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Ms. Billie Blanchard
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Ms. Lynda Kastoll
El Centro Field Office
Bureau of Land Management
1661 S. 4th Street
El Centro, CA 92243

Dear Ms. Blanchard and Ms. Kastoll:

SDG&E appreciates the opportunity to provide its final comments to the California Public Utilities Commission and Bureau of Land Management (CPUC/BLM) Sunrise Powerlink Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS). Several of the comments pertain to certain mitigation re-routes, infeasibilities of various alternatives, greenhouse gas issues and certain excessive mitigation measures. SDG&E requests that the CPUC/BLM incorporate this information into the Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS).

I. Sunrise Is The Best Option To Meet The Project And State Objectives Within The Time Needed For Reliability

The Sunrise Powerlink is the best option to meet the project objectives, state mandates and goals and ensure reliable energy for the San Diego region. The need to expand and improve the reliability of the grid is real and imminent. The looming retirement of aging generators on San Diego's coastline combined with the expected load growth in the region is the primary reason why the Sunrise Powerlink must be built.

SDG&E's balanced long-term energy resource plan includes aggressive conservation and demand response programs, more renewable power and local generation. But those resources and programs are not enough. SDG&E still needs to construct another transmission line that links San Diego to the state electric grid.

The San Diego region is severely transmission deficient. Of the 47 500 kilovolt (kV) lines serving California, only one – built nearly 25 years ago - serves SDG&E's 1.4 million electric customers. This lack of high-voltage transmission import capacity puts

the entire region at risk. The grid must be expanded to ensure future reliability for SDG&E customers.

Sunrise is the best option to provide direct access to the clean, renewable resources in the Imperial Valley that California is counting on to meet the state Renewable Portfolio Standard (RPS) and AB 32 greenhouse gas emissions reduction mandates. Unlike the environmentally superior alternative identified in the DEIR/EIS, the Sunrise Powerlink helps implement these aggressive policies and is consistent with California's vision for a cleaner energy future.

The Imperial Valley could become a leader in renewable generation if new transmission capacity that links the vast supplies of solar and geothermal resources to California load centers is built. One look at the California Independent System Operator (CAISO) interconnection queue makes this point obvious. The Imperial Valley region could surpass more well-known renewable resource areas like the Tehachapi area in terms of production. And unlike Tehachapi, the Imperial Valley has a diverse mix of resources that, at times, better matches California's load profile.

The California Energy Commission (CEC) has repeatedly said that the lack of transmission lines to areas like the Imperial Valley is a key impediment to reaching RPS goals. And SDG&E has repeatedly stated that it will not meet its goal of procuring at least 20 percent of SDG&E's retail sales from renewable energy sources by 2010 without the Sunrise Powerlink. (SDG&E will comply with its legal obligation in 2010 through flexible compliance mechanisms).

Sunrise is also the most cost-effective option for customers. SDG&E and CAISO have repeatedly demonstrated that Sunrise provides more energy cost savings than any other alternative under consideration by the CPUC/BLM. In fact, the Sunrise Powerlink will provide CAISO customers over \$100 million in annual energy savings and pay for itself over time.

Improved energy reliability, direct access to clean, renewable resources and lower costs for consumers make the Sunrise Powerlink the right choice for California. SDG&E appreciates that the DEIR/EIS focuses on the environmental impacts associated with Sunrise and various alternatives thereto. But while the DEIR/EIS identifies the "worst case" environmental impacts of the Proposed Route and examines a reasonable range of alternatives, the FEIR/EIS should offer more guidance for critical aspects of the CPUC/BLM's decision on this project. SDG&E's overarching comments on the DEIR/EIS are as follows.

First, the DEIR/EIS's top-ranking alternatives give short shrift to the project objectives. The DEIR/EIS only offers a conclusory assertion as to whether a particular alternative satisfies the project objectives. The DEIR/EIS admits that the non-Sunrise alternatives simply fail to meet the project objective of obtaining access to renewables in Imperial Valley altogether. Moreover, the DEIR/EIS omits some objectives entirely, even though they were included in SDG&E's Proponent's Environmental Assessment

(PEA) and identified in the CPUC/BLM's Notice of Preparation/Notice of Public Scoping Meetings dated September 11, 2006 at pages 3-4. One critical project objective is expandability. Expandability is an important planning consideration, is part of a long standing and accepted practice in the electric utility industry, and is consistent with various infrastructure siting principles. Several of the routing options limit future expandability.

Second, the DEIR/EIS does not thoroughly consider how the alternatives meet or advance the state energy and environmental mandates, laws and policies that guide utility operations and investments, in particular, renewable development, greenhouse gas (GHG) emission reductions and resource procurement. In this letter, SDG&E provides more information on these issues for the CPUC/BLM to include in the FEIR/EIS.

Third, the DEIR/EIS identifies various purportedly "environmentally superior" alternatives to Sunrise despite evidence that shows that such alternatives are, at best, speculative, hypothetical and/or infeasible. The DEIR/EIS admittedly did not evaluate the feasibility of the alternatives after selecting which proposed options should be given full evaluation. The FEIR/EIS should recognize these infeasibilities.

Fourth, the DEIR/EIS overstates Sunrise impacts and costs thereby affecting the comparison, screening and "ranking" of some alternatives against the Proposed Route. These specific weaknesses must be seen in light of the DEIR/EIS's limited focus on environmental effects. All electricity users, generation suppliers and citizens in the San Diego area have high and enduring social and economic stakes in the Sunrise decision. Additionally, 37 million Californians have a stake in the potential consequences of the Sunrise decision on California's renewable energy and greenhouse gas emission goals.

As described in more detail below, this letter discusses some of the infeasibilities and impacts not addressed by the DEIR/EIS's "superior" routing alternatives as well as the critical shortcomings of generation alternatives that the DEIR/EIS ranks higher than Sunrise. With respect to routing in particular, the DEIR/EIS identifies three potential routes for Sunrise:

- (1) the Proposed Project Route (the route originally proposed by SDG&E)
- (2) an "Environmentally Superior Southern Route (SWPL) Alternative" (Aspen's Southern Route) and
- (3) an "Environmentally Superior Northern Route Alternative" (Aspen's Northern Route).

Neither Aspen's Northern Route nor Aspen's Southern Route is feasible. In order to make a southern route feasible, SDG&E developed slight mitigation re-routes and identifies it as the "Modified Southern Route." SDG&E also identifies an "Enhanced Northern Route," using route alternatives evaluated in the DEIR/EIS to address some concerns identified in the DEIR/EIS regarding the Proposed Project Route. These mitigation re-routes are discussed in depth below. SDG&E's Enhanced Northern Route

and the Proposed Route are feasible, meet all of the project objectives¹ and should be included in the FEIR/EIS in response to these comments.

II. SDG&E's Enhanced Northern Route Is The Best Alternative - It Is Feasible, Meets Project And State Objectives And Has Limited Environmental Impacts

To mitigate certain environmental impacts associated with the Proposed Route, SDG&E has identified an "Enhanced Northern Route" that consists of the Proposed Route with some segments replaced by the following alternative segments analyzed in the DEIR/EIS.² The end result is a complete and feasible proposed northern route with reduced environmental impacts. SDG&E's Enhanced Northern Route includes the following modifications to the Proposed Route:

- Flat Tailed Horned Lizard (FTHL) Eastern Alternative (Imperial Valley Link);
- West Main Canal-Huff Road Modification Alternative (Imperial Valley Link);
- Overhead 500 kV ABDSP Within Existing 100-foot Corridor Alternative (Anza-Borrego Link);
- CNF Existing 69 kV Route Alternative (Inland Valley Link); and
- Oak Hollow Road Underground Alternative (Inland Valley Link).

FTHL Eastern Alternative

The Proposed Route parallels the existing Southwest Powerlink (SWPL) for four miles and turned north before heading in a northeasterly direction towards the West Main Canal. The FTHL Eastern Alternative also parallels SWPL, but only for three miles, turning north sooner and taking a more direct route to the West Main Canal. The FTHL Alternative is shorter by 1.4 miles than the Proposed Route. This alternative was proposed to avoid a route through a FTHL Management Area, and thus avoid impacts to this sensitive species. (DEIR/EIS at Ap.1-27.)

This alternative will result in some additional impacts to agricultural areas, but these impacts are minimal compared to the potential impacts to the FTHL. By locating the transmission line adjacent to agricultural access roads, canals and property lines, interference with agricultural operations would be nominal, and any interference would be compensated by SDG&E to those affected farmers and property owners, as appropriate. By avoiding FTHL areas, recovery of this species could be assisted. By avoiding these impacts, and locating the transmission line in a way which substantially

¹ The DEIR/EIS acknowledged that in its PEA, SDG&E identified eight objectives for the Sunrise Project, including expandability. (DEIR/EIS at ES-19 and ES-20.) Nevertheless, the DEIR/EIS reduced the eight project objectives to three broad objectives: (1) maintain reliability in the delivery of power to the San Diego region; (2) reduce the cost of energy in the region; and (3) accommodate the delivery of renewable energy to meet State and federal renewable energy goals from geothermal and solar resources in the Imperial Valley and wind and other sources in San Diego County. (DEIR/EIS at ES-20.)

² A map depicting SDG&E's Enhanced Northern Route is attached as Attachment 1.

minimizes farming impacts, it is expected that there may be a net reduction in impacts to FTHL by this option.

West Main Canal – Huff Road Alternative

This suggested modification would diverge from the Proposed Route at MP11, follow the Imperial Irrigation District's (IID) West Main Canal to the east-northeast and turn north on Huff Road. It would go north on the east side of Huff Road for 1.5 miles before joining the Proposed Route at MP 15.9. This alternative segment would avoid direct impacts to the Bull Frog Farms dairy structures and to the Raceway development. This alternative segment does not change the route length of the Proposed Route. (DEIR/EIS at Ap.1-34.)

Overhead 500 kV ABDSP Within Existing 100-foot Corridor Alternative

This segment option keeps the route within the existing 100-foot transmission corridor in Anza Borrego Desert State Park (ABDSP), eliminating the additional 50 feet of right-of-way needed for the Proposed Route and eliminating impacts to administratively designated wilderness in ABDSP. Delta lattice towers carrying both the 500 kV transmission line and the existing 69 kV and 92 kV circuits would be used for this area, and those structures would have an average height of 160 feet compared to an average of 130 feet for the structures in this segment of the Proposed Route. (DEIR/EIS at Ap.1-68.)

Even though the Sunrise line would remain within the existing transmission corridor through ABDSP under this alternative, SDG&E would continue its efforts to work with California Department of Parks and Recreation (State Parks) officials in making adjustments to minimize impacts to biological, cultural and recreational resources. To the extent that State Parks would prefer to mitigate certain cultural impacts by routing the overhead 500 kV line around a sensitive cultural resource known as Grapevine Canyon and/or mitigate certain recreational impacts at Tamarisk Grove Campground by routing the overhead 500 kV line east of the campground, SDG&E would continue its efforts to work with State Parks to implement those mitigation re-routes in a timely way.

Cleveland National Forest (CNF) Existing 69 kV Route Alternative

This segment option was suggested during scoping to reduce property and visual impacts to single-family residences on State Route (SR)78 and Deer Canyon Drive in unincorporated San Diego County. At MP 111.5, where the Proposed Route includes locating the 230 kV and existing 69 kV transmission lines west of CNF, the CNF Existing 69 kV Route Alternative would site the new 230 kV line adjacent to the existing 69 kV transmission line, traveling southwest through CNF for approximately 0.5 miles and rejoining the Proposed Route at MP 112.5. It would be 0.5 miles shorter than the Proposed Route and the existing 69 kV transmission line would not need to be relocated. (DEIR/EIS at Ap.1-129.) This option would be contingent upon Forest Service approval,

but SDG&E believes that this could be achieved with a project specific non-significant Forest Plan amendment in a time frame consistent with SDG&E's project objectives.

Oak Hollow Road Underground Alternative

This alternative was developed to reduce property and visual impacts to Starlight Mountain Estates. The double circuit overhead 230 kV line would transition underground as a 230 kV double circuit line in parallel duct banks at approximately MP 116.7 at transition poles within Mount Gower Open Space Preserve on a hill approximately 100 feet north of an existing dirt access road. The route would enter private property and would travel underground in the dirt road for approximately 1,400 feet before passing between a residence and a fenced pasture to join the residence's paved driveway at its intersection with Oak Hollow Road. The route would turn west and would travel underground in paved Oak Hollow Road for approximately 1,300 feet. When Oak Hollow Road turns into a dirt road, just west of the most western driveway in the Starlight Mountain Estate Owners (SMEO) area, the line would continue west-southwest in a maintained dirt and gravel access road (Oak Hollow Road) to exit SMEO private property, traveling under a fenced gate into Mt. Gower Open Space Preserve for approximately 600 feet to west of Structure I125. It would continue into Gunn Stage Road and would rejoin the underground segment of the Proposed Route at MP 117.3 along Gunn Stage Road. (DEIR/EIS at Ap.1-133.)

The mitigation re-routes proposed by SDG&E in its Enhanced Northern Route reduce impacts and render the route more feasible, by potentially reducing the regulatory obstacles associated with State Parks,³ while still meeting the project objectives – including access to Imperial Valley renewable energy resources and ensuring system reliability and expandability.

A. SDG&E Believes That It Will Be Able To Obtain Any Necessary Approvals To Construct Sunrise Through ABDSP

SDG&E developed its Enhanced Northern Route, in part, to directly address concerns raised by State Parks regarding the Proposed Route's impacts to administratively designated state wilderness through ABDSP. Although SDG&E does not agree with State Parks' conclusions regarding the scope, severity or implications of the Proposed Route's impacts, to avoid a potentially lengthy dispute regarding these issues, SDG&E sought to develop a transmission line route through ABDSP that would entirely avoid crossing any designated wilderness areas and would obviate the need for State Parks to amend the General Plan for ABDSP.⁴

The existing transmission line, which was built close to a decade before the Park

³ SDG&E notes that State Parks has recently asserted that a General Plan amendment will be necessary even if Sunrise remains within SDG&E's existing transmission corridor. SDG&E does not agree with that assessment as discussed *infra*. In all events, SDG&E believes that many of State Parks' concerns may be addressed by keeping Sunrise in the existing transmission corridor.

⁴ ABDSP General Plan website link: http://www.parks.ca.gov/default.asp?page_id=21314

itself was established, is located within an existing 100 foot corridor that State Parks has acknowledged in its own records and designated in the ABDSP General Plan as part of the Backcountry Zone.⁵ Both the management standards for Backcountry Zone areas and the ABDSP General Plan expressly allow for the expansion of the existing transmission line within (and outside) the existing corridor.⁶

Finalized in 2005, the ABDSP General Plan provides the broad framework that guides State Parks staff in managing and operating ABDSP. (*See* CAL. PUB. RES. CODE § 5002.2(a) (General Plans serve as “guides for the future development, management, and operation” of state park units); CAL. STATE PARKS PLANNING DIVISION, PLANNING MILESTONES FOR THE PARK UNITS AND MAJOR PROPERTIES ASSOCIATED WITH THE CAL. STATE PARKS SYSTEM 95 (July 1, 2007)⁷ [“Planning Milestones”] (noting that a General Plan should be more of a “vision” document than a “specific, detailed directive”)); (ABDSP General Plan at XI (plan “does not provide detailed management

⁵ The plan designated six management zones within the Park, and these zones “describe the overall management purpose and intent of specific regions within the Park as well as depict their intended uses.” (General Plan at XII); *see also id.* at 3-8 (“Each zone provides direction for the general level and type of development and use within the Park.”). (General Plan at Table 5.6).

⁶SDG&E believes that in several places the DEIR/EIS inaccurately states the nature and scope of the property rights and interests within the existing 100-foot transmission corridor in the Park. (*See, e.g.*, DEIR/EIS at B-9 to B-13.) SDG&E refers the CPUC/BLM to SDG&E’s data request responses on these topics, which are incorporated herein by reference. (*See* SDG&E’s Response to California Public Utilities Commission Data Request No. 1 dated January 11, 2007; SDG&E’s Supplemental Response to California Public Utilities Commission Data Request No. 1 dated July 25, 2007; SDG&E’s Response to California Public Utilities Commission Data Response No. #8, ALT-74 (initial and supplemental responses).) The existing 100-foot corridor follows the existing transmission line which was built a decade before ABDSP was created; historical evidence demonstrates that many affirmative and intentional steps have been taken to protect and grandfather the existing 100-foot transmission corridor. (*See, e.g.*, Letter from Mike Pool, State Director, BLM to Bret Lane, SDG&E dated July 5, 2007 attached as Attachment 2.) While SDG&E agrees with the DEIR/EIS that it is outside the scope of the CEQA and NEPA processes to verify the legal status of the existing transmission line corridor, the DEIR/EIS contains inconsistencies and other inaccurate information about these issues that should be deleted or, in the alternative, corrected in the FEIR/EIS. For example, on page B-10, n. 3 the DEIR/EIS states that Section 16 lands are held in trust by the State. Historical evidence demonstrating the sale of these lands to private individuals at the time the transmission line was built indicates that these lands were proprietary in nature, and not held in trust. SDG&E provided the CPUC with this documentary evidence in data request responses. Similarly, on page B-10, the DEIR/EIS states that “State Parks contends that ROW for transmission infrastructure is excluded from these lands.” Again, SDG&E disagrees with State Parks’ contention. As the DEIR/EIS correctly reports in the text on the same page, the BLM is still reviewing the status of the federal interests in the Section 16 lands. Likewise, on page B-13, the DEIR/EIS states that there is no documented width of certain segments of the transmission corridor, and argues that this allows for “an interpretation of minimal width equal to what the existing transmission line occupies.” SDG&E disagrees with this inaccurate assertion, particularly given that the undisputed width of the rights-of-way abutting each of these private parcels is 100-feet, as expressly reserved in federal patents and legislation. In any event, State Parks may grant a ROW for Sunrise across all of these lands under its authorizing statutes. (CAL. PUB. RES. CODE § 5012 (State Parks authority to grant permits and easements for “electric, gas, water, sewer, telephone, telegraph and utility lines, and pipelines and structures incidental thereto . . .”).) These conclusions should be deleted from the DEIR/EIS. In the alternative, the corrections here noted, and other clarifications consistent with SDG&E’s data request responses, should be corrected in the FEIR/EIS.

⁷ <http://www.parks.ca.gov/planning>

recommendations, but rather provides conceptual parameters for future management actions.”).) The plan “provides goals and guidelines for the appropriate types, locations, and designs of [facilities] that may be proposed in the future.” (General Plan at XIII; *id.* at XII (General Plan established “management goals and guidelines and management zones for resource management, facility operations, and accessible interpretive and recreational programs for the public within ABDSP”); CAL. STATE PARKS, PLANNING HANDBOOK 69 (Feb. 2002) [“Planning Handbook”] (noting that the General Plan may be referred to by subsequent environmental documents prepared for specific proposed projects)).⁸

As a broad framework document, a general plan is meant to be enduring and should “only be reconsidered for amendments or revisions when circumstances and needs dictate.” (Planning Handbook at 21.) The circumstances requiring a plan amendment might include “major and unforeseen changes in the unit and its surroundings.” (Planning Milestones at 121.)

Upgrading SDG&E’s existing transmission line through the Park is not a “major and unforeseen circumstance” and, instead, is explicitly contemplated within ABDSP’s General Plan. Specifically, the plan states:

Utility companies such as San Diego Gas & Electric and the Imperial Irrigation District have existing transmission lines through the Park. These companies have 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*. . . . Reconciling the inherent conflicts between the future electrical needs of the State and the protection of the Parks’ resources *will require the utility companies and the Department to work closely together in planning for the size and location of these future facilities.*

(General Plan at 2-96)(emphasis added). Additionally, under the Goals and Guidelines section for Infrastructure and Operations, Goal-Operations 4/Guideline-Operations 4a states that “[s]hould Caltrans or *utility companies propose to improve or expand existing facilities (within existing easements); the department will work in collaboration with them to minimize adverse impacts to Park resources and the visitor experience.*” (General Plan at 3-52 (emphasis added); *see also id.* (“The department shall work with local agencies, Caltrans, and utility companies to minimize the adverse impacts associated with developments.”).)

That the improvement of the existing line would take place within an area now

⁸ Pursuant to CEQA requirements, the ABDSP General Plan serves as a first-tier EIR. *See* CAL. CODE REGS. tit. 14, § 15166 (noting that EIR requirement can be satisfied by using the General Plan). As is the case here in considering the Sunrise Project, “[i]ndividual and/or site-specific projects and appropriate CEQA compliance will follow the General Plan/EIR.” (General Plan at XVII.)

designated as Backcountry Zone does not alter the conclusion that no General Plan amendment is required for SDG&E's Enhanced Northern Route. When State Parks first proposed that the area surrounding the existing transmission corridor be designated Backcountry Zone, SDG&E questioned State Parks to ensure that this zone designation was appropriate given the presence of the existing transmission line and the fact that SDG&E likely would seek to upgrade the line in the future. In a series of communications and then in writing, State Parks explicitly acknowledged that expansion of the existing line was possible within the Backcountry Zone, noting that the Backcountry Zone goals and guidelines *allow flexibility* for utilities, such as SDG&E, to expand existing utility lines. See Attachment 3, (California State Parks Response to SDG&E Comment Letter, Response #5-5 (noting that new language would be added in the goals and guidelines section of the General Plan to allow for greater flexibility within the Backcountry Zone)). State Parks altered the language in the final plan subsequently approved by the California Park and Recreation Commission (Park Commission) to include, among other things, Goal-Operations 4/Guideline-Operations 4a in response to SDG&E's request, and which allows utilities to improve or expand existing facilities within existing easements.) See also Attachment 4 (Transcript In the Matter of: Informational Proceeding and Preparation of the 2004 Integrated Energy Policy Report (IEPR) Update, Docket No. 03-IEP-01, August 23, 2004 (State Parks Director of Planning reporting on ABDSP position that "we have met with SDG&E . . . and driven the corridor which would most likely serve the needs of a future 500kV power line. . . . Currently there is a 69 kV line which basically traverse the middle of the park in an east-west direction along highway 78. . . . We discussed the concept, **which the Park can agree with**, of increasing the 500 kV using taller steel poles with longer spans than the current wooden poles. . . . The taller poles with spans two to three times the current span would actually have less physical impacts on the ground, on archeological sites, riparian areas, wildlife habitat, plan disturbance, et cetera. . . . Thus the idea of putting any new power lines in the park centers on placement along already disturbed routes, i.e., paved highways, as discussed in the energy briefing paper. **We can and will work with SDG&E.**") (emphasis added).)

State Parks would not be required to change the current Backcountry Zone designation in the area of the existing transmission corridor should the CPUC/BLM approve SDG&E's Enhanced Northern Route through the Park. This zone designation already allows for expansion of infrastructure such as roads and utility lines. The language of the General Plan explicitly states: "In ABDSP, Backcountry has the potential to allow new roads and utility lines through the Park." (See General Plan, Environmental Analysis at 4-7.) Moreover, the construction of Sunrise will not preclude State Parks from continuing to manage the area in the vicinity of the already existing transmission line and public highway in a manner that provides a "predominantly natural environment with moderate evidence of human existence."

In short, the General Plan acknowledges that SDG&E might seek to expand its existing transmission line through the Park, the plan approved by the Park Commission directs State Parks staff to work with SDG&E to resolve any potential resource conflicts implicated by any transmission line expansion within the existing 100 foot corridor, and

the plan defined a land use designation for that existing corridor that allows for expansion. As a result, there is no requirement to amend the ABDSP General Plan to allow for the construction of Sunrise along SDG&E's Enhanced Northern Route.

The DEIR/EIS suggests that a General Plan amendment "may" be required as a result of "inconsistencies" between the Sunrise Powerlink and certain broadly stated Goals and Guidelines of the ABDSP General Plan. Similarly, SDG&E understands that certain State Parks representatives have very recently asserted the position at the February 25, 2008 all parties meeting in San Diego that *any* route through ABDSP (including one that stays within the existing 100 foot corridor) would require a General Plan amendment given these and other newly found so-called inconsistencies. In other words, it now appears that State Parks is taking the position that the Park Commission must expressly approve Sunrise. This approach, however, ignores the more specific management zones and express operational goals and guidelines for utility facilities adopted by the General Plan and the fact that general plans are not intended to describe in detail the location and design of specific facilities.

There is no statutory, regulatory or guidance provision requiring State Parks to amend the General Plan under these circumstances. Just as the construction of the Sunrise Powerlink along SDG&E's Enhanced Northern Route will not require State Parks to change the Backcountry Zone designation in the vicinity of the existing transmission corridor, neither State Parks nor the DEIR/EIS identifies how any of the Goals and Guidelines of the General Plan that are alleged to be inconsistent with Sunrise must be changed to accommodate upgrading and improving the existing line through the Park. For example, the DEIR/EIS alleges that Sunrise would be inconsistent with the General Plan's Significant and Sensitive Biota Element Goal 1/Guideline 1a, which directs State Parks staff to preserve sensitive species and habitats and encourage their recovery. (DEIR/EIS at D.16-39.) Neither the DEIR/EIS nor State Parks has identified how this guideline would have to be changed. Indeed, Sunrise, which will be constructed in an already disturbed corridor, will not preclude State Parks from continuing to preserve sensitive species and habitats and encourage their recovery.

Similarly, the DEIR/EIS finds an alleged inconsistency between Landscape Linkages Goal 1/Guideline 1a, which mandates that State Parks "actively work with local, federal transportation, and regulatory agencies in the planning of future regional transportation and infrastructure projects." (DEIR/EIS at D.16-41.) The guideline further directs State Parks to "discourage the fragmentation and isolation of habitat by such projects and ensure that adequate mitigation measures are incorporated into all road and infrastructure improvement and construction projects." (DEIR/EIS at D.16-41.) State Parks is in fact doing exactly as the guideline directs and is advocating mitigation measures that will address the potential impacts of Sunrise, and indeed, the Northern Enhanced Route would stay entirely within the existing 100-foot transmission corridor, consistent with this requirement. The DEIR/EIS finds an "inconsistency" by concluding that these mitigation measures will not entirely eliminate the potential impacts to habitat areas within the Park. However, there is no direction in the General Plan that State Parks must eliminate all potential impacts from any proposed infrastructure project, and there is

no requirement that this guideline must be changed as a result of Sunrise. Rather, one would assume that this guideline should remain the same as future infrastructure projects are proposed so that State Parks staff continue to be obligated to work with relevant agencies in the planning of those projects and to advocate mitigation measures to offset any potential impacts of those projects.

By way of comparison, the DEIR/EIS makes similar conclusions about alleged inconsistencies between Sunrise and broad goals stated in the resource management plan applicable to the CNF. For example, the DEIR/EIS alleges that the Sunrise Powerlink is inconsistent with Goal 1/Objective 2 of Part 1 of the Land Management Plan for Southern California National Forests Vision, which directs that wildland fires should be suppressed at a minimum cost. (DEIR/EIS at D.16-20.) The DEIR/EIS also finds a so-called inconsistency between Sunrise and Goal 6/Objective 3 of the same plan, which directs that the Forest Service maintain the environmental, social and economic benefits of forests by reducing their conversion to other uses. (DEIR/EIS at D.16-21.) The DEIR/EIS erroneously concludes that as a result of these so-called inconsistencies with broadly stated goals, the Forest Plan must be amended as a result of the Sunrise Powerlink project. (DEIR/EIS at D.16-3.)

Plan amendments are not required under these circumstances, however, and instead as both the Forest Service has stated and the DEIR/EIS subsequently acknowledges, there are only three circumstances applicable to Sunrise that actually might require an amendment to the Cleveland National Forest Plan: (1) if a route traverses the Back Country Non-Motorized Zone; (2) if a route conflicts with specific scenic integrity objectives designated for a particular area; or (3) if a route crosses the Pacific Crest National Trail. (DEIR/EIS at D.17-9.) Amendments may be required under these circumstances because these three instances reflect specific standards designations contained in CNF's management plan, and these designations must be changed to allow Sunrise to be located within certain areas of the Forest.

By contrast, the DEIR/EIS's generic and often overstated conclusions about alleged inconsistencies between other Forest plan guidelines and Sunrise do not require a plan amendment because the plan guidelines would continue to remain the same, and the Sunrise Project (with associated mitigation) would be built in a manner contemplated by these broad guidelines. For example, the Forest Service will continue to fight fires at minimum costs and will continue to manage the Forest in a manner that reduces land use conversion.

The same holds true for the ABDSP General Plan. The DEIR/EIS's conclusions about alleged inconsistencies between a number of broadly stated guidelines in the ABDSP General Plan and Sunrise do not require that the ABDSP General Plan be amended in order for the project to be located within the Park, given that those guidelines would continue to remain exactly the same, and the project would be built in a manner that would not preclude application of these policies. General Plans must be read as a whole document, including the language adopted by the Park Commission in Operations Goal and Guideline 4. Indeed, the Plan expressly acknowledges that "[i]n ABDSP,

Backcountry has the potential to allow new roads and utility lines through the Park.” (See General Plan, Environmental Analysis at 4-7). The CPUC/BLM recognized as much when it noted that no General Plan amendment would be required for any route through ABDSP that used the existing transmission corridor. (See CPUC/BLM Notice Regarding Conclusions on EIR/EIS Alternatives to the Proposed Sunrise Powerlink Project: Results of the Second Scoping Process at 7 (noting that the Overhead 500 kV ABDSP Within Existing 100 Foot ROW was retained as an alternative northern route segment because it would stay within SDG&E’s existing corridor and therefore “would not result in direct effects on State-designated wilderness and would not require a State Park Plan Amendment.”); see also Park Commission, Minutes of the Meeting-Thursday, February 8, 2007⁹ (noting State Parks General Counsel’s opinion that if the transmission line stayed within the existing transmission corridor, it would decrease the likelihood of needing an amendment to the Park’s General Plan).)

Consistent with that finding, SDG&E compiled the Enhanced Northern Route as the optimum route for Sunrise, given that it avoids administratively designated wilderness and any need for a General Plan amendment.

