

**PUBLIC UTILITIES COMMISSION**

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



September 27, 2006

Mr. Kevin O'Beirne  
San Diego Gas & Electric Company  
8830 Century Park Court – CP32D  
San Diego, CA. 92123

**Re: Data Request #1 for the SDG&E Sunrise Powerlink Transmission Project,  
Application No. 06-08-010**

Dear Mr. O'Beirne:

The California Public Utilities Commission's (CPUC) Energy Division has reviewed all of the documents and materials that SDG&E has provided including the Proponent's Environmental Assessment (dated August 4, 2006), and the Application Supplement Materials (dated September 1, 2006). During the analysis of the aforementioned materials and in our initial phase of identification of alternatives, we have identified additional items that require information from SDG&E. Attached please find Data Request No. 1, which defines the additional questions we have at this time. It should be noted that additional data requests will most likely be necessary to address alternatives and other CEQA/NEPA topics. Also, we are reviewing the data requests submitted to SDG&E by parties in the ALJ's proceeding, and we may have questions related to these items or SDG&E's responses.

We would appreciate your prompt responses to these data requests, which will allow us to maintain our current EIR/EIS schedule. We request that responses to as many items as possible be provided to us within two weeks (by October 10, 2006). It is understood that some of these requests may require more time (especially those asking for engineering/design information); however, we request that information be provided to us as soon as each response is available (but no later than October 31, 2006).

Please submit one set of responses to me and one to Susan Lee at Aspen in San Francisco, in both hard copy and electronic format. Any questions on this data request should be directed to me at (415) 703-2068.

Sincerely,

Billie C. Blanchard, AICP, PURA V  
Project Manager for Sunrise Powerlink Project  
Energy Division, CEQA Unit

Attachment

cc: Sean Gallagher, CPUC Energy Division Director

Ken Lewis, CPUC Program Manager  
Steve Weissman, ALJ  
Traci Bone, Advisor to Commissioner Grueneich  
Nicholas Sher, CPUC Legal Div.  
Lynda Kastoll, BLM  
Susan Lee, Aspen Env. Group

# Sunrise Powerlink Transmission Line Project

## Data Request No. 1

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### General

- Gen-1 In order for the EIR/EIS team to be aware of access problems for surveys or site visits, please provide a listing of property owners (including phone numbers) along the Proposed Project route and SDG&E alternatives retained in the PEA, where SDG&E does not have right-of-entry.
- Gen-2 Please provide a copy of any and all documents relating to history, ownership, property rights, and surveys of the existing SDG&E ROW through the Anza-Borrego Desert State Park (ABDSP), defining any terms or conditions associated with the easement.
- Gen-3 a. Please provide GIS files including all existing transmission line structures within the proposed ROW (current data includes only structures to be added or removed).
- b. For all towers, provide a data table identifying the tower type and tower height.

### Project Description

- PD-1 a. Please clarify whether the preliminary structure locations provided in the Proposed Project GIS database are final for purposes of impact assessment.
- b. We recognize that slight modifications to tower locations may be required during project construction in response to conditions or resources encountered in the field (maximizing tower stability while minimizing environmental issues). Please describe the process that would be used to determine revised structure locations during construction, if necessary.
- PD-2 The PEA does not provide details on the transmission hardware that will be installed as part of the Proposed Project. Please provide detailed information regarding the composition, type and dimensions of conductors to be used for each circuit. Also, describe conductor spacing parameters for each type of line and structure.
- PD-3 a. The transmission structure figures (Figure 2.3-2A through 2.3-2k) in the PEA do not show ground wires or fiber optic cables. Will overhead ground wires be installed as part of the Proposed Project? If so, please provide information on the number of ground wires per type of line and their approximate spacing. In addition, identify their placement on the applicable PEA structure illustrations.
- b. Would fiber optic cables be installed on transmission structures? If so please identify the location of the fiber optic cable on each type of structure.
- PD-4 What other associated hardware would be needed for the Proposed Project other than conductors, insulators and ground wires? Please also explain the function of the additional hardware on the transmission structures.
- PD-5 In order to evaluate the potential impacts associated with operation and maintenance (O&M) activities, we need to understand these projected O&M activities for the Proposed Project. Please provide additional information on the frequency of O&M procedures. How often would

