

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

In the Matter of the Application of San Diego  
Gas & Electric Company (U 902-E) for a  
Certificate of Public Convenience and Necessity  
for the Sunrise Powerlink Transmission Project

Application No. 05-12-014  
(Filed December 14, 2005)

Application No. 06-08-010  
(Filed August 4, 2006)

**SUBMISSION OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902-E)  
IN RESPONSE TO ASSIGNED COMMISSIONER'S DIRECTIVE  
AT SEPTEMBER 13, 2006 PREHEARING CONFERENCE**

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October 2, 2006

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**I.**

**INTRODUCTION**

Pursuant to Assigned Commissioner Grueneich's directive at the September 13, 2006 prehearing conference in the above-captioned matter (Transcript ("T.") at 161-164), San Diego Gas & Electric Company ("SDG&E") hereby provides information related to the analysis of alternative routes that avoid the Anza-Borrego Desert State Park ("Park").

**A. Assigned Commissioner's Directive**

At the prehearing conference, Commissioner Grueneich discussed the proposed and alternative routes presented in the Sunrise project's Proponent's Environment Assessment ("PEA") and her desire to understand the factors and impacts related to potential routes that avoid the Park. Commissioner Grueneich directed SDG&E to (T. at 163):

"...come back with at least one routing alternative that avoids the park entirely."

"To the extent that there are other alternatives outside of the park that the company has studied but has rejected them, we would like to get that information, and provide it with any rankings that you have, any commentary." *Id.*

"...let's hear from SDG&E who has done obviously a great deal of study, what would a route like that look like. Let's get on the table whatever information the company has developed, looking at route sites outside the park..." T. at 163-164.

Based on the Commissioner's directive, SDG&E provides the following information concerning potential non-Park routes provided previously in the PEA, as well as some additional information prepared subsequent to the prehearing conference.

### **B. Energy Division Data Request**

In a follow-up to the Assigned Commissioner's directive, on September 27, 2006, the Energy Division included certain items in a data request<sup>1</sup> to SDG&E that address the information sought by the Assigned Commissioner.<sup>2</sup> Although the recent data request anticipates receiving SDG&E's responses to the sixty two questions during the month of October, 2006, Commissioner Grueneich desires SDG&E to provide this information as soon as possible (T. at 164):

“... the sooner that we can get this information from SDG&E the better. Because if it is possible to have this information available when we're having our scoping meetings, this obviously again will make it easier for people to understand what might be available in terms of mitigation or rerouting alternatives.”

With the Commission's EIR/EIS Public Scoping Meetings scheduled for October 2-5, 2006, SDG&E wishes to provide information currently available responsive to the Commissioner's directive prior to those scoping meetings. SDG&E will be able to provide additional information responsive to the Energy Division's specific data request questions in

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<sup>1</sup> CPUC's Energy Division Data Request #1 for the SDG&E Sunrise Powerlink Transmission Project, dated September 27, 2006.

<sup>2</sup> The data requests relate to the Environmental Impact Report / Environmental Impact Study (EIR/EIS) process for Sunrise. Based on CEQA/NEPA requirements, the Energy Division is required to analyze the proposed and alternative routes included in the applicant's application and PEA, as well as to analyze alternative routes to determine whether they should be carried forward in the EIR/EIS document. This analysis may include routes analyzed but not carried forward by the applicant as well as alternatives developed on the Energy Division's own initiative. Part of this process includes requesting information from the applicant regarding studies and analysis already performed as well as performing additional analysis on routes that were considered, but eliminated from the applicant's proposed routes.

October and will make its responses available on the project website. We set forth the currently available information below.

## **II.**

### **INFORMATION CONCERNING NON-PARK ALTERNATIVES: PROPOSED PROJECT PRELIMINARY STUDY CORRIDORS B, C, AND D**

The Sunrise PEA evaluated three corridors that did not go through the Park. These alternatives were called the “B, C, and D Preliminary Study Corridors.”

#### **A. Route Development Process – Environmental Siting Criteria**

Environmental routing criteria include, but are not limited to, opportunities and elements of the human and natural environment that may be subject to impact (sensitivities or constraints). SDG&E developed the opportunities and constraints in conjunction with the public during the Public Process to help site the proposed Project facilities.

