift may place the pole relatively close to the roadway. In this case an additional shift ahead-line may be worthwhile to increase the distance from

Table 1: Application No. 14-04-011 Data Needs #2

#	PEA Section, Page #	Data Need
		<p>the road.</p> <p>3) Pole #24, Segment A - This pole is located adjacent to Poway Road and is on a slightly elevated area and is also the location for a wire stringing site requiring a large amount of grading and a retaining wall. It is recommended that this pole be shifted back-line to a somewhat less sloped area to reduce earthwork and retaining wall.</p> <p>4) Poles #48 thru #57, Segment D - The poles in this section are shifted away from Peñasquitos Canyon, 40 feet from the existing H-frames and towards residences. An alternative to shift this section 30 to 40 feet towards Peñasquitos Canyon was reviewed. In general these shifts would require either a small extension of existing access road or restoration of a slightly longer section of existing road. Additional retaining walls may also be necessary for some of the crane pads.</p> <p>Preliminary engineering should include the following:</p> <ul style="list-style-type: none"> • Revised pole heights for relocated poles • Locations and dimensions at each relocated pole of revised permanent and temporary work areas including stringing sites, maintenance pads, and access roads • Revised estimated quantities of cut and fill for each relocated pole • Length and height dimensions of any retaining walls for each relocated pole
9	N/A	<p>Provide preliminary engineering for two potential underground alternatives from a cable pole located south of Carmel Valley Road at the east end of the underground line under consideration by the CPUC environmental team.</p> <p>Preliminary engineering is needed for an alternative cable pole location south of Carmel Valley Road at the approximate location of the first existing structure south of Carmel Valley Road. There are two potential underground alignments between the cable pole and Carmel Valley Road as shown on Attachment C:</p> <p>5) Northeasterly for a short distance (approximately 200 feet) along SDG&E access road to a paved road within the water reservoir facility north of the ROW. The route would be within the road for approximately 450 feet to Carmel Valley Road</p> <p>6) West and parallel to Carmel Valley Road from the cable pole along an existing access trail to an existing main access road to Emden Road where the route then turns north for approximately 400 feet to Carmel Valley Road.</p> <p>Provide preliminary engineering information as requested under item 3 above.</p>
10	N/A	<p>For Segment D, indicate whether the existing wood H-frame 69 kV line can be taken out of service while the replacement circuit is installed. If not, identify the minimum distance required between the existing H-Frame and the new double circuit 69 kV steel poles.</p>
11	PEA Section 5.2.4.1 No Project Alternative	<p>Provide additional detail regarding system operation conditions under the No Project Alternative.</p> <p>Specifically, describe in layman’s terms how SDG&E would manage the power flow needs defined by the project objectives in a No Project scenario.</p> <ul style="list-style-type: none"> • What system operational failures could occur? What would be the probably of each operational failure occurrence be?