- ground and aerial patrols be conducted for aboveground structures, underground structures, vegetation maintenance, washing the insulators, etc.? What are the labor and equipment requirements for patrols?
- PD-6 Please provide a detailed list of labor force required per month for each segment (i.e., Desert Link, Anza Borrego Desert State Park, Central Link, Inland Link, Coastal Link, substation, and other system upgrades) of the Proposed Project. Provide this information in Excel spreadsheet format with corresponding graphs.
- PD-7 An earlier version of the PEA indicated that the Proposed Project would require a large repeater station near the Central Substation. Although the repeater station was removed from the text in the August 4, 2006 version of the PEA, it was included in Table 2.3-1 (Sunrise Powerlink Project Plan of Service). Please confirm whether a microwave repeater site is not part of the Proposed Project.
- PD-8 There are two underground segments identified for the Proposed Project. Some of these segments would be located in urban streets that likely have other existing underground utilities. Please identify the separation required between the transmission line duct bank and other buried utilities (e.g., natural gas or water pipelines), especially those that operate at high temperatures. Please identify areas where the Proposed Project would run parallel or perpendicular to these high temperature substructures. Are there other instances where the SRPL underground lines would require additional separation distances (e.g., where corrosion of parallel pipelines could occur)?
- PD-9 Please clarify the radius of vegetation clearing around all transmission support structures. There is a discrepancy between pages 2-60 and 2-61 of the PEA. Page 2-60 states that SDG&E would maintain a 30 foot minimum working space around all transmission structures. Page 2-61 states that a ten foot radius is cleared around a pole or structure footing. Please clarify this discrepancy.
- PD-10 It is our understanding that steel poles, lattice towers, and H-frame towers would each require different amounts of clearance during construction due to the different construction techniques. Please provide a range or a specific amount of disturbance that would result at each structure type (e.g., xxx square feet for a 500 kV lattice tower; xxx square feet for a tubular steel pole).
- PD-11 Section 2.5.4.1.2 of the PEA states that typically the underground circuits would be constructed in a vertical configuration, but at some locations transitioning to a horizontal configuration may be required to clear substructures in highly congested areas. Please provide an illustration of a typical 230 kV double circuit duct bank with a horizontal configuration that would be used for the underground portions of the Proposed Project, if necessary.
- PD-12 Please provide a table that lists all waterway crossings (including existing culverts) in the underground segments of the Proposed Project, and states whether the crossing of that waterway will be accomplished by an open cut crossing, a bore, or a directionally drilled crossing. Each of these methods requires a different area of disturbance at the construction site and also has varying potential for affecting the water quality of the waterway itself. Therefore, this information is required for impact analysis.

## Alternatives

The EIR/EIS Team is evaluating a wide range of alternatives to the Proposed Project. No decision has been made as to which specific alternatives may be carried forward for analysis in the EIR/EIS; however, additional information is required in order for us to complete the screening process allowing this determination to be made. Also, we are requesting “preliminary engineering” on certain components that we believe are almost certain to require EIR/EIS analysis. For the following questions, we will first state the alternative for which we require information, then present the question(s) themselves.

### Alternatives Avoiding Anza-Borrego Desert State Park by Collocating with Segments of the SWPL

Any alternative that avoids ABDSP requires collocation with the existing 500 kV SWPL for a longer segment than that proposed by SDG&E in its Proposed Project route. The following questions are presented in order for us to clearly understand SDG&E’s stated concern about the reliability of this collocation.

