Billie, Lynda and Susan,

Please find SDG&E's second comment letter on the CPUC/BLM Draft EIR/EIS in the Sunrise Powerlink proceeding. As indicated in the cover letter, SDG&E is providing preliminary comments on Sections B and D of the Draft EIR/EIS.

<<Sunrise SDG&E Second DEIR-EIS Comment Letter 2-11-08.pdf>> <<Sunrise SDG&E Second DEIR-EIS Comment Letter - Sections B and D 2-11-08.xls>>

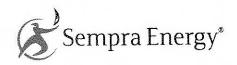
In addition, SDG&E is submitting a slightly revised version of our first comment letter to provide a clarification. The changes in this revised letter are limited to the first full paragraph on page 4, and only to the last two sentences in that paragraph. There are PV systems that are installed that are outside of the CSI program and we don't want that point to confuse anyone, so we determined that it would be best to provide this update to make it perfectly clear. Although the changes in the revised letter are limited to just those two referenced sentences, please replace our initial first comment letter entirely with this revision. Our point remains that approximately 1000 installations is a small fraction of the 20,000 per year that is included in the New In-Area Renewable Generation Alternative. We trust that this will avoid any possible confusion.

<Sunrise SDG&E REVISED First DEIR-EIS Comment Letter 2-11-08.pdf>>

Please contact me with any questions regarding the comment letter.

Kevin O'Beirne SDG&E Regulatory Case Manager 858/654-1765; KO'Beirne@SempraUtilities.com





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### February 11, 2008

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 & Ms. Kastoll

SDG&E appreciates the opportunity to provide the attached comments to the California Public Utilities Commission and Bureau of Land Management (CPUC/BLM) Sunrise Powerlink Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS). This comment letter covers SDG&E's preliminary comments on Sections B and D of the Draft EIR/EIS, thus focusing on the proposed project as submitted in our application of August 2006. SDG&E will provide additional specific comments in future letters for the CPUC/BLM to consider in preparation of the Final EIR/EIS, and may provide additional subsequent comments on Sections B and D of the Draft EIR/EIS as our review of the document continues.

As the CPUC/BLM reviews our current comments on the Draft EIR/EIS, it should be noted that our current comments are from a technical standpoint and focus on identifying potential inaccuracies, omissions, inconsistencies and clarifications that can be fully addressed in the Project Final EIR/EIS. SDG&E engineers, environmental and land experts and the technical consultant team reviewed the Draft EIR/EIS in the spirit of providing assistance to the CPUC/BLM in making the Final EIR/EIS as complete and thorough as possible.

Many comments clarify elements of the project description in Section B, especially as they relate to feasibility issues and construction practices based on actual field experience in constructing extra-high voltage lines. This also applies to issues associated with operations and maintenance of transmission lines.

With regard to Section D, the Draft EIR/EIS appears to overstate project impacts in a conclusory manner. Therefore, many of the comments request clarification or amplification of the criteria used to make the significance determinations and suggest ways in which the Final EIR/EIS could be modified accordingly. Other comments include minor corrections and clarifying information to augment the document.

Thank you in advance for your consideration of SDG&E's comments.