#### **1. Opportunities and Constraints**

In recognition of the value of state’s transmission system and the need for effective long-term transmission corridor planning, in Senate Bill 2431 (SB 2431, Chapter 1457, Statutes of 1988, Garamendi), the Legislature declared that it is in the best interests of the state to conduct transmission siting according to the following principles (“Garamendi Principles”):

1. Encourage the use of existing rights-of-way by upgrading existing transmission facilities where technically and economically justifiable.
2. When construction of new transmission lines is required, encourage expansion of existing right-of-way, when technically and economically feasible.
3. Provide for the creation of new rights-of-way when justified by environmental, technical, or economic reasons as determined by the appropriate licensing agency.
4. Where there is a need to construct additional transmission capacity, seek agreement among all interested utilities on the efficient use of that capacity.

The Sunrise Powerlink environmental siting criteria follow these principles.

For transmission lines, opportunities are identified as those providing advantageous routing corridors and are characterized by the potential to parallel or share a corridor occupied by *existing* linear facilities or physical features. Examples of opportunities include existing transmission lines and other utility corridors, transportation corridors, and other linear features such as property lines.

Sensitivities, or constraints, are those environmental criteria including point locations, areas, or features that should be taken into account with routing, construction, or additional licensing/permitting procedures. These constraints include point receptors such as cemeteries, hospitals, schools, or polygon coverages such as critical habitat and cultural resources.

## **2. Prioritizing Environmental Siting Criteria**

With the input of stakeholders, the environmental siting criteria were prioritized. This prioritization was based on how stakeholders, community officials, state and federal agencies, and members of the public perceived preferences to various existing linear features and also sensitivities to various environmental features.

By prioritizing the siting criteria into Primary and Secondary opportunities and Very High, High, Moderate, and Low constraints, the criteria became more specific and valuable to the routing and siting process by providing for a more detailed comparative analysis. Prioritization or categorization does not suggest that a “low” sensitivity is not to be considered. Categorizing constraints allows a secondary method of evaluation by incorporating the strength of opportunity. For example, two linear features, having the same general associated occurrence of sensitivities within proximity, can be secondarily compared by evaluating the priority of the occurring sensitivities. The linear feature having more occurring “low” sensitivities would be considered a stronger opportunity than the second linear feature having more occurring “very

high” sensitivities. As previously stated, the environmental routing criteria were evaluated in tandem with the assistance of composite mapping to determine which transmission line location opportunities were potential corridors in light of the sensitivities identified.

A qualitative assessment of the composite mapping resulted in the development of the preliminary study corridors.

### **3. Preliminary Study Corridors**

The overall process for identifying Preliminary Study Corridors was to utilize an Opportunity and Constraint analysis, with an intensive GIS mapping effort. Each of the sensitivity datasets was overlaid in GIS and “clipped” to the study area. “Clipping” is a function within GIS that allows one dataset to be clipped to the extent of another, or control, dataset. In this case, the study area for each opportunity is the data control. The result of clipping is the identification of the area or extent of any sensitivity occurring within the Study Area. This value is then converted to a “percent of total.” The percent of total is determined by dividing the total Study Area (length by width [1,000 feet] of the Study Area for any opportunity) by the occurrence value (for example 100 acres of wetland).

Corridor preference for transmission line location was directly related to the occurrence of sensitivities proximal or immediately adjacent to each of these existing linear feature opportunities. Directional orientation was also a consideration during this initial phase of comparative analysis. Opportunities traversing the study area along a continuous use of one existing right-of-way (ROW) were qualified higher than those requiring a fragmented use of existing ROW.

Again, this comparative analysis included the evaluation of both the occurrence of sensitivities and also the strength of the opportunities. Existing linear features having associated

ROWs are considered stronger opportunities in general because the properties have usually already been disturbed and mitigated and offer the means to reduce new impact by ROW sharing.

The results of the preceding steps, combined with the Public Process and field validation derived the Preliminary Study Corridors. The Preliminary Study Corridors included opportunities that held a lesser occurrence of constraints and were focused on necessary directional orientation and utilizing existing disturbed ROWs.

The Proposed Project, as defined in the Proponent's Environmental Assessment, was identified as a Preliminary Study Corridor, in addition to the B, C, and D study corridors. The Anza Borrego Desert State Park, which extends from the northern boundary of San Diego County almost to the southern boundary, acted as a primary consideration in the routing analysis. There are very limited strong opportunities, not otherwise having a high associated occurrence of constraints, which extend from the Imperial Valley to the inland San Diego region. Additionally, the functional direction of the Project involved a southeast to northwest orientation to interconnect the existing Imperial Valley Substation to the proposed Central Substation Siting Area. The substation siting area had been identified precursory to the development of the preliminary study corridors to act as the termination point of the proposed 500 kV facilities. This area was the most opportune area that would accommodate the required facility, and allow for the necessary 230 kV facilities to exit the facility.