- ALT-1
  - a. Provide references to general NERC and WECC criteria for reliability that apply to 500 kV transmission lines and requirements related to separation of parallel 500 kV transmission lines from each other.
  - b. Explain why there is variation among WECC-approved parallel 500 kV projects (e.g., Devers-Palo Verde No. 2 would have a 130 foot separation from Devers-Palo Verde No. 1, but Path 15 [Los Banos-Gates 500 kV] was constructed at "a minimum of 2000 feet" from the original 500 kV line).
- ALT-2 Have WECC, CAISO, or STEP proceedings defined specific reliability criteria for a second 500 kV line parallel to the SWPL? If so, please provide such criteria, along with references to documents in which they were presented.
- ALT-3 Provide a table that lists each outage on the SWPL since it was constructed. For each outage, include the following columns: date of outage, cause of the outage, and the amount of time the line was out of service.
- ALT-4 What is the width of the existing ROW for the SWPL between Imperial Valley Substation and a point along the SWPL just south of Barrett Substation. If the ROW width varies, please provide width by milepost, starting at the Imperial Valley Substation.
- ALT-5 Please provide a copy of the CEQA and NEPA environmental documentation that was prepared when the SWPL was constructed.
- ALT-6 SDG&E has previously pointed out “pinch points” where environmental constraints exist along the SWPL corridor. Please answer the following questions about these locations:
  - a. The Jacumba Wilderness appears to end north of the Mexican border. Given the existence of the Jacumba Wilderness and the Campo Reservation, would it be possible to install a new set of towers south of the existing SWPL and outside of the Wilderness Area, but then use those new towers for the existing IV-Miguel circuit? The existing SWPL towers could be used for the new IV-Central (or other endpoint) circuit. This should allow for avoidance of

critical land uses (i.e., the Jacumba Wilderness) without requiring crossings of the 500 kV lines. Please comment and confirm that this would be possible.

b. In PEA Supplement map Attachment ALT 1, SDG&E pointed out “Indian land” as a pinch point in the vicinity of the Campo Reservation. Similar to item a above, could this land be avoided by installing the new towers south of the existing SWPL?

c. PEA Supplement map Attachment ALT 1 also points out locations of designated critical habitat along the SWPL. How would the extent of impact to this habitat compare with impacts to critical habitat for the proposed route?

ALT-7 Please provide preliminary engineering (tower locations) for a 500 kV transmission line in a route parallel to and adjacent the SWPL starting at the Imperial Valley Substation and ending at a point about five miles west of the intersection of Hwy 94 and Barrett Lake Road. Incorporate into this route the following requirements:

- Pass to the south of the Jacumba Wilderness (as described in ALT-6a above),
- Include appropriate separation from SWPL (incorporating response to ALT-1 above),
- Pass to the south of the Campo Reservation as (as described in ALT-6b above)

Note that various substation alternatives along this segment are addressed below.

ALT-8 What is the capacity of the existing SWPL (in MW) and what has been its utilization, on an annual average basis, over the past five years?

### Alternatives Through Cleveland National Forest

The most feasible non-ABDSP routes that were considered by SDG&E appear to be Alternatives C and D, which both follow existing 69 kV transmission lines and pass through portions of the Cleveland National Forest. Answers to the following questions will allow us to understand these routes and their potential constraints.

**Substation Options.** The Proposed Project includes a 500/230 kV substation at a point approximately 30 miles from the eastern border of San Diego County. We are evaluating several potential locations for a 500/230 kV substation at similar points along an alternative route that would parallel the SWPL. These substation locations could be used in conjunction with portions of the C, D, and C-D alternative routes (as well as other routes developed by the EIR/EIS Team). Converting the project to a 230 kV line near the SWPL would allow greater flexibility in line siting when designing a north-south transmission line route that would connect with the Proposed Project route to the north. Please provide the information requested below for each of the 500/230 kV substation options described.

ALT-9 **Low-Profile Substation Design.** On other projects, we have seen utilities use a “low-profile” substation design in order to minimize the visibility of substation equipment. An example is the PG&E 230 kV Cayetano Substation recently constructed near Livermore, Alameda County on North Livermore Road. Describe the possibility of using such a design for a 500/230 substation, and explain how such a substation would vary (in design, cost, and profile) from the proposed design of the Central East Substation.