cc: Michael Niggli E. Gregory Barnes Jill Larson

Chapter #	Page #	Paragraph #	Comment
B.2	B-2	1	Pages B-1 (B.2, last paragraph) to B-2 (first paragraph): "Relocation of an existing 69 kV transmission line to parallel the proposed 230 kV overhead transmission lines between the junction of State Route (SR) 76 and SR79 and a point near the existing Santa Ysabel Substation. To accommodate the proposed relocation, this segment would also include removal of the existing 69 kV structures, and placement of new towers tubular steel poles along a nine mile segment to accommodate the relocated 69 kV line." This is corroborated on Page B-14, 5 <sup>th</sup> paragraph where it refers to "new tubular steel poles" and not "towers".
B.2	B-2	Last bullet	The plan of service for capacitor additions is: 63 MVAR at San Luis Rey 230 kV, 126 MVAR at Central 230 kV and 50 MVAR at South Bay 69 kV.
B.2.1	B-6	1	The text says "SRPL would be constructed approximately 450 feet north of the existing SWPL towers." This should be 400 feet.
B.2.1	B-6	2	The text should be corrected to include (as in bold underlined text) " continuing through open desert and private agricultural land west of the outskirts of the unincorporated town of Seeley."
В	B-6 B-10	4th x	The EIR/EIS should indicate that BLM has asserted its continuing federal interest and jurisdiction in those portions of the ROW for which it granted easements previously.
В	B-9	1	Describes statutory or recorded easement through majority of ABDSP as 100 feet, "but may be narrower in several areas." Should accurately describe existing ROW as being at least 100 feet in all areas, to which SDG&E has full rights derived from both prescriptive, equitable and granted easements.
B.2	B-9	2	Designated wilderness by definition does not include existing easements and associated access roads.
B.2.2	B-9	1st	SDG&E has indicated that Proposed Project could be built within existing 100-foot-wide transmission corridor.
B.2.2	B-9	1st	Statement that easement is narrower or non-existent in several places is misleading. Private easements are silent regarding width, and SDG&E believes that surrounding circumstances and intent of parties indicates they are 100-feet-wide. Prescriptive and equitable easements have not yet been perfected, but SDG&E believes that they are 100-feet-wide.
B.2.2	B-9	3rd	Neither existence of transmission corridor nor SDG&E's rights to maintain existing line within corridor have been contested by any party.
B.2.2	B-9	14th	SDG&E has equitable rights, in addition to recorded and prescriptive easements.

Chapter #	Page #	Paragraph #	Comment
B.3	B-9	2	States that all lands in Grapevine Canyon except for SDG&E's current easement has been classified as designated wilderness. This disregards the access roads and any public roads.
В	B-10	Last	Should clarify that SDG&E contends that ROW for transmission infrastructure was not excluded from Sec. 16 lands, and that BLM's easement grant to SDG&E expressly included these lands.
В	B-10	FN3	In footnote 3, second sentence, should be "from State to the federal government for power lines"
В	B-10	FN 3	In footnote 3, DEIR makes a legal conclusion about the nature of Section 16 lands despite previous acknowledgment that review of easement rights through the Park was still being conducted. SDG&E contends that the Section 16 lands in question were proprietary lands of the State. Additionally, the State has recognized that rights-of-way could be granted over such lands in certain circumstances.
В	B-13	1st	At the top of the page, the Draft EIR/EIS concludes that interpretation could be made of existing easement restricted to actual occupation. This is an incomplete assessment, should also note other interpretations, namely where an easement grant omits width, the width is interpreted based on the purpose of the easements, the intent of the parties, and the nature of the property. SDG&E received easement grants from the federal government, which expressly granted a 100 foot ROW. For those portions of the easement for which SDG&E received grants from other parties where a width was not specified, it is reasonable to assume that the width granted was also 100 feet. Additionally, the width of the ROW is that width reasonably necessary for the maintenance and safety of a transmission line, and standards dictate that this width is 100 feet for a 69 kV line. Finally, State Parks' own land records reflect a 100 foot corridor throughout ABDSP.
B.2.2	B-13	3rd	SDG&E performed survey in connection with 1955 BLM ROW application and another GPS survey in 2006, which was submitted after BLM ROW renewal application. SDG&E did not perform survey in 2005.
B.2.2	B-13	2	Change "field monuments" to "property corner monuments".