Essentially, placement of a new 500 kV line in any of the three alternative segments in this area (B, C, or D) would simply transfer impacts from one area to another without reducing significant impacts. While these potential routes would avoid crossing the Park, any route that

traverses San Diego County on a north-south axis in this part of San Diego County would adversely affect one or more of the following areas:

- Cleveland National Forrest
- Indian Lands
- Cuyamaca Rancho State Park
- Community of Laguna
- Community of Pine Valley
- Community of Boulevard
- Community of Julian
- Community of Santa Ysabel
- Community of Descanso
- Community of Cameron
- Community of Guatay
- Community of Jacumba
- Community of Campo
- Community of Tecate
- Community of Potrero

The Proposed Project, which parallels the existing 92 kV transmission line east of the Anza Borrego Desert State Park, was identified as a Preliminary Study Corridor. The B, C, and D study corridors, as described below, were also identified.

**B. The B, C, and D Preliminary Study Corridors**

Two prominent north-south linear features, the SR79 and the S1, provide access to the Cuyamaca Rancho State Park and Laguna Mountains Recreation Area and are either designated or eligible for designation as scenic highways. Segment B would follow these highways, and Segments C and D would cross them. An argument can be made that the Laguna Mountains Recreation Area and Cuyamaca Rancho State Park are as valuable as the Park in terms of recreational opportunities and cultural and/or natural resources.

The C corridor paralleled an existing 69 kV transmission line from the Boulevard area to the Pine Valley area and then north through the Boulder Creek Substation area.



The D corridor paralleled the existing SWPL 500 kV transmission line for the greatest length and then an existing 69 kV transmission line from the Barrett Substation area north to the Boulder Creek Substation area.

Significant cultural features, as well as increasingly rare coulter-ponderosa pine habitat, oak woodlands and cedar forest, are located within both the Cuyamaca and Mount Laguna areas.

In addition, the segments that follow portions of SDG&E's existing 69 kV transmission system from southeast to central San Diego County (Segments C and D) would traverse the CNF and require a significant expansion of existing ROW on national forestland. Such a route could include all or portions of Transmission Line 625 (TL 625) (Barrett-Descanso-Loveland 69 kV), TL 626 (Descanso-Santa Ysabel-Boulder Creek 69 kV), and/or TL 629 (Descanso-Glencliff-Cameron-Crestwood 69 kV). The ROW widths for these transmission lines vary in width up to a maximum of 50 feet in some areas. According to USFS regulations, overhead facilities greater than 100 kV are strongly discouraged from being sited through the CNF. Furthermore, these existing 69 kV routes are not designated as utility corridors in the recently approved CNF Management Plan. Nor are these routes currently being considered for designation as utility corridors under the current evaluation of utility corridors on western federal lands. Therefore, to accommodate this project on CNF lands, the CNF Forest Plan would have to be amended to provide for a major utility corridor in this area and reconcile major inconsistencies with plan objectives and land-use designations. The time required for the plan amendment process with the CNF would likely preclude the Project from being in service by June 2010.

In comparison, the recently completed Park General Plan would not require an amendment for the Proposed Project because it was recently updated to include the transmission

line corridor that exists as a permitted use. The following text is directly from the Park General Plan:

“Utility companies (such as San Diego Gas & Electric and the Imperial Irrigation District) have existing transmission lines through the Park. These companies have the responsibility to address California’s future need for additional electrical power, which is critical to the continued economic viability of the State. Anticipated electrical needs in Southern California will require the utility companies to evaluate proposals to expand the existing level of service. The location, operation, and construction of such utility corridors may adversely affect Park resources through fragmentation of the Park’s vast desert landscapes, biological connectivity, and possible destruction of paleontological and cultural resources. Reconciling the inherent conflicts between the future electrical needs of the State and the protection of Park resources, will require the utility companies and State Parks to work closely together in planning for the size and location of these future facilities”.

Therefore, the Proposed Project would be a permitted use in the Park. Additionally, the existing ROW through the State Park is 100 feet in width. Without the need for a plan amendment, the Proposed Project is more likely to be able to meet the critical June 2010 in-service date.

In terms of resource impacts, significant visual impacts to the CNF could occur using or following the 69 kV routes because of the extensive agency-designated viewsheds.

Also, any of these alternative routes (B, C, and D) would result in impacts to several sensitive plant and animal species. The D Segment which follows TL 635 would impact several sensitive plant and animal species.