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ALT-10 **Construction of a New 500/230 kV Substation after following the SWPL into central San Diego County.** Please provide preliminary engineering using a feasible low profile design (describing site size required, equipment needs, and comments on the feasibility of a substation at these locations) for a 500/230kV substation that could be located at one of the following sites:

a. The Barrett Substation is surrounded by undeveloped land and is relatively flat. There are residences west of the substation, but not nearby to the north or south. Please provide preliminary engineering (describing site size required and equipment needs) for the Barrett Substation if that facility were to be expanded to a 500/230kV substation.

b. East of the intersection of Hwy 94 and Barrett Lake Road, where the SWPL crosses Hwy 94, there is a Caltrans yard. Identify a site that SDG&E believes to be the most appropriate for a 500/230 kV substation in this vicinity.

c. Could a substation be located adjacent to the SWPL on BLM land, at a point generally southwest of the Barrett Substation and about 3 to 5 miles west of Barrett Lake Road? Identify a site that SDG&E believes to be the most appropriate for a 500/230 kV substation in this vicinity and adjacent to the SWPL.

d. Along or just north of the SWPL corridor, south of the Cameron substation. Identify a site that SDG&E believes to be the most appropriate for a 500/230 kV substation in this vicinity.

e. Could the Loveland Substation (south of Alpine) be expanded to be a 500/230 kV substation? Please provide the size of the parcel that SDG&E owns, a detailed topographic map and an aerial photograph of the site.

ALT-11 How wide are the existing SDG&E rights-of-way (ROWs) along the "D" alternative route, "C" alternative route and "C-D" segment alternative route? If the ROW widths vary along the routes, please provide the widths by milepost in a table, with an associated map showing milepost locations.

ALT-12 What is the expiration date of the 69kV ROW within the Cleveland National Forest along the route "C" and "D" alternatives?

ALT-13 The EIR/EIS Team is looking at all alternatives between the SWPL ROW and the proposed ROW in the Ramona area. Please provide detailed environmental information on the following east-west corridors: B-C Corridor and C-D corridor in the same level of detail as provided for other alternatives identified in tables on PEA p. 3-11 to 3-13.

ALT-14 a. Please provide preliminary engineering (tower locations) for a 230 kV double circuit line following the D Alternative described in the PEA. How wide a ROW would be required? Could the existing 69 kV line be constructed as an underbuild on the 230 kV towers?

This route would start at the Barrett Substation, then follow the existing 69 kV line from Barrett Substation, past Descanso, through the Boulder Creek area, cross the San Diego River south of Santa Ysabel, and terminate at the Central South Substation Alternative. The preliminary engineering should include connection to the SWPL, using the D Alternative route south to the Barrett Substation, then using each of the substation alternatives defined in ALT-10 above to connect with the SWPL corridor.

b. Describe the difference in ROW width and tower spacing that would occur if a 500 kV line were constructed to the Central South Substation Alternative site, as compared with the tower locations presented in 14a above.

ALT-15 For the areas of most dense residential land uses along the C, D, and C-D routes, including the existing 69 kV routes through residential areas of Pine Valley and Descanso, please present preliminary engineering, including tower locations, for modified routes for a 230 kV or 500 kV line (diverging from the existing 69 kV corridors) that would avoid the residential areas and/or minimize impacts to residences.

ALT-16 There are several existing 69 kV circuits that are located within the C, D, and C-D routes presented in the PEA. Please identify whether the existing 69 kV circuits are located within tribal or reservation lands. If so, provide detailed maps showing tower locations and reservation boundaries.

### Alternatives West of Cleveland National Forest

The EIR/EIS Team is also evaluating whether it is possible to identify a transmission line route (most likely a 230 kV line) that would avoid both the ABDSP and the Cleveland National Forest. We recognize the extent of residential development in this area, as well as tribal land and other constraints. Regardless, SDG&E should identify a transmission line route option through this area.