Chapter #	Page #	Paragraph #	Comment
B.2.2	B-13	3	The Draft EIR/EIS states "SDG&E asserts that maps of the facilities to date, including results of the 2006 GPS survey, are inaccurate." We are uncertain of the source of this statement or what is meant by this sentence. The 2006 GPS survey accurately positions the location of the facilities.
B.2.2	B-13	4	Page B-13 (B.2.2, fourth paragraph): "As part of the Proposed Project, SDG&E would remove the 92 kV conductors from the existing wood poles between MP 60.9 and MP 68.2 and attach (or "underbuild") them to replace them with new conductors underbuilt on the new 500 kV lattice steel towers." Note that the old conductors would not be reused, but would be replaced with new conductors.
B.2.3	B-14	2	Existing 69 kV poles will be topped after 69 kV circuit is removed (cut off top of poles, mainly for aesthetics, leaving about 1 foot above the distribution-level).
B.2.4	B-17	4	MP117.2 - MP121.9 is southwest, not southeast
B.2.5	B-18	2	Page B-18 (B.2.5, second paragraph): "Just outside of the existing Chicarita Substation (MP 142.3), the existing 69 kV, 138 kV, and 230 kV lines would deviate from the consolidated ROW transition from one SDG&E ROW to a connected ROW, and the new single-circuit 230 kV overhead line would transition from overhead to underground."
B.2.5	B-18	5	Replace "all work" with "all proposed substation work".
B.2.5	B-18	4	Replace "all proposed modifications" with "all proposed substation modifications".
B.2.7	B-23	4	Central East Substation is designed for a future 500 kV connection, but not necessarily going north.
B.2.7	B-23		Confusing paragraph may misrepresent SDG&E's import capability. SDG&E only needs two 230 kV lines to maintain the SDG&E 4200 MW all lines in-service import capability and SDG&E 3500 MW G-1, N-1 import capability.
B.2.7	B-24		It is not true that "The most likely trigger for additional 230 kV circuits out of Central East Substation is reliability needs and operational constraints or mitigation required by NERC/WECC reliability criteria for the outage of one or both of the two Central East - Sycamore Canyon 230 kV circuits". SDG&E only needs two 230 kV lines to maintain the SDG&E 4200 MW all lines inservice import capability and SDG&E 3500 MW G-1, N-1 import capability. WECC considers the Northern Route a "Category D", and NERC/WECC reliability criteria would not need additional 230 kV circuits out of Central East Substation.

Chapter #	Page #	Paragraph #	Comment
B.3.1	B-32	1	Page B-32 (B.3.1, first paragraph): "The proposed 500 kV circuit would be supported by three types of structures: lattice steel towers (Figure B-13), tubular steel poles (Figure B-14), and steel H-frame structures (Figure B-15). The SRPL 230 kV structures would be lattice steel towers (Figure B-16), tubular steel poles (Figure B-17), and single-circuit overhead to underground transition structures (Figure B-18)." Note that the Title Block for Figure B-18 should be changed as follows: Typical 230 kV Single Circuit Steel Overhead to Underground Transition Tower Structure: Inland Valley and Coastal Links. The Title Blocks for Figures B-21, B-22 and B-23 should also be changed to replace "Tower" with "Structure".
B.3.1	B-32	1	Page B-32 (B.3.1, first paragraph): "Additionally, some 500 kV structures within ABDSP would have a third one circuit underbuilt, as described in Section B.2 and illustrated in Figure B-19."
B.3.1	B-32	2	"The replacement wooden poles for this segment of the Proposed Project would have the <u>same</u> dimensions as the existing wooden poles." - Should restate this as having <u>relatively similar</u> dimensions as the existing structures.
B.3.1	B-32	4	For the Imperial Valley Link, since this link includes both transmission towers and steel poles, delete the word "tower" in the second sentence of the paragraph so that the sentence now reads "Each new structure would be approximately 160 feet tall."
B.3.1	B-32	5 & 6	Anza-Borrego Link shows a total of 127 structures - need verification.
B.3.1	B-44	1	"The 230kV portion of this segment (Central Link) would be supported by tubular steel poles. However, lattice towers would be required where inaccessible terrain requires helicopter construction as steel poles are too heavy for helicopters to transport" - This is one of many locations where SDG&E is directed to: 1) Use towers where there is helicopter only access and 2) use steel poles unless helicopter only access. Both of these statements are restricting the design for non-environmental reasons.
B.3.1	B-44	1	Replace "and" in the first sentence with "and/or" to not restrict design choice of tower use in the Inland Valley Link to areas where visual impacts are not an issue and where helicopter only access exists.
B.3.1	B-44	1	Central Link, shows 37 - 500 kV towers and 119 - 230 kV towers and 117 steel poles - needs verification (Says 35 structure on A-3)