Additionally, alternative Segments B, C and D would result in higher direct impacts to residential communities and the taking of homes as compared to the Proposed Project.

As described above, the environmental impacts associated with these alternatives (B, C, and D) are greater than those for the Proposed Project.

Additionally, the following table provides an overall impact summary of the Proposed Project and Alternate Route segments, as analyzed in the PEA, compared to any of the B, C, or D study corridors that were considered but not carried forward.

<b>Sunrise Powerlink Project                      Imperial Valley Substation to Central Substation Interconnection Area                      Comparative Route Analysis Summary</b>					
<b>Key Routing                      Criteria/Considerations/Issues</b>	<b>"Proposed                      Project"                      via IV Substation                      to Central                      Substation Siting                      Area</b>	<b>Alternate Route                      Segments</b>	<b>"B Corridor"                      via                      SWPL / CR 1                      Route to                      Central                      Substation                      Siting Area</b>	<b>"C Corridor"                      via Pine Valley to                      Central                      Substation Siting                      Area</b>	<b>"D Corridor"                      via Barrett                      Substation to                      Central                      Substation Siting                      Area</b>
<b>STRENGTH OF OPPORTUNITY</b>					
Parallels Existing Disturbed ROW	<b>Optimized parallel</b> of existing disturbed transmission line ROWs with <b>the least incremental additional ROW required</b> and <b>NO direct impacts to encroaching dwelling units.</b>	Parallel of existing disturbed ROWs and linear features with <b>NO direct impacts to encroaching dwelling units.</b>	Parallel of existing disturbed transmission line ROW; however with more incremental additional ROW required. There may also be an <b>increased potential for direct impacts to encroaching dwelling units.</b> Also parallels the existing SWPL 500 kV line, which is a less preferred opportunity as a result of reliability and access concerns, for a portion of its length.	Parallel of existing disturbed transmission line ROW; however with more incremental additional ROW required; however, <b>very significant direct impacts to encroaching dwelling units (&gt;50).</b> Also parallels the existing SWPL 500 kV line, which is a less preferred opportunity as a result of reliability and access concerns, for a portion of its length.	Optimized parallel of existing disturbed transmission line ROW; however, <b>significant direct impacts to encroaching dwelling units (&gt;40).</b> Also parallels the existing SWPL 500 kV line, which is a less preferred opportunity as a result of reliability and access concerns, for a large portion of its length.
<b>ENVIRONMENTAL SITING CRITERIA</b>					
Impacts to Existing Dwelling Units/Residential Land Use	<b>NO existing dwelling units</b> within 300 foot study corridor.	<b>NO existing dwelling units</b> within 300 foot study corridor.	<b>Increased potential for direct impacts to existing dwelling units.</b>	<b>At least 50 existing dwelling units</b> , within a 300 foot study corridor, <b>would be directly impacted.</b>	<b>At least 40 existing dwelling units</b> , within a 300 foot study corridor, <b>would be directly impacted.</b>
Impacts to Existing Schools (less than 1320 feet from edge of study corridor)	<b>NO existing schools</b> occur within 1320 feet	<b>NO existing schools</b> occur within 1320 feet of the edge of the	<b>Approximately 7 schools</b> occur within 1320	<b>Approximately 3 schools</b> occur within 1320 feet	<b>NO existing schools</b> occur within 1320 feet

**Sunrise Powerlink Project  
Imperial Valley Substation to Central Substation Interconnection Area  
Comparative Route Analysis Summary**