ALT-17 In order to find a potential route west of the Cleveland National Forest that minimizes effects on residential areas and avoids tribal lands, please provide preliminary routing based on topography and avoidance of residences in the following areas:

a. From Barrett Substation to the Loveland Substation, following a route west of the Forest boundary in a north-northwesterly direction through the following sections:

- T17S, R2E – sections 23, 25, 26
- T16S, R2E – sections 33, 28, 29, 20, 17

b. From Loveland Substation to the proposed corridor using one of the following routes:

- T16S, R2E – sections 8/7 (section line) and 6/5 (section line)
- T16S, R1E – sections 1, 2
- T15S, R1E – sections 35, and along NW boundary of 26, 25, 24; along western boundary of sections 13, 12; SW boundary of section 1, southern boundary of section 2, then following either:
  - Northern section boundary of T15S, R1E section 3, 4, 5, 6 to Hwy 67 and then north along east or west side of Hwy 67 to proposed route, or
  - Through T14S, R1E, sections 34 (BLM land) and 28 on a NW diagonal, north along section lines between 20/21 and 16/17 to join the proposed route northeast of San Vicente Reservoir.

ALT-18 Please identify one or more additional routes or route segments (if other routes would reduce impacts in comparison with those identified in ALT-17 above) that would be located west of the Cleveland National Forest (also avoiding areas of high residential density and tribal land)



that could connect the area of the Barrett Substation (with various substation options, as defined above) with the proposed route, either at or east of the Sycamore Canyon Substation.

### San Felipe Substation

The EIR/EIS Team is evaluating an option under which the proposed 500/230 kV substation (now proposed to be located at the Central East site) would be moved east to the IID San Felipe Substation location. This concept offers two potential benefits: (a) a 500 kV substation would be required in the vicinity of San Felipe under the Sun Path/Green Path North project (as approved by the CAISO) so the cost of the new substation could be shared with IID and LADWP, and (b) converting the Sunrise Powerlink to 230 kV at this location would allow portions of the project to be installed underground west of this point, eliminating the construction of a new 500 kV transmission line through ABDSP. Specific questions on this option are as follows:

- ALT-19 The existing San Felipe Substation is in an isolated location, surrounded by flat and undeveloped land. Please provide preliminary engineering (describing site size required and equipment needs) for the San Felipe Substation if that facility were to be expanded to a 500/230kV substation.
- ALT-20 The PEA and CPCN do not present a specific goal for the transfer capacity of the Sunrise Powerlink, but a CAISO document states this to be “up to 1,000 MW”. If the project west of San Felipe were to be a double-circuit, bundled 230 kV line, what would be the transfer capacity of the line between Imperial Valley and Sycamore Canyon Substations?
- ALT-21 PEA Figure 2.3-2M illustrates the duct bank required for the underground segment proposed south of Ramona. Is there any reason that an underground segment through the ABDSP would use a different construction method?
- ALT-22 The “Sun Path Project” as evaluated by the CAISO combines the Sunrise Powerlink and the Green Path Project:
- (a) Would a 500/230 kV substation be constructed at the approximate location of IID’s San Felipe Substation as a necessary component of Sun Path, under the No Project Alternative?
  - (b) Would this substation upgrade be required even in combination with a routing alternative that avoids San Felipe, such as a new 500 kV parallel to SWPL?
  - (c) Please describe whether SDG&E considers construction and operation of the San Felipe 500/230 kV substation to be a reasonably foreseeable indirect consequence of approving the Proposed Project.
- ALT-23 Please provide preliminary engineering, including vault spacing, for installation of a double-circuit bundled 230 kV line that would be installed underground in Highway 78 (including the segment of Highway 78 in which SDG&E is proposing to underground the existing 92 and 69 kV lines) between Old Kane Springs Road and San Felipe Road (Route 2). Is SDG&E aware of any engineering constraints that could prevent installation of such an underground line? Similarly, provide preliminary engineering, including vault spacing, for an underground line underground in Route 2 between Highway 78 and Montezuma Valley Road (Route 22), and identify any constraints to installing such a line in that location.