B. SDG&E’s Enhanced Northern Route Should Allow For 2011 In-Service Date

Because SDG&E’s Enhanced Northern Route is similar to the Proposed Route and does not require significant lengths of underground construction, which would add greatly to the schedule, SDG&E expects that Sunrise can be constructed along the Enhanced Northern Route to meet the same in-service date as is expected for the Proposed Route. If the Enhanced Northern Route is constructed, the expected in-service date would be June 2011. This estimated in-service date takes into account mitigation and reasonably expected permit requirements, land acquisition activities and the varied construction methods proposed for this alternative.

In the event that a statutory exception to General Plan amendment requirements does not apply,¹⁰ SDG&E believes that the amendment can be achieved within the timeframe of obtaining the other permits. A Forest Plan Amendment required for any southern routes is expected to take longer to complete since it may require additional subsequent environmental review, as discussed below. It is estimated this would delay the in-service date of the southern routes.

C. The Enhanced Northern Route Provides Expandability For Future Needs

SDG&E’s proposed Central East Substation is designed to allow for a potential buildout, if needed, of two 500 kV circuits and six 230 kV circuits of which initially there will be one 500 kV circuit and two 230 kV circuits. It is prudent planning for large infrastructure projects such as transmission lines to design for potential future needs, even where the certainty of such needs and the precise timing of such needs is not known.

⁹ <http://www.parks.ca.gov/pages/843/files/minutes2-8-07.pdf>

¹⁰ These statutory exemptions are discussed in more detail herein and are equally applicable to the Enhanced Northern Route.

SDG&E does not know the routes of any potential future transmission lines. However, if needed, it is reasonable to assume the future 500 kV or 230 kV lines would go to existing substations. Thus, future 230 kV circuits out of Central East Substation would probably terminate at existing substations such as Escondido and Sycamore Canyon. (DEIR/EIS at B.2.7.) From a planning perspective, SDG&E would, to the extent possible, site additional lines in already disturbed corridors using existing rights-of-way. A possible 500 kV future route is to connect to the Valley – Serrano 500 kV line, as shown in the DEIR/EIS in Figure B.12-b.

The Enhanced Northern Route provides better opportunity for future transmission routes. Central East Substation is better placed to serve future needs in the northern service territory or the southern part of the service territory. Future routes out of the southern route substation sites like the Modified Route D Alternative (MRDA) Substation Alternative would have to traverse longer distances to get to the Valley – Serrano interconnection point. A southern substation site would also have a longer route to get to Escondido and other northern substations. Whereas, a location like Central East Substation would be able to get to the northern substation and the southern substations like Sycamore Canyon Substation.

Future transmission routes from the MRDA Substation Alternative compared to the Central East Substation reveals there are more constraints with the former. The future transmission route (as shown in DEIR/EIS at Fig. E.1.1-6) following the Route D Alternative goes through CNF proposed wilderness areas and Back Country Non-motorized Zones. The second future transmission route shown in the DEIR/EIS proposes to go in existing transmission corridors through developed areas and will impact businesses and residences. Therefore, the feasibility of the future expansion routes is at best questionable if a southern alternative for Sunrise is chosen. Because any such future line would be longer from a southern route than a northern route, it almost certainly would be more expensive (with the ultimate cost dependent on routing and construction methods).

If future 500 kV and 230 kV circuits cannot not be built due to the location of the substation and route constraints, then one of the critical objectives of the Sunrise Powerlink, “expandability” would not be met.

D. The Enhanced Northern Route Follows Linear Features

SDG&E’s Enhanced Northern Route uses more existing transmission line corridor than Aspen’s Southern Route – the former uses 49 miles out of a total length of 147.7 miles, while the latter uses only 9 miles of existing corridor – and SDG&E’s Enhanced Northern Route follows more existing linear features. (See SDG&E Direct Testimony at 6.31¹¹ and Attach 5 - maps depicting proposed miles located within or parallel to existing facilities.) By following existing disturbed transmission corridors and

¹¹ SDG&E’s Phase 2 Direct Testimony and Rebuttal Testimony referenced in this letter are hereby incorporated by reference and may be accessed at <http://www.sdge.com/sunrisepowerlink/CPUC.html>.

existing linear features such as highways, the Enhanced Northern Route limits overall and site-specific effects and avoids the introduction of new facilities onto previously undisturbed landscapes, as would occur with the southern routes. Additionally, when following existing linear features, this route would reduce the need for new access roads, thus minimizing impacts to upland vegetation communities wetlands, and stream crossings. (*Id.*) These accepted guidelines are both incorporated into State policy known as the Garamendi Principles and many multiple species conservation plans (MSCP) in San Diego County. (*See, e.g.*, City of San Diego MSPC Subarea Plan at 44 (noting that utility lines “should follow previously-existing roads, easements, rights of way, and disturbed areas, minimizing habitat fragmentation”) at Attachment 6.)

III. SDG&E’s Proposed Route Is The Second Best Alternative—It Is Feasible, Meets Project Objectives And Has Limited Environmental Impacts

SDG&E’s Proposed Route is the second best option available to meet the needs of SDG&E ratepayers and achieve the State of California’s energy goals. Because the Proposed Route deviates from the existing transmission corridor through ABDSP, it may take longer to secure all necessary permits and approvals before SDG&E can commence construction on Sunrise. Accordingly, the in-service date could be slightly delayed compared to SDG&E’s Enhanced Northern Route. Nevertheless, the Proposed Route still achieves all of the project objectives and has limited environmental effects compared to the southern routes.

A. SDG&E Believes That It Can Continue Working With State Parks To Obtain Any Necessary State Parks Approvals, Though It May Take More Time Than On SDG&E’s Enhanced Northern Route

If the CPUC/BLM determines that SDG&E’s Enhanced Northern Route should not be selected, SDG&E’s Proposed Route continues to be the ideal route choice for the Sunrise Powerlink. The Proposed Route is legally and technically feasible and can be implemented with fewer delays and without the uncertainty associated with southern routes. Moreover, the Proposed Route was selected by SDG&E because of its potential to limit certain environmental effects within ABDSP.

The Proposed Route generally follows the existing transmission corridor through ABDSP, just as SDG&E’s Enhanced Northern Route does and in accordance with the Garamendi Principles, discussed at length in SDG&E’s PEA and in Phase 2 testimony.¹² SDG&E proposed certain deviations from that existing corridor, however, to lessen the potential environmental impacts of the existing transmission corridor through ABDSP. SDG&E acknowledges that as a result of these proposed deviations, the Proposed Route would traverse some administratively designated wilderness areas in ABDSP. (DEIR/EIS at D.5-22.) But SDG&E believes that the slight boundary adjustment that would be required to accommodate these deviations from the existing transmission corridor is outweighed by the benefits to ABDSP of relocating the transmission line outside of certain sensitive areas, reducing the number of structures required in the Park, and

¹² SDG&E Phase 2 Direct Testimony at Ch. 6, p. 6.30.

reducing the number of instances of transmission line crossings across certain roadways, especially in light of the extensive environmental review and analysis that has already been performed.

The DEIR/EIS states that an amendment to ABDSP's General Plan is required for the Proposed Route because the route will cross administratively designated wilderness. SDG&E respectfully disagrees with this conclusion. California law holds that no general plan revision is required if the undertaking is "necessary for the protection of public health and safety." (CAL. PUB. RES. CODE § 5002.2(c).) Ensuring reliable power and preventing blackouts with the implementation of the Sunrise Powerlink is unquestionably a matter of public health and safety. (*See also* CAL. PUB. UTIL. CODE § 334 (recognizing that the importance of electrical system reliability is "of paramount importance to the safety, health, and comfort of the people of California").¹³)

Even if a General Plan amendment was required to implement the Proposed Route, it should be a minor amendment consisting of adjusting the boundaries of administratively designated wilderness within the Park to reflect a slightly wider right-of-way corridor. Minor boundary adjustments of federal wilderness areas have occurred to accommodate needed power infrastructure, particularly if there is no net loss of wilderness through mitigation measures.¹⁴ In those areas where the Proposed Route deviates from the existing transmission corridor altogether, as mentioned above, these deviations were specifically designed to provide the Park with a net environmental benefit as a result of the project by moving the existing line outside of sensitive areas and reducing the overall number of structures and road crossings within the Park. In this way, instead of being inconsistent with the ABDSP General Plan, SDG&E followed the dictates of that plan, which directs that if facilities are proposed in areas not designated for such use, State Parks shall work with the project proponent to evaluate alternatives that will result in a net improvement to the environment. (General Plan at 3-52, Guideline - Operation 4b.)

Despite some suggestions in the DEIR/EIS to the contrary, the Proposed Project would be constructed in a manner that would be consistent with the broad policies contained in the ABDSP General Plan, and thus SDG&E does not believe an amendment to the plan on that basis is necessary to authorize Sunrise. Rather, the only requirement related to a plan amendment that appears to apply given the text of the existing General Plan is the California Code provision directing that General Plans be revised in the event of any reclassification of the state park unit, absent an applicable exception. (CAL. PUB. RES. CODE § 5002.2.) In the event that a statutory exception to General Plan amendment requirements does not apply, however, SDG&E believes that an amendment to the plan to reflect new wilderness boundaries could be processed expeditiously, because both

¹³ *See also* CAL. PUB. RES. CODE § 5002.2(c) (no general plan amendment is required "if the only development contemplated by the department consists of the repair, replacement, or rehabilitation of an existing facility").

¹⁴ Boundary adjustments to federal wilderness (which unlike here require legislative action under federal law) are not unprecedented. (*See, e.g.*, Glacier Bay National Park Boundary Adjustment Act of 1998, Pub. L. No. 105-317 (1998).)

State Parks and the Park Commission already have at their disposal the thorough environmental analysis that has been performed to date and is currently reflected in the DEIR/EIS and the soon-to-be-issued FEIR/EIS.

In order to amend the General Plan, State Parks would prepare an inventory of the unit's scenic, natural and cultural features – information readily at the agency's disposal from its recent development of the General Plan and easily supplemented by the information gathered during the Sunrise Powerlink environmental review process. (*See CAL. PUB. RES. CODE § 5002.1* (requiring inventory prior to reclassification).) In sum, SDG&E believes that, in the event that an amendment to the General Plan is required, such amendment could be processed in a manner that prevents delay of the implementation of the Sunrise Powerlink.

B. The Proposed Route Potentially Minimizes Cultural Impacts

Any route for the Sunrise Powerlink is likely to have some cultural impacts given the rich cultural history of Southern California generally and the greater San Diego area specifically. In selecting its Proposed Route, SDG&E followed already-disturbed corridors containing existing rights-of-way and linear features and minimized undergrounding, whenever possible in order to minimize the potential impact to culturally significant areas. Additionally, SDG&E identified a range of proven measures aimed at minimizing any of the impacts that might occur and incorporated those Applicant Proposed Measures into the project design itself. Aspen's Southern Route does not minimize the cultural impacts associated with SDG&E's Proposed Route; instead, going south merely moves those impacts from one area to another. Moreover, in evaluating SDG&E's Proposed Route, the DEIR/EIS appears to have overstated the impacts that would be likely to occur and disregarded the effectiveness of SDG&E's proposed mitigation measures.¹⁵

The substantial undergrounding associated with Aspen's Northern Route will result in a far greater likelihood that the route will encounter subsurface cultural resources, given that the route passes through two culturally sensitive areas – ABDSP and the Santa Ysabel Valley.

Additionally, not only does Aspen's Southern Route also propose potentially destructive undergrounding through culturally important areas – an Early Period habitation site (CA-SDI-4798) in the vicinity of Alpine – overhead portions of this route will span the potentially large cultural area in the vicinity of the National Register listed Table Mountain Archaeological District. In short, neither Aspen's Northern route nor Aspen's Southern Route demonstrably improves the cultural impacts that may be associated with Sunrise. In addition, the amount of culturally sensitive areas on the Proposed Route are known because the Proposed Route has been subjected to a 100% Class III pedestrian survey, while a lesser amount has been surveyed with Aspen's Southern Route. In fact, there is more of a likelihood of encountering additional

¹⁵ SDG&E has previously identified concerns on these issues in its prior comment letters on the DEIR/EIS.

culturally sensitive areas on Aspen's Southern Route than the Proposed Route (or SDG&E's Enhanced Northern Route).

Moreover, in carefully selecting its Proposed Route, SDG&E selected a number of measures associated with that route to reduce potential effects on cultural resources. The DEIR/EIS, however, appears to discount many of SDG&E's proposed measures and overstates the scope of the cultural impacts likely to result from the Proposed Route. For example, throughout each link traversed by the Proposed Route, the DEIR/EIS concludes that Class I impacts may occur even where no cultural resources have been identified, assuming that every segment of the Proposed Route may – hypothetically – contain certain types of resources, such as human remains or significant traditional cultural properties. (DEIR/EIS at D.7-46.) The DEIR/EIS notes, for instance, that the Sycamore Canyon Substation has been previously surveyed twice for cultural resources, one researcher has determined that the site has been “completely obliterated” by development, and the one area where cultural resources have actually been recorded would not be affected by the Proposed Route. (DEIR/EIS at D.7-56.) Yet the DEIR/EIS assumes that human remains or other significant resources could be located in this area and thus concludes that significant, unmitigable impacts could result. (DEIR/EIS at D.7-57.) If this were correct, most proposed construction projects in California would have significant, unmitigable impacts on cultural resources, which is not the case.

C. The Proposed Route Has Negligible Impacts On Agricultural Land

Calculations of permanent impact to agricultural lands in Table D.6-8 of the DEIR/EIS appear premised upon the potential permanent loss of land for agricultural operations within the entire transmission corridor required for the Proposed Route. The actual permanent impact of the Proposed Route to agricultural land resources is far less than portrayed in the DEIR/EIS and more accurately assessed in impact tables on page 5.1-6 of the PEA. Impact estimates in the PEA are based upon actual anticipated ground disturbance from transmission structures or access roads that would permanently remove land from agricultural use.

The portion of Sunrise proposed to cross irrigated farmland in Imperial County is approximately 19 miles in length and based on actual ground disturbance will permanently encumber approximately 27.3 acres of farmland including Department of Conservation (DOC) farmlands, not the 270.5 acres of DOC farmland noted in DEIR/EIS Table D.6-8. These farmlands contain the categories of important farmland analyzed in the DEIR/EIS including Prime Farmland, Unique Farmland, Farmland of Statewide Importance and Farmland of Local Importance.

In addressing concerns regarding potential impacts to agricultural lands as analyzed in the DEIR/EIS and expressed by IID and the Farm Bureau thus far on this project, it is important to point out that SDG&E has experience regarding the installation and maintenance of 500 kV electric transmission lines across agricultural farmland in Imperial County. In order to address specific concerns about the Proposed Route on agricultural land, SDG&E investigated the status of agricultural operations along the existing SWPL. Placed in service by SDG&E in 1984, this 500 kV facility is located

within a 200 foot wide right-of-way (ROW) extending across irrigated agricultural land, between the Westside Main Canal and the East Highline Canal in southern Imperial County, a distance of 28 miles. Along this alignment the SWPL facility also traverses the Phillips Cattle Company, a cattle feeding (feed lot) operation on Wahl Road.

An aerial review of the SWPL project indicates transmission structure spacing is variable, allowing it to line up with property boundaries to the extent feasible. There are 99 tower sites along the approximately 28 mile length of SWPL between the Westside Main and East Highline Canals. Assuming a liberal impact area of 625 square feet (25' x 25') per structure, the combined on-the-ground impacted area is approximately 1.42 acres. This is far less than the impacts suggested in Table D.6-8 of the DEIR/EIS for the Proposed Route, a 500 kV line that would have relatively similar ROW cross section and construction as SWPL. As has been the case with SWPL, no impacts to farming operations would occur.

1. Sustainability of agricultural enterprises

Weather in Imperial County and availability of gravity flow irrigation allows for the year-around growing of crops. SWPL has been in place through this irrigated crop land for approximately 24 years and demonstrates that a 500kV transmission line, similar to the Proposed Route, can be designed and built in a manner that sites transmission structures and access roads to avoid the disruption, division or fragmentation of agricultural lands and disruption to dairy operations as described on page D.6-18 of the DEIR/EIS.

2. Effects to irrigation and the potential for increased soil salinity

Salt content in the soil and irrigation water (historically 1.2 to 1.8 tons per acre foot) is a fact of farming life in Imperial County. These soluble salts arrive at the property and pass through the soil in irrigation water, and leave the field through the drain tile lines. Transmission structure locations do not interfere with agricultural irrigation systems, resulting in the accumulation of salt in irrigated farmland. Contrary to statements in the DEIR/EIS at D.6-16 suggesting that transmission rights-of-way negatively impact agricultural irrigation systems, even salt sensitive crops such as carrots thrive and grow successfully in agricultural fields crossed by corridors that contain transmission structures.

3. Aerial application

With respect to aerial application, the overriding issue is pilot safety. The worst case scenario affecting pilot safety is the coterminous siting of both distribution and transmission lines in the same ROW as noted on page D.6-18 of the DEIR/EIS. However, such coterminous siting is not proposed in the ROW crossing Imperial Valley agricultural lands.

The siting of electric transmission lines and towers does not significantly affect aerial spraying operations as described at D.6-18 of the DEIR/EIS. Agricultural fields

containing transmission lines are routinely sprayed, and there is no added cost associated with spraying fields encumbered with transmission facilities.

All of this information regarding minimal affects of Sunrise to agricultural operations should be included in the FEIR/EIS and the significance determinations and mitigation reduced to reflect those minimal effects.

D. The Proposed Route Has Fewer Biological Impacts And Mitigation Issues Than Described In The DEIR/EIS¹⁶

As with cultural impacts, given the nature of San Diego County and its biological diversity and richness, it is impossible to develop a route for Sunrise that would entirely avoid all biological resources. Indeed, according to the DEIR/EIS, the Proposed Route, Aspen's Northern Route and Aspen's Southern Route have comparable Class I impacts. (DEIR/EIS at Table H-1 thru Table H-25.) Specifically, there is no difference in the number of identified Class I biological impacts between the Proposed Route and Aspen's Northern Route – both have eleven Class I impacts to biological resources, and the DEIR/EIS identified ten Class I impacts along Aspen's Southern Route. Moreover, the DEIR/EIS appears to have overstated the likely impacts associated with the Proposed Route and discounted the effectiveness of the mitigation measures that SDG&E will perform.¹⁷

The DEIR/EIS concludes, for example, that the Proposed Route will have significant, unmitigable impacts to the Quino Checkerspot Butterfly (QCB) because the route crosses habitat that could potentially be suitable for the species, despite no known occupation currently and despite the fact that the nearest critical habitat for the butterfly is located 12.6 miles from the Proposed Route. (DEIR/EIS at D.2-129.) By contrast, Aspen's Southern Route will directly impact 23.5 acres of designated critical habitat for the butterfly. (DEIR/EIS at E.1.2-31.)

The DEIR/EIS also makes a number of conclusions about the Proposed Route's potential impacts on Peninsular Bighorn Sheep (PBS). Aspen concludes that the Proposed Route will cause significant, unmitigable impacts to PBS because the animals may, for instance, perceive the transmission line as a barrier to movement. Aspen even states that the effect of transmission lines and associated structures on PBS is unknown. (DEIR/EIS at D.2-114.) There is no documented basis to assume that such an impact will take place. Bighorn sheep have been documented to move under and across high voltage transmission lines, without ill effect. (See Attachment 7.) Additionally, as demonstrated by a six-year study on bighorn sheep/transmission line interactions, entitled *Studies of Desert Bighorn Sheep (Ovis Canadensis Mexicana) In Western Arizona: Impacts of the Palo Verde to Devers 500 kV Transmission Line, Final Report (1986)* at pp. 40 and 41, "it is abundantly clear that construction and operation of the transmission line did not

¹⁶ The same would also hold true for SDG&E's Enhanced Northern Route.

¹⁷ In several places in the DEIR/EIS, the document analyzes potential environmental impacts from connected actions and indirect effects. As SDG&E asserted in Phase 1 proceedings and in response to CPUC data requests, SDG&E disagrees that certain connected actions and indirect effects of Sunrise identified by Aspen are properly characterized as such under NEPA or CEQA.

preclude bighorn sheep from moving freely back and forth across the transmission line corridor in the Dome Rock Mountains” and had “little negative effect.” Renowned bighorn sheep expert Dr. Rob Roy Ramey agrees. (*See generally*, SDG&E’s Rebuttal Testimony in Response to Center for Biological Diversity and the Sierra Club’s Phase 2 Direct Testimony, Part 1: Prepared Rebuttal Testimony of Dr. Rob Roy Ramey at 1.1-5 to 1.1-14 (noting examples where bighorn sheep crossed high-voltage transmission lines, including SWPL).)

Similarly, the DEIR/EIS concludes, without any scientific support, that PBS may be affected by transmission line corona noise – which can be intermittently created during moist air and rain conditions, which may cause unstable irregularities in the electrical field around conductors and insulators of transmission lines, which the DEIR/EIS then assumes may be loud enough for PBS to hear and consequently be affected, for instance, by preventing them from hearing predators. (DEIR/EIS at D.2-114 and D.8-10 (describing corona noise).) Despite the speculative nature of these assumptions, and the predominantly dry conditions in the desert, the DEIR/EIS nevertheless concludes that these potential effects would “adversely affect survival and recovery of the species.” (DEIR/EIS at D.2-115.) These conclusions ignore well-documented evidence, however, that transmission lines do not have a significant impact on PBS, and a number of mitigation measures – such as those proposed by SDG&E – can substantially lessen any impacts that might result.

Yet another example of overstating the impacts associated with the Proposed Route is the DEIR/EIS conclusions regarding the potential for SDG&E to locate sufficient mitigation lands that would be used to offset any impacts from the project. The DEIR/EIS concludes, without sufficient documented basis, that the Proposed Route will have significant, unmitigable impacts because there may be insufficient mitigation land available in the vicinity of the Proposed Route. (DEIR/EIS at D.2-85.) As a linear project spanning a large area, however, there is in fact likely to be ample high quality, available properties in close proximity to the Proposed Route to provide sufficient mitigation.

Although it is highly likely that in-kind mitigation habitat can be acquired in close proximity to the Proposed Route, the FEIR/EIS should allow USFWS and CDFG (collectively, the Wildlife Agencies) greater latitude at the time of permitting to determine the appropriate form of mitigation. For instance, the Wildlife Agencies may prefer a larger block of mitigation habitat compared to an in-kind species-by-species and habitat-by-habitat approach that would result in smaller mitigation parcels. This regional approach is currently being used with other linear projects such as highway construction projects. The FEIR/EIS should also recognize that there are other types of mitigation that can be implemented in addition to habitat acquisition, such as restoration and enhancement of existing habitat. As a result, the FEIR/EIS should assume that mitigation is possible for native vegetation, sensitive plants, and sensitive wildlife, and should categorize the impacts as less than significant with mitigation. Further, notwithstanding its length of close to 150 miles, there would be only minimal impacts to vegetative communities, including vernal pools (0.02 acre permanent impact) and rare and sensitive plants, which the DEIR/EIS assumes have higher potential to occur in the proposed right-

of-way than is warranted.¹⁸ Similarly, the Proposed Project (as well as the Enhanced Northern Route) would only cross 5 acres of Multiple Species Conservation Plan preserve lands,¹⁹ and 16 acres of Pre-Approved Mitigation Area (PAMA) lands.

In general, the DEIR/EIS appears to have placed insufficient weight on the effectiveness of mitigation measures that SDG&E will perform to minimize any impacts that might result from the Proposed Route. These measures emphasize pre-construction studies and relocation of facilities to avoid impacts, in addition to securing sufficient mitigation lands, and a number of these measures would reduce impacts that Aspen has erroneously determined would be significant and unmitigable. The FEIR/EIS should take these measures into account during the significance determination, reduce the mitigation to be roughly proportionate to the potential impact and acknowledge that SDG&E will be able to mitigate for effects on biological resources.

As a result, although the Proposed Route presents more potential regulatory challenges than SDG&E's Enhanced Northern Route, this route is still a better option than any of the southern routes presented in the DEIR/EIS, given the potential for the Proposed Route to be implemented sooner without the significant uncertainty and delay associated with those southern routes, which are discussed in detail below. The Proposed Route is legally and technically feasible, has limited effects on resources and meets all of the project objectives.

IV. Aspen's "Environmentally Superior Northern Route Alternative" Is Infeasible And Limits Future Expandability

Aspen's Northern Route is infeasible to construct because it seeks to cross an Indian Reservation without Tribal consent, places an underground transmission line across active earthquake faults and seeks to place two 230 kV circuits in a roadway with insufficient space. Moreover, construction of Sunrise along Aspen's Northern Route incurs an unnecessary seismic risk to reliability even if the CPUC/BLM were to order Sunrise constructed underground across active faults. Even if it were feasible, Aspen's Northern Route would be subject to significant work restrictions. Finally, Aspen's Northern Route limits future expandability, a critical project objective. These concerns should be included in the FEIR/EIS.

A. Aspen's Northern Route Crosses The Santa Ysabel Indian Reservation Despite Tribal Opposition

Aspen's Northern Route crosses the Santa Ysabel Indian Reservation. (DEIR/EIS at C-40 to 43; Ap. 1, Fig Ap. 11C-19; *see also* DEIR/EIS at H-35 (concluding that this

¹⁸ The same holds true for SDG&E's Enhanced Northern Route.

¹⁹ These lands are located within the Los Peñasquitos Preserve. Sunrise crosses these lands within an existing sewer easement through the Preserve in order to avoid a highly sensitive vernal pool complex under SDG&E's existing transmission line in that area. The DEIR/EIS properly finds that the project crossing into the Los Peñasquitos Preserve is consistent with both the City of San Diego MSCP Subarea Plan and the Los Peñasquitos Preserve Master Plan and a City of San Diego ordinance which authorizes utilities within the Preserve. (*See* Attachment 5.)

alternative should be included within Aspen's Northern Route).) The DEIR/EIS acknowledges this is Indian Reservation land held by the Santa Ysabel Band of Diegueno Indians, which would require Tribal approval to implement. (DEIR/EIS at C-40 to 43; *see also* DEIR/EIS at H-33 ("A portion of SR79 at the northern portion of this alternative is located on Tribal land (where the Santa Ysabel Reservation is located below or east of the roadway), and ... would require Caltrans, Bureau of Indian Affairs or Santa Ysabel Tribe approval").) This route segment also crosses a parcel that is located outside of the Reservation, is the site of a Tribal cemetery, and is also held by the United States.

SDG&E reviewed the results of recent land surveying in the area, tax assessor records and information from a title company and the Bureau of Indian Affairs (BIA) to determine the land ownership status of the American Indian lands crossed by this route (and all other proposed routes crossing Tribal lands). Each of these parcels, in whole or in part, is owned by the United States, indicating that they are Tribal trust lands. (*See* Attachment 8.)

On June 14, 2007, the Santa Ysabel Band declared its general opposition to the entire Sunrise Project and, specifically, to the Proposed Route in the vicinity of the Santa Ysabel Reservation. Although the CPUC/BLM may consider the Tribe's comments in opposition, because neither SDG&E's Proposed Route nor SDG&E's Enhanced Northern Route actually cross the Santa Ysabel Indian Reservation, the Tribe does not have an effective veto over those routes.

Because SDG&E cannot condemn the necessary easements across the Reservation, the Tribe has an effective veto over constructing Sunrise along this route. Although the Tribe has not yet taken a position on Aspen's Northern Route specifically, the Tribe's general opposition to Sunrise puts in serious doubt the feasibility of Aspen's Northern Route.

B. Aspen's Northern Route Has Several Technical Feasibility Concerns

The feasibility of Aspen's Northern Route is questionable also due to construction difficulties, particularly in the ABDSP. The difficulty and challenge in construction related safety concerns, rock excavation, traffic impact and limited work space escalates the construction cost and prolongs construction. It is highly likely that SDG&E would encounter hard rock and boulders at hard rock surfaces during trenching and manhole excavations. The steep slope of the rocky hill above the trenching area makes safety hazard of high concern since vibration from the hard rock removal will result to falling rocks from above. In addition, traffic control and limited work space impacts the work activities tremendously. Challenges in construction technique are anticipated due to the limited work space. Finally, temporary closure of highway and road may be required for manhole construction and installation.

- **Intensive Traffic Control (for entire route)**

The entire route consists of two travel lanes with one lane for each direction with relatively narrow shoulders. In order to maintain traffic flow in SR78 and San Felipe Road during construction, one lane shall be open for traffic

flow for both directions. This requires extensive traffic control with flaggers and radio communication. During manhole construction and installation, traffic control shall be maintained for a 24-hour period until manhole installation is complete, or additional efforts required for bridging the steel plates on top of the manhole excavation, opening for traffic. This intensive traffic control escalates the construction cost. Because SR78 and San Felipe Road is the main thoroughfare in the desert area, highway closure is unlikely.

- **Limited Work Space**

The entire route consists of two traffic lanes with narrow shoulders. One lane will be kept open for traffic flows while another one will be closed. Due to the narrow shoulder, the work space along the entire route is limited and impacts the construction activities. For instance, after the trench is excavated, there is not sufficient space for equipment along the trench (off loading conduits, concrete placement, fluidized thermal backfill (FTB) placement, or steel plates shall be removed and replaced to facilitate the conduit, concrete and FTB installation). This sequence of construction would substantially limit construction and escalate cost. Construction activities will be most likely be restricted to stay within the roadway and shoulder area. The contractor will be limited to 12 feet to 16 feet width of work space for the entire route because the other lane is required for traffic control. In the section of both sides being a steep upslope and/or down slope rocky hills, the areas available working space is as narrow as 12 feet which is proposed to be kept open for traffic. Trenching activity and manhole installation at this area requires closure of SR78. If traffic has to be maintained with one lane open, construction activities are limited to one lane of work space. Productivity and work efficiency is decreased tremendously.