Key Routing Criteria/Considerations/Issues	"Proposed Project" via IV Substation to Central Substation Siting Area	Alternate Route Segments	"B Corridor" via SWPL / CR 1 Route to Central Substation Siting Area	"C Corridor" via Pine Valley to Central Substation Siting Area	"D Corridor" via Barrett Substation to Central Substation Siting Area
	of the edge of the study corridor.	study corridor.	feet of the edge of the study corridor.	of the edge of the study corridor.	of the edge of the study corridor.
Impacts to State, Regional and Local Parks, Designated Open Space, Preserves, and/or Reserves (excluding state or national parks)	<b>NO impacts</b> to regional and local parks, designated open space, preserves, and/or reserves. Impacts to State Park will be mitigated and include 345 acres.	<b>Variable impacts as compared to the Proposed Project</b> to regional and local parks, designated open space, preserves, and/or reserves. Impact State Park, 82 acres more for the Alternative Alignment and 208 acres less for the Borrego Alternative than the proposed project.	<b>Direct impacts</b> to regional and local parks, designated open space, preserves, and/or reserves.	<b>Direct impacts</b> to regional and local parks, designated open space, preserves, and/or reserves.	<b>Direct impacts</b> to regional and local parks, designated open space, preserves, and/or reserves. Would also have a <b>greater direct impact to the San Diego River Conservancy Park.</b>
Impacts to Designated Recreational Use Areas (OHV)	<b>Least impacts</b> to OHV areas even though the Proposed Project traverses a greater acreage of BLM land.	<b>Lesser impacts</b> to designated recreational use areas.	<b>Greater impacts</b> to designated recreational use areas.	<b>Greater impacts</b> to designated recreational use areas.	<b>Greater impacts</b> to designated recreational use areas.
Impacts to Cleveland National Forest and Compliance with Forest Plan or Compliance to Desert Plan	<b>NO impacts</b> to Cleveland National Forest. No impacts to Desert Plan if Proposed Project remains within existing ROW.	<b>NO impacts</b> to Cleveland National Forest.	Direct impacts to Cleveland National Forest and <b>would not comply with Forest Plan.</b> A designated utility corridor would be required, as well as additional easement from the Forest. Would impact sensitive management areas and designated scenic viewsheds within the Forest; and also have the increased	Direct impacts to Cleveland National Forest and <b>would not comply with Forest Plan.</b> A designated utility corridor would be required, as well as additional easement from the Forest. Would impact sensitive management areas and designated scenic viewsheds within the Forest; and also have the increased potential to negatively impact overall Project schedule.	Direct impacts to Cleveland National Forest and <b>would not comply with Forest Plan.</b> A designated utility corridor would be required, as well as additional easement from the Forest. Would impact sensitive management areas and designated scenic viewsheds within the Forest; and also have the increased potential to negatively impact overall Project schedule.

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Imperial Valley Substation to Central Substation Interconnection Area  
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Key Routing Criteria/Considerations/Issues	"Proposed Project" via IV Substation to Central Substation Siting Area	Alternate Route Segments	"B Corridor" via SWPL / CR 1 Route to Central Substation Siting Area	"C Corridor" via Pine Valley to Central Substation Siting Area	"D Corridor" via Barrett Substation to Central Substation Siting Area
			potential to negatively impact overall Project schedule.		
Impacts to Indian Lands	<b>NO impacts</b> to Indian Lands.	<b>NO impacts</b> to Indian Lands.	<b>Indirect impacts</b> to Indian Lands - project is in proximity of 2 reservations.	<b>Direct impacts</b> to Indian Lands. Would require easement from the appropriate entity and would have the increased potential to negatively impact overall Project schedule.	<b>Direct impacts</b> to Indian Lands. Would require easement from the appropriate entity and would have the increased potential to negatively impact overall Project schedule.
Impacts to Cultural Resources	<b>Direct Impacts</b> to recorded cultural resource sites.	<b>Direct Impacts</b> to recorded cultural resource sites.	<b>Direct Impacts</b> to recorded cultural resource sites. More sites potentially eligible for National Register.	<b>Direct Impacts</b> to recorded cultural resource sites. More sites potentially eligible for National Register.	<b>Direct Impacts</b> to recorded cultural resource sites. More sites potentially eligible for National Register.
Impacts to State and Federally Designated Wilderness Areas	<b>NO impacts</b> to federally designated wilderness areas. Impact to state wilderness based on 150 feet of ROW and avoidance of cultural sites. 150 feet of ROW proposed in order to reduce overall impacts to the State Park. No impacts to State Wilderness if Project is constructed within 100 feet of existing ROW.	<b>NO impacts</b> to federally designated wilderness areas. Net increase in designated state wilderness with redesignation.	<b>Direct impacts</b> to federally designated wilderness areas.	<b>Direct impacts</b> to federally designated wilderness areas.	<b>Direct impacts</b> to federally designated wilderness areas.
Impacts to Visual Resources (Sensitive Receptors and Designated Scenic Viewpoints or Viewsheds)	<b>Minimal impacts</b> due to paralleling existing transmission	<b>Less impacts</b> – designated scenic viewpoint along S22 in the State Park.	<b>Greater incremental impacts</b> due to likelihood of	<b>Greater incremental impacts</b> due to significant number	<b>Greater incremental impacts</b> due to significant