## Santa Ysabel Valley Alternatives

Given the high visibility of the proposed route through the Santa Ysabel Valley, the EIR/EIS Team will carefully consider alternatives to this route segment, including the potential for using the existing SDG&E 69 kV route parallel to Highway 79 and the SDG&E alternative that would move the 230 kV line to the west. Questions include:

- ALT-24 The Routing Study (page 75) states that use of the existing 69 kV route for the new 230 kV line was not considered because of the San Ysabel Mission and Nature Conservancy Lands. Please provide a detailed map illustrating the width of SDG&E's existing easement and existing tower locations for the segment of the 69 kV line that parallels SR 79 between its intersection with SR 76 to the north and SR 78 to the south. The map should illustrate the boundaries of the Mission property and the Nature Conservancy Lands.
- ALT-25 PEA Section 3.4.3 (last paragraph before Section 3.4.4 on page 3-62) states that two route segments were reversed before submittal of the PEA with respect to their "proposed" and "alternative" status based on meetings with County of San Diego and San Dieguito River Park staff. The concerns of the County staff were based on visual impacts on recreational users. In order for EIR/EIS Team to understand how the proposed route in this area was selected, please describe:
- (a) the parcels that would have been affected by the route to the west in comparison to the parcels affected by the route as currently proposed,
  - (b) the difference in recreational use between the two areas
  - (c) the traffic volume on Highway 79.
- ALT-26 We are evaluating two possible alternatives in the area of Santa Ysabel: one west of SR79 (PEA Alternative N55-N45) and one east of SR 79, following the existing 69 kV ROW. We have been given tower locations for the western alternative. Please provide preliminary engineering (tower locations) for 230 kV towers along the route that would follow the existing 69 kV ROW north from the Santa Ysabel substation to N18. Engineering should assume that this would be a consolidated ROW like the proposed project (double circuit 230 kV with 69 kV underbuild).

## UCAN Alternatives

In its September 7, 2006 statement in the CPUC's Sunrise proceeding, UCAN presents several alternatives (pages 2-3). Please respond to the following questions on these suggestions.

- ALT-27 Please explain the potential environmental benefits and environmental/engineering constraints of the "Mexico Light" alternative and the ability of "Mexico Light" to achieve project objectives. Provide sufficient detail on each environmental discipline that a comparison can be made with the proposed route.

UCAN describes "Mexico Light" as follows: The "Mexico Light" alternative would consist of a very short segment of new 230 KV transmission from either the TDM and/or Intergen generators to the CFE grid. This new transmission would normally be operated open. The existing cross-trip for loss of SWPL would be amended so that, in the event of loss of the IV-Miguel segment of SWPL, the TDM and/or Intergen plants would no longer trip off completely, and the Tijuana-Otay Mesa circuit would no longer be opened. Instead, the

TDM/Intergen to CFE circuit(s) would be closed, and the generators would continue to operate.

- ALT-28 Please explain the potential environmental benefits and environmental/engineering constraints of the “SONGS Upgrade” and “SONGS Medium” options as project alternatives and the ability of these options to achieve project objectives. Provide sufficient detail on each environmental discipline that a comparison can be made with the proposed route.

UCAN describes the “SONGS Upgrade” as follows: The existing SCE-SONGS lines that form the north-of-SONGS transmission path pass SDG&E’s Talega Substation. Looping one of those lines into the Talega Substation would require no more than one mile of new transmission line, plus two new termination positions at Talega, and would create a 6th south-of-SONGS line. The existing SCE system north of SONGS can already handle flows of up to 2850 MW into the SDG&E system. Similarly, a six-line south-of-SONGS path should be able to handle 2850 MW after losing one of the six lines, because a five-line south-of-SONGS path can handle 2850 MW today under N-0 conditions.