Chapter #	Page #	Paragraph #	Comment
B.3.1	B-44	3	Inland Valley Link shows 120 - 230 kV poles/towers and 4 transition poles - needs verification.
B.3.1	B-44	4 & 5	Coastal Link shows 50 new structures, which conflicts with 30 - 230 kV double-circuit steel poles (eastern boundary of Coastal Link to Chicarita Substation), 2 transition poles and 16 - 230 kV double circuit steel poles starting at MP 146.7. The 16 is incorrect and should be 18 (States 48 poles on A-4, should be 50.)
B.3.1	B-48	Table B-1	Coastal Link shows 50 new structures with 30 - 230 kV poles, 2 transition poles and 18 - 230 kV poles - this appears to be the correct representation.
B.3.1	B-48	Table B-1	Category "Height" should be "Average Height"
B.3.2.1	B-49	3	Spacing is between phases, not circuits.
B.3.2.1	B-49	Bullets	500 kV steel pole phase spacing is 34.8 feet vertical, and 34.8 feet horizontal.
B.3.2.2	B-49	4	Deadend assembly description only notes jumper string, not ahead and back deadend assemblies.
B.3	B-51	Table	Under Inland Valley, the existing ROW is not 200 feet, it is 100 feet.
B.4	B-52	Table B-4a	Numerical values in the table agree with SDG&E's response to Data Request PD-21. However, revise the titles in the "Activity" column by replacing "Average" with "total" five times. The quantities represent total water usage by link, not the average per structure.
B.4	B-52	Table B-4a	Central East Substation - Landscape Water Usage - total water quantity is not correct - the correct number is 5,500,000 gallons per year.
B.4	B-52	Table B-4a	Central East Substation - Substation Fire Protection - Water Usage of 1.0M gallons is not correct, Replace with 100,000 gallons.
B.4.1.1	B-54	5	The sentence should be changed as indicated in bold underlined text. "At each structure location, an area approximately 100 feet by 100 feet plus an adjacent area approximately 35 feet by 75 feet that is an extension of the access road would be cleared using a bulldozer or backhoe." This will then match the response given by SDG&E to CPUC Energy Division Data Request 17, PD-26, on 8/24/07.

Chapter #	Page #	Paragraph #	Comment
B.4.1.1	B-55	2	Page B-55 (B.4.1.1, second paragraph): "Where solid rock is encountered, blasting (see Section B.4.4.1), rock hauling, or the use of a rock anchoring or mini pile system may be required. The rock anchoring or mini-pile system would be used in areas where site access is limited or adjacent structures could be damaged as a result of blasting or rock hauling activities. Such anchoring systems may also be used where economically and technically justified. In environmentally sensitive areas, a HydroVac, which uses water pressure and a vacuum, would be used to excavate material into a storage tank. In areas where it is not possible to operate large drilling equipment due to access or environmental constraints, hand digging may be required."
B.4.1.1	B-55	3	Page B-55 (B.4.1.1, third paragraph): "Reinforcing steel For tubular structures, reinforcing steel rebar cages and anchor bolt cages would be installed after excavation and prior to concrete placement and structure installation. For lattice towers, steel rebar cages and stub angles would be installed. These cages are designed to strengthen the structural integrity of the foundations and would be assembled in pieces at the nearest project laydown yard and delivered to the structure site via flatbed truck or helicopter. These cages would be inserted in the holes prior to pouring concrete."
B.4.1.1	B-55	6	Page B-55 (B.4.1.1, sixth paragraph): "Lattice towers and tubular steel support structures would be assembled on site, except where helicopter delivery is required, as described in Section B.4.4.2. Steel members for each structure would be delivered to the site by flatbed truck. Assembly would be facilitated onsite by a small truck-mounted crane. Subsequent to full or partial assembly, the entire or the lower portion of the structures would be lifted onto the foundation using a large crane designed for erecting towers. The crane would move along the ROW as towers are erected."
B.4.1.1	B-56	5	The Draft EIR/EIS says "Underbuilding is the term for attaching two or more transmission lines to the same transmission line support structure." That more accurately should say "Underbuilding is the term for placement of one or more lower-voltage circuit under one or more higher-voltage circuit."