**Sunrise Powerlink Project  
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	facilities and a lesser occurrence of sensitive receptors or designated viewsheds or viewpoints. Impact to 6.41 miles of State Designated Scenic Highway (SR 78) within an adjacent to the ABDSP, Tamarisk Grove Camp Ground and Grapevine Canyon.	Removal of existing transmission lines and substation from park resulting in reduced visual impacts as compared to preferred project route and existing conditions for Borrego Route. Distant view impacts from designated scenic viewpoint along S22 in the State Park for the Borrego Route.	greater number of occurring sensitive receptors and impacts to designated viewsheds on public lands.	of occurring sensitive receptors and impacts to designated viewsheds on public lands.	number of occurring sensitive receptors and impacts to designated viewsheds on public lands.
Impacts to Designated Critical Habitats	<b>Potentially significant impacts</b> as a result of Applicant-proposed mitigation measures.	<b>Less than significant impacts</b> as a result of Applicant-proposed mitigation measures.	<b>Habitats unique to a greater number of species would be impacted.</b>	<b>Habitats unique to a greater number of species would be impacted.</b>	<b>Habitats unique to a greater number of species would be impacted.</b>
<b>RELIABILITY and ECONOMICS</b>					
Reliability	<b>Lesser concern</b> associated with outage resulting from natural and man-induced disturbances due to geographic separation of critical energy paths.	<b>Lesser concern</b> associated with outage resulting from natural and man-induced disturbances due to geographic separation of critical energy paths.	Paralleling the existing SWPL 500 kV line for an extended distance <b>would cumulatively compound reliability concerns</b> associated with outage resulting from natural and man-induced disturbances.	Paralleling the existing SWPL 500 kV line for an extended distance <b>would cumulatively compound reliability concerns</b> associated with outage resulting from natural and man-induced disturbances.	Paralleling the existing SWPL 500 kV line for an extended distance <b>would cumulatively compound reliability concerns</b> associated with outage resulting from natural and man-induced disturbances.
Economics	Greater potential for realizing the economic benefits.	Similar potential for economic benefits as the Proposed Project.	<b>Greater potential for significant increase in costs</b> due to additional ROW required, potential for direct impacts to existing	<b>Greater potential for significant increase in costs</b> due to additional ROW required, potential for direct impacts to existing dwelling units, design considerations,	<b>Greater potential for significant increase in costs</b> due to additional ROW required, potential for direct impacts to existing dwelling units, design

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			dwelling units, design considerations, and construction considerations.	and construction considerations.	considerations, and construction considerations.

<sup>1</sup>Orange = Greater/Greatest Impacts, Yellow = Incremental Increase in Impacts

<sup>2</sup>The number of directly impacted dwelling units is approximate based on limited field access and aerial interpretation. A study corridor width of 300 feet was used for this estimate to maintain consistency within the comparative analysis. The study corridor width is not necessarily equivalent to the ultimate right-of-way width that would be required.

The future supplemental analysis on a specific D Route may result in minimizing or avoiding impacts as compared to what is presented in the table above.

Although portions of the Routing Study and alternatives analysis section from Chapter 3 of the PEA are provided above, the complete detailed assessment of the Proposed Project compared to the Alternate Route segments or any of the Preliminary Study Corridors (B, C, and D) can be found in these locations. Additionally, the information provided herein will be further supplemented and resubmitted with the data request received on September 27, 2006.

**C. Whether the non-Park Alternatives meet Project Objectives**

The table below provides a comparative summary of how the Proposed Project, as analyzed in the Proponent's Environmental Assessment (PEA), and the B, C, and D study corridors, that were considered but not carried forward, would meet the identified Project Objectives.

1. Ensure SDG&E's transmission system satisfies minimum CAISO, NERC and WECC reliability criteria throughout the planning horizon of the LTRP and beyond, including the requirement that there be no loss of load within the San Diego area under G-1/N-1 contingency conditions. Avoid siting the Proposed Project parallel to SWPL for long distances especially avoiding areas with fire history or fire potential.

2. Provide a transmission facilities with a voltage level and transfer capability that
  - (a) allows for prudent system expandability to meet both anticipated short-term (2010) and long-term (2015 and beyond) load growth through a total San Diego area import capability of at least 4,200 MW (all lines in service) and 3500 MW (under G-1/N-1 contingency conditions) and (b) supports regional expansion of the electric grid.
3. Provide transmission capability for Imperial Valley renewable resources for SDG&E customers to assist in meeting or exceeding California’s 20% renewable energy source mandate by 2010 and the Governor’s proposed goal of 33% by 2020.
4. Reduce the above-market costs associated with maintaining reliability in the San Diego area while mitigating the potential exercise of local market power, particularly the costs associated with inefficient generators such as the South Bay and Encina Power Plants.
5. Improve regional transmission system infrastructure to provide for the delivery of adequate, reliable and reasonably priced energy supplies and implement the transmission elements of state and local energy plans.
6. Obtain electricity generated by diverse fuel sources and decrease the dependence on increasingly scarce and costly natural gas.
7. Avoid, to the extent feasible, the taking and relocation of homes, businesses or industries, in the siting of the transmission line, substation and associated facilities.
8. Minimize the need for new or expanded transmission line ROW in urban or suburban areas of the SDG&E service territory already traversed by multiple high voltage transmission facilities and, to the extent feasible, assist in implementing local land use goals.