- **Hard Rock Excavation**

Field visit reveals hard rocks and boulders on both sides of the route for a distance of approximately 2.25 miles on Hwy 78 (please see areas indicated in the route map). Rock excavation and removal will be anticipated during trenching and manhole construction. Due to the limited work space, it makes trenching activity and manhole installation more time consuming and challenging. Work activities (AC removal, rock excavation and removal, conduit installation, concrete placement and FTB placement, AC paving restoration) will be in one lane width of work space, while the other lane is kept open for traffic. In addition, falling rock from the steep upslope hill above the work area is anticipated.

- **Creek Crossing**

Near the west entrance of ABDSP, the route would cross an existing creek via a bridge attachment. Jack & Bore method or Horizontal Directional Drilling method would not work because of the hard rock and boulders in the area. The area near the existing bridge consists of hard rock and boulders. Bridge attachment is the easiest alternative crossing the creek, but this requires approval by Caltrans and the County of San Diego. If the bridge attachment

design is granted, the duct systems would be installed at the bottom of the sidewalk deck on both sides of the bridge.

- **Remote Work Area**
The project site for this route alternative is considered a remote area. The nearest big town, Ramona, is approximately 45 minutes away. This will be a longer drive for material/equipment delivery, daily commute of the crews and disposal haul off. This situation would limit construction tremendously. For instance, it may take the whole shift for a water truck to deliver one truck of water to the site because of the driving times. The closest concrete batch plant may be too far. One concrete truck may only deliver one load of concrete per day, which will jeopardize the quality of the concrete and FTB.
- **Equipment/Material Staging Area**
It is most likely that all material and equipment staging shall be out side of ABDSP. State Parks will likely not allow equipment and material storage in the park during the off work hours. Equipment and material staging areas may be set up at both ends of the state park. But, due to the length of the route, it will take longer times to mobilize to the work area in the central park areas. This will shorten the work window during the construction in the central park area.
- **Turn Around Area**
SR78 and San Felipe Road are long stretch roads with less turn around area. This means the trucks or construction equipment requires longer time to drive to the turn around area and escalates the construction cost.
- **Transition Station & Loss Compensation**
Due to the length of the underground transmission, the riser pole at the west end of this route may require a transition station (switching and shunt reactors requirement) to compensate for the energy loss due to its length.
- **Two 230kV Circuits in Close Proximity**
This option consists of two 230kV circuits with two cables per phase in separate duct banks. Due to the limited width of the route, the two duct banks will be placed approximately 12 feet apart, center to center. In some areas, due to the steep down slope terrain in one side, the center to center distance between the two duct banks may be only 6 feet. This may result into two concerns: (1) heat dissipation from the circuits may de-rate each other, and reduce the cable ampacity ratings and (2) induced current from the energized circuit on the de-energized circuit when performing maintenance.

The placement of two 230 kV circuits into a single 12-conduit duct bank proposed in Aspen's Northern Route is contrary to SDG&E's practice for installing 230 kV cables. SDG&E is very concerned that the induced voltage could pose a safety risk to crews working in vaults containing two circuits. During maintenance of a circuit, the circuit is

de-energized, but the circuit is anticipated to have induced voltage from the other energized circuit. This poses a safety concern for the workers.

There are serious feasibility concerns simply with respect to construction of the two underground duct banks along SR78 and S2. The road shoulder is very limited or non-existent in certain segments due to a steep incline on one side or sheer cliff on the other side. Given the necessary separation between two 230 kV circuits and the limited width of the road right of way, construction of this alternative is not feasible. The required vaults would also need to fit within the highway ROW to avoid impacting State Park wilderness areas in certain segments.

Additionally, the DEIR/EIS states: "In late 2006, Caltrans closed the SR78 for 8 weeks for maintenance, so although road closure would be an inconvenience for traffic, it is feasible." (DEIR/EIS at Ap.1-66.) SDG&E has spoken with Caltrans representatives since the issuance of the DEIR/EIS. Caltrans representatives stated that Caltrans would prefer to have underground infrastructure installed outside of the highway ROW lines. If that is not possible, then Caltrans would follow certain policies and standards to work with SDG&E on constructing the underground circuits within the highway ROW. These policies and standards are focused on maintaining the safety and integrity of the impacted roadways. In order to accommodate future activities including maintenance needs of the proposed underground alignment, Caltrans would require that the alignment be placed either outside of the road shoulder lines, or, if that is not possible, within the shoulder but outside of the traveled lanes. In specific areas it is infeasible to utilize the roadway shoulder for infrastructure installation due to limiting topography, geologic formations and bridge crossings along the roadway alignment.

In addition to Caltrans' concern with the specific alignment of the circuits and the highway ROW, Caltrans would impose traffic control restrictions on the project when it issues construction permits. Traffic control requirements could include such measures as no construction on weekends; the need to work around the off-road recreation season; only allowing one-way traffic control; construction can only occur in one location at a time between road detour alternatives (cannot have multiple construction sites along a stretch of roadway); construction extents can only impact one-half mile to one mile stretches of roadway at any one time; traffic delays can only last for 30 minutes or less between route detour alternatives; and construction can only occur on one trench alignment at a time.

Based on the intensive construction activities and the restrictive traffic control requirements for the underground construction along SR78, the duration of construction for this route is estimated to take approximately 155 weeks. As noted in the DEIR/EIS: "Excavation of rock is anticipated during trenching in the area. ... Limited workspace will make trenching and vault installations hazardous and time consuming. Hazardous activities include blasting to perform trenching and deep vault excavations, the use of heavy equipment to break up the rock, and the use of heavier-than normal equipment to remove the rock." (DEIR/EIS at Ap.1-67.) Construction of the All-Underground Option, or even the Partial Underground Alternative, would be an unnecessarily lengthy process.

All of these construction concerns should be reflected in the FEIR/EIS.

C. Environmental Impacts Of Aspen's Northern Route

In comparison with SDG&E's Enhanced Northern Route, Aspen's Northern Route has the potential to cause greater impacts to cultural resources given the amount of undergrounding proposed. Unlike Aspen's Northern Route, SDG&E's Enhanced Northern Route focuses on using overhead transmission routes whenever possible, which minimizes the potential impacts to subsurface resources associated with undergrounding. By contrast, Aspen's Northern Route proposes to underground transmission lines in two culturally significant areas. The DEIR/EIS suggests undergrounding the line through Santa Ysabel Valley, with either the Santa Ysabel SR79 All Underground Alternative or the Santa Ysabel Partial Underground Alternative. (DEIR/EIS at C-40 to C-44.) Additionally, Aspen's Northern Route has 28 miles of underground transmission lines through ABDSP. (DEIR/EIS at ES-47.)

While overhead transmission lines can be sited appropriately before construction begins to avoid potentially significant areas and can be more easily adjusted if unknown sites are encountered, once undergrounding has begun and a culturally significant site is encountered, it is very difficult to avoid those resources. The undergrounding proposed by Aspen's Northern Route through ABDSP would take place primarily in existing roadways, which might lessen the potential for encountering unknown cultural resources. With respect to the Santa Ysabel Valley, given that this area is known to contain subsurface cultural resources, SDG&E has proposed the much more prudent measure of constructing overhead lines through this area rather than the undergrounding proposed by Aspen's Northern Route.

In sum, Aspen's Northern Route presents adverse environmental effects that should be included in the FEIR/EIS.

D. Aspen's Northern Alternative Limits Future Expandability

The project objective of expandability is limited with Aspen's Northern Route. If the San Felipe Substation becomes the transition point between 500 kV and 230 kV with 230 kV underground lines brought through ABDSP, then ultimately as many as four additional 230 kV circuits would be required through ABDSP, for a total of six 230 kV circuits. There will be increased environmental impacts from installing two, let alone six underground 230 kV circuits as opposed to one 500 kV circuit. These increased environmental impacts would come through digging up the road for the initial two circuits, diverting traffic for installation, as well as the subsequent impact from additional underground circuits in the future. Also, there could be substantial transportation impacts during construction, and to address possible outages on the underground segments of the line, which could potentially take the entire road out of service at times. It is better to have one 500 kV transmission line through ABDSP than to have six 230 kV transmission lines through the Park. Although this ultimate build out may not be needed for decades, at least one or two additional 230 kV circuits are possible within the first decade following completion of Sunrise in 2010.

V. Aspen's Southern Route Is Not Feasible To Construct And Has Operation Challenges

Despite being ranked in the DEIR/EIS as the fourth ranked option from an environmental perspective (DEIR/EIS at ES-3), Aspen's Southern Route is not feasible, does not meet the project objectives and presents its own environmental impacts that should be reflected in the FEIR/EIS.

A. The Campo Band Has Opposed A Route Across Its Reservation, And There Is No Guarantee That The La Posta Tribe Will Agree to Allow Sunrise To Be Constructed On Its Reservation

Aspen's Southern Route will cross both the Campo and La Posta Indian Reservations. SDG&E cannot condemn Tribal trust lands because these lands are owned by the United States, and any easement across these lands must have the consent of the Tribe for whom such land is held in trust. The Campo Band of Mission Indians has stated its opposition to Aspen's Southern Route, which would route the Sunrise transmission line across portions of the Campo Indian Reservation Tribal trust lands, both in writing and at the public hearing held in Pine Valley on February 25, 2008. Further, the Tribe denied SDG&E permission and access to survey the segment. Accordingly, this route (along with the I-8 Alternative, which also crosses the Campo Reservation) is not feasible.

Additionally, Aspen's Southern Route will cross the La Posta Reservation. Although the La Posta Tribe has not publicly stated its position on the Sunrise Project, locating the route on this land raises considerable uncertainty about the feasibility of this route, even if the Campo Tribe's opposition could be overcome.

1. Aspen's Southern Route crosses the Campo Indian Reservation, rendering this route infeasible due to the Campo Tribe's Opposition

Along both Aspen's Southern Route and the I-8 Alternative, the transmission line would cross the Campo Indian Reservation. Aspen's Southern Route includes the I-8 Alternative through much of the Campo Indian Reservation, but deviates from the route slightly for approximately 1.4 miles by using the Campo North Route Option, in response to a suggestion made by the Campo Tribe. The Campo North Route Option places the line just north of the I-8 freeway in the vicinity of the Kumeyaay Wind Energy Project farm, but still entirely within the Campo Indian Reservation. (DEIR/EIS at ES-56, E.1.7 to -10.)

Based on the tax assessor's records and information provided by a title company, each of the parcels traversed by this option within the Reservation is owned by the United States, indicating that these are Tribal trust lands. The Campo North Route Option crosses two other parcels located within the Reservation; these parcels are owned in fee by individuals but are surrounded by the Tribal trust lands.

The I-8 Alternative through the Campo Reservation crosses the same four trust parcels mentioned above, as well as another parcel, which is held in fee by the Tribe. (See Attachment 9.) This parcel, as with the other fee parcels, is entirely surrounded by Tribal trust lands. The Campo Indian Tribe denied SDG&E access to the Campo Indian Reservation to complete land surveying activities across the Reservation. (See, Letter dated February 1, 2008 from Campo Kumeeyaay Nation to Lynn Trexel at Attachment 10.) The Campo Tribe stated that after conducting a preliminary review of the DEIR/EIS, it has sufficient information to make the determination that a route across the Campo Indian Reservation is unacceptable. Because the majority of land for both the Campo North Route Option and the I-8 Alternative across the Campo Indian Reservation is held in trust – and those parcels that are held in fee are entirely surrounded by trust lands – both Aspen’s Southern Route and the I-8 Alternative are infeasible due to Tribal opposition.

2. Aspen’s Southern Route also crosses the La Posta Indian Reservation, rendering this route questionably feasible

Even if the Campo Tribe’s opposition could be overcome, Aspen’s Southern Route also crosses the La Posta Indian Reservation, rendering this route questionably feasible. Specifically, the route would follow the I-8 Alternative to the southern boundary of the La Posta Reservation and enter the reservation between MP I8-48 and MP I8-49. (SDG&E Phase 2 Direct Testimony at 10-4.) The DEIR/EIS proposes locating a transmission pole and associated access roads and pull sites within the boundary of the Reservation on a parcel owned by the United States, indicating that it is Tribal trust land that cannot be condemned by SDG&E should the Tribe oppose locating any facilities on the Reservation. (See Attachment 11.) As a result, even if Campo approved a route that crosses that Tribe’s Reservation, Aspen’s Southern Route could still be rendered infeasible due to the La Posta Tribe’s opposition.

The infeasibility of Aspen’s Southern Route cannot be remedied by adopting the I-8 Alternative for similar reasons. In addition to crossing the Campo Indian Reservation, there are portions of the I-8 Alternative that are sited across the La Posta and Viejas Indian Reservations. More specifically, with respect to the La Posta Reservation, the route would enter the southern boundary of the Reservation at approximately MP I8-48.9 and travel in a northwesterly direction for approximately 1.94 miles, exiting the western boundary of the Reservation just before MP I8-51. (DEIR/EIS at E.1.1-3.) The DEIR/EIS states that this is an Indian Reservation, and it is held by the La Posta Tribe. (DEIR/EIS at E.1.7-1.) Three of the parcels crossed by this route are owned by the United States indicating that they are Tribal trust land; the fourth parcel is Tribal fee land owned by the La Posta Tribe. (See Attachment 12.) If the La Posta Tribe opposes locating facilities on the Reservation, the I-8 Alternative would be rendered infeasible.

3. The I-8 alternative also crosses the Viejas Indian Reservation and will likely be opposed by the Viejas Tribe

Portions of the I-8 Alternative would also be located on the Viejas Indian Reservation.²⁰ The DEIR/EIS contemplates that an access road would be required for the I-8 Alternative between I8-70 and I8-71, which would enter the Viejas Indian Reservation at its most southeast corner and cross approximately 0.8 miles of the Reservation. (DEIR/EIS at E.1.7-1; Fig. Ap. 11C-70.) Additionally, a portion of the 300 foot right of way required for the I-8 Alternative in this area would be located on approximately 0.26 acres of the Reservation. The DEIR/EIS states this is an Indian Reservation, and it is held by the Viejas Band of Kumeyaay Indians. (DEIR/EIS at E.1.7-1.) The tax assessor's records and information provided by a title company show that these parcels are fee lands owned by the Viejas Tribe. Representatives from the Viejas Tribe have indicated to SDG&E that they will oppose the I-8 Alternative because of alleged visual and cultural impact concerns, rendering this route infeasible.²¹ Although here the lands crossed are not Tribal trust lands, SDG&E's ability to condemn these lands is still highly questionable due to both Tribal sovereign immunity and federal restrictions on the alienation of Indian land. In any event, in those few instances where a route would cross Tribal-held fee parcels, attempting to condemn such land likely would result in a legal battle that could take years to resolve.

4. Required regulatory approvals from the BIA may result in additional uncertainty and lengthy delays

Even if a Tribe could be induced to permit routing of Sunrise across its lands, additional approvals from the United States must be obtained for any rights-of-way across Tribal trust lands. These rights-of-way would require specific approval from the BIA, after compliance with applicable federal law, including NEPA. Federal regulations also require additional procedures before any right-of-way could be issued, including appraisals, bonds, and most importantly, consent of the Tribe and then issuance of a BIA right-of-way. (*See, e.g.*, 25 C.F.R. pt. 169.) This process is lengthy and can result in additional uncertainty, delays, and the discretion of yet another federal agency not required for either SDG&E's Enhanced Northern Route or the Proposed Route.

There is also significant potential for protracted delays during the Tribal negotiation process. If the Tribe does not perceive a benefit from locating the project on Tribal lands, it has no incentive to conclude negotiations quickly and may not come to the table willingly at all, let alone willing to come to mutually agreeable terms. The possibility of protracted negotiations with Tribes to secure a right-of-way grant would jeopardize the in-service date for Sunrise, and, indeed, had SDG&E contemplated a route that would cross Indian lands, SDG&E would have begun the necessary negotiations months, if not years, ago. Moreover, where – as here – a Tribe has expressed its opposition to a project, the potential for a successful negotiation simply does not exist.

²⁰ There is also some uncertainty regarding whether the Route D Alternative may cross the Capitan Grande Reservation, which SDG&E understands is held in part by the Viejas Tribe and in part by the Barona Band of Mission Indians. SDG&E understands that the boundaries of this Reservation have never been officially surveyed, and the Route D Alternative runs immediately adjacent to the eastern border of the Reservation.

²¹ The Tribe indicated that they would oppose the Route D alternative as well on the same grounds.

B. SDG&E Will Need Regulatory Approval From The Forest Service, And Potential Construction Requirements Within Cleveland National Forest May Substantially Impede The Construction Schedule

In contrast to both the Proposed Route and SDG&E's Enhanced Northern Route – routes developed to primarily follow existing rights-of-way, improve existing environmental conditions and avoid the prospect of involving additional protected lands and other federal agencies – any southern route located outside of ABDSP and sited a sufficient distance from SDG&E's existing SWPL requires crossing the CNF through previously undisturbed land. As a result, any southern route will implicate Forest Service requirements, and these requirements have the potential to delay construction and the projected in-service date for the Sunrise Powerlink. Moreover, potential Forest Service requirements related to construction within CNF may substantially delay the construction schedule and increase related operations and maintenance costs.

Any route that crosses CNF will require SDG&E to obtain a Special Use authorization from the Forest Service. Before issuing any Special Use authorizations, the Forest Service must first ensure that the proposed use is consistent with the National Forest Land and Resource Management Plan for CNF. If the proposed use is not consistent with the plan, the applicant must modify the project to ensure its consistency with the plan, the Forest Service must amend the plan to allow for the project, or the Forest Service may reject the proposal.²²

In its March 2007 scoping comments, the Forest Service has stated three circumstances under which a plan amendment is likely required to allow the Sunrise Powerlink to cross CNF lands: (1) if the route crosses lands designated as having a high scenic integrity objective; (2) if the route crosses lands designated as within the Back Country Non-Motorized Zone; or (3) if the route impacts the Pacific Crest National Trail.

Aspen's Southern Route includes route segments that will cross significant portions of CNF lands designated as having a high scenic integrity objective. (See DEIR/EIS Fig. D.17-3.) Aspen's Southern Route also crosses the Pacific Crest National Trail, as do some of the other alternative route segments through CNF. (DEIR/EIS Fig. Ap. 11C-77 (illustrating that Modified Route D crosses the trail); Fig. Ap. 11C-66 (illustrating that the BCD Alternative without the BCD South Option crosses the trail).) Finally, assuming it is not possible to cross the Campo Reservation, the BCD Alternative avoids the Reservation, but the BCD Alternative crosses a number of areas within CNF designated as part of the Back Country Non-Motorized Zone. (DEIR/EIS Fig. D.17-2.) As a result, plan amendments are likely required to allow these segments to be implemented, and these amendments have the potential to be more complicated, given the number of issues implicated and the possibility of more affected Back Country Non-

²² SDG&E notes that the Center for Biological Diversity has recently sued the Forest Service over the Forest Plan, adding additional uncertainty to routes along the south. (See Press Release, Center for Biological Diversity, Suit Filed to Protect Endangered Species on Southern California National Forests; Forest Plans Disregard Rarest Plants and Animals, available at http://www.biologicaldiversity.org/news/press_releases/2008/four-forests-03-05-2008.html.)

Motorized Zone areas, than the amendments required for SDG&E's Modified Southern Route.²³

Moreover, assuming the Forest Service chooses to proceed with fully evaluating Sunrise route segments that cross CNF lands, the agency has informed SDG&E that it may need to conduct its own environmental review of the project, separate and apart from the review performed by the CPUC and BLM – a decision that could substantially delay the implementation of the project by approximately six months to two years. (*See* Letter from William Metz, Forest Supervisor to Billie Blanchard, CPUC and Lynda Kastoll, BLM dated March 12, 2008 (“[i]f the NEPA analysis conducted by the CPUC/BLM does not meet Forest Service NEPA policy or provide the record necessary to support the findings required by other statutory requirements, a decision regarding the special use authorization would not be likely without preparing a supplement to the EIR/EIS.”).) Additionally, the Forest Service’s plan amendment process itself – regardless of whether the Forest Service conducts a separate environmental review or uses the existing CPUC/BLM analysis – also has the potential to significantly delay the commencement of the project. Further, the Forest Service may determine that the plan amendments required for Aspen’s Southern Route are significant amendments, implicating a longer regulatory review and approval process. Given that there are no statutory or regulatory deadlines associated with completing a significant or non-significant plan amendment, any decision by the Forest Service that a plan amendment is required – particularly a significant one – raises uncertainty about when construction could be commenced on CNF lands.

In addition to the regulatory obstacles associated with siting Sunrise through CNF, there are potential challenges associated with the construction requirements that may be imposed by the Forest Service that could further delay construction and drive up related costs. Specifically, the Forest Service may require that no access roads be constructed within certain areas of CNF otherwise needed to support the construction and maintenance of the Sunrise infrastructure. If no access roads are permitted in specified areas, construction activities would have to be completed by helicopter. Heli-pads would be installed near each structure site, however maintenance would be limited to good weather conditions and would require that some maintenance be completed from a helicopter. In addition to safety concerns with this type of work, additional cost and time would be required to maintain the infrastructure.

²³ Both SDG&E’s Enhanced Northern Route and Aspen’s Northern Route also include a route segment (the CNF Existing 69 kV Route Alternative) that will cross CNF lands in an area designated as having a high scenic integrity objective. The Forest Service has indicated to SDG&E that a project specific amendment would be required for this route segment, however, the amendment would be non-significant and would be made at the time of the Forest Service’s decision on the project. (DEIR/EIS at D.17-13; *see also* Forest Service, FEIS, Volume 1, Land Management Plans: Angeles, Cleveland, Los Padres, and San Bernardino National Forests at 521 (Sept. 2005) (noting that “[m]inor under-achievement of [scenic integrity objectives] is allowed with Forest Supervisor approval at the project level.”), <http://www.fs.fed.us/r5/scfpr/projects/lmp/docs/feis-v1.pdf>.) This route segment therefore stands in contrast to the many miles of new transmission ROW that will be required for the southern route alternatives, which may require a significant plan amendment.

Also, to the extent that the Forest Service requires that transmission lines be installed underground through CNF, switching from 500 kV overhead transmission lines to 230 kV underground transmission lines will greatly increase project costs, particularly through an area such as CNF, with difficult topography to navigate. Undergrounding is likely to increase the environmental impacts, given the likelihood of encountering more environmentally and culturally sensitive resources, and the potential for traffic impacts are greater. Maintenance and reliability concerns also exist with the installation of major underground circuits, as the determination of fault locations is much more difficult and time consuming for underground transmission lines as opposed to overhead transmission lines. Once a problem is located, specialized technicians are required to fix the cable, and to maintain warranty, the manufacturer may require having a representative present to oversee any repair work. Due to the complexity of the high voltage cable systems, repair work can take many days to complete, and this extensive duration of repair has significant impacts to system reliability for such a critical transmission line. These challenges should be discussed in the FEIR/EIS.

In sum, choosing a southern route for Sunrise will result in crossing extensive previously undeveloped CNF lands, injecting considerable uncertainty, new points of potential opposition, and potentially significant delays into the planning process for Sunrise.

C. The Undergrounding Through Alpine Boulevard Proposed With Aspen's Southern Route Presents Significant Feasibility Constraints

Aspen's Southern Route includes a segment route, along the Interstate 8 Alternative, which would underground a 230 kV double circuit transmission line for approximately 8.1 miles along Alpine Boulevard - a two lane, paved roadway in the community of Alpine. This route segment presents potentially significant construction and schedule constraints.

SDG&E specifications require a twenty foot separation between buried 230 kV double circuits both for safety reasons and to avoiding a need to de-rate the cables due to heat. Currently, Alpine Boulevard has fiber optic cable backbones on both the north and south side, which will increase the difficulty of obtaining the required separation for the 230 kV circuits proposed by Aspen's Southern Route in this area. These backbones may require relocation, which would be both risky and costly, given the need to ensure that the fiber optic cable remains active during any relocation. In addition to the fiber optic cable, the City of Alpine hosts other underground utilities, such as water, sewer, and power, currently installed within Alpine Boulevard. These utilities will require relocation to install the two 230 kV duct banks, and this relocation will necessitate the closure of travel lanes in Alpine for extended periods of time.

D. Aspen's Southern Route Does Not Meet San Diego's Likely Future Electric Transmission Expansion Needs

The extent to which any southern route is expandable in the future is questionable, and the DEIR/EIS has identified future transmission routes for the south (see DEIR/EIS

at Fig. E.1.1-6) that are either infeasible altogether or will present potentially substantial implementation delays. As mentioned above, it is very difficult to find sufficient room in Alpine Boulevard. For two 230 kV underground circuits, it would be difficult if not impossible to install future additional underground 230 kV circuits within Alpine Boulevard to accommodate future transmission expansion needs. The future transmission route following the Route D Alternative is infeasible, given that it would cross proposed CNF wilderness areas and CNF Back Country Non-Motorized Zones, and the Forest Service has indicated that it will not issue a Special Use permit for any such route. (See March 12, 2008 Forest Service letter.) Additionally, the second future transmission route following the Modified Route D Alternative is already heavily congested, with developed areas right up to the edge of the associated corridors, and will require expanding existing rights-of-way. Such expansion will require business and residence relocation. As a result, the ability of SDG&E to expand along Aspen's Southern Route is questionable and renders this route less reliable than the Proposed Route or SDG&E's Enhanced Northern Route.

E. Aspen's Southern Route Is In Close Proximity To Multiple Culturally Important Sites

Aspen's Southern Route presents at least as great a potential for impacts to cultural resources as either the Proposed Route or SDG&E's Enhanced Northern Route. For example, there is a highly sensitive area located along the eastern 3.4 miles of the I-8 Overhead Alternative in the Jacumba Valley, which is included as part of Aspen's Southern Route. Approximately 125 archaeological sites are recorded within the one-mile-wide record search area, and twenty of these sites – some of which are quite large – are mapped wholly or partially within the 300-foot-wide proposed Aspen Southern Route corridor.

Additionally, less than a quarter mile to the north of this corridor is the Table Mountain Archaeological District (TMAD), which is listed on the National Register. The district is within a BLM Area of Critical Environmental Concern, is comprised of 183 sites ranging in complexity from base camps to isolated roasting pits, and represents an intensive Late Period Native American presence. (SDG&E Phase 2 Direct Testimony at 10.19.) Although Aspen's Southern Route does not directly cross what is currently designated as the TMAD, the route's presence near this important area suggests a likelihood that there may be other significant sites within the corridor potentially eligible for listing on the National Register.

For instance, ethnographic data collected in 1920 by Leslie Spier from an elder Indian informant from the Campo area describes the territory of the Southern Diegueno as east of Cuyamaca Mountain and Rio del Tia Juana to the hills on the eastern side of Imperial Valley, from San Felipe River on the north to an undetermined point in Mexico not far south of the border. In addition, Spier lists 21 gentes or patrilineal groups who occupied places in southeastern San Diego County, southwestern Imperial County, and into Mexico throughout the 19th century. Given this data, it is likely that there may be additional significant sites, aside from the TMAD alone, within the corridor crossed by Aspen's Southern Route. Not only will Aspen's Southern Route pass near the TMAD; it

will pass right through the Jacumba Discontiguous Archaeological District, which has been recommended as eligible for the National Register. Several of the previously recorded sites mapped in this corridor are quite large, which may make it challenging to site even an overhead transmission line through this area in such a manner as to avoid culturally significant resources.

Aspen's Southern Route also has the potential to significantly impact several other important cultural areas in the Alpine area. A large habitation site has been mapped in the Alpine area that could be significantly impacted by the undergrounding proposed by Aspen's Southern Route. The site (CA-SDI-4798) was recorded in 1969, prior to the construction of I-8, and information about this site has not been updated since that time. As a result, its size and current status are unknown. Given its mapped location and significance, however, trenching for an underground transmission line through this area could represent a significant adverse impact.

Given that Aspen's Southern Route proposes substantial undergrounding in the Alpine area, the potential for impacts to important subsurface cultural resources is significant, as recognized by the DEIR/EIS (at E.1.7-4) and will be difficult to mitigate against ahead of time. Unlike overhead transmission lines, which can often be sited appropriately to span culturally significant areas and can be adjusted once new cultural resources are discovered, undergrounding a transmission line presents the potential for greater impacts – once cultural resources are discovered through underground operations, the impact to the resource may have already occurred, and it is difficult to simply re-route the line.²⁴

In sum, Aspen's Southern Route does not reduce the overall environmental impacts associated with the Sunrise Powerlink and instead merely moves those impacts to a different geographic location.

F. Aspen's Southern Route Presents Operation And Maintenance Challenges

Aspen's Southern Route presents substantial challenges for operation and maintenance of the Sunrise Powerlink. There will be areas where the Forest Service will restrict installation of permanent access roads, making future transmission maintenance very difficult. The terrain is more challenging along this route so it will involve more construction by helicopter. Helicopter construction will be dependent on wind conditions and weather, which may delay the schedule. Landing zones will be more complicated due to the terrain and weather. All of these constraints make operation and maintenance more burdensome and time-consuming.

All of the above-referenced infeasibilities and challenges should be reflected in the FEIR/EIS.

²⁴ It should also be noted that the I-8 Alternative located just south of the Viejas Indian Reservation appears to cross a Tribally important area with known human remains.

VI. SDG&E's Modified Southern Route Attempts To Mitigate The Impacts Of Aspen's Southern Route

SDG&E is proposing a segment re-route for Aspen's Southern Route that would mitigate direct impacts to CNF lands currently designated as Back Country Non-Motorized Zone and that would avoid all Indian Reservations located along Aspen's Southern Route. The FEIR/EIS should include this mitigation re-route as "SDG&E's Modified Southern Route."²⁵ This re-route would mitigate the feasibility concerns arising from those impacts, but still would require contingent Forest Service approvals. Other route constraints still remain, such as potential impacts to a very large archaeological district, the significant difficulties associated with undergrounding a 230 kV transmission line in Alpine Boulevard, and the infeasibility of locating any future 230 kV underground through Alpine Boulevard.