Table 1: Application No. 14-04-011 Data Needs #2

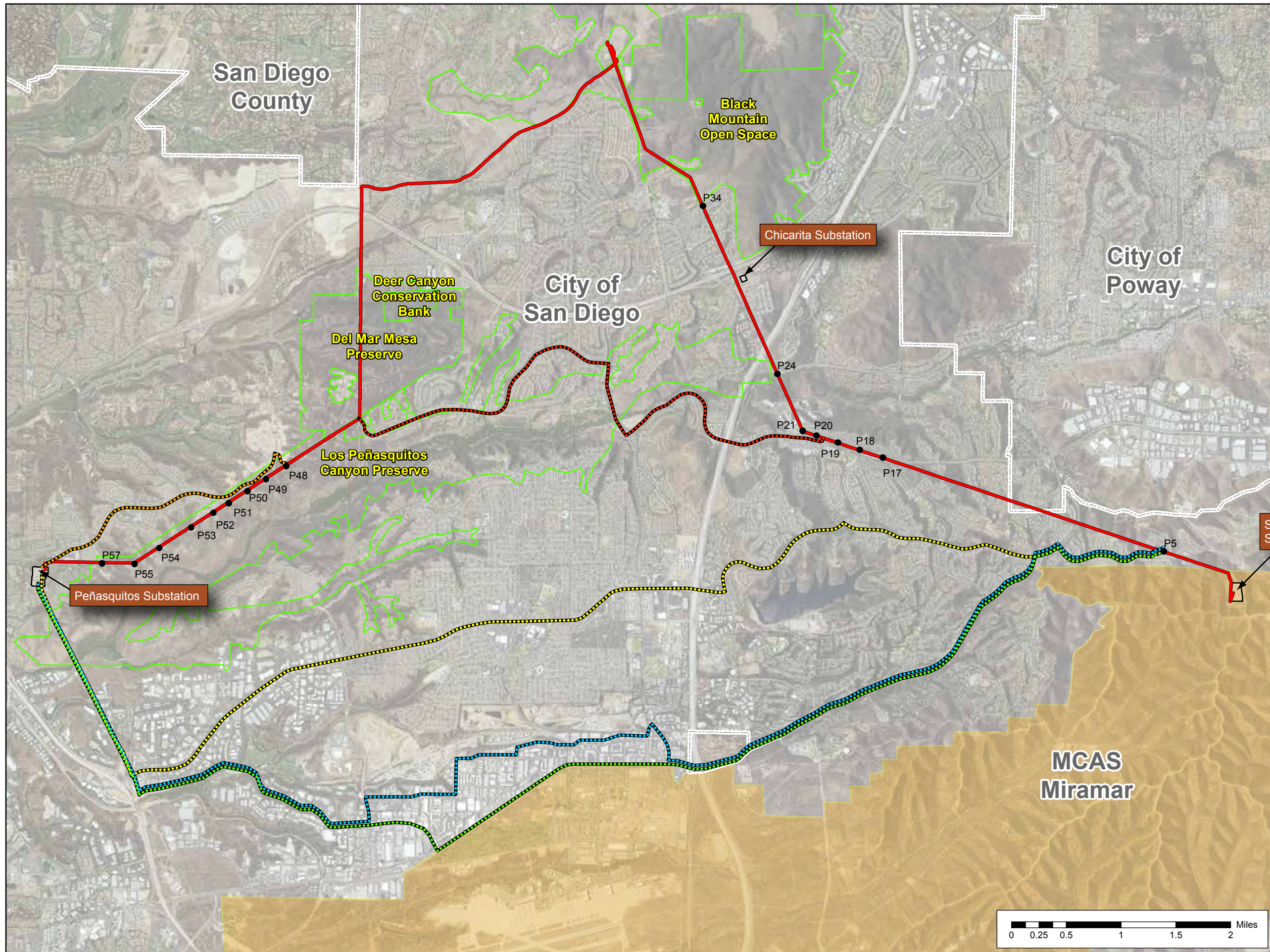
#	PEA Section, Page #	Data Need
		<ul style="list-style-type: none">• What procedures, actions, or mitigations would be implemented in lieu of the proposed project?• How and to what extent would these procedures, actions, or mitigations eliminate operational failures?

Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternative Routes Under Consideration

Legend

- Select Project Pole
- LPCP Mercy Rd Alternative
- Pomorado Rd to Miramar Area North Combined Underground and Overhead Alternative
- Pomorado Rd to Miramar Combined Underground and Overhead Alternative Alignment
- Segment D 68 kV Partial Underground Alignment
- Stonebridge-Mira Mesa Combined Underground and Overhead Alternative
- Proposed 230kV Line
- Substation
- County and City Boundaries
- MCAS Miramar
- Preserve or Open Space



Map Created: 3/2/2015
 Aerial Imagery Captured: 2014
 Scale = 1:55,000



Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P5






Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way



Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P17






Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way



Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P18






Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend



-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way

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Sycamore-Peñasquitos 230-kV Transmission Line Project
Alternatives Under Consideration - Pole Relocation P19



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community




Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend



-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way



Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P20



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community




Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend



-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way

PANORAMA
ENVIRONMENTAL, INC.

Sycamore-Peñasquitos 230-kV Transmission Line Project
Alternatives Under Consideration - Pole Relocation P21






Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way



Sycamore-Peñasquitos 230-kV Transmission Line Project
Alternatives Under Consideration - Pole Relocation P24






Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way






Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P34



Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010



Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P48






Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way

PANORAMA
ENVIRONMENTAL, INC.

Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P49






Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way



Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P50






Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend




-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way



Sycamore-Peñasquitos 230-kV Transmission Line Project
Alternatives Under Consideration - Pole Relocation P51



Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010




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Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P52



Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

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Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P53






Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way



Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P54






Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way

PANORAMA
ENVIRONMENTAL, INC.

Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P55





Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

Aerial Imagery Captured: 5/3/2010

Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way

PANORAMA
ENVIRONMENTAL, INC.