<b>Project Objectives</b>	<b>Proposed Project</b>	<b>B Route</b>	<b>C Route</b>	<b>D Route</b>
Objective 1 (Reliability)	Met	Not met – A scheme to drop load would be required to mitigate the credible double line outage of the existing SWPL and the adjacent new line. The amount of load drop would be considerable since fire season and high electrical demand often coincide. SDG&E believes the required amount of load drop is unacceptable and expects the CAISO would not approve load drop of the required magnitude.	Not met – A scheme to drop load would be required to mitigate the credible double line outage of the existing SWPL and the adjacent new line. The amount of load drop would be considerable since fire season and high electrical demand often coincide. SDG&E believes the required amount of load drop is unacceptable and expects the CAISO would not approve load drop of the required magnitude.	Not met – A scheme to drop load would be required to mitigate the credible double line outage of the existing SWPL and the adjacent new line. The amount of load drop would be considerable since fire season and high electrical demand often coincide. SDG&E believes the required amount of load drop is unacceptable and expects the CAISO would not approve load drop of the required magnitude.



<b>Project Objectives</b>	<b>Proposed Project</b>	<b>B Route</b>	<b>C Route</b>	<b>D Route</b>
Objective 2 (Future Growth)	Met	Not met – Project 2010 in-service date would likely not be met due to lengthy federal permitting process.	Not met – Project 2010 in-service date would likely not be met due to lengthy federal permitting process.	Not met – Project 2010 in-service date would likely not be met due to lengthy federal permitting process.
Objective 3 (Renewables)	Met	Met	Met	Met
Objective 4 (Economics)	Met	Not Met – In order to compensate for load drop potential, existing/additional generation in the San Diego basin would have to be maintained.	Not Met – In order to compensate for load drop potential, existing/additional generation in the San Diego basin would have to be maintained.	Not Met – In order to compensate for load drop potential, existing/additional generation in the San Diego basin would have to be maintained.
Objective 5 (Access)	Met	Met	Met	Met
Objective 6 (Diversity)	Met	Met	Met	Met
Objective 7 (Takings)	Met	Not met -this alternative would likely involve the taking of homes, businesses, or industries and would require new or expanded ROW.	Not met -this alternative would likely involve the taking of homes, businesses, or industries and would require new or expanded ROW.	Not met -this alternative would likely involve the taking of homes, businesses, or industries and would require new or expanded ROW.
Objective 8 (Rights of Way)	Met	Not met -this alternative would involve a significant amount of new or expanded ROW.	Not met -this alternative would involve a significant amount of new or expanded ROW.	Not met -this alternative would involve a significant amount of new or expanded ROW.

The table above compares the Proposed Project and B, C, and D preliminary study corridors to the Project Objectives. The Proposed Project meets all the objectives and thus is the preferred alternative. The B, C, and D preliminary study corridors do not meet Objectives 1, 2, 4, 7, and 8. It should not be assumed that the Objectives have equal weighting. For example, Objective 1, meeting the reliability criteria and avoiding placement of the Sunrise Powerlink Project in fire areas adjacent to the existing SWPL 500 kV transmission line is of great importance to SDG&E and its customers and is more fully in accordance with CAISO and WECC evaluation factors. As currently implemented by the CAISO, the G-1/N-1 reliability criteria that drives the RMR designations for the San Diego area does not reach the G-1/N-2 condition. Adjacent high voltage lines invoke a credible N-2 condition requiring some form of mitigation. The CAISO would likely not accept and SDG&E is unwilling to use forced load

shedding as this mitigation measure. As a result, Objective 4 would not be met. Objective 7 and 8 would either impact residences and businesses or require significant expanded ROW.

Therefore, the B, C, and D preliminary study corridors are not routes that should be carried forward. However, in compliance with Commissioner Grueneich's directive to analyze an alternate route that avoids the Anza Borrego Desert State Park, the D Route is further presented in this submittal. The CPUC may judge the relative weight of the project objectives differently.