SDG&E's Modified Southern Route would follow Aspen's Southern Alternative from the Imperial Valley Substation, using the I-8 Alternative, until the intersection of the I-8 Alternative and the BCD Alternative (DEIR/EIS at Fig. E.1.1-1) located southeast of the town of Boulevard. SDG&E's Modified Southern Route would follow the BCD Alternative, which crosses I-8 as it travels in a north-northwest direction, passing one mile east of Boulevard and generally paralleling McCain Valley Road. The route would pass directly adjacent to the Carrizo Gorge Wilderness Area, crossing both BLM and private lands.

Then, the route would pass within one mile and east of the Lark Canyon Campground and Off-Highway Vehicle Area at the BCD Alternative MP 4. At BCD Alternative MP 6.5, the route would turn northwest for 2.5 miles on BLM land, crossing Lost Valley Road and McCain Valley Road, and passing approximately three miles southwest of the Carrizo Overlook at BCD Alternative MP 8 before heading west through BLM land for approximately five miles. The route would pass within two miles for the Cottonwood Campground at BCD Alternative MP 10 and cross Lost Valley Road, Manzanita Cottonwood Road, Canebrake Road, and Old Mile Road.

SDG&E's Modified Southern Route would deviate from BCD Alternative MP 12 to go north through BLM lands and around CNF Back Country Non-Motorized Zones before rejoining the BCD Alternative at BCD Alternative MP 13.7, located at the crossing of La Posta Truck Trail. SDG&E's Modified Southern Route would then turn south, primarily following the BCD South Alternative, although, as noted below, the line may need to be located slightly to the west to avoid placing a structure in the middle of the I-8 ROW. After crossing I-8 and the La Posta Valley, the Modified Southern Route would rejoin Aspen's Southern Route along the Modified Route D Alternative near Modified Route D Alternative MP 2.5. After joining the Modified Route D Alternative, SDG&E's Modified Southern Route would follow Aspen's Southern Route until reaching Sycamore Canyon Substation. After this point, this alternative would be the same as the

²⁵ The Modified Southern Route is depicted on Attachment 1.

Coastal Link of the Proposed Route. SDG&E requests that this mitigation re-route be incorporated into the FEIR/EIS.

A. No American Indian Lands Or Backcountry Non-Motorized Zones Would Be Crossed By The Modified Southern Route

SDG&E developed the Modified Southern Route to respond the Campo Indian Tribe's letter stating it will not allow any route across its Reservation, rendering Aspen's Southern Route infeasible. The BCD Alternative and the Backcountry Non-Motorized Zone work-around proposed by SDG&E is a necessary mitigation re-route to avoid these Indian Reservations and land use conflicts in CNF. (*See also* March 12, 2008 letter from Forest Service (requiring reroute of BCD Alternative "between milepost 12 and 14 to avoid the conflict with the Forest Plan".))

SDG&E has also recently learned that this route (which is a portion of the BCD Alternative) would cross a Section 16 parcel of land, located in Township 16 South, Range 6 East, currently under California State Lands Commission (SLC) jurisdiction, raising some uncertainty with the feasibility of crossing this Section 16. SDG&E understands that SLC has received an application from a developer, PPM Energy, Inc., to use the entirety of the land for a wind energy project and, at this time, it is unclear whether Sunrise could be constructed over that land should the wind energy project be pursued. While SDG&E believes that an appropriate work-around could be achieved to minimize any potential impacts and conflicts, this situation represents another example of the delays and uncertainty applicable to any of the southern routes proposed for Sunrise and would involve yet another permitting agency (SLC).

In any event, assuming SDG&E's proposed mitigation re-route is feasible, after avoiding the Back Country Non-Motorized Zone area in the vicinity of the BCD Alternative, SDG&E's Modified Southern Route would then, for the most part, follow the BCD South Option to the Modified Route D Alternative and then rejoin Aspen's Southern Route. However, SDG&E has proposed another necessary mitigation re-route in this area – siting the BCD South Option further west at a location crossing I-8 to avoid impacts to the highway ROW by eliminating the need to put a structure in the middle of that ROW.

To avoid the Campo, Manzanita and La Posta Reservations and to locate Sunrise a safe distance from the Southwest Powerlink, SDG&E's Modified Southern Route, like Aspen's Southern Route, must cross many miles of the CNF. As such, any southern route implicates Forest Service requirements, which could delay construction and the projected in-service date for Sunrise. For these reasons, SDG&E continues to believe that either its Enhanced Northern Route or the Proposed Route are superior to any southern route.

B. Forest Service Approvals Would Still Be Required But Impacts Would Be Reduced By Avoiding Backcountry Non-Motorized Zones

Both SDG&E's Modified Southern Route and Aspen's Southern Route include route segments that will cross extensive portions of the CNF designated as having a high scenic integrity objective. (DEIR/EIS at Fig. D.17-3.) As a result, plan amendments are likely required to allow these segments to be implemented.

Assuming the Forest Service proceeds with fully evaluating the Sunrise route segments that cross CNF lands, the agency has informed SDG&E that it may need to conduct its own environmental review of the project, separate and apart from the review performed by the CPUC and BLM, as discussed above. Although SDG&E supports the use of the existing environmental review documents by the Forest Service, given that SDG&E believes it provides adequate analysis of the project's environmental impacts, the Forest Service still retains the discretion to conduct a separate environmental review. This is in contrast to the situation presented by any route through ABDSP and CEQA's mandate to State Parks to combine its EIR process with the "existing planning, review, and project approval process used by each public agency" – in this case that of the CPUC. (See CAL. CODE REGS. tit. 14, § 15080; see also CAL. PUB. RES. CODE § 21166 (mandating that a responsible agency (such as State Parks here) cannot undertake a subsequent or supplemental EIR unless certain circumstances not present here occur).) Thus, unlike state law, federal law would not preclude the Forest Service from conducting its own potentially lengthy environmental review process (typically anywhere from six months to two years) – a decision that could substantially delay the in-service date for Sunrise.

C. SDG&E's Modified Southern Route Still Has Feasibility Constraints And Could Delay The In-service Date

Even with SDG&E's modifications to Aspen's Southern Route, there remain additional obstacles and constraints that render SDG&E's Modified Southern Route less preferable to either SDG&E's Enhanced Northern Route or the Proposed Route. Among other issues, SDG&E's Modified Southern Route includes the undergrounding through Alpine Boulevard that is proposed as part of Aspen's Southern Route. This undergrounding presents a number of technical and scheduling challenges associated with installing two 230 kV circuits in the same area as fiber optic cables and other existing underground utility lines in this area.

Also, the expected in-service date is still predicted to be later than either the Proposed Route or SDG&E's Enhanced Northern Route. Optimistically, it is possible that SDG&E's Modified Southern Route could be in service by June 2012, at the very earliest. This delay is attributable to a number of factors, including the likelihood of a Forest Plan amendment, the potential delays associated with required mitigation measures and the extensive underground construction along Alpine Boulevard. The latter obstacle, in particular, may cause substantial delays, given the need to avoid impacts to cultural sites, work with area businesses potentially affected by construction, and avoid conflicts with existing facilities in the ground. Additionally, Aspen's Southern Route will require a number of I-8 crossings, which will pose timing challenges in coordinating with Caltrans to install the conductor across a busy highway. Other potential schedule delays exist as well, including those associated with navigating the challenging terrain of

areas such as the steep rocky grades of Mountain Springs Grade, the McCain Valley area where the BCD Alternative is proposed, and the Chocolate Canyon to Highway 67 segment. All these constraints will add to the delay of the in-service date. These issues should be included in the FEIR/EIS.

D. Choosing Any Southern Route Will Impede Future Expandability

The Modified Southern Route also fails to meet the future expansion project objective. Although the timing for the need for future transmission lines out of the proposed Modified Route D Substation has not yet been determined, prudent planning suggests that this alternative be sited where future transmission expansion is possible. The potential routes for future transmission expansion associated with the southern routes have questionable feasibility. (DEIR/EIS at E.1.1-22 (Fig. E.1.1-6).) As mentioned previously for Aspen's Southern Route, the ability to add additional underground 230 kV circuits within Alpine Boulevard may not be possible resulting in limited future ability to meet transmission expansion needs.

For instance, one of the DEIR/EIS's potential future expansion routes for this option proposes to follow the Route D Alternative. As proposed, it traverses through CNF Back Country Non-Motorized Zones, through inventoried roadless areas and through proposed wilderness areas. (DEIR/EIS at Table E.3.4-3.) The Forest Service has already indicated that a special use authorization will not be approved for any route that follows the Route D Alternative. (*See* Forest Service's March 12, 2008 letter.)

A second route identified would follow Modified Route D south of the Modified Route D Substation Alternative, turn north through the community of Alpine, and then continue on to the Chicarita Substation then to the Talega-Escondido line. (DEIR/EIS at E.1.7-21.) This future transmission route follows heavily congested transmission corridors, with developed areas right up to the edge of those corridors. As a result, any future transmission at the 230 kV or 500 kV level will require expansion of existing rights-of-way, which in turn will require relocation of businesses or residences. In general, the ability of SDG&E to expand along this route is therefore questionable and renders any southern route less reliable than the Proposed Route or SDG&E's Enhanced Northern Route.

VII. The Other "Top-Ranked" Alternatives Are Infeasible

The DEIR/EIS identifies three alternatives as "environmentally superior" to any permutation of Sunrise: (1) the "New In-Area, All-Source Generation Alternative"; (2) the "New In-Area Renewable Generation Alternative"; and (3) the "LEAPS Transmission-Only Alternative."²⁶ The DEIR/EIS states these options are "reasonably expected to occur in the future" if Sunrise is not approved.²⁷

²⁶ The "LEAPS Transmission-Only Alternative" is called the TE/VS Interconnect.

²⁷ DEIR/EIS at ES-4.

As described below, the feasibility of the In-area, All-Source Generation Alternative and In-area Renewable Generation Alternative are questionable at best, as they rely on (a) several proposed generation facilities that are uncertain or have been completely abandoned by developers because of strong local opposition and (b) the unproven ability to greatly expand solar photovoltaic generating capability. Further, the In-area Renewable Generation Alternative falls short of filling the reliability deficit and could not be implemented in time to meet the reliability deficiency forecast for 2010. As described fully below, these same concerns equally apply to the LEAPS Transmission-Only Alternative.

VIII. The In-Area All-Source Generation Has Serious Shortcomings And Should Not Be The Top Ranked Alternative

The New In-Area All-Source Generation Alternative, selected as the overall environmentally superior alternative in the DEIR/EIS at ES-2, calls for a hypothetical fossil-fueled fired central state and peaking generation, non-renewable distributed generation and renewable generation. (DEIR/EIS at E.6.1.1) Eighty-two percent of the generation counted for reliability purposes proposed for this alternative would burn fossil fuels. Accordingly, this alternative conflicts with the policy decisions of Governor Schwarzenegger and the California Legislature mandating greater use of renewable resources and less fossil fuel to meet SDG&E's customers' energy needs.²⁸ By building substantially more fossil generation in lieu of Sunrise (which would import up to 1,000 MW of renewable resources), this alternative will frustrate SDG&E's ability to meet the State's RPS and AB 32 GHG emission reduction targets. It simply runs counter to California policy encouraging development of renewable resources and should be rejected.

Not only does it run counter to state policies, it is infeasible in terms of meeting the project objectives for Sunrise and thus will not meet the purpose and need for the project. The infeasibilities associated with the components of this options are as follows.

A. The Gas Fired Generation In The New In-Area All-Source Generation Alternative Is Not A Feasible Alternative To Sunrise

The DEIR/EIS does not reflect the challenges associated siting new generation in the San Diego In-Area All-Source Generation Alternative. While claiming that it is "not intended to depend on the progress of contracts for individual utility projects",²⁹ implementation of this alternative will rely on several individual projects that will likely face opposition. In general, there is strong opposition to new infrastructure development in San Diego. Simply naming various generation projects and listing substations that could house a new peaker does nothing to assure timely success at any of these locations—and is inconsistent with CPUC precedent. CPUC decisions and the CAISO transmission planning guidelines recognize that it is inappropriate to rely on generation

²⁸ See The Global Warming Solutions Act of 2006 (AB 32) and Senate Bill 107, signed by the Governor in September 2006, moving the RPS date to achieve 20% renewable energy sales up to December 31, 2010.

²⁹ DEIR/EIS at E.6-1.

for transmission planning purposes within a 10-year planning horizon unless the generation has received regulatory approval or is under construction.³⁰ Given the need to ensure reliable electric service, the Commission and CAISO have directed utilities to look at the status of known potential generation and not hypothetical projects.

While multiple locations could represent diversification of risk, there is not sufficient time from a reliability perspective to sequentially move through this list of potential generation development with the attendant risk of any project's failure necessitating consideration of other alternatives together with further delays. Such an approach would not conform to the CPUC's guidelines for procurement through Requests for Offers (RFOs). To select projects simply based on location and probability of completion would ignore the CPUC's directives on least-cost, best-fit competitive procurement (*see* D.04-07-029.) To attempt to begin all projects at once, rather than sequentially, would require that SDG&E potentially procure more power than its CPUC-authorized needs.

This alternative has the largest portion of the proposed new reliability capacity (the 620 MW of CCGT) being added to the system in 2010. The DEIR/EIS implies that this is possible because these projects have either submitted applications for permits and/or have a power purchase agreement (PPA) in place.³¹ SDG&E believes this misrepresents the status of various proposed projects in the following ways:

- The South Bay Replacement Project (SBRP), a nominal 620 MW gas-fired combined cycle power plant, has withdrawn its Application for Certification (AFC) with the CEC (as noted in the DEIR/EIS at E.6-1) and does not have a PPA. SDG&E is unaware of any plans by the developer to move forward with this project.
- The San Diego Community Power Project (SDCPP), a nominal 750 MW gas-fired combined cycle power plant, does not even have an AFC submitted to the CEC and does not have a PPA. (DEIR/EIS at E.6-11.) In fact, the SDCPP has been in the CAISO's generator interconnection queue since November 2000. This proposed project has already attracted opposition, even at this early stage of its development. In fact, the City of Santee is vigorously fighting the proposal.³²
- The Encina Power Plant Repowering Project (or Carlsbad Energy Project) if successful in its PPA negotiations, permitting and development, only nets 222 MW based on the DEIR/EIS's assumed output of 540 MW. This

³⁰ *In re Valley Rainbow Transmission Interconnection*, D.02-12-066 at 16-17; *In re Jefferson-Martin*, D.04-08-046 at 43-44; CAISO Grid Planning Generation Assumptions, April 16, 2004, <http://www.aiso.com/docs/2001/06/25/20010625134406100.pdf>.

³¹ "Other new combined cycle projects or peaker projects may not be feasible in the 2010 timeframe because they have not yet submitted applications for permits and/or they do not have power purchase agreements." (DEIR/EIS at E.6-2.)

³² *See* Notices of Ex Parte Communication of City of Santee (filed February 27, 2008 in this proceeding); San Diego Union Tribune article entitled: "San Diego's energy puzzle" dated June 24, 2007.

is because the Encina Power Plant Repowering Project includes the removal of the existing Encina 1 -3 generating units. The project also does not yet have approval from the CEC for its AFC, as the AFC was only filed after the In-area All-source Generation Alternative was identified and analyzed. (DEIR/EIS at E.6-1.)

- On March 11, 2008, the CEC denied Orange Grove's application for a Small Power Producer Exemption (SPPE) for its proposed peaker to be located in North San Diego County at SDG&E's Pala Substation. With the recent CEC denial of the SPPE for the project, the online date becomes uncertain. Thus, even under optimistic expedited processing, the addition of new generation is subject to unforeseen delay.

These clarifications surrounding each project call into question the likelihood of any of these projects meeting the proposed 2010 online date. It is highly unlikely that a project of this size, if begun today, could be online prior to 2012 and most likely later.

In sum, there is no factual basis for the DEIR/EIS to have identified this menu of generation options as the "environmentally superior" alternative when there is no definitive project analyzed. The use of hypothetical elements and stalled or abandoned projects as the basis for the alternative does not provide a true comparison to Sunrise. These options are not feasible to meet the needed in-service date. The FEIR/EIS should reflect these concerns in the FEIR/EIS.

B. The Proposed In-Service Date For The Solar Component Of The In-Area All-Source Generation Alternative Is Unrealistic

While the DEIR/EIS assumes a full 210 MW build out of solar PV by 2010, given the current costs and actual installation of systems in SDG&E's territory to date, the feasibility of achieving this goal is unrealistic. This assumed amount of PV exceeds SDG&E's California Solar Initiative target of 180.3 MW over its ten year duration starting in 2007 as provided in D.06-08-028. Additionally, the CEC in its latest revised demand forecast predicts only an incremental 13 MW of nameplate capacity by 2010 and 33 MW by 2016.³³

The In-Area All-Source Generation Alternative also includes a solar thermal generation unit near Borrego Springs by 2016. However, no developer is identified for such project and such a project requires a new transmission line through ABDSP that is likely to meet opposition similar to Sunrise. Thus, the likelihood of such solar thermal generation is uncertain and reliance upon it as a feasible alternative is contrary to CPUC precedent and CAISO planning guidelines.

C. SDG&E Transmission Upgrades Would Be Necessary For The Generation

³³ California Energy Demand 2008-2018 Staff Revised Forecast, CEC-200-2007-015-SF2, November 2007, Form 1.4 pg 143.

SDG&E briefly raises the issue of various transmission upgrades that would need to be identified and implemented in order to accommodate the new generation in the In-Area All Source Generation Alternative. Generation needs transmission to deliver the power to the electric grid. There would be much analysis of the reliability criteria violations to the transmission system and implementation of those upgrades that render this alternative less preferable. It is unlikely that the technical and environmental implications of these upgrades could be studied and implemented in coordination with the new generation so that the generation meets a reasonable in-service date.

D. The In-Area All-Source Generation Alternative Does Not Interconnect to Imperial Valley Renewables

The DEIR/EIS recognizes that this alternative does not meet the project objective of importing renewable power from Imperial Valley and yet ranks it as the highest rated option. There is no component of this option that would allow for the delivery of renewable resources from Imperial Valley because there is no transmission proposed to link it. SDG&E disagrees with the DEIR/EIS's ranking and believes the problems with the various components of this alternative should be addressed in the FEIR/EIS.

IX. The In-Area Renewable Generation Alternative Is Also Infeasible And Will Not Meet The In-Service Date

The In-Area Renewable Generation Alternative is infeasible. The vast majority of the generation components of this Alternative are merely hypothetical—they are not under development, much less permitted and under construction. Therefore, reliance upon them is contrary to CPUC precedent and CAISO planning guidelines.³⁴ Moreover, even assuming such projects were under development, which they are not, they would not be implemented until several years after Sunrise, even though it is the second highest ranked alternative in the DEIR/EIS. The In-Area Renewable Generation Alternative assumes various in-area renewable development projects for a combined 1,000 MW by 2016. (DEIR/EIS at E.5) The DEIR/EIS admits that its analysis of the options is based on “reasonable assumptions about what could be developed.” (DEIR/EIS at E.5-1.) Because the In-area Renewable Generation Alternative is not feasible, does not meet the project objectives and will not come close to meeting the in-service date, it should not be considered a viable alternative to Sunrise. The FEIR/EIS should include the flaws in this option as discussed below.

A. The Timing For On-Line Dates Assumed In The In-Area Renewable Generation Alternative Is Not Feasible

The In-Area Renewable Generation Alternative describes the required 1000 MW as being added by 2016. However, the need for Sunrise is much more immediate. The

³⁴ *In re Valley Rainbow Transmission Interconnection*, D.02-12-066 at 16-17; *In re Jefferson-Martin*, D.04-08-046 at 43-44; CAISO Grid Planning Generation Assumptions, April 16, 2004, <http://www.caiso.com/docs/2001/06/25/20010625134406100.pdf>.

largest single renewable resource – a hypothetical solar thermal plant providing nearly half of this alternatives capacity and one third of its energy -- would not be completed until 2016, if at all. Similarly, the 400 MW of assumed wind resources are also contemplated to be completed in 2016. Again with biomass, this assumed alternative assumes 50 MW in operation by 2010 with the full 100 MW in operation by 2016. Many of the projects suggested to fill this need have either been withdrawn or demonstrated an inability to meet development deadlines.

The DEIR/EIS assumes that the full build out of the photovoltaic portion is by 2010. Specifically, the DEIR/EIS at E.5-12 states that over 20,000 PV systems per year can be installed in the SDG&E system for each of the years 2008-2010. The In-area Renewable Generation Alternative does not address the difficulty in siting these PV systems. Indeed, the DEIR/EIS at E.5-12 acknowledges that there is no plan in place to address the feasibility of siting this amount of PV.³⁵

In order to build this portion of the alternative, SDG&E would need to ask for and receive approval from over 60,000 residential and 255 commercial customers and construct these systems in a three year period. Since 1999, SDG&E has had only 4,842 PV systems installed for a total of 33,345 kW of nameplate capacity. This includes the 8,742 kW of nameplate capacity (one thousand photovoltaic systems) customers installed during 2007. Given the current costs and actual installation of systems in SDG&E's service territory to date, the feasibility of achieving this goal of 210 MW of PV generation by 2010 is questionable at best and also exceeds SDG&E's California Solar Initiative target of 180.3 MW over its ten year duration starting in 2007 as provided in D.06-08-028. Additionally, the CEC in its latest revised demand forecast predicts only an incremental 13 MW of nameplate capacity by 2010 and 33 MW by 2016.³⁶ In sum, the suggested renewable components will not be implemented for years after the timeframe needed to fulfill the reliability need for SDG&E customers.

B. The Large-Scale Solar Thermal Project Is Unrealistic And Impacts Borrego

The centerpiece of the In-Area Renewable Generation Alternative is a hypothetical 2.3 square mile, 232 MW solar thermal project in Borrego Springs. As the DEIR/EIS (at E.5.1.1) points out, "... no developers have identified sites in Borrego Springs for such a large solar thermal project..." The DEIR/EIS estimates (at C-75) that such a project would not be developed until 2016, despite the need to address a reliability deficiency in 2010. Moreover, this project alone would require significant transmission upgrades to SDG&E's system. SDG&E believes that two 230 kV circuits on a single pole line would be a more appropriate configuration than the single circuit 138 kV line assumed in the DEIR/EIS. It would improve reliability to the generators and decrease the losses associated with transmission of electric power, as the length of the Borrego Solar

³⁵ DEIR/EIS at E.5-12 "...final locations would depend on the consumer."

³⁶ California Energy Demand 2008-2018 Staff Revised Forecast, CEC-200-2007-015-SF2, November 2007, Form 1.4 pg 143.

Thermal generation ties will cause significant losses.³⁷

Surprisingly, the DEIR/EIS proposes such a solar thermal project even though it would require construction of a new 36-mile transmission line through the community of Borrego Springs and the ABDSP. (DEIR/EIS at E.5-6.) Given that this proposal is supposed to be an alternative to Sunrise, it is surprising that one component of this option to require a transmission line is essentially the same as a segment of Sunrise that the DEIR/EIS has raised concerns about regarding impacts. Moreover, these upgrades would fail to deliver any of the import capability offered by Sunrise, for other renewables.

C. The Amount Of Renewable Potential Assumed In This Alternative Is Unrealistic

SDG&E presented evidence in the Phase 2 proceedings regarding the infeasibility of the amount of renewables contemplated by the In-Area Renewable Generation Alternative.³⁸ There are fewer gigawatt-hours or energy offered into SDG&E RPS RFO's than are contemplated in this alternative. In fact, developers of out-of basin renewable projects bid nearly six times more gigawatt hours of energy than were proposed in-basin. In terms of availability, there is less than one half of the energy required to make this alternative a reality. While it is possible that other projects may be developed to fill the gap, this is purely hypothetical. Such projects should be considered unlikely, given that the RPS RFOs conducted since 2002 have brought forth an abundance of likely projects already. That is to say, if these hypothetical projects existed, they would likely have been bid into an RFO by now. Even if these hypothetical projects do materialize, they will take a considerable amount of time to go through the full development cycle from concept to production. Again, these observations illustrate the infeasibility of too little renewable potential being available in time to be considered real alternatives to Sunrise.

D. The Technologies And Development Assumed In This Alternative Are Problematic

There are concerns about all of the technologies contemplated by the In-area Renewable Generation Alternative. One general concern with the 400 MW of wind contemplated in this alternative is reliance on projects that were bid into SDG&E within the last three years that have proved difficult to develop. One major goal of Sunrise is the enhancement of reliability of power to SDG&E customers. Reliance upon projects that have had, and continue to experience a difficult path to commercial operations, is not prudent resource planning. Two of the primary difficulties that these projects face seem to be site control and the availability of transmission.

One developer is currently struggling with a significant reduction of its proposed site in the BLM right-of-way process. Although BLM has publicly committed to make

³⁷ More detail on the anticipated transmission upgrades are discussed in SDG&E Phase 2 Direct Testimony, Ch. 2.

³⁸ SDG&E Phase 2 Direct Testimony, Ch. 12; SDG&E Phase 2 Rebuttal Testimony, Ch. 5.

land available to support the State's renewable energy goals,³⁹ BLM has rejected the use of this land for renewable generation in favor of maintaining visual aspects of the land, prioritizing the use of part of the site for off-road vehicle enthusiasts and reservation of part of the land for PBS habitat.⁴⁰ The In-Area Renewable Generation Alternative favors the use of BLM sites over private lands, but clearly this solution to siting is uncertain and potentially infeasible.

There has been a "chicken-and-egg" situation with regard to transmission and wind project development in eastern San Diego County. Developers are looking for the certainty that there will be sufficient transmission capacity to allow them to interconnect significant quantities of new wind generation for delivery to load areas. This alternative assumes that a connection to SWPL could be constructed to deliver the proposed 400 MW of wind, without the addition of Sunrise. (DEIR/EIS at E.5-31.) There is substantial uncertainty with this assumption because continued delays and uncertainty surrounding future transmission have caused at least one major wind development project to suspend activity and withdraw its previous bid to SDG&E.

The largest technology uncertainty in this alternative is reliance on local biomass to provide a large portion of the energy and the most reliable capacity. There may be insufficient bio fuel available to supply even the three projects (~35MW) currently under contract to SDG&E. This creates serious doubts with regard to the viability of plans for 100MW of local biomass called for in this alternative. In fact, 93MW of the 100MW of biomass in the In-Area Renewable Generation Alternative will come from projects that SDG&E has been told will rely on Municipal Solid Waste as the sole fuel source. While current CEC Renewable Eligibility Guidelines permit the use of garbage to create renewable energy, the conversion of garbage to electricity must be done under very strict controls. This alternative suffers from insufficient capacity – the lack of fuel for biomass generation may increase the reliability shortfall by another 93 MW.

In addition, the Miramar Landfill is scheduled to close in 2012 and the assumed Miramar Landfill renewable energy project does not appear to be feasible. It is unclear whether sufficient landfill gas is available to support the economics of a new 3MW project. Although SDG&E has issued annual RPS RFOs since 2004, the City of San Diego has not indicated any interest in a new landfill gas project at Miramar. It has never submitted a proposal in response to an RFO. In fact, SDG&E currently contracts with Minnesota Methane for a generating facility at the North City Water Reclamation Plant. This contract calls for landfill gas to be piped in from the Miramar Landfill to fuel the 3.7MW generator (of which only 1MW is available for export to SDG&E).

³⁹See e.g.,

[http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy.Par.48479.File.dat/SolarEnergyCommPlan asof Feb 19.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy.Par.48479.File.dat/SolarEnergyCommPlan%20asof%20Feb%2019.pdf)

⁴⁰Eastern San Diego County Page ES-37 BLM Eastern San Diego County Proposed RMP/Final EIS, November 2007.

In sum, the renewable generation alternative is not feasible to implement in a timely manner and will not meet the project objectives. This should be reflected in the FEIR/EIS.

X. The “LEAPS Transmission-Only Alternative” Is A Phantom Project That Is Not A Feasible Alternative

The LEAPS Transmission Only Alternative as identified in the DEIR/EIS at C-69 is comprised of a new 500 kV line and upgraded 230 kV lines in Riverside and Orange Counties. The DEIR/EIS concludes that the “Transmission-Only Alternative is technically, legally, and regulatory feasible.” (DEIR/EIS at C-68.) SDG&E refers to this option as the TE/VS Interconnect because Talega/Valley Sorrento is the transmission component of the combined LEAPS project described below. SDG&E disagrees that the TE/VS Interconnect Alternative is feasible, primarily because of the history and current permitting status of the “project.”

The “Leaps Project Transmission and Generation Alternative” in the DEIR/EIS at C-64 and C-67 describes the Lake Elsinore Advanced Pumped Storage project (LEAPS). The DEIR/EIS, however, overlooks that this project is co-sponsored by The Nevada Hydro Company (TNHC) and the Elsinore Valley Municipal Water District (EVMWD) whom have jointly applied to FERC for a hydroelectric power plant. Co-applicants propose to generate power at a new 500 MW pumped-storage facility located in the City of Lake Elsinore and in the Cleveland National Forest, including the construction of the associated 32 mile 500 kV new transmission line between the proposed Lake and Pendleton Substations as well as additional facilities.

While TNHC has proposed in its CPCN application a TE/VS Interconnect project, the fundamental issue remains: What project is on the table, both at the Federal Energy Regulatory Commission (FERC) and at the CPUC? TNHC has maintained in two pending FERC proceedings⁴¹ project scopes that include *both* the TE/VS Interconnect lines and the pump storage generation. While these two proceedings involving the combined project are pending at FERC, however, TNHC also now has a CPCN application pending with the CPUC. This application is not yet deemed complete. (CPUC Letter to TNHC, Inc. dated March 6, 2008.) In this latter filing, its LEAPS unit is not identified by TNHC as a facility within the scope of the TE/VS Interconnect.⁴² Accordingly, TNHC has not made its development intentions clear to either FERC or CPUC or other parties in all three -- and with Sunrise, four -- pending regulatory proceedings.

In addition, the State Water Resources Control Board (SWRCB) recently advised TNHC that it has concerns about the 401 water quality certification. By letter dated March 7, 2008, SWRCB states that CEQA must be performed for the combined LEAPS

⁴¹ Docket P-11585-000 dealing with TNHC's application for a FERC hydroelectric license, and Docket ER06-278-000 dealing with TNHC's December 2005 request for incentive ratemaking.