Chapter #	Page #	Paragraph #	Comment
B.4.1.2	B-57	2	Page B-57 (B.4.1.2, second paragraph): "The majority of the underground duct banks (described below) would be installed in a vertical configuration using open-cut trenching techniques. A vertical duct bank configuration would place the three cables of the circuit in a pyramid, with two cables on the bottom and one cable stacked on top and separated by spacers (Figures B-24 and B-25) as shown in Figures B-24 and B-25." Note that Figures 24 and 25 show a vertical configuration, not a pyramid configuration.
B.4.1.2	B-57	4	"Trenching would be staged so that open trench lengths would not exceed that required to install the duct banks." - Not quite sure what is meant by this. The first and second sentence should probably be combined to read: "Trenching activities would be staged so that a maximum of 300 to 500 feet of trench length would be open at one time at any one location, depending on applicable permit requirements."
B.4.1.2	B-58	3	"Respectively" to what, at the end of the first sentence
B.4.1.2	B-58	6	Earthquake loading is normally not considered in underground vault design.
B.4.1.2	B-58	Table B-8	Figure B-29 shows correct 30" manhole diameter, not 36" as stated here for 230 kV vaults. The 36" should be corrected to 30".
B.4.1.2	B-59 thru 61	Fig. B-27, B-28, B-29	Figures may indicate 4 instead of 6 UG conductors per manhole.
B.4.1.2	B-62	5	The second sentence should be revised as follows: "Transition structureswould consist of a tubular pole structure with an anchor-bolted pier foundation for each set of 3 or 6 cables, depending on site parameters."
B.4.1.2	B-63	1	SDG&E has not committed to leaving the steel casing in place for horizontal borings. Use of fiber reinforced mortar pipes is preferred in areas where technically feasible.
B.4.1.2	B-63	2	The text indicates a casing is to be used for the directional drill.  This will not be determined until the engineering is finalized (which requires the necessary Geotech information).
B.4.2	B-63		Central East Substation - "800,000 gallons" of water a day would be required for grading and site work, landscaping, fire protection, and concrete for substation from batch plant. "800,000 gallons is incorrect. Replace with 600,000 gallons of water a day. Note that all activities in Table B-9 do not occur at the same time, therefore the total daily amount is not merely the sum of the parts.

Chapter #	Page #	Paragraph #	Comment
B.4.3.3	B-77	1	In the first paragraph under B.4.3.3, referring to the Sycamore Canyon to Elliott Substation 69 kV Transmission Line Reconductor, it refers to replacing conductors with " ACSS/AW conductors, which have a higher voltage capacity." The term "voltage capacity" should be deleted, and replaced with "current-carrying (ampere) capacity".
B.4.4.2	B-84	1	Need to add a sentence before the last sentence that reads "Helicopter may be used in other areas to facilitate construction dependent upon the recommendations of the installation contractor."
B.4.4.2	B-84	1	The Draft EIR/EIS states that tubular steel poles are excepted from helicopter placement. SDG&E has not committed to this, so the Final EIR/EIS should state this.
B.4.4.2	B-84	1 and 3	It is noted that "Helicopters would be unable to lift and install typical 230 kV or 500 kV tubular steel poles, due to their excessive weight." While that may be generally true, the option should be kept open for installing steel poles by helicopter in case a contractor could jack the pole sections together from the air, making use of a helicopter in that manner.
B.4.4.2	B-84	2	Fly yards do not appear to be shown on Figures B-3 through B-9 as stated.
B.4.4.2	B-84	3	Revise the first sentence to read "Prior to installation of helicopteraided tower assemblies, each tower structure would be assembled in approximately 3 to 6 sections at the fly yard."
B.4.4.2	B-84	4	Revise first sentence as follows: "In areas requiring helicopteraided construction, laborers, materials, and equipment would be flown in by helicopter. To the extent feasible, facilities to allow personnel to walk to the helicopter access only sites will be provided."
B.4.4.2	B-84	4	Add an additional sentence (after Foundation excavation would be completed prior to delivery of structure sections) stating "Concrete would be placed in the excavated foundation by helicopter using suspended buckets, or by pumping from accessible areas."
B.4.4	B-84	4	3rd row from the bottom sentence of this paragraph, change to "atop the previously installed structure section".
В	B-86	1	SDG&E suggests new wording as follows for this discussion "SDG&E intends to refine the design of the Proposed Project during the CPUC/BLM approval process in order to immediately commence right of way acquisition and permitting activities leading to construction if the project is approved."