UCAN describes “SONGS Medium” as follows: A variation on the “SONGS Upgrade” would involve either a second Talega-Escondido line or a 4th SONGS-San Luis Rey line. This alternative would consist of SONGS light (looping an SCE-SONGS line into Talega) plus a new 230 kV line, either Talega-Escondido #2 or SONGS-San Luis Rey #4.

### No Project Alternative

- ALT-29 Please describe whether SDG&E considers construction and operation of the 300 to 900 MW Stirling solar facility to be a reasonably foreseeable indirect consequence of approving the Proposed Project.
- ALT-30 CPUC recently ordered IOUs to procure 3,700 MW of new generation to come on line beginning in 2009 (D. 06-07-029 on July 20, 2006, R. 06-02-013). Although only PG&E and SCE were ordered to issue RFOs for this new generation, the CPUC could conceivably in the future order such procurements for SDG&E. Please expand the description of the No Project Alternative to illustrate what level of new generation would need to be procured by SDG&E in each year from 2010 to 2015 to meet Resource Adequacy requirements and RPS goals, in the absence of the Sunrise Powerlink Project.

### Technology Alternatives

- ALT-31 SDG&E should identify and discuss project alternatives using composite material conductors, such as 3M's Aluminum Conductor Composite Reinforced (ACCR) wires. SDG&E should describe these alternatives and determine the feasibility of meeting project objectives while minimizing impacts in the following situations:

(a) By using composite conductors, could SDG&E design a high voltage transmission line with a high level of transfer capability within the narrow existing ROW along the route of the Proposed Project, avoiding the need to substantially expand the existing ROW within ABDSP? Describe whether differences in tower design given use of composite conductors could reduce visual or ground disturbance impacts as compared with the proposed project. Please provide information from composite conductor manufacturers on these options.

(b) By using composite conductors, could SDG&E design a 230 kV line partially underground (within ABDSP) with a higher level of transfer capability between San Felipe and the proposed Central East Substation than would occur with standard solid dielectric cable? Please provide information from composite conductor manufacturers on these options.

(c) By replacing existing conductors with composite conductors on the existing SWPL towers, would SDG&E be able to improve the transfer capability of the existing SWPL to satisfy the import capability goals?

### Other Alternatives Issues

ALT-32 Please provide an electronic copy of SDG&E's most-recent RPS procurement plan. We believe that this is the plan filed April 15, 2005 in R. 04-04-026, but if there is a more recent plan, please provide that instead.

### Full Loop Alternative

The PEA includes a very brief description of the Full Loop Alternative in Section 3.3.3.9, but the discussion is not adequate for the EIR/EIS Team to fully understand the option and respond to public questions about this potential option. The following questions address this topic.

ALT-33 The PEA's description of the Full Loop Alternative does not provide any information supporting the claim that impacts to "residences and commercial entities" would occur. Please identify the locations of the residences and commercial entities that would be affected.

ALT-34 Please provide a detailed description of the corridors that would be followed by the Full Loop Alternative, identify the transmission corridors for which SDG&E has easements, and the general land ownership for portions of the alignments outside of SDG&E corridors.

ALT-35 Please provide detailed GIS-based maps of the Central-Serrano/Valley 500 kV line segment.

### LEAPS Project Alternative

ALT-36 Please provide a detailed discussion explaining the difference between the environmental effects and system benefits of SDG&E's previously proposed Valley-Rainbow project with the LEAPS project. Include a discussion, and diagrams, illustrating the difference between the previously proposed "Rainbow" substation interconnection to the SDG&E grid as compared to the proposed interconnection of the LEAPS project. Please also explain whether or not the LEAPS interconnection can be configured to provide similar benefits to what was expected with the Valley-Rainbow project.