⁴² In its protest to this application, dated November 29, 2008, SDG&E pointed out areas in which TNHC's economic analysis appears to include LEAPS nonetheless.

project, at project-level detail, because the LEAPS project is the pump storage and the TE/VS transmission line, according to the FERC application and the EIS. Yet the application before the CPUC is just for the transmission line. In essence, SWRCB requested a full CEQA analysis of the entire LEAPS project or it will deny the pending application for a water quality certification. The 401 certification is required by FERC before it can issue its License for the LEAPS project. In sum, the LEAPS Transmission Only Alternative face challenges in terms of clarity as to the “project,” permitting and timing.

SDG&E’s consultants reviewed the LEAPS information included in the “transmission only” draft PEA dated January 2008 and FERC’s EIS on the combined LEAPS project dated January 31, 2007. A conceptual level project schedule for the permitting, design and construction of the LEAPS Project was developed based on these documents. The current status and future permitting requirements; the time to perform the geotechnical investigations needed for the project design; the time to design the facilities and obtain the necessary approvals; and the time to construct the tunnels, upper reservoir, Lake Elsinore intake, powerhouse, substation and transmission interconnection to the TE/VS were evaluated. The schedule developed indicates that it is reasonable to expect full commercial operation approximately 73 months after the FERC License is issued or at least April 2014. The transmission line interconnection from the proposed LEAPS Substation to the TE/VS Interconnect would need to be energized in early July 2013. Therefore, it is reasonable to expect that the TE/VS Interconnect would be required to energize LEAPS six to eight months earlier.

In addition, substantial transmission upgrades to SDG&E’s system would need to be designed and implemented to place the LEAPS Transmission Only alternative. As described in more technical detail in SDG&E’s Phase 2 Direct Testimony,⁴³ the import capability claimed by TNHC cannot be achieved without substantial network upgrades. Based on SDG&E’s review of a more appropriate set of assumptions, these upgrades impact the schedule, cost, resource impacts and feasibility of this alternative.

In light of these uncertainties, the CPUC/BLM can not consider this TE/VS Interconnect Alternative as a feasible alternative to Sunrise in meeting SDG&E’s resource deficiencies in a timely fashion. The FEIR/EIS should be revised accordingly.

XI. UCAN’s Proposed Southern Route Is Neither Feasible Nor Superior Environmentally

In its Phase 2 direct testimony, UCAN proposed a southern route that it erroneously contends is preferable to Sunrise on cost grounds, equal with regard to reliability and superior environmentally.⁴⁴ UCAN proposed a route similar to Aspen’s Southern Route for the first 40 and last 27 miles and has its 500/230 kV substation in the same place.⁴⁵ Although UCAN’s Southern Route is the same for 60 of the 102 proposed

⁴³ SDG&E Phase 2 Direct Testimony at Ch. 1 and 2.

⁴⁴ UCAN Phase 2 Direct Testimony at 1.

⁴⁵ UCAN Phase 2 Direct Testimony at 36.

miles, it deviates in the middle section of the route based on certain “selection criteria” described below. UCAN’s Southern Route consists of the following:

- Follows the I-8 route for the first 40 miles west from the Imperial Valley Substation
- Follows the BCD route for 19 miles between mileposts 40 and 58
- Follows the I-8 route west for 13 miles from milepost 58 to milepost 71
- Follows the Modified Route D route south for 2 miles from Modified Route D milepost 36 to milepost 34, with a substation at the Modified Route D substation site
- Follows the Star Valley Option route for its 3 mile length
- Follows the I-8 route from milepost 74 west to Sycamore Canyon Substation
- If appropriate, follows the Chocolate Canyon alternative between I-8 mileposts 80 and 82
- Uses the RPCC alternative eliminating any new transmission line construction west of Sycamore Canyon Substation⁴⁶

A. As Proposed By UCAN, The BCD Alternative Segment Is Not Feasible

As reflected in Table E.2.4-3 of the DEIR/EIS, one of the land use designations associated with segments of the BCD Alternative is Back Country Non-motorized zone.⁴⁷ In its comment letter on the DEIR/EIS, the Forest Service referenced its March 13, 2007 letter to the Commission, which stated that the BCD Alternative crosses several areas within Cleveland National Forest designated as Back Country Non-motorized and would not be accepted as an application for special use on National Forest Service (NFS) lands. More specifically, the Forest Service comments discuss the feasibility of the southern alternative routes to Sunrise and land use issues associated with the routing and development of a transmission line across Forest Service lands.

The southern alternatives conflict with Forest Service Land Use Zones (LUZ) (specifically Inventoried Roadless Areas and Back Country Non-Motorized Zones) and/or Scenic Integrity Objectives (SIO) set forth in the Cleveland National Forest Plan approved in 2005. Specifically the Forest Service states that the I-8 Alternative, portions of the BCD Alternative and the Route D Alternative are not compatible with the Forest Plan and would not be permitted by the agency.

B. As Proposed By UCAN, The I-8 Alternative Segment Is Not Feasible

Segments of UCAN’s Southern Route that follow the I-8 Alternative also cross Back Country Non-motorized Land Use Zones within Cleveland National Forest. As shown in Table E.1.4-3 in the DEIR/EIS, milepost I8-58 to I8-60 goes through these land

⁴⁶ UCAN Phase 2 Direct Testimony at 34.

⁴⁷ DEIR/EIS at E.2.4-3.

use zones. Similar to the BDC Alternative, the Forest Service will not grant a special use permit, rendering this segment of UCAN's Southern Route infeasible.⁴⁸

In addition, SDG&E cannot condemn Tribal trust lands because these lands are owned by the United States, and any easement across these lands must have the consent of the Tribe for whom the land is held in trust. The I-8 segment from I-8 MP 58 to I-8 MP 71 crosses a corner of the Viejas Indian Reservation and includes an access road into the Reservation. (DEIR/EIS Fig. Ap. 11C-52.) Accordingly, this route would require Viejas Tribal approval. Representatives from the Viejas Tribe have indicated to SDG&E that they will oppose the I-8 Alternative because of visual and cultural resource impact concerns, rendering this route infeasible. Although the lands crossed here are not Tribal trust lands,⁴⁹ SDG&E's ability to condemn these lands is still highly questionable due to both Tribal sovereign immunity and federal restrictions on the alienation of Indian land.

C. UCAN's Southern Route Could Have More Impacts to Cultural Sites

UCAN's Southern Route follows the I-8 route for the first 40 miles west from the Imperial Valley Substation to milepost 40 near Boulevard. Therefore, as with Aspen's Southern Route, UCAN's Southern Route crosses the highly culturally sensitive Jacumba Valley area, which contains approximately 125 recorded archaeological sites within the one-mile-wide record search area, 20 of which are within the 300-foot-wide proposed southern route corridor.⁵⁰ The large size of several of these sites, and their proximity to one another, makes it unlikely that they can be avoided by structure placement and spanning of the sites or by modifying proposed access road alignments, and thus the potential for direct impacts may actually be higher than is the case for SDG&E's Enhanced Northern Route or the Proposed Route. Furthermore, the presence of the National Register-listed TMAD less than one-quarter mile north of UCAN's Southern Route and significant cultural resources just south of the U.S.-Mexico border, combined with ethnographic information attesting to Native American traditional knowledge of the area during the early twentieth century, show clearly that the area was important during the pre-contact period and into the twentieth century.

In addition, west of Ocotillo is a cluster of potentially significant sites, which would be very difficult to span because of the large size of individual sites. One site fills approximately 2,800 linear feet of right-of-way, with a nearby site stretching through an additional 2,200 feet of right-of-way. A possible astronomical alignment is noted within the second of these sites, and, if present, would be very significant.

UCAN's Southern Route then follows the BCD route for 19 miles. A 100 percent cultural resource survey of this route identified 18 cultural resources, 10 of which require further information to determine whether they are eligible for the National Register of

⁴⁸ DEIR/EIS at E.1.4-8.

⁴⁹ SDG&E Phase 2 Direct Testimony at 10.6.

⁵⁰ See SDG&E Phase 2 Direct Testimony at 6.35 and 6.36.

Historic Places (NRHP).⁵¹ The DEIR/EIS identifies four significant cultural resource impacts associated with the BCD Route.⁵²

Undergrounding through Alpine Boulevard could have an adverse affect on a large habitation site in the Alpine area. The site was recorded in 1969, prior to the construction of I-8, and the site description has not been updated since that time.⁵³ As a result, its size and current status are unknown, but, given its mapped location and potential significance, trenching for an underground transmission line could represent a significant adverse impact to cultural resources.

The Chocolate Canyon alternative is also proposed by UCAN “if appropriate.”⁵⁴ The DEIR/EIS states that approximately 27 percent (1.01 miles) of this option segment was surveyed, and one site that could be eligible for the NRHP was identified.⁵⁵ It identifies four significant cultural resource impacts associated with the Chocolate Canyon alternative, based on the partial survey.⁵⁶ Further surveys could reveal even more cultural sites. Accordingly, the UCAN Southern Route with the Chocolate Canyon alternative is not preferable from an environmental perspective.

UCAN’s Southern Route, like Aspen’s Southern Route, moves cultural resource impacts to another geographic location, in which significant, unmitigable impacts would also be expected.

D. UCAN’s Southern Route Unnecessarily Creates Operational And Maintenance Constraints

In its comment letter on the DEIR/EIS, the Forest Service states that in areas where there are no current access roads, only temporary roads will be allowed to access pull sites and structures. These temporary roads will be restored after construction of the line. This poses serious concerns for maintenance and operation of the line.

SDG&E is responsible for maintaining the electric transmission system, which includes inspection, regular maintenance and restoration activity as outlined in the Standard Maintenance Practice, filed with CAISO. WECC, NERC/FERC and CAISO all regulate electric transmission and promulgate their own rules and regulations that SDG&E must follow. SDG&E must adhere to these agencies’ requirements in its maintenance of the transmission grid.

Maintenance techniques for transmission lines are dependent upon landscape, topography, access roads, equipment accessibility, structure design, proximity to other transmission lines, constraints by property owners or regulating agencies, environmental restrictions, cultural impacts and weather conditions. Once Sunrise is constructed,

⁵¹ DEIR/EIS at E.2.7-1.

⁵² DEIR/EIS at E.2.7-2.

⁵³ DEIR/EIS at E.1.7-4.

⁵⁴ UCAN Phase 2 Direct Testimony at 34.

⁵⁵ DEIR/EIS at E.1.7-17.

⁵⁶ DEIR/EIS at E.1.7-3 and E.1.7-18 through E.1.7-19.

SDG&E needs to properly maintain the electric transmission system in order to reliably transmit bulk electrical power. When access to these facilities is limited, SDG&E will encounter difficulties in both timely completing the prescribed maintenance and responding to outages that could compromise grid reliability.

When structures are built with no vehicle access, SDG&E needs some type of access within a reasonable distance of the structure. For example,

- Foot access requires that an access road be within a reasonable distance of the structure (300 feet).
- Helicopter access requires a landing pad within a reasonable distance of the structure (300 feet).

Along with the increased cost associated with maintaining the Electric Transmission System solely by helicopter, SDG&E is at the mercy of suitable weather conditions and lift capability, which can change due to temperature and altitude. These factors can impact restoration times during an emergency. Emergency restoration times can more than double when structures have no vehicle access. During the recent fires in San Diego County, islanding of the San Diego Transmission Grid was averted, due to the well maintained access roads available for immediate repair and restoration of damaged facilities. Although steel structures were not damaged during the fire, the attached insulators were contaminated with soot, preventing the lines from being re-energized until they could be thoroughly cleaned.

If structures on Sunrise are built without vehicle access, this necessitates increased helicopter use, which in itself constitutes a high safety risk activity. The safety risk is magnified during adverse weather conditions. Helicopter flying at low levels or hovering are very susceptible to wind, rain and high temperatures. If there is access by foot only, the higher risk of injury to employees due to slips, trips and falls also needs to be considered. The fact that transmission material and equipment are heavy and cumbersome, especially if carried in by hand will increase these risks. Finally, with both limited helicopter and foot access, the duration of work is increased (sometimes substantially) due to the factors described above.

E. UCAN's Southern Route Presents Substantial Expansion Challenges

UCAN's Southern Route includes a segment route, along the I-8 Alternative, which would underground a 230 kV double circuit transmission line for 6 miles along Alpine Boulevard in the community of Alpine. This route segment presents potentially significant construction, cost and schedule constraints. SDG&E specifications require a twenty foot separation between buried 230 kV double circuits. Currently, Alpine Boulevard has fiber optic cable backbones on both the north and south side, which will increase the difficulty of obtaining the required separation for the 230 kV circuits proposed by UCAN in this area. These backbones may require relocation, which would be both risky and costly, given the need to ensure that the fiber optic cable remains active during any relocation. In addition to the fiber optic cable, many other underground utilities, such as water, sewer and power are currently installed within Alpine Boulevard.

These utilities will require relocation to install the two 230 kV duct banks, and this relocation will necessitate the closure of travel lanes in the City of Alpine for extended periods of time.

The Forest Service comments also confirm SDG&E's position regarding the difficulties associated with potential future expansion along the southern routes, and suggest certain options to help alleviate some of these difficulties, such as undergrounding in Alpine Boulevard or moving the location of a proposed substation. For instance, the Forest Service suggests several underground options such as installing four 230 kV circuits or a 500 kV circuit along Alpine Boulevard. As already outlined in SDG&E's Phase 2 direct testimony, however, there are significant feasibility concerns regarding multiple 230kV circuits within Alpine Boulevard, and the 500kV option is not feasible due to space limits within existing roads like Alpine Boulevard.⁵⁷

Underground 500 kV transmission using XLPE cable would be installed inside a tunnel or inside a concrete encased duct bank system. SDG&E has approximately 30 years experience with XLPE technologies at 69kV and 138kV. But, 500 kV XLPE technology is relatively new, and there are serious reliability concerns about relying on relatively new technology for a major 500kV line due to lack of experience and repair/maintenance concerns.

In order to meet ampacity requirements for the proposed circuit, three cables per phase (total of nine cables) would be required. It is assumed that the installation inside a series of duct banks versus a tunnel system would be the lesser impact to the environment and the surrounding area due to the size of the tunnel required. Other technologies for installation of 500 kV underground are Gas Insulated Transmission Line (GIL), and Self-Contained Fluid Filled (SCFF). GIL installations are typically for shorter distances such as substation or power plant getaways and require a large diameter design as well as a gas management system. SCFF technology installation would be similar to the XLPE technology but would require a fluid pressurization system.

None of these options address the fundamental constraints inherent in the southern routes from an expandability potential, particularly as compared to the northern alternatives.⁵⁸

F. Contrary To UCAN's Contention, Its Southern Route Does Not Have More Expansion Options Than Sunrise

UCAN incorrectly states that its route alternative "has expansion options that SDG&E's Sunrise route lacks."⁵⁹ The Proposed Route and SDG&E's Enhanced Northern Route provide expansion options that UCAN's Southern Route will not. The

⁵⁷ SDG&E Phase 2 Direct Testimony at 10.13.

⁵⁸ SDG&E has evaluated the Forest Service comment that future northern expansion routes which follow SR 76 are potentially inconsistent with the Forest Plan land use zones. Appropriate minor work-around options in this area are available to minimize potential impacts to Forest Service lands on both CalTrans ROW and private lands.

⁵⁹ UCAN Phase 2 Direct Testimony at 36.

Proposed Route and SDG&E's Enhanced Northern Route allows for efficient expansion of SDG&E's load serving capability where UCAN's Southern Route does not. The expansion options that UCAN describes are not unique to UCAN's proposal. In fact, if the northern route were constructed the same expansion opportunities are available on existing facilities. This would be possible because Sunrise would free up capacity on these existing lines.

Additionally, a Sunrise route following the Proposed Project route or Enhanced Northern Route would be better situated to connect future transmission lines to SCE's system. As identified in SDG&E's December 14, 2005 testimony filing,⁶⁰ a full loop interconnection with SCE's system would provide benefit to CAISO consumers. A southern route alternative such as UCAN's Southern Route would not facilitate a future expansion opportunity to SCE's system.

XII. The DEIR/EIS Properly Eliminated the All Solar and Nonrenewable Distributed Generation Alternatives

SDG&E would like to specifically address issues relevant to the DEIR/EIS alternatives analysis that arose during Phase 2 testimony, as it may arise during comments on the DEIR/EIS. In the Phase 2 Direct Testimony of Powers Engineering on Behalf of Bill Powers, P.E. (Powers Testimony), Mr. Powers describes "an in-area generation alternate" that does not match either the In-Area Renewable Generation Alternative or the In-Area All-Source Generation Alternative. (*See* DEIR/EIS at E.5-1 to -32, E.6-1 to -28.) Instead, Mr. Powers offers an amalgam of options, including photovoltaic (PV) systems of varying sizes, unspecified energy efficiency measures and "combined heat and power" (CHP) plants. To support this testimony, Mr. Powers primarily cites a report he wrote entitled "San Diego Smart Energy 2020" (October 2007) (Smart Energy Report). He contends that any and all of these options will solve San Diego's need for peak power capacity and thus meet SDG&E's obligation to provide reliable electric service in compliance with CAISO and WECC requirements.

Mr. Powers' testimony does not clearly present any viable alternative to Sunrise as the means to meet SDG&E's obligation to provide reliable electric service to San Diego. The DEIR/EIS properly considered and eliminated his proposals from full evaluation. SDG&E has fully responded to Mr. Powers' claims in its Phase 2 Rebuttal Testimony, Chapter 5. SDG&E discusses herein the following flaws, which are sufficient to establish that Mr. Powers provides no legitimate alternative solution to be evaluated in the FEIR/EIS:

- Mr. Powers does not identify any "renewable energy parks," commercial PV facilities or CHP plants under development, much less under construction, and concedes he cannot do so. (*See* SDG&E Phase 2 Rebuttal Testimony at 5.6 and 5.8; Powers Testimony, Transcript at 3396-97, 3399-3400, 3403-04.) Moreover, Mr. Powers did not consider whether transmission upgrades would be necessary to accommodate his vision

⁶⁰ SDG&E's December 14, 2005 testimony discussed expandability of Sunrise including the "full loop: interconnection with SCE" (Brown, Ex. SD-2 at II-3, VI-12-15, App. II, Fig. II-1, App. VI-iii).

of such facilities. (Powers Testimony, Transcript at 3397-99). Thus, the alternative generation he proposes to meet San Diego's needs simply does not exist at this time and there is no reasonable expectation that it will be here in the reasonable future.

- Because Mr. Powers cannot and did not identify any actual generation facilities under construction or development, the DEIR/EIS could not and did not evaluate the environmental impacts of what literally could be hundreds of commercial PV units, "renewable energy parks," or CHP plants. The DEIR/EIS evaluated a reasonable range of alternatives, and need not have guessed where such hypothetical developments might occur at some unknown date in the future.

- Mr. Powers' assertion that 920 MW of PV can be installed in San Diego County with a further incentive program has no factual basis, is contrary to SDG&E's experience with the existing incentive program and is contrary to the CEC's staff latest revised forecast for such installations. (*See* SDG&E's Phase 2 Rebuttal Testimony, Chapter 5(II)).

- Mr. Powers is incorrect in assuming that PV systems with batteries could serve to address San Diego's peak capacity needs. Today, batteries can provide backup power to a residence with a PV system, but these batteries do not provide power to the electrical grid. Moreover, SDG&E's load profile has two peaks, one in the late afternoon and one in the evening. Even if batteries with nascent, sophisticated control systems were in existence today, and in place to provide power to the grid, they would require energy storage capabilities well in excess of the "limited" amount and impose significantly higher costs than envisioned by Mr. Powers.

- Although Mr. Powers suggests that 620 MW of CHP could replace the 620 MW combined cycle plant assumed in the In-Area All-Source Generation Alternative, Mr. Powers concedes that none of his assumed CHP plants exist, are under construction or even under development. Moreover, without any factual basis, Mr. Powers overstates the contribution of CHP to SDG&E's on-peak capacity needs, does not address cost-effectiveness, and misstates CHP emission impacts. (*See* SDG&E's Phase 2 Rebuttal Testimony, Chapter 5(V)).

In sum, Mr. Powers submits a "wish list" based on assumptions that do not withstand careful analysis of their viability or cost-effectiveness. The DEIR/EIS already evaluated the same alternatives that Mr. Powers proposes and found them infeasible, thus eliminating them from full evaluation. (DEIR/EIS at Ap.1-343, 350, 354, 347.)

XIII. The DEIR/EIS Properly Evaluated A Reasonable Range Of Alternatives

SDG&E believes that the CPUC and BLM adequately analyzed a reasonable range of alternatives in compliance with CEQA⁶¹ and NEPA despite SDG&E's comments regarding the infeasibilities associated with the alternatives evaluated in the

⁶¹ CEQA Guidelines, Section 15126.6.

DEIR/EIS.⁶² The DEIR/EIS carried forward for full evaluation 27 alternatives to the Proposed Route, including the No Project/No Action Alternative, as required by CEQA and NEPA. (ES-31 to 37; Ch. C and H.) The CPUC/BLM appropriately analyzed alternatives that were “potentially feasible” in accordance with the mandates set forth in CEQA and NEPA.⁶³ But, it is appropriate for SDG&E to identify infeasibilities with alternatives not accounted for in the alternatives analysis in the DEIR/EIS. Even though alternatives included in a DEIR/EIS need only be considered “potentially feasible” to be evaluated, an agency’s decision at the end of the process to approve a project and find the alternatives “infeasible” involves a comprehensive comparison of the proposed project with the alternatives. An agency’s ultimate findings rejecting the alternatives as infeasible do not imply that those options were improperly included for discussion in the DEIR/EIS. (*Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477.) Accordingly, the alternatives evaluated in the DEIR/EIS constituted an adequate alternatives analysis.

XIV. The DEIR/EIS Properly Did Not Need to Analyze the “Full Loop”

It may be asserted during the comment period that the DEIR/EIS should have included a detailed environmental analysis of the linkage corridor between the proposed Central East Substation and the proposed Pendleton Substation along the proposed LEAPS project. This is also known as the “Full Loop,” which would complete a full loop of infrastructure between San Diego and the Southern California Edison (SCE) service territory. (DEIR/EIS at Ap. 1-284-28.) Any claim that the EIR conduct an environmental review of the full loop has no merit. As set forth in its Phase 1 testimony, SDG&E has no current plans to build a transmission line between those two substations (neither of which currently exist), or to “close the loop” more generally. In fact, as the Phase 1 record at 44 Brown, T. 707:5-18 shows, Sunrise provides enough reliability benefits past 2020 and the next upgrade could be new generation instead of transmission. While it is prudent to recognize the future possibility of a 500 kV connection of the SDG&E system to SCE’s system, and thus the benefit of expandability to the northern routes for Sunrise, SDG&E has not proposed such a connection at this time as it is not currently needed.

Additionally, the DEIR/EIS properly notes that this option does not offer any environmental advantages over Sunrise because it would have the additional impacts of a new 500 kV line across northern San Diego County. (DEIR/EIS at Ap.1-285.) It would also take more time to design, permit and construct thereby jeopardizing the in-service date needed for Sunrise. In sum, the DEIR/EIS appropriately eliminated this option from further consideration.

XV. The Identified Environmental Impacts Of The Alternatives Should Be Given Some Relative Weight In The FEIR/EIS

⁶² Council on Environmental Quality’s NEPA Regs. (40 C.F.R. 1502.14.)

⁶³ The EIR/EIS also considered and eliminated an additional 70 alternatives for various reasons. DEIR/EIS at ES-33 to ES-34.

The Executive Summary of the DEIR/EIS simply identifies the number of Class I impacts associated with the alternatives and the Proposed Route. There is no distinction between temporary impacts and permanent impacts, even though that time/impact factor should play a critical role in the CPUC's ultimate determination on this project. SDG&E believes the FEIR/EIS should weigh or value the various short-term and long-term impacts associated with the alternatives and the Proposed Route.

For example, the DEIR/EIS's short-term air quality impacts associated with construction were inaccurately compared to long-term GHG emission reductions from the renewable energy sources that would transmit power via the project. (DEIR/EIS at Table H-25, Table H-28 and Table H-29.) Yet, the DEIR/EIS found a "significant" GHG impact for both the Sunrise alternatives, which will provide access to renewable power for SDG&E, and the "environmentally superior" New In-area, All-Source Generation Alternative, which is focused on new fossil-fueled generation. There is an enormous difference between the two projects on GHG emissions, but each counts as one "significant, unmitigable impact" in the DEIR/EIS.

Also, Class I impacts were assigned to the Proposed Route and various alternatives, but there was no correlation between these Class I impacts and the relative ranking of the alternatives. For example, the environmentally superior project alternative - The New In-Area All-Source Generation Alternative - had 38 significant, unmitigable impacts while the 2nd ranked alternative had less at 32. LEAPS Transmission Only, ranked 3rd, had 27 significant, unmitigable impacts. According to the DEIR/EIS, LEAPS Transmission Only was not "environmentally superior" to the generation alternatives due to its impact to Cleveland National Forest. The northern Sunrise routes, which avoid the Forest, were ranked less preferable as having greater impacts than the southern routes, which also have impacts to the Forest. (DEIR/EIS at H-115, 133 and 138.) Thus, there is not a clear explanation of how the DEIR/EIS weighed the impacts of Sunrise and its alternatives, and it appears inconsistent on its face.

XVI. Sunrise Will Result In The Fewest Greenhouse Gas Emissions Of Any Feasible Alternative For Serving That Demand

Given Sunrise's vital role in bringing renewable energy in the Imperial Valley into SDG&E's energy resource supply, the DEIR/EIS's conclusion that "because total construction GHG emissions exceed the GHG reductions achieved due to avoided power plant emissions over 40 years of transmission line operation, the Proposed Route would cause a net overall increase in GHG emissions and a significant climate change impact" (DEIR/EIS at D.11-55) is both misleading and inaccurate.

The DEIR/EIS's conclusion is the result of an analytical method that does not adequately represent the positive impact that the Sunrise project will have on the regional GHG budget. First, the DEIR/EIS sets the "baseline" for GHG construction emissions, against which the Proposed Route is measured, as the fixed amount of electric generation emissions estimated in the past. Thus, any construction emissions exceed the "baseline" used in the significance determination. Second, the DEIR/EIS sets the "significance" threshold at zero, meaning a project with a net GHG emission increase of even one pound

is deemed “significant” under CEQA/NEPA. Third, the DEIR/EIS concludes that there is no way to offset GHG emissions, meaning that any such net increase is “significant and unavoidable,” *i.e.* a “Class 1” impact.

The methodology employed by the DEIR/EIS arrives at the counterintuitive conclusion that a project undertaken to service load growth in San Diego by interconnecting renewable power in Imperial Valley, which is consistent with statewide efforts to reduce GHG emissions from energy production and result in the construction and utilization of low GHG emitting renewable power plants, in fact has a significant and unavoidable GHG impact. The DEIR/EIS’s methodology leads it to conclude that Sunrise, all Sunrise routing alternatives, the “New In-Area All Source Generation Alternative” and the LEAPS alternatives have “significant and unavoidable” GHG and climate change impacts.

It is common sense that the operational benefits of having renewable resources with low operational GHG emissions will offset the temporary GHG emissions associated with their construction. For instance, the 900 MW Stirling solar power plant is conditioned on Sunrise being constructed and it is widely held that solar power is part of the overall solution to reducing GHG emissions from statewide energy production. The transient and comparatively small construction emissions required to build and access electricity from solar plants should not be a barrier to the creation of renewable power.

The DEIR/EIS does not apply this common sense approach to highlight the positive GHG aspects of a project that was designed in part to meet RPS obligations. Rather than analyzing the incremental benefits of making renewable power available based on existing conditions and availability, the DEIR/EIS determines the operational benefits of the Sunrise project based on a CAISO evaluation of how GHG emissions may be reduced on a WECC-wide basis with and without Sunrise. The future hypothetical CAISO base case requires substantial infrastructure development including renewable plant development and new transmission lines in 2015. The use of the CAISO analysis results in an inaccurate depiction of the GHG impacts of Sunrise because of the assumptions in the CAISO analysis.

The CAISO analysis rests upon a future hypothetical CAISO “base case” in which all utilities already have met their renewable energy requirements under the RPS and all transmission necessary to obtain such renewable energy have been constructed. Initial Testimony of CAISO Part II, Table 2.1 (March 1, 2007). The CAISO then compares the Sunrise transmission line (the “Sunrise case”) to this hypothetical world to determine how the change in GHG emissions. The DEIR/EIS then compares the 1650 tons per year reduction in GHG emissions found by the CAISO to conclude that such reductions do not offset Sunrise GHG construction emissions.

This method, however, does not set an equivalent “baseline” (or properly compare Sunrise against either the “no project” alternative or any other alternative). Instead, it compares Sunrise against a “baseline” where substantial infrastructure development, including renewable plant development and new transmission lines, has already occurred,

and thus does not consider any of the construction emissions associated with such infrastructure development. Thus, the “baseline” is not consistent.

Leaving aside the technical question of the appropriate baseline, the use of the CASIO analysis to consider whether Sunrise has a “net” positive impact (i.e. a reduction) or a net negative impact (i.e. an increase) in GHG emissions leads to an inaccurate result. The present reality is that not every utility has met its renewable goals for 2010, much less for 2015, and the transmission infrastructure has not been built. Thus, comparing Sunrise to such a future is an inaccurate picture of the GHG benefits of building the very transmission infrastructure that CAISO’s modeling assumed exists already. The danger of this type of reasoning is that every transmission project could be compared to such a hypothetical world—which counts on transmission infrastructure being developed somewhere—and be used to suggest that transmission infrastructure is not needed anywhere to reduce GHG emissions by increasing access to renewables.