Sycamore-Peñasquitos 230-kV Transmission Line Project

Alternatives Under Consideration - Pole Relocation P57






Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Created: 3/2/2015

Scale = 1:1,000

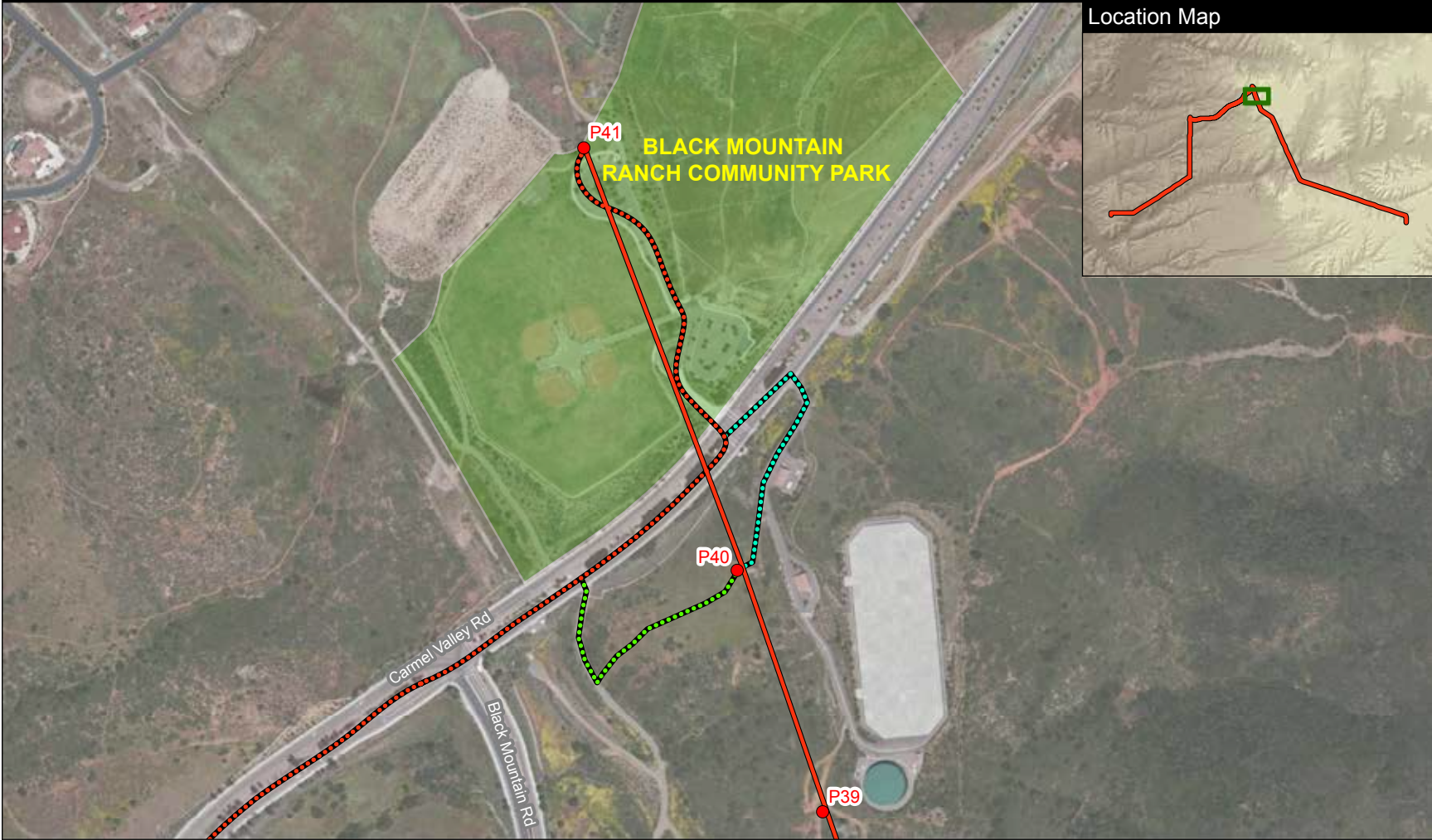
Aerial Imagery Captured: 5/3/2010

Legend

-  SDG&E Proposed Pole
-  Relocated Pole
-  SDG&E Right-of-Way



Alternative Cable Pole Underground Routes Under Consideration

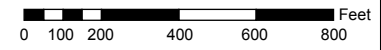


SOURCES: Esri 2014, Phaseline 2014, SDG&E 2014, and Panorama Environmental, Inc. 2014

Scale: 1:6,000

LEGEND

- Proposed Alignment
- Proposed Alignment (Underground)
- New Pole
- Segment B Eastern Cable Pole Option 3
- Segment B Eastern Cable Pole Option 4
- Park



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