Chapter #	Page #	Paragraph #	Comment
B.4.8	B-97	Tables B-16, 17	Numerical values in these tables agree with SDG&E's response to Data Request PD-21. However in Table B-16 revise the titles in the "Activity" column by deleting "Average" in five places. In Table B-17 revise titles in the "Activities" column by replacing "Average" with "Total" in five places.
B.5.1	B-99	1	"SDG&E's overhead transmission line and substation" should be "transmission line and structures" since the section is for transmission line maintenance.
B.6.1.2	B-112 - B-113		The San Felipe Substation would not be 20 acres as stated in the Draft EIR/EIS. Figure Ap.1-5 shows a 40 acre site for San Felipe Substation, which seems to be correct. San Felipe Substation fenced area will be similar to Central East Substation, and cannot be smaller than 40 acres. The initial equipment requirement sets the 40 acre footprint. Future equipment, if any, will fit in the 40 acres.
B.6.2	B-133		Jacumba Substation would be about 60 acres, not 20 acres as stated in the Draft EIR/EIS. Figure B-47 shows a 60 acre site for Jacumba Substation. The text should be corrected to reflect approximately 60 acres.
В	B-142	LU-APM-7	SDG&E suggests new wording as follows for this discussion "SDG&E would pay just compensation to affected property owners based upon the impact to the property caused by the facility locations identified by SDG&E."
В	B-146	WQ-APM-6	SDG&E suggests new wording as follows for this discussion "SDG&E will negotiate with affected landowner to provide alternative water supplies in the event a supply well or springs dry up directly caused by project activities. Negotiation shall be by either a remedial cash payment to the landowner or by SDG&E contracting for the drilling of a replacement well."

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D.1 D.1-2	D.1.2.1 Third bullet under Central Link	Page D.1-2 (D.1.2.1, third bullet under Central Link): 'Construction of the new Central East Substationcapable of accommodating with termination of one 500 kV transmission line and two 230 kV transmission lines" This point of clarification is important since Central East Substation is designed to be capable of accommodating up to six 230 kV and two 500 kV lines in the ultimate configuration (as on Pages ES-9 and in Paragraph D.1.2.3), but for the proposed Sunrise Powerlink only one 500 kV and two 230 kV lines would actually terminate at the substation.

12 df 83 D.1 Intro

Chapter #	Page #	Paragraph #	Comment
D.2	5	2	CDFG can also take jurisdiction over riparian/lacustrine vegetation and vernal swales not necessarily limited to stream-flow/wetland vegetation. SDG&E suggests that this be added to the discussion on the first full page on D.2-5.
D.2	5, 99 and 265		The EIR/EIS states that focused plant species surveys were conducted in spring/summer of 2007 where ROE permission was granted, and although some special status plant species were found, the results of the surveys are inconclusive because the poor rainfall conditions likely prevented the germination of many annual species. However, rare plant surveys for the Coastal, Inland Valley and Central were a valid survey due to: 1) high diversity of annual/perennial species observed during the 2007 survey; 2) Observation of thriving rare plant reference populations during the 2007 survey; 3) Nearly all the sensitive plant species with high potential to occur within the proposed alignment were detected during the survey; and 4) Sensitive plant species which had high potential to occur but were not detected (i.e., San Diego Thorn Mint) appear to be excluded from the proposed alignment because of the lack of suitable habitat requirements not rainfall.
D.2	37	Table D.2-3	The EIR/EIS states that San Diego Thorn-mint was regarded as having a high potential to occur for the proposed alignment based off CNDDB records. However, these CNDDB points are located within a specific area with associated clay soil inclusion, and although these locations are near the proposed alignment, the alignment does not have the same suitable soils. The EIR gives a false impression of the likelihood of finding this narrow endemic plant species within the alignment. The EIR/EIS should use the actual assessment (low potential) given in the SRPL 2007 Rare Plant Report which is based on field observations. Incidentally, these CNDDB locations of San Diego thornmint for the Inland Valley Link were observed during the 2007 rare plant survey, and revealed thriving stands of San Diego thornmint, which would support the assumption that rainfall would not be a factor preventing the observation of this species within the alignment during 2007. Furthermore, rare plant potential assessment for many species specified in the SPRL Rare Plant Survey appears to be disregarded in DEIR/EIS.