B, C, and D meet Objectives 3, 5, and 6 so no further comparison using these Objectives is necessary. Further comparison of B, C, and D using Objectives 1, 2, 4, 7, and 8 reveals that the B Route better meets these Objectives. The B Route has fewer miles paralleling SWPL, fewer takes of homes and businesses, but follows the least amount of area with existing transmission lines. However, the B Route does traverse a portion of the State Park and thus was not selected for further analysis.

The C Route involves less paralleling of SWPL but not significantly less. It does involve more takes of homes and businesses than either the B or D Routes.

The D Route was selected for further analysis because it involves the least take of homes and business and follows the most areas of existing transmission alignments. Attachment D depicts the D Route over the preliminary B, C, and D study corridors. Attachment E depicts the D Route and all the associated constraints associated with this alignment.

A more detailed assessment of the Proposed Project compared to the Alternate Route segments or any of the preliminary study corridors can be found in the Routing Study, and Chapter 3 of the PEA. Additionally, the information provided herein will be further supplemented and resubmitted with the data request received on September 27, 2006.

#### **D. Summary of D Route**

As presented on the supplemental map which depicts the large number of constraints associated with the D Route, the implications of carrying this route forward are more than evident. The D Route, avoids the Anza Borrego Desert State Park but instead impacts other public lands, parallels existing transmission lines in an area having very few other opportunities to select from, and impacts fewer existing dwelling units only when compared to the C study corridor. The D Route would result in significantly greater environmental impacts than the Proposed Project. Within a 300 foot study corridor, more than 40 homes would be directly impacted by this alignment. Directly impacted implies that these homes would need to be ‘taken’ by the Applicant. This would also then significantly increase overall costs.

The D Route would parallel the existing SWPL 500 kV transmission line for a large portion of its length and therefore provide for the least reliable routing alternative with regard to compounded risks as a result of paralleling two critical extra-high voltage energy paths. As depicted on the supplemental map, compounded risks related to outage as a result of fire is a major concern. Fire related outage areas and the dates on the existing 500 kV transmission line, Southwest Powerlink (SWPL), are shown in the red-circled areas. Many more fires have occurred on various segments of the D Route that have not resulted in outages to SWPL but may have potential of outages to the Proposed Sunrise Powerlink. The D Route would conflict with a number of land use or land management plans or objectives. Specifically, the D Route would not comply with the Cleveland National Forest Plan and would impact a number of sensitive resources or resource areas within the Forest. The D Route would impact designated critical habitat for multiple species which has the potential for more significant implications associated with mitigation.

### III.

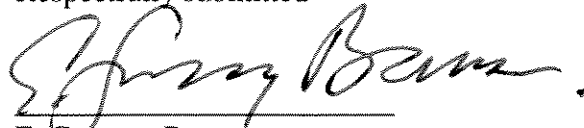
#### KEY CONCLUSIONS/SUMMARY – SUPERIORITY OF THE PROPOSED PROJECT

The Proposed Project is distinctly superior to the D Route. It has no impact to existing dwelling units, optimizes the use of existing disturbed transmission line ROWs that do not have associated reliability concerns and minimal additional ROW required, and has a lesser environmental impact from an overall cumulative perspective than alternatives that do not cross the Park.

- The **Proposed Project provides the most reliable routing alternative** compared to the B, C, or D study corridors; the Proposed Project does not present the risk of significant load shedding due to common corridor outages with SWPL in an area with known fire danger.
- The **Proposed Project would have NO direct impacts to existing dwelling units.**
- The **Proposed Project better conforms to existing land use or land management plans** and have significantly fewer conflicts with these plans.
- The **Proposed Project would optimize the parallel of existing disturbed transmission line ROWs with less additional ROW required than any of the B, C or D study corridors.**
- The **Proposed Project has significantly fewer environmental impacts**, from an overall cumulative perspective, when compared to any of the B, C, or D study corridors.

In sum, SDG&E asks that the Assigned Commissioner accept this submission in partial response to her prehearing conference directive.

Respectfully submitted



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October 2, 2006

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a copy of the foregoing **SUBMISSION OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902-E) IN RESPONSE TO ASSIGNED COMMISSIONER'S DIRECTIVE AT SEPTEMBER 13, 2006 PREHEARING CONFERENCE** on all parties identified in A.05-12-014 and A.06-08-010 on the attached service list by U.S. mail and electronic mail, and by Federal Express to the assigned Commissioner(s) and Administrative Law Judge(s).

Dated at San Diego, California, this 2<sup>nd</sup> day of October, 2006.

  
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Joel Delloso