### General Alternatives Questions

ALT-37 a. Our review of the GIS shapefile of all existing transmission lines determined that some of the attribute data may be incorrect. For example, the IID 161 kV transmission line is labeled as 115 kV. In addition, it is our understanding that many of the existing transmission line structure locations were estimated from aerial photographs and digitized into GIS and are spatially inaccurate. Please verify that all attribute and location information related to existing transmission lines and ROWs is accurate.

b. Structure data has not been provided for all existing transmission lines. If available, please provide structure data (location type, height) for each existing transmission line structure.

ALT-38 In order for us to understand the power flow and capacity situation at Imperial Valley Substation, please provide the following information:

a. On a month-by-month basis through 2005 and 2006, where was power coming from and where was it going (approximate # of MW on each transmission line entering and leaving the substation).

b. Specifically illustrate the amount of power coming in from Mexico.

c. Are any new transmission lines in the planning process or otherwise being evaluated between Mexico and the Imperial Valley, or between Imperial Valley and points further east, such as North Gila?

### In-Basin Generation Alternative

The PEA in several sections states that one benefit of the Sunrise Powerlink Project will be its ability to allow closure of highly polluting in-basin power plants. Given the plans for repowering several of these plants, as well as the recent completion of the Palomar Energy Project, the EIR/EIS will seriously consider in-basin generation as an alternative to the SRPL. In order to adequately define and evaluate a generation alternative, we need information on the status of existing and proposed generation in San Diego County.

ALT-39 Please list all the generation sources within San Diego County from which SDG&E has purchased power in 2004 – 2006, including the name of the facility and the number of MW purchased.

ALT-40 The Palomar Energy Project was approved by the California Energy Commission in August 2003 and was online starting in April 2006 and is owned by Sempra Energy. Explain how this plant is being operated and how Sempra plans to use its output to serve the needs of the San Diego region. What has been the monthly plant output (in MW) since April 2006, and how as output fluctuated on a daily basis?

ALT-41 Does SDG&E/Sempra have contracts to purchase power from the existing South Bay Power Plant? If so, please provide contract terms. What has been the output (in MW) of the existing plant since 2004? Please provide the contract terms (\$/mwh) for any existing contracts for South Bay Power Plant output.

ALT-42 With respect to the proposed repower of South Bay (South Bay Replacement Project) now in the permitting process by LS Power, does SDG&E/Sempra plan to procure power from the new plant, with its anticipated capacity of up to 620 MW?

ALT-43 What is the status of construction and ownership of the 510 MW Otay Mesa Power Plant? When is construction expected to be completed, and when will operation begin? How will the plant be operated?

ALT-44 A proposed power plant has been identified on federal land at the Naval Air Station Miramar, which was identified in federal law HR4656. This plant is known as ENPEX or San Diego Community Power. If available, please provide information on the developer of this project, whether they have requested interconnection with SDG&E, what the size of the project would

be, and how it would tie into the SD&GE system. Would the Sycamore Canyon Substation have to be expanded? If so, how would this expansion occur (in which directions, and by how much acreage)? Has a system impact study been prepared for the project?

### **Non-Wires Alternatives**

ALT-45 The PEA in “System Alternatives Considered and Eliminated” eliminates each of five options because each individually would not provide sufficient demand reduction or generation to replace the power that SRPL could provide. Describe an alternative in which these options (energy efficiency, demand response [including implementation of Advanced Metering], in-area generation, distributed generation, and rooftop solar) were implemented together as a package, and explain whether these options in combination would then provide adequate energy sources or savings.

### **Visual Resources**

VIS-1 Please identify the location of existing 500 kV H-Frame towers that are similar to those proposed for the Sunrise Project in ABDSP. The EIR/EIS’ visual resources specialist would like to see such towers in the field in order to evaluate the PEA simulations and potentially to prepare additional simulations.

### **Cultural**

CULT-1 We have previously made this request, and would like to develop a schedule for SDG&E’s compliance with this request. Please provide by October 9 a current schedule for completion of the cultural resources survey work. The schedule should provide anticipated dates for completion of specific segments and for submittal of new site records and shape files depicting both new site locations and newly surveyed areas. An updated schedule should be submitted each week as surveys continue to be done.