Instead of comparing Sunrise to the hypothetical world reflected in CAISO’s modeling, the relevant question regarding GHG emissions is which of the feasible alternatives for meeting load growth in San Diego has the most beneficial effect on GHG emissions (either the least GHG emissions or the greatest net reduction in GHG emissions). Given that demand for electricity is growing and that load growth will be satisfied with power generated by some means, the critical comparison is the Sunrise GHG emissions measured against what would happen without Sunrise. The Sunrise project has been shown to have a quantifiable reduction of operational GHG emissions utilizing the CAISO methodology. Based on the concept that renewable energy is part of the solution to reducing GHG emissions from energy production, in addition to the quantifiable operational benefits based on the CAISO analysis, Sunrise is a sensible approach to complying with the statewide efforts to reduce GHG emissions and to transition from fossil fuel use to renewable energy sources.

All of the alternatives, including the “no project” alternative, will have an impact on GHG emissions. Yet none of the GHG emissions for any of the alternatives has been quantified to allow for comparison against Sunrise.

As set forth in SDG&E’s Phase 2 Rebuttal Testimony, Chapter 2(I), SDG&E has contracted for significant quantities of renewable energy from the Imperial Valley and needs that energy to accomplish its current strategy for meeting its RPS goals. SDG&E quantifies the amount of fossil fuel fired generation that will be displaced by such renewable power and the avoided GHG emissions depending upon the nature of the fossil-fuel generation displaced. These avoided GHG emissions dwarf the DEIR/EIS’s identified Sunrise construction emissions. Moreover, the Sunrise project has been shown to have a quantifiable reduction of operational GHG emissions even utilizing the CAISO methodology.⁶⁴

⁶⁴ In rebuttal testimony, Division of Ratepayer Advocate’s witness Daniel Suurkask provides an effort to evaluate GHG emissions between DEIR/EIS alternatives. Mr. Suurkask, however, relies upon SDG&E Gridview modeling done for the purposes of comparing the economic benefit of the alternatives. In SDG&E’s modeling, the same Imperial Valley renewable resources were assumed to exist whether or not

Based on the concept that renewable energy is part of the solution to reducing GHG emissions from energy production, in addition to the quantifiable operational benefits based on the CAISO analysis, Sunrise is a sensible approach to complying with the statewide efforts to reduce GHG emissions and to transition from fossil fuel use to renewable energy sources.

A. The DEIR/EIS's GHG Emission Baseline Determination Methodology Does Not Account For Growing Demand

The DEIR/EIS sets the environmental “baseline” for GHG emissions within California based on the GHG emission inventories listed in Table D.11-2. (DEIR/EIS at D.11-52.) Table D.11-2 quantifies GHG emissions associated with in-state electricity generation in the years 1990 and 2005. Emissions resulting from electricity imports are estimated for 2004. (DEIR/EIS at D.11-7.) The year that is considered for baseline determination in Table D.11-2 is not explicitly stated, although it is assumed the most recent year 2004 was employed.

Under the methodology utilized in the DEIR/EIS, any project that would emit any amount of GHG would be deemed to cause an increase in GHG emissions over the baseline identified in Table D.11-2 because existing emissions have already occurred. Thus, the DEIR/EIS concludes that the emissions of approximately 109,000 tons of CO₂ during the construction of Sunrise would be a “substantial increase over the baseline condition” and a “significant and unavoidable impact.” (DEIR/EIS at D.11-52 to 11-53.)

The DEIR/EIS's approach to the “baseline” for construction emissions is to look at ‘past conditions’ rather than the construction that would be necessary to serve energy demand in some other fashion. By this methodology every alternative, including the No Project alternative, will show an increase over baseline levels for construction emissions. Because any project will have construction emissions, using a baseline fixed to past emissions by definition will ensure there is an increase over baseline in construction emissions.

For operational GHG emissions, the DEIR/EIS considers any net increase over the fixed “baseline” to be a “significant” exceedence of the baseline condition. In assessing operational emissions for Sunrise (though not the non-Sunrise alternatives), the DEIR/EIS looked to CAISO estimates of 2015 emissions in relation to what the CAISO modeling project considered the 2015 baseline case. The details of the CAISO model results and assumptions are detailed in a subsequent section. The CAISO baseline is based on a hypothetical future condition where all RPS obligations already are met. In

Sunrise is constructed to isolate the economic benefit. Thus, there are no new renewable resources brought on-line as a result of Sunrise under SDG&E's Gridview modeling, while in-area renewable resources are added by both the DEIR/EIS's New In-Area, All-Source Generation Alternative and New In-Area, Renewable Generation Alternative. Not surprisingly, adding more renewable power reduces GHG emissions (albeit only minimally when looking WECC-wide). That, of course, is SDG&E's point. Sunrise will result in the addition of renewable energy resources in the Imperial Valley because there will be transmission capacity to encourage development.

this future base-case, the augmentation of existing power plants, the construction of new power plants, and even the construction of various transmission systems are assumed. Thus, the baseline for operational conditions includes significant construction emissions. However, in deciding whether the GHG emissions “substantially exceed” the baseline, the DEIR/EIS again considers only whether there has been a net increase of GHG emissions from the Project, thus comparing it to the fixed baseline where the emission of even a single pound of CO₂ is considered to “substantially exceed” the baseline. (DEIR/EIS at D.11-17 and D.11-55.)

The DEIR/EIS did not evaluate either construction emissions or operational emissions against a baseline of what GHG emissions would be expected if SDG&E’s need for energy to serve San Diego load growth were served without Sunrise. As the DEIR/EIS repeatedly states with respect to each generation unit: “Demand for electricity would not change as a result of the [generation unit], and power generated in response to the demand would occur regardless of whether the [generation unit] moves forward.” (DEIR/EIS at D.11-39, D.11-44, D.11-47, E.5-210, E.5-212, E.5-214 and E.5-216.) Yet, the DEIR/EIS does not utilize a baseline that reflects the real world condition of increasing load growth that will result in the construction of electrical facilities, both generation and transmission.

B. The DEIR/EIS’s GHG Emission Significance Threshold Precludes A Meaningful Comparison Among The Project And Alternatives

The DEIR/EIS uses a “net zero threshold” for the significance determination on GHG emissions. (See, DEIR/EIS at D.11-21 (Table D.11-12), D.11-24 (Table D.11-13) and D.11-26 (Table D.11-14).) The DEIR/EIS states that “consistent with the aim of AB 32 to provide GHG reductions, overall Sunrise GHG emissions would ‘substantially exceed’ baseline emissions if the total effect of all project activities causes a net increase of GHG emission over the baseline.” (DEIR/EIS at D.11-17.) The DEIR/EIS sets the significance criteria for GHG emissions at zero, meaning that Sunrise would be found to have a “significant” impact on the environment if it resulted in a net increase of one pound of CO₂. Because the DEIR/EIS fixes the baseline on past emissions, the end result is that any net increase in GHG emissions is considered to be “significant.” The DEIR/EIS significance determination becomes difficult in light of the fact that differing baselines are used for construction versus operational emissions.

An important consequence of the zero threshold is that all projects that are not net zero or better are weighted equally from a GHG perspective because they all result in significant and unavoidable impacts. This type of analysis does not allow for a meaningful comparison of the GHG impact of Sunrise against the analyzed alternatives.

C. The CPUC Has Recognized That GHG Emissions Can Be Mitigated, And SDG&E Will Mitigate Any Net Increase In GHG Emissions Caused By Sunrise’s Construction

The DEIR/EIS concludes that the net increase in GHG emissions associated with Sunrise cannot be fully mitigated. The DEIR/EIS proposes Mitigation Measure AQ-4a to require SDG&E to obtain “carbon credits to offset 55,000 tons of carbon dioxide emissions for each of the two years of construction,” but then asserts: “However carbon credit trading markets are not fully formed or regulated, and the relationship of credits to real GHG reductions is not uniformly enforceable.” (DEIR/EIS at D.11-52, 11-53, & 11-55.) Thus, the DEIR/EIS concludes that the impacts are unmitigable.

In reality, offset programs exist that should satisfy this mitigation requirement. For example, the California Air Resources Board, the agency responsible for implementing GHG regulations, formally adopted “the California Climate Action Registry’s (CCAR) forestry protocols as non-regulatory quantification methods for the purposes of voluntary greenhouse gas accounting.” CCAR recently announced the certification of two forest projects under the CCAR Forest Protocols. For instance, CCAR verified that 77,000 tons/year of CO₂ offsets were available at the Garcia River Forest to offset any net GHG emissions from Sunrise’s construction. Accordingly, it is likely that Sunrise would be able to mitigate for GHG impacts associated with construction of Sunrise.

The DEIR/EIS’s conclusion that Sunrise construction emissions are significant and unavoidable should be revised in the FEIR/EIS given that SDG&E could reduce any such emissions to zero.

XVII. Sunrise Does Not Pose A Significant Fire Risk And Fire Is Not A Significant Risk To Sunrise

The DEIR/EIS overstates both the risk of fires caused by the proposed Sunrise transmission lines as well as the risk of fire to the Sunrise transmission lines. Although Southern California experienced major wildfires in 2003 and in October 2007, the fires notably were not caused by 230 kV or 500 kV transmission lines. California is at risk of fires because of a number of factors that are not attributable to extra high voltage transmission lines, including the combination of vegetation, topography, climate and population density. SDG&E has demonstrated in its testimony that the transmission line facilities for Sunrise will be designed to withstand wind speeds that are well beyond that required by California (General Order 95) and National (NESC) standards, and well beyond all recorded maximum wind speeds measured over the last 50 years+.

Although the risk of a 230 kV or 500 kV transmission line causing a fire is negligible and should not be used as an obstacle to avoid developing necessary additional transmission capacity, the risks to transmission lines can help inform route selection. SDG&E does not believe that the DEIR/EIS adequately assesses the fire risks to Sunrise compared to the fire risks to alternatives ranked as “environmentally superior” to Sunrise. (DEIR/EIS at D.15, E.1.15, E.5.15, E.6.15, E.7.15, E.8.15 and H.) The DEIR/EIS overstates the risk of fire from Sunrise and to Sunrise, as well as the risk of interference by Sunrise with firefighting efforts. Some risk of fire exists with the alternatives ranked as “environmentally superior” to Sunrise, but the DEIR/EIS does not appear to adequately characterize and evaluate such risk when comparing those alternatives to the

Proposed Route. On balance, it is clear that the proposed northern route alternatives are the best options from a fire occurrence and reliability perspective. The FEIR/EIS should be revised accordingly.

A. Power Lines Cause Few Fires Within Wildland Urban Interface Areas, And The Majority Of Such Fires Result From Distribution Lines

The number of fires caused by power lines in SDG&E's service territory and similarly in the state is approximately 3% or slightly lower, depending on the time frame examined. For example, only 12 of 339 wildland fires (3.5% of the total) identified by the San Diego Fire Recovery Network from 1900 to 2004 were attributed to power lines.⁶⁵ More than half of the 12 fires believed to be caused by power lines occurred prior to 1970. Since that time, improved engineering of transmission line structures, towers and lines has likely reduced the fire risk.

SDG&E's experience with its electric system is consistent with these figures and demonstrates that the majority of power line fires are not associated with transmission lines. Since February 2004 (the initiation of the SDG&E Fire Information Reporting System), the cause of 114 fires was related to SDG&E equipment or facilities. Of these 114 fires, 14 were related to transmission facilities. This is 12% of the power line-caused fires in the SDG&E service territory in the last four years. Applying the 3% statewide figure of the number of power line fires, transmission-caused fires in the SDG&E territory constitute less than 0.4 of 1%. During this period, there were zero 500 kV caused fires and three 230 kV caused fires, resulting in less than 0.1 of 1% for fires caused by major transmission structures.

According to the California Department of Forestry and Fire Protection's (CDF) latest Fire and Resource Assessment Program (FRAP) data (2006), in the fire perimeter layer, only 170 out of 15,737 fires statewide were listed as caused by power lines.⁶⁶ This constitutes 1.1% of all fires in CDF's assessment program which includes fires from 1950 through 2006.

The risk of fire from causes other than transmission lines is significantly greater. For example, equipment use was responsible for 27% of the fires in California during 2000-2005.⁶⁷ Using SDG&E's data over the past four years, such equipment is 9 times more likely to start a wildland fire than a power line, and roughly 75 times more likely to start a wildland fire than a transmission line, yet their use continues to be allowed in the wildland communities. In sum, transmission lines at 230 kV and 500 kV produce minimal risk for fire ignition, particularly when compared to other causes of fire.

⁶⁵ San Diego Fire Recovery Network, San Diego Fire History 1990-2004, available at <http://www.sdfirerecovery.net/reviews/index.html>.

⁶⁶ The data was obtained across all reporting agencies, including CDF, Forest Service, BIA, BLM, National Park Service (NPS) and contract counties, and is available at <http://frap.cdf.ca.gov/data/frapgisdata>.

⁶⁷ Equipment use includes mechanical, non-vehicular equipment such as tractors, mowers, harvesters, etc.

B. The Engineering Of 230 kV and 500 kV Transmission Lines Makes It Unlikely That Any Such Line Would Cause A Fire

A number of engineering characteristics of 230 kV and 500 kV transmission lines make them unlikely to cause fires. Transmission lines of this voltage are typically on steel poles rather than wood poles, and they are able to better withstand the wind, making them less susceptible to the risk of fires. The towers also are designed to be better protected against lightning strikes because they have static lines across the top.⁶⁸ Because of the height of these transmission lines and the fact that the arms of the towers keep the lines at greater distances from each other, the wires are not likely to touch and spark fires at ground level. Regulatory requirements for vegetation clearance in proximity to 230 kV and 500 kV lines⁶⁹ also minimize fire risk.

In addition, because of the typical location of these towers, they experience less risk of car/pole contact which can cause a fire. Even if car/pole contact occurred, these structures would be able to better withstand the impact. The fact that there is less equipment (*e.g.*, transformers, switches, fuses, connectors) on these large transmission lines also means that there are fewer related components on these lines which may fail and result in fires.

C. Construction And Maintenance Procedures Help Minimize Fire Risks Associated With Extra High Voltage Transmission Lines

SDG&E is committed to complying with all governing requirements to minimize wildlife risk associated with powerlines and is proactive in evaluating and improving upon its fire risk mitigation efforts. Examples of methods for reducing the risks of wildfires from and to power lines include the following.

SDG&E has a very proactive vegetation management program and continually works to improve and expand efforts to reduce fire risk. This will continue with the Sunrise project and virtually eliminate subject trees from causing fires on transmission structures or related equipment. Increased emphasis is being placed on trees/limbs outside of the right of way that could break out and contact conductors. Tree hazard assessments will be used to help determine potential failures and allow SDG&E to remove the hazard, further reducing the number of fire starts.

Vegetation reduction or hazard mitigation on the surface fuels beneath transmission lines also is evolving as an opportunity to reduce the risk of fire associated with transmission lines. SDG&E will work with the appropriate land management agency or private land owner where practical to eliminate hazardous fuel accumulation and reduce the risk of fire. SDG&E is currently operating under a Memorandum of Understanding and partnership with CDF for fuels reduction work along SWPL. SDG&E vegetation management has actively participated as committee members with

⁶⁸ Overhead shield wires (some of which would be fiber optic shield wires) would be located on the peaks of each transmission structure and function to intercept lightning that would otherwise strike the conductor.

⁶⁹ The regulatory requirements are included in GO 95, CPUC Rule 35 and Cal. Pub. Res. Code § 4293.

the San Diego Forest Area Safety Task Force since April 2003, when the Governor of California issued a proclamation ordering the CPUC to direct utility companies with transmission lines in their counties including San Diego to ensure all dead, dying and diseased trees and vegetation are completely cleared from utility rights-of-way to mitigate the potential fire danger. SDG&E will continue to support the multi-agency effort led by CDF, the Forest Service, United States Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG) and other agencies to reduce hazardous vegetation fuels and educate property owners through public outreach programs.

Fire risk impacts during project construction can be mitigated considerably. Proper scheduling (*e.g.*, avoiding high fire danger days when conducting potential fire causing activities), developing a project fire plan, establishing and adhering to prescribed fire prevention measures, pre-positioning fire suppression equipment and water supply, and following the Sempra Utilities Wildland Fire Prevention and Fire Safety Plan, will greatly reduce any potential fire risks during construction.

SDG&E will cooperatively perform inspections of work sites with respective fire agencies prior to beginning work and periodically throughout the project. SDG&E also will assign a “fire patrol” to pay particular attention to fire-related activities, conduct tailgate fire safety meetings, and patrol the work area after the end of business each day.

The above information related to fire risk, as well as SDG&E’s previous comments to modify fire risk mitigation, should be incorporated into the FEIR/EIS.

XVIII. Certain Mitigation Measures Are Not Roughly Proportional To The Potential Impact And Should Be Revised In The FEIR/EIS

SDG&E believes that several mitigation measures should be either eliminated or modified to be roughly proportionate to the potential resource impact, as set forth below. These points are supplemented by the accompanying table of mitigation-specific comments.

One example of an infeasible mitigation measure is Mitigation Measure F-3a, which requires vegetation management within a quarter mile of the transmission line centerline for impacts associated with potential fire risk. (DEIR/EIS at D.15-87.) Such management may not be feasible given that SDG&E’s land rights do not extend that far, and which would improperly require impacts to State designated wilderness. Additionally, the twelve miles of fuel breaks proposed by the measure (*see* DEIR/EIS at Table D.15-26) would require over 3,480 acres of treatments. The environmental impacts of that amount of vegetation treatment would far outweigh the perceived benefits and the fire risk abatement would be negligible in most cases. The fuelbreaks need to be constructed in partnership with the appropriate fire agencies and only used where they meld strategically with their fire defense planning. An example where this would not be appropriate is when the structures traverse mid-slope across the terrain. A fuelbreak under the lines at that point would be virtually useless from a fire suppression standpoint and have critical environmental considerations. Any fuelbreak construction must be done in conjunction with land management agency’s strategic fire planning and only

implemented after appropriately assessing the benefit against the potential impacts. Furthermore, the last paragraph of the mitigation measure would require in a worst-case scenario - where SDG&E is not able to secure vegetation management rights for any of the fuelbreak - that \$3.5 to \$15 million be paid for initial offsite fuelbreak creation, then \$1 to \$3.5 million annually for maintenance. (DEIR/EIS at D.15-90.) This mitigation measure is clearly excessive for the potential impact and is infeasible.

In addition, many of the mitigation measures proposed to address potential biology and hydrology impacts are not supported by any data or are so broadly defined as to apply in all circumstances of project construction despite the lack of a discernable impact. For example, Mitigation Measures H-1a, H-1a(CC) and H-1b restrict construction to the dry season. (DEIR/EIS at D.12-33 and Ap.12-92.) With BMPs, project construction can proceed year round, especially in areas that have minimal topographic relief, are developed or have ample vegetative cover to have minimal erosion potential. The DEIR/EIS assumes, without any supporting data, that BMPs will be inadequate to address potential effects during the rainy season. In the absence of that data, these mitigation measures are unnecessarily restrictive and not roughly proportional to the potential impacts.

Another example of an unnecessary and overly broad mitigation measure is Mitigation Measure B-12a, which proposes to limit maintenance activities only during times outside of the general avian breeding season. (DEIR/EIS at D.2-151.) Specifically, in areas not cleared of vegetation in the prior two years, all vegetation clearing, except tree trimming or removal, shall take place between September 16 and February 14 (*i.e.*, outside of the general avian breeding season of February 15 through September 15). Tree trimming or removal can only occur between September 16 and December 31 (*i.e.*, outside the raptor breeding season of January 1 through September 15). This measure treats all areas along the route the same, regardless of whether any birds would actually be affected. It also disregards SDG&E's proposed BIO-APM-16 from its PEA, which states:

Environmentally sensitive tree trimming locations for the project would be identified in SDG&E's existing vegetation management tree trim database utilized by tree trim contractors. The biological field construction monitor shall be contacted prior to trimming in environmentally sensitive areas. Whenever feasible, trees in environmentally sensitive areas, such as areas of riparian or native scrub vegetation, would be scheduled for trimming during nonsensitive (*i.e.*, outside breeding or nesting) times. Where trees cannot be trimmed during non-sensitive times, SDG&E would perform a site survey, or more as appropriate, to determine presence or absence of endangered nesting bird species in riparian or native scrub vegetation. SDG&E would submit results of this survey to the USFWS and CDFG and consult on mitigation measures for potential impacts, prior to tree trimming in environmentally sensitive areas. However, this survey would not replace the need for SDG&E to perform detailed on-the-ground surveys as otherwise required by BIO-APM-1. Where riparian areas with

overstory vegetation are crossed, tree removal (i.e., clear-cut) widths would be varied where feasible to minimize visual landscape contrast and to maintain habitat diversity at established wildlife corridor edges. Where tree removal widths cannot be varied, SDG&E would consult with the USFWS and CDFG to develop alternative tree removal options that could reasonably maintain edge diversity.

The DEIR/EIS at D.2-81 states:

According to SDG&E, the Proposed Project would also require trimming of up to approximately 178 non-native trees (acacia, brisbane box, eucalyptus, and pine) and up to approximately 1,013 native oak trees and 26 native willow trees. Although the trimming of non-native trees or shrubs would be an adverse but less than significant impact (Class III) because they are non-native and they usually do not support special status wildlife species, trimming a non-native tree or shrub that contains an active bird nest would be a violation of the Migratory Bird Treaty Act and a significant impact that is mitigable to less than significant levels (Class II). Likewise, trimming of a native tree or shrub that contains an active bird nest would also be a violation of the Migratory Bird Treaty Act and a significant impact that is mitigable to less than significant levels (Class II). See discussion in Impact B-8 for how construction activities (including tree trimming) would result in a potential loss of nesting birds and violation of the Migratory Bird Treaty Act.

Trimming up to 30 percent of a native tree's crown would diminish the tree's value as wildlife habitat and could cause harm to the tree leading to its decline or death. Therefore, native tree trimming would be significant according to Significance Criteria 1, 2, 4, and 5 listed above. The loss and trimming of this large number of native trees is considered significant impacts that would not be mitigable to less than significant levels (Class I) because adequate mitigation land required by Mitigation Measure B-1a for restoration and/or acquisition may not be available. However, Mitigation Measure B-1a is required to reduce the impacts to the greatest extent possible.

With regards to trimming, SDG&E strongly disagrees that with the implementation of APM-16 there would still be a Class I impact. SDG&E trims thousands of trees every year to ensure compliance with CPUC clearance requirements and avoids and substantially minimizes impacts from tree trimming activities. SDG&E recommends that the tree trimming impact be considered separately from the potential worst-case tree removal impact analysis and reclassified as Class II, with APM-16 incorporated into the project description and the adoption of Mitigation Measure B-1a.

In addition, SDG&E created a table (Attachment 13) to determine the potential effect of mitigation time constraints for various species identified in the DEIR/EIS relative to meeting the in-service date. For PBS, for instance, there is only a window of

four months to construct Sunrise within the very confined spaces of Grapevine Canyon and the PBS habitat areas of ABDSP. During the current construction operations window, from October through January, two of these months are the rainiest months in the area and even if no rain occurs due to rain shadow effects, periods of high winds can occur creating a safety issue for workers that need to climb to construct the new towers as well as hampering any helicopter operations that may be done to reduce ground disturbing impacts. Given these constraints, it may be necessary to construct portions of the line over a period of two and possibly three or more years, spreading out the construction disturbance in the park longer than necessary. SDG&E proposed in a prior comment letter that the construction restrictions be modified to allow flexibility in avoidance measures with activities within PBS habitat. SDG&E reiterates that Mitigation Measure B-7c be revised in the FEIR/EIS because the impacts will be sufficiently reduced with the less strict times proposed.

Another example of a timing concern is with respect to the Proposed Route from SR86/SR78 to the eastern ABDSP boundary where the DEIR/EIS indicates a potential for burrowing owl and desert tortoise. If both of these species are found under certain conditions as specified in Mitigation Measure B-7d and B-7d(CA), then there would be no construction window *any* time of year, thus potentially delaying construction by two or more years for this area of the Desert Link. The measure should allow for flexibility to avoid impacts other than a complete halt on construction activity.

Even with the southern alternative routes, the restrictions imposed by Mitigation Measures B-7c, B-7c(CA), B-7i and B-7i(CA) (FT) (LE) for PBS and QCB could make it so that in certain areas, there would be no suitable time of the year for construction. Again, this measure could delay construction activity over a period of two or more years. Given the extremely rough terrain and limited road access of many of the southern routes, it may not be possible to conduct pre-construction surveys at the appropriate time. As a result, assumed presence and avoidance is mandated under this mitigation measure for QCB again, delaying construction resulting in disturbance occurring over two or more years.

With regard to other limitations proposed for the above and other sensitive species, SDG&E proposes that the seasonal restrictions be more clearly defined in the FEIR/EIS to only be implemented if the sensitive species or suitable habitat in question is observed during pre-construction or construction phase monitoring adjacent to the portion of the route being constructed. This is a more reasonable and fact-based approach of identifying a potential impact and mitigating accordingly.

In addition, the air quality impacts analysis and resulting mitigation should be revised with respect to the Federal General Conformity Rule (pages D.11-18 and D.11-49 of DEIR/EIS). Although BLM would probably have to make General Conformity Determinations to show that emissions from the proposed project will not conflict/impact the State Implementation Plans (SIPs) for San Diego Air Pollution Control District (SDAPCD) (ozone standard) and Imperial County Air Pollution Control District

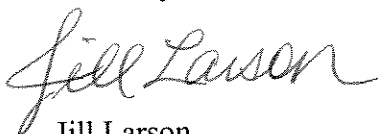
(ICAPCD) (ozone and PM10 standards), it appears that mitigation measures (i.e. PM10 and NOx offsets identified in Mitigation Measure AQ-1h) are not warranted.

Based on SDG&E's correspondence with the SDAPCD, it appears that SDAPCD staff is confident that the emissions from Sunrise should not impact the SDAPCD's attainment plan to comply with the federal 8-hr ozone standard (submitted to EPA in 2007). SDAPCD staff has indicated that the emissions from Sunrise are very small percentage of the overall allocation of construction/mobile source emissions budgeted to San Diego County in the SIP. Based on the feedback received from SDAPCD's staff, it is apparent that the project should be in conformance with the Federal General Conformity Rule as it applies to San Diego County (as referenced in SDAPCD Rule 1501) and mitigation will not be needed. SDG&E believes that a similar finding can also be made for emissions from the segments of the project in Imperial County (under the jurisdiction of ICAPCD). Based on the above, SDG&E requests that Mitigation Measure AQ-1h be removed in its entirety in the FEIR/EIS.

Conclusion

SDG&E appreciates all of the work that went into preparing the DEIR/EIS and looks forward to the CPUC/BLM's issuance of the FEIR/EIS. Thank you in advance for your consideration of SDG&E's comments.

Sincerely,

A handwritten signature in cursive script that reads "Jill Larson".

Jill Larson

cc: Greg Barnes
Michael Niggli

SDG&E's 4th Comment Letter on the Sunrise DEIR/EIS
Mitigation Re-Routes Corresponding to the Project Description

Reroute No.	Chapter #	Page #	Para. #	Comment
1	B	B-13		Around Narrows Substation: This re-route is to improve the previous submittal where the 500kV passes over the top of Narrows Substation on the south side which would have resulted in maintenance and safety concerns. This re-work remains within the SDG&E easement and routes the 500kV to the north side of the substation and results in an aerial encroachment over the Caltrans ROW but not over the 69/92kV equipment inside the substation. New structures will remain within the SDG&E easement in addition to the 500kV wire setup.
2	B	B-14	2	Grapevine Canyon - North End (avoid 69 kV lines): The Grapevine Canyon Alternative is an alternative to leave the existing 69 kV circuit as is once outside the State Park. This alternative provides for increased separation from the existing 69kV line and increases the distances to homes.
3	B	B-51	1	100-Ft ROW in ABDSP: The ABDSP 100-foot corridor design is intended locate the 500kV transmission line entirely within SDG&E's existing 100-foot wide corridor through the State Park. This revision relocates access roads, pull sites, etc. out of designated wilderness areas.
4	B	B-14	2	Central East Substation ingress / egress: The Central East Substation 500kV ingress and 230kV egress have been modified to fit updated substation civil and electrical engineering and to provide for increased separation between the incoming 500kV line and the outgoing 230kV line to accommodate future transmission expansion.
5	B	B-6	1	N6 Private Land Revision: The N6 Private Land Revision relocates the Preferred Alternative to BLM parcels to avoid bi-secting a private land parcel and cultural resources.
6	C	C-50		For the Coastal Link System Upgrade Alternative, the following transmission upgrades need to be included in the FEIR/EIS: the upgrade of Sycamore - Pomerado 69 kV Circuits 1 and 2 and the upgrade of Sycamore - Scripps 69 kV line.
7	E	Figure E.1.1-2a		SWPPL Archaeological Site (Plaster City): The SWPPL Archaeological Site (Plaster City) avoids a large archaeological site.
8	E	E.1.1-2		Jacumba SWPPL Breakaway Point Revision: The Jacumba SWPPL Breakaway Point Revision eliminates the need for one large angle structure by spanning directly between two smaller angle structures without impacting additional parcels.
9	E	E.1.4-8		Pine Valley I8 Non-motorized Avoidance Revision: The Pine Valley I8 Non-motorized Avoidance Revision avoids Forest Service parcels with the back-country, non-motorized designation and avoids crossing the Viejas Indian Reservation.
10	E	E.1.4-13		High Meadows Revision: The High Meadows Revision relocates the I8 centerline downhill to the west to reduce visual and land use impacts to the High Meadows Ranch Subdivision.

SDG&E's 4th Comment Letter on the Sunrise DEIR/EIS
 Mitigation Re-Routes Corresponding to the Project Description

Reroute No.	Chapter #	Page #	Para. #	Comment
11	E	E.1.4-13		Highway 67 Hansen Quarry: The Highway 67 Hansen Quarry Revision relocates the I8 centerline downhill to the east to eliminate land use impacts to the Hansen Aggregates Quarry.
12	E	E.4.1-8		Lightner Substation Ingress/Egress: The Lightner Substation 500kV ingress and 230kV egress have been modified to fit updated substation civil and electrical engineering and to provide for increased separation between the incoming 500kV line and the outgoing 230kV line to accommodate future transmission expansion.
13	Ap.1	Ap.1-4		Coastal Link Alternative - Chicarita Cable Pole: The relocation of the Chicarita Cable Pole provides an alternative that avoids construction within close proximity to an apartment complex and avoids crossing over two 138 kV existing lines originating at Chicarita Substation and going under a 230 kV structure that has a 69 kV circuit on it.
14	Ap.1	Ap.1-114		Santa Ysabel Partial UG Avoiding Cultural Sites: This is an alternative to the Santa Ysabel Full Underground Alternative that utilizes the Proposed Project overhead route and is routed underground along Mesa Grande Road and adjacent to property lines to avoid impacts to cultural resources and reduce visual and property impacts.

Mitigation Re-Routes – Corresponding Impact and Mitigation Table

Reroute #	Chapter #	Page #	Para #	Comment
1	D	D.4-23, 24	Bottom 2 paragraphs, 23, second bullet, 24, second full paragraph 24	<p>Around Narrows Substation. This re-route around the Narrows Substation is to improve the previous submittal where the 500kV passes over the top of Narrows Substation on the south side which would have resulted in maintenance and safety concerns. This re-work remains within the SDG&E easement and routes the 500kV to the north side of the substation and results in an aerial encroachment over the Caltrans ROW but not over the 69/92kV equipment inside the substation. New structures will remain within the SDG&E easement in addition to the 500kV wire setup. This revision relocates access roads, pull sites, etc. out of designated wilderness areas to specifically address Impact WR-4: <i>Presence of a transmission line in a designated wilderness or wilderness study area would result in loss of wilderness land (Class I). The proposed SRPL Project would require a 50-foot expansion of SDG&E's existing easement throughout ABDSP, and in some locations in Grapevine Canyon, a larger portion of the ROW would be located within wilderness areas. The additional ROW width through Grapevine Canyon would require the use of approximately 50.2 acres of State Wilderness within the Pinyon Ridge Wilderness Area (48.1 acres) and Grapevine Mountain Wilderness Area (1.3 acres) (see Table D.5-3 and Appendix 11B for detailed maps). Proposed SRPL ROW would not be located within Vallecito Mountains Wilderness Area; however, portions of three temporary pull sites for stringing the 500 kV conductor would be located within the Wilderness Area, resulting in 0.8 acres of impact to wilderness. Note that the distinction between temporary and permanent impacts to wilderness is not made because both are prohibited.</i> This alternative incorporates full wilderness avoidance to supplant mitigation WR-4a and WR-4b.</p>
2	D	D.4-23, 24	Bottom 2 paragraphs, 23, second bullet, 24, second full paragraph 24	<p>Grapevine Canyon - North End (avoid 69 kV lines): The Grapevine Canyon Alternative is an alternative to leave the existing 69 kV circuit as is once outside the State Park. This alternative provides for increased separation from the existing 69kV line and increases the distances to homes, specifically to address Impact L-1: <i>Construction would temporarily disturb land uses at or near the alignment, from MP 83 to MP 88 (See Figure Ap.LU-10 for Grapevine Canyon, west of ABDSP): There are four structures that appear to be residences within 1,000 feet of the proposed ROW in this segment of the project. They are located between 200 and 800 feet from the corridor.</i> This relocation augments and partially supplants APMs LU-1, LU-4, and LU-6 and Mitigation Measure L-1a, Prepare Construction Notification Plan.</p>

SDG&E's 4th Comment Letter on the Sunrise DEIR/EIS

Mitigation Re-Routes – Corresponding Impact and Mitigation Table

Reroute #	Chapter #	Page #	Para #	Comment
3	D	D.5-36, D.5-45	2, page 36 2, page 45	<p>100-Ft ROW in ABDSP: The ABDSP 100-foot corridor design is intended locate the 500kV transmission line entirely within SDG&E's existing 100-foot wide corridor through the State Park. This revision relocates access roads, pull sites, etc. out of designated wilderness areas to specifically address Impact WR-4: <i>Presence of a transmission line in a designated wilderness or wilderness study area would result in loss of wilderness land (Class I). The proposed SRPL Project would require a 50-foot expansion of SDG&E's existing easement throughout ABDSP, and in some locations in Grapevine Canyon, a larger portion of the ROW would be located within wilderness areas. The additional ROW width through Grapevine Canyon would require the use of approximately 50.2 acres of State Wilderness within the Pinyon Ridge Wilderness Area (48.1 acres) and Grapevine Mountain Wilderness Area (1.3 acres) (see Table D.5-3 and Appendix 11B for detailed maps). Proposed SRPL ROW would not be located within Vallecito Mountains Wilderness Area; however, portions of three temporary pull sites for stringing the 500 kV conductor would be located within the Wilderness Area, resulting in 0.8 acres of impact to wilderness. Note that the distinction between temporary and permanent impacts to wilderness is not made because both are prohibited.</i> This alternative incorporates full wilderness avoidance to supplant mitigation WR-4a and WR-4b and because 50-feet of wilderness expansion is not required under this alternative would avoid the Class I impact of loss of wilderness land.</p>

Mitigation Re-Routes – Corresponding Impact and Mitigation Table

Reroute #	Chapter #	Page #	Para #	Comment
4	D	D.3-178 D.3-179	4 2	<p>Central East Substation ingress / egress: The Central East Substation 500kV ingress and 230kV egress have been modified to fit updated substation civil and electrical engineering and to provide for increased separation between the incoming 500kV line and the outgoing 230kV line to accommodate future transmission expansion. This modification is proposed to address Cumulative Impact V-2FT: <i>Increased structure contrast, industrial character, view blockage, and skylining resulting in cumulative visual impacts (Class I). The visual sensitivity of the existing landscape and viewing conditions, structure design, site-specific siting locations of future transmission structures, and the resulting cumulative visual impacts of the future 230 kV lines vary along the length of the potential future routes. Where two transmission lines are lined up, viewers would be able to see a doubling of the built features (structures and conductors) with increased visual contrast and view blockage. Assuming that the new transmission line is of identical design and is effectively matched up with an existing 230 kV line, tower for tower with synchronized conductor spans, the cumulative impact would be less than significant. However, with three or more transmission lines in a corridor, even with identical designs, it would be very unlikely that natural terrain variations would allow for a consistent matching of structures. As a result, structures would likely be offset in terms of both location and elevation. This would cause asynchronous structure positioning and conductor spans. The corridor would appear more structurally complex with substantially greater industrial character. View blockage of higher valued landscape features (hills, ridgelines, mountains, and sky) would also be more substantial. The resulting cumulative visual impact would be significant and unmitigable (Class I). The future 230 kV lines that would be located along existing 69 kV routes, could also cause substantial cumulative impacts on visual resources due to the larger, taller pole sizes needed to support the weight of the new lines. The new towers would be structurally more prominent with increased industrial character compared to the existing transmission line facilities and would likely result in more instances of structure skylining (extending above the horizon). View blockage of higher valued landscape features would increase. Such substantial cumulative visual impacts would be significant and unavoidable (Class I).</i></p> <p>This modification is a specific implementation of Mitigation Measure V-25a. Structure design and placement guidance.</p>

Mitigation Re-Routes – Corresponding Impact and Mitigation Table

Reroute #	Chapter #	Page #	Para #	Comment
5	D	D.7-29 D.7-30	4 5	N6 Private Land Revision: The N6 Private Land Revision relocates the Preferred Alternative to BLM parcels to avoid bisecting a private land parcel and cultural resources. This segment option specifically mitigates for Impact C-1: <i>Construction of the project would cause an adverse change to known historic properties (Class I or II)</i> "Historic properties", as used herein, are those resources (including historical built environment resources, prehistoric archaeological sites, historical archaeological sites, unique archaeological sites, and traditional cultural properties — regardless of their age) that are determined by a federal, State, or local agency to be eligible for listing on a historic register. The Proposed Project would impact historic properties directly during construction activities such as excavating and grading, as well as indirectly through increased access to cultural resources that could result in vandalism or inadvertent impacts. This segment relocation implements Mitigation Measure C-1b, Avoid and protect potentially significant resources.
7	E	E.1.7-4	2, 4	SWPPL Archaeological Site (Plaster City): The SWPPL Archaeological Site (Plaster City) avoids a large archaeological site. This segment option specifically mitigates for Impact C-1: <i>Construction of the project would cause an adverse change to known historic properties (Class I or II)</i> "Historic properties", as used herein, are those resources (including historical built environment resources, prehistoric archaeological sites, historical archaeological sites, unique archaeological sites, and traditional cultural properties — regardless of their age) that are determined by a federal, State, or local agency to be eligible for listing on a historic register. The Proposed Project would impact historic properties directly during construction activities such as excavating and grading, as well as indirectly through increased access to cultural resources that could result in vandalism or inadvertent impacts. This segment relocation implements Mitigation Measure C-1b, Avoid and protect potentially significant resources.

Mitigation Re-Routes – Corresponding Impact and Mitigation Table

Reroute #	Chapter #	Page #	Para #	Comment
8	E	E.1.3-79 E.1.3-80	5 1,2	<p>Jacumba SWPPL Breakaway Point Revision: The Jacumba SWPPL Breakaway Point Revision eliminates the need for one large angle structure by spanning directly between two smaller angle structures without impacting additional parcels. This modification directly mitigated for Impact L-2: <i>Presence of a project component would divide an established community or disrupt land uses at or near the alignment (No Impact for division of community; Class I or Class II for Pending/Future Development) Pending and Future Development.</i> <i>If a transmission route is approved by CPUC and BLM decision-makers, ROW acquisition and detailed design would begin soon after approval. Prior to this process, new land development projects may have been proposed or constructed by landowners on land parcels across which the route would pass. When Proposed Project was defined, an effort was made to avoid properties where the alignment would affect existing or newly planned land developments. However, development is occurring rapidly in southern California, and there are new development projects entering local development approval processes continually. In order for the final engineering of the transmission line to accommodate land use changes that may have occurred after the route was originally defined, Mitigation Measure L-1b is recommended. This measure requires SDG&E to coordinate with landowners to revise the route, where feasible, to minimize land use conflicts between the transmission line and existing/planned development. To reduce impacts to planned new land uses identified subsequent to project approval by CPUC and BLM, it may be feasible to make minor adjustments to alignment location or tower design that would accommodate the proposed development without compromising the transmission line or creating new impacts to adjacent land uses that would be more adverse than the approved alignment. Preparation and implementation of a construction notification plan (Mitigation Measure L-1a) would serve to notify landowners and tenants of pending construction. However, this notification would not provide sufficient time to investigate mitigation rerouting of the transmission line at specific parcels. There would be no impact if no developments are affected, but impacts to these developments would be significant if the mitigation cannot be effectively implemented. It is expected that minor route revisions will reduce impacts to less than significant levels (Class II) but that there may also be situations where the alignment or facility components cannot be relocated, and the impact would remain significant (Class I).</i> This modification implements Mitigation Measure L-2b, Revise project elements to minimize land use conflicts.</p>

SDG&E's 4th Comment Letter on the Sunrise DEIR/EIS

Mitigation Re-Routes – Corresponding Impact and Mitigation Table

Reroute #	Chapter #	Page #	Para #	Comment
9	E	E.2.5-3, 4	2, 2	<p>Pine Valley I8 Non-motorized Avoidance Revision: The Pine Valley I8 Non-motorized Avoidance Revision avoids Forest Service parcels with the back-country, non-motorized designation and avoids crossing the Viejas Indian Reservation. This option mitigation Impact WR-2: <i>Presence of a transmission line or substation would permanently change the character of a recreation area, diminishing its recreational value (Class I). The BCD Alternative would not be collocated with other overhead utilities, and would therefore introduce new structurally complex, industrial type features to a predominantly natural landscape. As described in Section E.2.3, Visual Resources, long-term, operational visual impacts would be experienced by viewers throughout the length of this alternative.</i> This option implements Mitigation Measure WR-2a, Coordinate tower and road locations with the authorized officer for the recreation area, based on input from the USFS March 2008 comment letter on the DEIR/EIS.</p>

Mitigation Re-Routes – Corresponding Impact and Mitigation Table

Reroute #	Chapter #	Page #	Para #	Comment
10	E	E.1.4-12, 13	12, last 13, 2, second bullet	<p>High Meadows Revision: The High Meadows Revision relocates the I8 centerline downhill to the west to reduce visual and land use impacts to the High Meadows Ranch Subdivision. This modification directly mitigates for Impact L-2: <i>When the Interstate 8 Alternative was defined, an effort was made to avoid properties where the alignment would affect existing or newly planned land developments. Development is occurring rapidly in southern California, and there are new development projects entering local development approval processes continually. Mitigation Measure L-1b requires SDG&E to coordinate with landowners to revise the route, where feasible, to minimize land use conflicts between the transmission line and existing/planned development. Several new projects have been identified as having potential conflicts with the Interstate 8 Alternative. Potential solutions for these specific projects are presented in the mitigation measure. It is likely that there will be other projects that will be in the land use approval process prior to final design and construction of the approved route. To reduce impacts to planned new land uses identified subsequent to project approval by CPUC and BLM, it may be feasible to make minor adjustments to alignment location or tower design that would accommodate the proposed development without compromising the transmission line or creating new impacts to adjacent land uses that would be more adverse than the approved alignment. Preparation and implementation of a construction notification plan (Mitigation Measure L-1a) would serve to notify landowners and tenants of pending construction. However, this notification would not provide sufficient time to investigate mitigation rerouting of the transmission line at specific parcels. The impact to these developments would be significant if the mitigation cannot be effectively implemented. It is expected that minor route revisions will reduce impacts to less than significant levels (Class II) but that there may also be situations where the alignment or facility components cannot be relocated, and the impact would remain significant (Class I).</i></p> <p>This segment alternative implements Mitigation Measure L-2b, Interstate 8 Alternative: <i>MP I8-87 through I8-89.5, High Meadow Ranch. The initial alignment shall be shifted approximately 200 feet to the west, down slope, in order to minimize visual effects of the towers on the development. See Figure Ap.11C-56 for map of this area.</i></p>

Mitigation Re-Routes – Corresponding Impact and Mitigation Table

Reroute #	Chapter #	Page #	Para #	Comment
11	E	E.1.4-12, 13	12, last 13, 2, second bullet	<p>Highway 67 Hansen Quarry: The Highway 67 Hansen Quarry Revision relocates the l8 centerline downhill to the east to eliminate land use impacts to the Hansen Aggregates Quarry. This modification directly mitigated for Impact L-2: <i>Presence of a project component would divide an established community or disrupt land uses at or near the alignment (No Impact for division of community; Class I or Class II for Pending/Future Development) Pending and Future Development.</i> <i>If a transmission route is approved by CPUC and BLM decision-makers, ROW acquisition and detailed design would begin soon after approval. Prior to this process, new land development projects may have been proposed or constructed by landowners on land parcels across which the route would pass. When Proposed Project was defined, an effort was made to avoid properties where the alignment would affect existing or newly planned land developments. However, development is occurring rapidly in southern California, and there are new development projects entering local development approval processes continually. In order for the final engineering of the transmission line to accommodate land use changes that may have occurred after the route was originally defined, Mitigation Measure L-1b is recommended. This measure requires SDG&E to coordinate with landowners to revise the route, where feasible, to minimize land use conflicts between the transmission line and existing/planned development. To reduce impacts to planned new land uses identified subsequent to project approval by CPUC and BLM, it may be feasible to make minor adjustments to alignment location or tower design that would accommodate the proposed development without compromising the transmission line or creating new impacts to adjacent land uses that would be more adverse than the approved alignment. Preparation and implementation of a construction notification plan (Mitigation Measure L-1a) would serve to notify landowners and tenants of pending construction. However, this notification would not provide sufficient time to investigate mitigation rerouting of the transmission line at specific parcels. There would be no impact if no developments are affected, but impacts to these developments would be significant if the mitigation cannot be effectively implemented. It is expected that minor route revisions will reduce impacts to less than significant levels (Class II) but that there may also be situations where the alignment or facility components cannot be relocated, and the impact would remain significant (Class I).</i> This modification implements Mitigation Measure L-2b, Revise project elements to minimize land use conflicts.</p>

Mitigation Re-Routes – Corresponding Impact and Mitigation Table

Reroute #	Chapter #	Page #	Para #	Comment
12	E	E.1.79, 80	Last, 2	<p>Lightner Substation Ingress/Egress: The Lightner Substation 500kV ingress and 230kV egress have been modified to fit updated substation civil and electrical engineering and to provide for increased separation between the incoming 500kV line and the outgoing 230kV line to accommodate future transmission expansion. This modification is proposed to address Cumulative Impact V-2FT: <i>Increased structure contrast, industrial character, view blockage, and skylining resulting in cumulative visual impacts (Class I).</i> <i>The visual sensitivity of the existing landscape and viewing conditions, structure design, site-specific siting locations of future transmission structures, and the resulting cumulative visual impacts of the future 230 kV lines vary along the length of the potential future routes. Where two transmission lines are lined up, viewers would be able to see a doubling of the built features (structures and conductors) with increased visual contrast and view blockage. Assuming that the new transmission line is of identical design and is effectively matched up with an existing 230 kV line, tower for tower with synchronized conductor spans, the cumulative impact would be less than significant. However, with three or more transmission lines in a corridor, even with identical designs, it would be very unlikely that natural terrain variations would allow for a consistent matching of structures. As a result, structures would likely be offset in terms of both location and elevation. This would cause asynchronous structure positioning and conductor spans. The corridor would appear more structurally complex with substantially greater industrial character. View blockage of higher valued landscape features (hills, ridgelines, mountains, and sky) would also be more substantial. The resulting cumulative visual impact would be significant and unmitigable (Class I). The future 230 kV lines that would be located along existing 69 kV routes, could also cause substantial cumulative impacts on visual resources due to the larger, taller pole sizes needed to support the weight of the new lines. The new towers would be structurally more prominent with increased industrial character compared to the existing transmission line facilities and would likely result in more instances of structure skylining (extending above the horizon). View blockage of higher valued landscape features would increase. Such substantial cumulative visual impacts would be significant and unavoidable (Class I). This modification is a specific implementation of Mitigation Measure V-25a, Structure design and placement guidance.</i></p>

Mitigation Re-Routes – Corresponding Impact and Mitigation Table

Reroute #	Chapter #	Page #	Para #	Comment
13	D	D.4-31, 32	Third Bullet bottom of 31 and second full paragraph on 32	<p>Coastal Link Alternative - Chicarita Cable Pole: The relocation of the Chicarita Cable Pole provides an alternative that avoids construction within close proximity to an apartment complex and avoids crossing over two 138 kV existing lines originating at Chicarita Substation and going under a 230 kV structure that has a 69 kV circuit on it. This relocation directly addresses Impact L-1: <i>Construction would temporarily disturb land uses at or near the alignment (Class II, III) Within the Coastal Link, including the Sycamore Canyon to Elliot Substation reconductoring, land uses traversed by or adjacent to the proposed route include commercial and office use, industrial uses, military facilities, public roadways, a religious facility, schools, open space preserves, parks, and single- and multi-family residential. Construction of the Coastal Link would temporarily disturb the surrounding areas as a result of heavy construction equipment, trenching activities associated with the undergrounding of a portion of the proposed transmission line, and the movement of building materials to sites and returning to construction staging areas. MP 142.3 Chicarita Substation) to MP 146.5 (end of Park Village Road). Figure Ap.LU-17 provides a map of sensitive land uses along this segment. This underground segment would pass within 1,000 feet of nearly 1900 residential structures. This relocation augments and partially replaces APMs LU-1, LU-4, and LU-6.</i></p>
14	D	D.7-45, 46	Last, First	<p>Santa Ysabel Partial UG Avoiding Cultural Sites: This is an alternative to the Santa Ysabel Full Underground Alternative that utilizes the Proposed Project overhead route and is routed underground along Mesa Grande Road and adjacent to property lines to avoid impacts to cultural resources and reduce visual and property impacts. This segment option specifically mitigates for Impact C-1: <i>Forty-three (43) cultural resources within the Central Link are potentially eligible for listing on the NRHP or CRHR. Eleven of the resources identified within the Central Link are located in areas of direct impact. All but one of these resources is prehistoric, and two prehistoric habitation sites are among those that would be impacted. If these sites were evaluated and recommended eligible for NRHP and/or CRHR, it would likely be under Criterion D (data potential). As such, impacts to these resources could be mitigated through data recovery; however, avoidance is always preferred. This segment relocation implements Mitigation Measure C-1b, Avoid and protect potentially significant resources.</i></p>

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Ch. B.3.1, page 32, para. 1

In Section B.3.1 (Structures) beginning with the sentence "The proposed 500 kV...", SDG&E recommends adding the following sentence after the second sentence "Tubular steel poles shown in Figure B-17 have SDG&E curved gull wing arm design. SDG&E will also consider straight arm designs."

Ch. B.3.1, page 32

In Section B.3.1 (Structures), SDG&E recommends adding a new paragraph after the existing first paragraph ending with "...illustrated in Figure B-19". The new paragraph should read "These designations for lattice towers or steel poles are based on preliminary engineering. In the final engineering phase it may become advantageous to use steel poles where lattice towers were anticipated, or to use lattice towers where steel poles were anticipated. The final decision to use lattice towers or steel poles would be based on structure capacity, economical, and visual reasons."

Ch. B.3.1, page 32, para 4

In Section B.3.1 (Structures) beginning with the sentence "Imperial Valley Link...", SDG&E recommends adding the following sentence immediately before the last sentence in the paragraph "It is anticipated that dead end structures (i.e. line angles greater than 60 degrees) from MP 4 to MP 20 abutting the agricultural lands will be lattice towers."

Ch. C, page 12

Table C-2 states that the Top of the World Substation Alternative was VID (landowner) preference over other options on its land and then on p. C-53, Section C.4.7.1, it states that the Top of the World site would meet project objectives and would be potentially feasible. From SDG&E's land acquisition and land management perspective, the Top of the World Substation Alternative would not be feasible for several reasons. First, the Vista Irrigation District (VID) has clearly indicated to SDG&E that it would not be willing to sell any portion of their property for a substation site, and it is unlikely that SDG&E would be able to condemn VID for these land rights. It is SDG&E's policy to acquire land in fee for substation sites rather than lease. It gives SDG&E the ability to control the operations on the site and it is financially more advantageous to own rather than lease the property. Additionally, during a more recent discussion with VID, they indicated they would be unwilling to lease the site to SDG&E, in view of SDG&E's current ownership of the property for the Central East Substation site.

Ch. D.2; Ap.12; page D.2-88; Ap.12-1; para. B-1a

In Mitigation Measure B-1a, 'off-site' acquisition in relation to mitigation is not clearly defined. The FEIR/EIS should clearly define 'off-site' in relation to acquisition of mitigation lands (outside ROW, outside impact or vegetation management area, outside previously created preserves/open space). Add the following text, "Any area that can be preserved as intact or restored habitat, or if it contains any species (plant or animal) that require project-related compensatory mitigation will qualify as mitigation lands."

Also, Mitigation Measure B-1a: The DEIR/EIS presently states "All limits of construction shall be delineated with orange construction fencing. During and after construction, entrances to access roads shall be gated to prevent the unauthorized use of these roads by the general public. Signs prohibiting unauthorized use of the access roads shall be posted on these gates." SDG&E would like to confirm that this measure does not

Mitigation Measures and Miscellaneous Comments

apply in ABDSP, as putting up gates in the non-wilderness area of the Park will create a new visual impact in addition to new ground impacts for the gate posts. This should be clarified in the Final EIR/EIS.

Ch. D.2; Ap.12; page D.2-89; Ap.12.2; Mitigation Measure B-1a

Mitigation Measure B-1a states acquisition of mitigation land is required for areas where habitat restoration cannot meet mitigation requirements. Please clarify the length of time restoration must be attempted before purchasing mitigation land.

Ch. D.2; Ap.12; page D.2-91; Ap.12-4; Mitigation Measure B-1b

In Mitigation Measure B-1b, please confirm that impact determination and mitigation measures would solely pertain to extant road ruts at the time of implementation of the project. Mitigation for any impact should only be required once.

Ch. D.2; Ap.12 page D.2-91; Ap.12.5 para. 5; 2

Mitigation Measure B-1b states any plating or bridging shall be considered a direct impact. It is counterintuitive how protection of vernal pools can be considered a permanent impact requiring mitigation. This portion of the measure in essence requires mitigation for a minimization measure. There is no proportionality between the impact and this mitigation measure.

Ch. D.2; Ap.12 page D.2-91; Ap.12-5 Mitigation Measure B-1b

Regarding Mitigation Measure B-1b, an alternate to steel plating is requested for maintenance activities to follow current SDG&E BMPs that require a qualified biologist to monitor eminence activities to insure no impacts to critical habitat while working. Accordingly, SDG&E requests that a sentence in this measure be modified as follows: "...If access roads must be used while any portion of the depressions within the roads are wet, avoidance of the wet areas shall be the preferred method of access but where avoidance is not possible, metal plating or bridging shall be placed over the depressions to prevent alteration of the depression topography and hydrology, and to prevent impacts to the endangered San Diego fairy shrimp (where the absence of fairy shrimp has not been proven). This bridging or plating shall not be left in place for more than three weeks. Any bridging or plating shall be considered a direct impact to fairy shrimp (where not proven absent) and shall be mitigated in accordance with this mitigation measure as follows."

Ch. D.2; Ap.12 Page Ap.12-8 Mitigation Measure B-1f

Mitigation Measure B-1f: The DEIR/EIS presently states "stringing of new wire and reconductoring for the project would be allowed year round in sensitive habitats if the conductor is not allowed to drag on the ground or in brush and all vehicles used during stringing remain on project access roads." Stringing sites are generally quite large, 200 feet by 500 feet is typical. To the extent possible SDG&E has tried to place these sites in the ROW, however, these locations are driven by the conductor reel length and line angles. The conductor has to be pulled in longitudinally, that is in line with the alignment. For example, if the line angle is 45° there will need to be two sites at that structure to accommodate the pull in both directions. In these cases the sites will be outside of the ROW. If the pull were attempted within the ROW, it would likely result in structure damage or failure because of the excessive strain placed on the structures due to the angle. These sites have been previously identified. SDG&E recommends that the measure be reworded as follows: "...stringing of new wire and reconductoring for the project would be allowed year round in sensitive habitats if the conductor is not allowed to drag on the ground or in brush and all vehicles used during stringing remain on project access roads to the greatest extent feasible and any vehicle or

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equipment placement off of roads be monitored and confirmed that no sensitive environmental resources would be impacted." Support vehicles and stringing equipment should be allowed off project access roads where approved in order to access stringing sites not on project access roads.

D.2; Ap.12 D.2-97 to 98; Ap.12-14 Mitigation Measure B-3a; 7

The requirement during the lifespan of the construction and operation/maintenance to wash all vehicles and equipment before and after entering all project areas seems excessive. SDG&E has constructed other projects and has successfully managed the spread of noxious weeds. This is evident along the existing SWPL right of way. During operation and maintenance of the line, SDG&E crews would only be at the location temporarily and would not cause an impact. The effectiveness of this measure is questionable since non-natives can spread in many ways including shoes, equipment, wind, birds, small mammals and members of the public walking or biking through the ROW. Non-natives are already widespread throughout southern California. The spread of non-natives can be a problem more due to the encroachment of urban and other residential development, and associated with ornamental plant species and invasive exotics immediately adjacent to the ROW, not the occasional use of access roads by SDG&E maintenance and construction vehicles. Further, water resources would be unnecessarily wasted if this mitigation measure were implemented as currently drafted because SDG&E would have to bring in more water trucks beyond those needed for dust control, and thus cause more impacts than the value intended to be gained by this measure. Finally, this measure could conflict with the Stormwater Pollution Prevention Plan ("SWPPP"), which will seek to minimize the generation of non-stormwater and would require additional mitigation to reduce potential water quality and sedimentation impacts. The FEIR/EIS should eliminate this requirement because it would be ineffective and causes additional impacts to water supply and quality.

D.2; Ap.12 D.2-115; Ap.12-21 Mitigation Measure B-7c

Mitigation Measure B-7c requires that land be purchased for bighorn sheep mitigation; however, an alternative set of numbers needs to be calculated and presented based on proposed Critical Habitat as laid out in the 2007 Proposed Rule. If adopted, this would substantially reduce the amount of Critical Habitat in the project area. The DEIR/EIS based calculations only on currently designated Critical Habitat, which has been remanded to the USFWS by the Court for new rulemaking. The Draft EIR/EIS states (middle of Ap.12 page 22): "For the I-8 Alternative, the required mitigation for PBS impacts includes off-site purchase of 246.2 acres and on-site restoration of 25.4 acres. All other PBS mitigation described in Mitigation Measure B-7c for the Proposed Project is also required for the I-8 Alternative."

This mitigation measure should recognize that restoration of habitat areas can also be considered mitigation, as approved by USFWS and CDFG. For example, the restoration of habitat south of I-8 would encourage bighorn sheep use of Jacumba Mountains Wilderness. Restoration activities would involve fencing and exclusion of humans from waterholes that would be used by bighorn sheep.

D.2; Ap.12 D.2-115; Ap.12-21 Mitigation Measure B-7c

Mitigation Measure B-7c: The DEIR/EIS proposes a series of unnecessary restrictions on construction and maintenance that constrain these into a narrow range of dates that will result in construction delays. B-7c begins, "With regard to timing of activities, construction and maintenance activities in bighorn sheep habitat shall be limited to outside the lambing season and the period of greatest water need. The lambing season is February through August. The period of greatest water need is May through September." It is not necessary to restrict construction and maintenance activities during the entire span of possible lambing

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dates but only during the period when the majority of the populations lambing occurs (31 January to 1 May, when 87% of lambing occurs) and only when construction is within 1 km of occupied lambing areas. Similarly, the DEIR/EIS suggests restricting activities during the period of greatest water need (May-September). This restriction has no nexus if water sources are nowhere near the transmission line corridor. In fact, construction in areas away from water sources during this period could result in less disturbance to bighorn sheep. That is because bighorn are more likely to be concentrated near water sources during the summer heat. Under the Coachella MSCP, the seasonal restrictions are shorter than in the DEIR/EIS - human access to lambing areas is limited from January 15 to June 30 (compared to the EIR/EIS's February -August) and access to water source areas is limited from July 1 to September 30 (compared to May through September). This is 3 1/2 months less in terms of construction restrictions, which substantially impacts the project schedule.

Contrary to the excessively restrictive measures proposed in the DEIR/EIS, preconstruction surveys for bighorn sheep can be conducted prior to construction and maintenance activities, and if bighorn sheep are found, then SDG&E can consult with the appropriate agencies (U.S. Fish and Wildlife Service [USFWS] and California Department of Fish and Game [CDFG]) to determine appropriate and reasonable avoidance measures to effectively minimize potential impacts to bighorn sheep. The mitigation measure should be revised to require preconstruction surveys for bighorn sheep prior to construction and maintenance activities for work proposed within bighorn sheep habitat. As stated, if the presence of bighorn sheep is determined then SDG&E would consult with USFWS and CDFG as appropriate to determine suitable mitigation.

Potential for temporary displacement and some indirect effects on bighorn sheep (e.g. running from closely approaching helicopters or reduced foraging time when helicopters are operating in the immediate vicinity) may be mitigated by requiring that helicopters follow predictable patterns that are not potentially threatening to bighorn sheep. Such reasonable avoidance measures specifically related to helicopter usage could include:

- 1) Follow regular flight corridors that avoid occupied bighorn sheep habitat to the maximum extent possible.
- 2) Avoid areas within 0.6 miles (1 km) of lambing areas from 31 January to 1 May (this is when 87% of lambing occurs in the Peninsular Ranges (Rubin et al. 2000).
- 3) Avoid lamb-rearing areas to the extent possible from 1 March to 1 June.
- 4) Avoid low-flying within 0.6 miles (1 km) critical bighorn sheep water sources during the hottest time of the year (1 June - 1 September).
- 5) Avoid the use of low-flying "shortcuts" over bighorn sheep habitat.

Areas of transient bighorn sheep use that do not have critical resources for bighorn sheep (e.g. alluvial fans beyond the toe of the slope) will not require the same level of restrictions. All of the suggested mitigation measures above can be most easily achieved by establishing helicopter flight corridors above existing roadways.

For Mitigation Measure B-7g, the Proposed Project desert tortoise surveys were performed from MP 40 to MP 74, so clearance surveys should be limited to that portion of the Proposed Project.

Mitigation Measure B-7g states, "A worker bonus program shall be implemented that would reward construction/maintenance staff who spot a tortoise within the work area and, without touching or disturbing

Mitigation Measures and Miscellaneous Comments

the animal, notify the authorized biologist for action." Suitable tortoise habitat within the Proposed Project ROW was surveyed for Desert Tortoises with no signs of the endangered species. Contacts with USFWS (John Messina telecom with ___ at USFWS (2007)) did not feel the species would be found and if found they would be domesticated pets released into the wild. A bonus program might promote workers to displace endangered species in order to collect a reward. Suggest deletion of second bullet to eliminate a program that could encourage take of a listed species.

D.2; Ap.12 D.2-124; Ap.12-28 Mitigation Measure B-7g

Mitigation Measure B-7g calls for access to all areas within 100 feet of construction zones may not be feasible because of entry restrictions or may be unsuitable burrowing habitat for desert tortoise. Suggest adding the following text to the beginning of the first bullet of Mitigation Measure B-7g: "Where access is not restricted and suitable burrow habitat is present, "

D.2; Ap.12 D.2-124; Ap.12-29 Mitigation Measure B-7g, second bullet

Mitigation Measure B-7h should be revised because using a 4,000-ft buffer is not justified by the literature or the standard approach used for other projects. The FEIR/EIS should propose a realistic buffer for Golden Eagles found along the approved Sunrise alignment that should be based on more literature review and evaluation of site specific conditions along the proposed corridors, e.g. actual habitat buffers between construction activities and known locations of Golden Eagle nests. This analysis would result in specific setback recommendations that SDG&E could use to minimize potential effects. A buffer of up to 1/4 mile (1,320 feet) for active nests is recommended. Activities within 1/4 mile of an active nest should not be prohibited, especially in areas where the activities are screened by natural topography or vegetation (obstructed view). These cases could be monitored by a qualified raptor biologist to provide construction flexibility; if the biologist determines that construction activities are not disturbing the nest, construction could continue. The biologist would have full authority to stop work if the nest was deemed to be disturbed.

D.2; Ap.12 D.2-124; Ap.12-28 Mitigation Measure B-7g

Another option would be to use the study methods developed to determine what the actual flushing distances are for Golden Eagles and recommend specific buffers and other mitigation for construction and operation of the power line. Studies by Stalmaster and Newman 1978 (Stalmaster, M. V. and J.R. Newman. 1978. Behavioral Responses of Wintering Bald Eagles to Human Activity. *Journal of Wildlife Management* 42:503-513) show that eagles are tolerant to non-threatening human activity and become acclimated to it. Acclimation to human activity is common in birds. Vegetation and topographic conditions reduce the potential disturbance even further. This study and studies on wading birds show that the mere presence of human activity may not be disturbing to birds if it is not directed at them, e.g. walking parallel to a particular bird (non-threatening) versus walking directly at a particular bird (threatening activity). Construction and maintenance of the power line will not be directed at Golden Eagles and should not be considered a threatening activity.

In addition, there should be some flexibility for "Maintenance Activities" added to the mitigation measure in the Final EIR/EIS. Necessary maintenance activity can be accomplished under the direction of a raptor expert.

Mitigation Measures and Miscellaneous Comments

D.2; Ap.12 D.2-126; Ap.12-29 Mitigation Measure B-7h

Suggest revising Mitigation Measure B-7m to restrict program to suitable FTHL habitat by using the following text: 1) Fund and implement a FTHL protective signed program along all roads within the project area that occur within suitable FTHL habitat. 2) Surface all new access roads (with asphalt, gravel, chemical or physical stabilizers or other surfacing acceptable to the authorized officer) within suitable FTHL habitat in the project area to reduce the amount of time that FTHLs may spend on these access roads.

If there are no nesting birds present, there would be no violation of the MBTA. Therefore, add the following as the first sentence of Mitigation Measure B-8a "If pre-activity surveys for bird nests conducted by a qualified biologist during the nesting season (between September 16 and February 14) clear the area to be disturbed, no seasonal restriction to vegetation clearing is required. Outside of the nesting season, no nest clearance surveys are required prior to project activity. If clearance surveys are not performed, all vegetation clearing..."

D.2; Ap.12 D.2-136; Ap.12-40 Mitigation Measure B-7m

Mitigation Measure B-10a states "Where such markers are installed, the applicant shall fund a study to determine the effectiveness of the markers as a collision prevention measure since there are few, if any, studies that show if such markers work, especially on transmission lines (CEC, 2007). The applicant shall develop a draft study protocol and submit it to the Wildlife Agencies and State Parks, as well as to CPUC and BLM, for review. The applicant shall continue to work with these agencies until approval of a final study protocol is obtained. If the study shows the markers to be ineffective, the applicant shall coordinate with the Wildlife Agencies to develop alternate collision protection measures." If diverters are installed before baseline monitoring can be done, there will be no data to compare to and no measure of the effectiveness of the diverters. After the first sentence of last bullet on page Ap.12-43, insert, "Two years of monitoring will be conducted after the line is installed without diverters to collect baseline data on bird collisions. If collisions are not determined to be an issue, diverters would not be required. If they are an issue, the Applicant should install them and implement the following study."

D.2; Ap.12 D.2-141; Ap.12-41 Mitigation Measure B-8a

In Mitigation Measure B-11a, please define the limits of the area of the raven control plan.

D.2; Ap.12 D.2-147; Ap.12-43 Mitigation Measure B-10a

The 2nd sentence of Mitigation Measure B-1g should be slightly revised as follows "Where it is not feasible for access roads to cross at right angles, SDG&E would limit the crossing angle to 45 degrees. The access road crossings would continue at the maximum 45 degrees to the streambed or wash for a minimum distance of 50 feet from the edge of streambed or wash before they would become more parallel to the streambed or wash." Also, suggest removing "...roads constructed parallel to streambeds..." from the 4th sentence.

D.2; Ap.12 D.2-148; Ap.12.45 Mitigation Measure B-11a

Mitigation Measure B-5c states "Plant or wildlife species may not be collected for pets or any other reason." Please revise to allow limited plant collection for identification purposes. Suggested revision, "Except when collection is necessary for the proper identification of plants, plant or wildlife species may not be collected for pets or any other reason."

Mitigation Measures and Miscellaneous Comments

D.2; Ap. 12 D.2-163; Ap.12-9 Mitigation Measure B-1g

For FTHL mitigation in Mitigation Measure B-7m, please clarify that measure applies only to the land covered by the Truckhaven EIS.

D.2; Ap.12 D.2-167; Ap.12-17 Mitigation Measure B-5c

Mitigation Measure B-12a reads: "If the qualified acoustician determines that no methods would reduce noise to below the threshold, maintenance shall be deferred until the nestlings have fledged as determined the qualified biologist." Suggest modifying requirement to state: "maintenance should be deferred if at all possible".

D.2; Ap.12 D.2-233; Ap.12-40 Mitigation Measure B-7m

Mitigation Measure V-2b: Suggest that manipulating remaining vegetation be used as the first measure to mitigate. Contrasts from unnatural vegetation lines, such as straight edges resulting from vegetation removal can be mitigated by scalloping edges to create irregular edges, and thinning or feathering edges by retaining a mix of trees and shrubs. This mitigation would avoid the impact of unnatural vegetation lines, be more cost effective than revegetation, and avoid the extended time required for the establishment of vegetation before the impact is successfully mitigated.

D.3.5; Ap.12 D.3-49; Ap.12-50 Mitigation Measure V-1b

The EIR/EIS should not require that restoration areas be fenced because this could cause localized habitat fragmentation. At a minimum, the FEIR/EIS should leave fencing requirements to the discretion of USFWS and CDFG. Also, it can take many years for vegetation to return to a pre-project state, so the time frame for the requirement of creating barriers or fences to prevent public access and patrol construction routes should be changed to a time frame defined as the successful re-establishment of vegetation rather than a return to a pre-project state.

Mitigation Measure V-3a: The DEIR/EIS states "no new access roads shall be constructed such that they directly approach existing or proposed towers in a straight line from locations immediately downhill of the structures." For construction in ABDSP non-wilderness areas, SDG&E may have to employ a 'drive and crush' method to access structure locations. Drive and crush simply means that vehicles will drive over any vegetation rather than removing the vegetation using a bulldozer blade or other destructive tool. The drive and crush method typically will not damage the root system so the vegetation can re-grow with minimal impact. In order to minimize vegetation impact, a straight line approach would likely be used, provided the topography is conducive to this approach. SDG&E recommends that Mitigation Measure V-3a be reworded to include straight-line access to the greatest extent feasible if drive and crush temporary access is the only way to access structures to avoid impacts to designated wilderness or other sensitive environmental features.

Mitigation Measure V-3b: The DEIR/EIS states that SDG&E is to use a non-specular design to reduce conductor visibility and visual contrast. SDG&E will use dulled metal finish transmission structures and non-specular conductors in visually sensitive areas including the ABDSP, new ROW in the Central Link and Peñasquitos Junction to Peñasquitos Substation in the Coastal Link. This may be problematic from Peñasquitos Junction to Peñasquitos Substation in the Coastal Link. Early on during SDG&E's public participation meetings, the public clearly indicated they wanted steel poles in this section and not lattice

Mitigation Measures and Miscellaneous Comments

steel towers as presently exists. As such, SDG&E proposed steel poles in this area in the PEA. The poles will, in general, match the existing tower locations and as a result will be similar in height, averaging 120 feet. Steel poles are fabricated in sections. The overall weight of the base section is one limiting criteria and depending on the overall pole height, this too will also affect the number of pole sections. If the section weights and lengths can be erected with conventional ground equipment, cranes etc., then typically two to three sections are required. However, if the pole sections are to be galvanized rather than painted, this may impact the design and require additional sections. The pole sections are hot dipped galvanized and there are only a few fabricators with galvanizing facilities large enough to accommodate these pieces. Galvanizing pole sections longer than 55 feet may be problematic or may dictate the pole design to be multiple sections. SDG&E recommends that there be flexibility with the structure finish/painting.

Ap.12 Ap.12-52 Mitigation Measure V-3a

Mitigation Measure WR-3c states, "Construct transmission line underground to avoid hang gliding areas. This would place 2.1 miles of the potential 500kV route underground through the hang gliding area along South Main Divide Road." Installation of underground 500 kV is not feasible for this segment so Mitigation Measure WR-3c should be eliminated.

Ap.12 Ap.12-52 Mitigation Measure V-3b

The DEIR/EIS states, "Overall the Santa Ysabel All Underground Alternative would reduce and/or eliminate significant (Class I) temporary and permanent impacts and has been found to be most preferred to all issue areas with significant impacts, except for air quality...."

This contradicts the analysis that concludes the Santa Ysabel All Underground Alternative is the worst of the six alternatives through the valley with respect to Cultural Resources. In fact, the analysis concludes that the "Proposed Project and SDG&E Mesa Grande Alternative" is the preferred alternative for cultural resources, followed by the Proposed Project, which is ranked second.

With respect to Aspen's Northern Route, the FEIR/EIS should acknowledge that it is the least preferred in terms of cultural resources and explain how the concern for human remains adjacent to the Santa Ysabel Chapel can be mitigated.

D.5; Ap.12 D.5-61; Ap.12-63 Mitigation Measure WR-3c

Mitigation Measure T-1a: The DEIR/EIS states that "SDG&E shall restrict all necessary lane closures or obstructions on major roadways associated with overhead or underground construction activities to off-peak periods in congested areas to reduce traffic delays. Lane closures must not occur between 6:00 and 9:30 a.m. and between 3:30 and 6:30 p.m., unless otherwise directed in writing by the responsible public agency issuing an encroachment permit." This is problematic for Alpine Blvd. where it is proposed underground two bundled (2 cables per phase) circuits of 230kV. If no County variance is authorized to work in off peak hours, six hours per day (9:30am-3:30pm) will severely impact the construction schedule. Of the six working hours per day, at least one hour will be devoted to setting up and taking down the required traffic control leaving five productive work hours per day. One lane will likely have to be blocked for any construction along Alpine Blvd. due to the narrow width and minimal setback. Construction may include relocating the existing underground facilities in order to make room for SDG&E's infrastructure while maintaining the 20 feet required separation between circuits, so both sides of Alpine Blvd. will be impacted. SDG&E suggests that the mitigation be reworded to include, "to the extent feasible" at the end of the sentence.

Mitigation Measures and Miscellaneous Comments

Ch. D.7 and H, pages 7-133, 7-137, paragraphs 42, 35

Mitigation Measure AQ-1h states, "SDG&E shall obtain and hold for the duration of construction NOx emission reduction credits or fund incentive programs approved by ICAPCD and SDAPCD at sufficient levels to offset the construction emissions of NOx that exceed the ozone nonattainment area federal General Conformity Rule." The requirement to obtain NOx credits for temporary impacts of construction activities is disproportionate to the potential short-term impacts. Sunrise Powerlink will result in a net reduction of NOx and should not be subjected to this requirement. Suggest deletion of Mitigation Measure AQ-1h.

Ap.12 Ap.12-80 Mitigation Measure T-1a

Mitigation Measure H-1m states, "Poway Creek crossing to be overhead in the existing bridge or directionally drilled rather than trenched. The Poway Creek crossing in the Los Peñasquitos Canyon Preserve–Mercy Road Alternative shall be attached to the bridge or directionally drilled rather than trenched across the stream." SDG&E suggests that this measure be modified slightly to allow for the crossing to be achieved by either boring ("jack and bore" or directional drilling method) or as a bridge attachment.

D.11; Ap.12 D.11-50; Ap.12-90 Mitigation Measure AQ-1h

Mitigation Measure G-6a states, "The design-level geotechnical surveys conducted by the Applicant shall perform slope stability analyses in areas of planned grading and excavation that cross and are adjacent to hills and mountains." Suggest the testing to be performed for grading and excavation for structures and not for all hillside access roads. Testing, design and construction of access roads to eliminate damage due to landslide would be overly burdensome in respect to repair and restoration costs if an access road is damaged during the life of the project. In the first sentence, insert "immediately" before "adjacent." The second sentence should eliminate "and in other areas of ground disturbance, such as grading for access and spur roads." Also, SDG&E requests the submission to the CPUC be 30 days rather than 60.

D.12; Ap.12 D.12-125; Ap.12-96 Mitigation Measure H-1m

Mitigation Measure F1a: The mandate that during Red Flag alerts "all construction and maintenance shall cease" is not feasible. SDG&E has a Standard Practice developed for working during Red Flag days that will adequately address potential impacts. Since the recent fires, the Red Flag warnings from the agencies will probably increase in numbers. This would hamper SDG&E's ability to perform maintenance work in order to stay in compliance with our "Regulated Maintenance Practice." This portion of the measure should be revised so that SDG&E follows its Standard Practice during these times.

D.13; Ap.12 D.13-59; Ap.12-102 Mitigation Measure G-6a

Mitigation Measure F-2a should be revised because this item provides detailed requirements for vegetation to line clearances and requirements for removal of brush and trees. These requirements are already adequately covered by existing CPUC General Orders and Public Resource Code sections. It is recommended that those requirements be adopted for this project rather than adopt different requirements for this transmission line only.

Mitigation Measures and Miscellaneous Comments

Ap.12 Ap.12-106 Mitigation Measure F-1a

Table D15-19 should be re-checked and revised in the FEIR/EIS based on the following information. NERC Standard FAC-003-1 is based on IEEE Standard 516-2003, specifically page 94, (Table D.3) and page 20 (Table 5) in that IEEE Standard. The "Vegetation-to-Conductor" distance is the distance that the IEEE terms "Phase to ground". Therefore, corrections to the FEIR/EIS should be made as follows.

The 500 kV distance should read 14.68 feet (4.48 meters), not 19 feet (5.7 meters).

The 230 kV distance should read 5.14 feet (1.57 meters), not 13 feet (3.9 meters).

Ap.12 Ap.12-106 Mitigation Measure F-2a

The top of page D.15-57 where it is stated "Rule 35 guidelines require:" should be changed to "Rule 35 guidelines specify, at the time of trimming:" This is based on Appendix E, "Guidelines to Rule 35", in the August 2007 GO 95 regulations.

D.15 D.15- 55 Table D.15-19

The Draft EIR/EIS incorrectly states "PRC 4292, Powerline Hazard Reduction, requires a 10-foot clearance of any tree branches or ground vegetation from around the base of power poles carrying more than 110 kV.". That should be changed to "PRC 4292, Powerline Hazard Reduction, requires clearing vegetation inside a 10 foot circumference of such pole or tower which supports a switch, fuse, transformer, lightning arrester, line junction, or dead end or corner pole." That can be verified, if desired, by searching for the exact language of PRC 4292 at <http://www.leginfo.ca.gov/calaw.html>.

Ch. D.15 page D.15- 57 para. 1

The DEIR/EIS proposes a new underground duct bank configuration for the 230 kV underground cable crossing the ABDSP for DEIR Alternative no. 5. This new duct bank configuration (see Fig. Ap. 1-6) requires 12 cables enclosed in a common concrete encased duct bank. There are serious concerns about the feasibility of this proposed underground cable configuration and whether it could meet the project power transfer, and reliability requirements. The ampacity (power transfer) requirements cannot be met due to the close proximity of the cables of both 230 kV circuit to one another and the mutual heating of cables caused by this configuration. The ampacity of the cables would be greatly reduced to levels even lower than described in the DEIR (pg. Ap. 1-58) due to this proximity and the higher ambient soil temperature experienced in the desert region as well as possible increased trench depth. Also, because the cables are located in a common trench, both circuits would need to be degenergized, shutting down the entire Sunrise Powerlink, if repairs are needed. One cable on one circuit cannot be worked on while the other circuit is energized because of induced voltages creates worker safety issues.

Ch. D.15 Page D.15-58 Second bullet

Mitigation Measure F-2b states in part, "Where construction of the Proposed Project or an alternative would result in the relocation of existing 69 kV transmission lines, these lines shall be relocated onto steel poles using vertical conductor construction. Also, all existing 69 kV or distribution lines with poles located within 100 feet of the Proposed Project or alternative shall be reconstructed so the existing conductors are on steel poles using vertical conductor construction." This mitigation measure will significantly increase project costs and environmental impacts associated with removals and replacement of facilities not originally considered in the scope of work. Placing conductors in a vertical configuration for both transmission and distribution circuits will likely increase the heights of existing structures causing potential visual impacts as well as potential impacts to calculated EMF levels at the edge of ROW. Additionally, increasing the heights

Mitigation Measures and Miscellaneous Comments

of adjacent structures could have impacts on the structure height or type of the proposed structures. If this measure is not removed from the final plan of service, it should be amended to include "to the extent feasible" and a process by which SDG&E can recommend an alternative to minimize fire concerns with less impact to costs, scope and the environment.

Ch. Ap.12 Page Ap.15-58 Para 2

Many mitigation measures require the submittal of final plans for review and or approval of various agencies. The measures require submittal of the approved plans to the CPUC between 30 and 120 days prior to start of construction. As schedule is a major factor in the successful implementation and realization of project benefits the listed time frames are too restrictive and can be reduced while still fulfilling the intent of the requirements. The Final EIR/EIS should allow for shorter advance submittals. This can be accomplished by adding language such as, "or shorter review periods where practicable" (i.e. "Agency consultations must be conducted and approvals received at least 120 days *or shorter review period where practicable* prior to the start of construction. This qualification has been implemented successfully on past projects as the project team and mitigation compliance monitoring team maintain close schedule coordination. After documentation has been submitted and to avoid delays in planning or construction, a review period should be identified. The following text is suggested to be added to the Mitigation Measures listed below, all of which have the review and approval of a plan as part of the mitigation, "If review and approval of the final plan is not facilitated and the plan is not reviewed and returned to SDG&E within 30 days of submittal, the plans will be deemed acceptable as submitted for procurement and/or construction." The preceding text applies to the plans mentioned in the following measures: B-10a, B-13a, V-1a, V-1b, V-2a, V-2b, V-2c, V-7a, V-7b, V-8a, V-21a, V-42a, V-52a, V-53a, V-66a, V-68a, V-69a, V-NW10a, V-NW13a, L-1c, L-1g, WR-4b, C-1c, C-5a, C-6c, C-6f, P-2a, P-6b, P-7b, H-1a, H-1b, H-1l, H-5a, H-6a, H-7a, H-8a, G-2a, G-3a, G-4a, G-4b, G-5a, G-5b, G-6a, G-9a, F-1b, F-3a, USFS-30

Ch. D.15; Ap.12 Page D.15-86; Ap.12-108 Mitigation Measure F-2b

Southern Route Alternatives: SDG&E has reviewed the southern route alternatives and noted some structures that will likely be impacted by the proposed routes. Impact L-2 states the following: *Presence of a project component would divide an established community or disrupt land uses at or near the alignment (No Impact for division of community; Class I or Class II for Pending/Future Development) Pending and Future Development. If a transmission route is approved by CPUC and BLM decision-makers, ROW acquisition and detailed design would begin soon after approval. Prior to this process, new land development projects may have been proposed or constructed by landowners on land parcels across which the route would pass. When Proposed Project was defined, an effort was made to avoid properties where the alignment would affect existing or newly planned land developments. However, development is occurring rapidly in southern California, and there are new development projects entering local development approval processes continually. In order for the final engineering of the transmission line to accommodate land use changes that may have occurred after the route was originally defined, Mitigation Measure L-1b is recommended. This measure requires SDG&E to coordinate with landowners to revise the route, where feasible, to minimize land use conflicts between the transmission line and existing/planned development. To reduce impacts to planned new land uses identified subsequent to project approval by CPUC and BLM, it may be feasible to make minor adjustments to alignment location or tower design that would accommodate the proposed development without compromising the transmission line or creating new impacts to adjacent land uses that would be more adverse than the approved alignment. Preparation and implementation of a construction notification plan (Mitigation Measure L-1a) would serve to notify landowners and tenants of pending construction. However, this notification*

Mitigation Measures and Miscellaneous Comments

would not provide sufficient time to investigate mitigation rerouting of the transmission line at specific parcels. There would be no impact if no developments are affected, but impacts to these developments would be significant if the mitigation cannot be effectively implemented. It is expected that minor route revisions will reduce impacts to less than significant levels (Class II) but that there may also be situations where the alignment or facility components cannot be relocated, and the impact would remain significant (Class I).

SDG&E recommends that the CPUC verify whether structures are impacted and may require rerouting to mitigate potential impacts to structures on the following parcels (parcel maps with transmission alignment overlays are provided with this response):

- 613-090-10 Loving (I-8 Alternative)
- 612-030-15 Parry (I-8 Alternative)
- 608-110-04 Survivors Trust (Campo North Alternative)
- 326-061-06 San Diego County Water Authority (I-8 Alternative)
- 389-030-06 Calderon/Rivera (I-8 Alternative)

Ch. Ap.12 Page: numerous

Mitigation Measures B-10a, B-13a, V-1a, V-1b, V-2a, V-2b, V-2c, V-7a, V-7b, V-8a, V-21a, V-42a, V-52a, V-53a, V-66a, V-68a, V-69a, V-NW10a, V-NW13a, L-1c, L-1g, WR-4b, C-1c, C-5a, C-6c, C-6f, P-2a, P-6b, P-7b, H-1a, H-1b, H-1l, H-5a, H-6a, H-7a, H-8a, G-2a, G-3a, G-4a, G-4b, G-5a, G-5b, G-6a, G-9a, F-1b, F-3a, USFS-30

The DEIR/EIS suggests that the Top of the World Substation Site Alternative would reduce environmental impact because *"This alternative spreads its impacts out over more than three miles instead of confining them to a more singular area like the proposed Central East Substation site."* SDG&E questions whether spreading environmental impact over a wide area is environmentally preferable to confining environmental impact to a smaller, confined area, which seems counter-intuitive. For this reason, among others, SDG&E disagrees that the Top of the World Substation Site is preferable.

Section E, page E.1.4-12, 13, paragraph 12, last; paragraph 13, 2, second bullet

Remove this phrase from the first paragraph: "and to reduce the amount of grading/ground disturbance that would be required." This statement is not true, as the Top of the World substation will have more ground disturbance - approximately 123 acres for the Top of the World compared to 106 acres for Central East Substation. These numbers include the substation pad, access road to the substation and the laydown yards. This DEIR/EIS section used 143 acres of ground disturbance for Central East, however, Table B-10 on page B-64 shows the total as 106 acres, which is close to the latest calculation of 103 acres. This DEIR/EIS section used 115 acres of ground disturbance for the Top of the World, which is close but lower than the latest calculation of 123 acres.

The mileage number in the following sentence is incorrect: "The three mile road has to be constructed to access the alternative site: the access road to the proposed Central East Substation would be shorter, approximately 2.79 miles long." This should be changed from 2.79 miles to 1 mile in the FEIR/EIS. The DEIR/EIS does not provide a figure/drawing showing the Top of the World Substation access road. The figure/drawing showing this substation access road is included with this comment letter.

Ch. H.3.6, page 67

Remove this bullet item: "Top of the World site would eliminate the potential to experience surface fault rupture should an earthquake on the Earthquake Valley Fault Zone propagate along a fault through the Central East Substation site." The earthquake fault does not pass through the Central East Substation Site.

SDG&E's 4th Comment Letter to CPUC on Sunrise DEIR/EIS

Mitigation Measures and Miscellaneous Comments

Ch H.3.6, 67, para. 1, Second bullet

Table H-15 "Class I impacts Eliminated by Top of the World Substation Site Alternative" shows that the TOW eliminates B-7H and N-1 impact issues. This is not correct, as the Top of the World impacts N-1 (noise) and B-7H (direct loss of habitat) are not less than Central East. The DEIR/EIS used incorrect ground disturbance acreage for these substations. The ground disturbance acreage is larger at Top of the World (123 acres) than Central East (106 acres). The FEIR/EIS should reflect 115 acres for Top of the World and 143 acres for Central East.

H.3.6 67 5th bullet

With respect to the California Solar Initiative, the budgets and MW goals for SDG&E are inconsistent with the most recent CPUC Decision (D.06-01-024) at 29, 36 and Appendix B, Table 2. The FEIR/EIS should be revised to make these consistent.

Ch. H.3.6, page 69, Table H-15

[No comment provided]

Ch. Ap.1, pages Ap.1-304 to 305

[No comment provided]

ATTACHMENT LIST

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|------------------|--|
| Attachment 1 | Map depicting SDG&E's Enhanced Northern Route |
| Attachment 2 | Letter from Mike Pool, State Director, BLM to Bret Lane, SDG&E dated July 5, 2007 |
| Attachment 3 | California State Parks' Response to SDG&E Comment Letter, Response #5-5 |
| Attachment 4 | Transcript in the Matter of: Informational Proceeding and Preparation of the 2004 Integrated Energy Policy Report (IEPR) Update, Docket No. 03-IEP-01, August 23, 2004 – Transcript cover and pp 15-25 |
| Attachment 5a 5b | Maps depicting existing facilities |
| Attachment 6 | City of San Diego MSCP Subarea Plan, the Los Penasquitos Preserve Master Plan and City of San Diego Ordinance which authorizes utilities within the preserve |
| Attachment 7 | Photos of Peninsular Bighorn Sheep under and across high voltage transmission lines |
| Attachment 8 | Map indicating Santa Ysabel Tribal Lands within Aspen's Northern Route |
| Attachment 9 | Map depicting Campo Tribal Lands along the I-8 Alternative |
| Attachment 10 | Letter dated February 1, 2008 from Campo Kumeyaay Nation to Lynn Trexel |
| Attachment 11 | Map depicting Tribal Lands within Aspen's Southern Route |
| Attachment 12 | Map depicting Tribal Lands |
| Attachment 13 | Table regarding the potential effect of mitigation time constraints |