13 df 83 D.2 Biology

Chapter #	Page #	Paragraph #	Comment
D.2	38	Table D.2-3	The EIR/EIS states that Wart-stemmed ceanothus was listed as not detected for the Inland Valley link. However, Wart-stemmed ceanothus was detected in the Inland Valley during 2007 rare plant surveys. The EIR/EIS should use the results given in the SRPL 2007 Rare Plant Report, which is based on field observations.
D.2	39	Table D.2-3	The EIR/EIS states that Variegated dudleya was regarded as having a high potential to occur. However, Variegated dudleya was regarded as having a low potential by the 2007 SRPL Rare Plant Survey, due to lack of specific habitat requirements. Rare plant potential assessment for many species specified in the SPRL Rare Plant Survey appears to be disregarded throughout the EIR/EIS document. The EIR/EIS should use the results given in the SRPL 2007 Rare Plant Report which is based on field observations.
D.2	39, 40, 41	Table D.2-3	The EIR/EIS states that San Diego button celery, San Diego gumplant, and Willowy monardella, were given a high potential to occur. However, San Diego button celery, San Diego gumplant, and Willowy monardella were regarded as having a low potential to occur by 2007 SRPL Rare Plant Survey, due to lack of specific habitat requirements. Rare plant potential assessment for many species specified in the SPRL Rare Plant Survey appears to be disregarded throughout the EIR/EIS document.
D.2	41	Table D.2-3	The EIR/EIS states that San Diego mesa mint, and Del Mar sand aster were regarded as having a high potential to occur. However, San Diego mesa mint and Del Mar sand aster were regarded as having a low potential to occur (refer to 2007 rare plant report for the SRPL). Rare plant potential assessment for many species specified in the SPRL Rare Plant Survey appears to be disregarded throughout the EIR/EIS document.
D.2	99	1	The EIR/EIS states an incorrect sensitive plant common name. Correct common name of Hulsea californica to read San Diego Hulsea (CNPS 1B), as it is currently labeled as San Diego sunflower which is the common name of Viguera lacinata (CNPS List 4).

14 **d**f 83 D.2 Biology

Chapter #	Page #	Paragraph #	Comment
D.2	99	3	The EIR/EIS states that rare plant surveys for the proposed alignment are inconclusive because the Habitat for special status species may also occur where ROE permission was not granted. However, only a small portion of the Coastal, Inland Valley, and Central Links were not surveyed due to ROE issues. Furthermore restricted areas in the Central Link were dominated by heavily disturbed areas with very limited potential for sensitive species. The EIR/EIS could acknowledge that only a small portion of the proposed alignment was not surveyed because of ROE issues, and that the rare plant surveys in 2007 are valid.
D.2	100	2 - Global	The EIR/EIS states that impacts to Borrego bedstraw are expected within the proposed alignment through Grapevine Canyon. Also, impacts to Del Mar manzanita are expected within coastal link. However, through project design direct impacts to Borrego Bedstraw and Del Mar manzanita can/and should be eliminated. additionally, the number of individuals occurring in the areas of impacts appears greater than estimates given in the SPRL 2007 Rare Plant Report. Solution: EIR/EIS should use data provided by the 2007 Rare Plant Survey, and provide accurate assessments of predicted impacts. There appears to be a global over estimation of impacts to sensitive species throughout the document.
D.2	100-103		The EIR/EIS estimates impacts to CNPS listed sensitive plant species. However, although certain unavoidable impacts to many CNPS Listed sensitive plant species will occur, through project design (i.e. using existing access roads and moving structure locations to avoid impacts) the number of individuals impacted appears to be grossly over estimated for the proposed project. For example, the EIR/EIS's Proposed Project Biological Resource Maps used for illustration of potential impacts to sensitive plant species employs sensitive plant polygons generated from the 2007 SRPL Rare Plant Survey; however, many of these polygons extend past the ROW, but show up on the bio resource maps as existing completely in the ROW, giving an over estimate of impacts to sensitive plants. Because project design will eliminate direct impacts to sensitive species, or at least limit impacts to an extremely low level, impacts would appear to be mitigable through habitat restoration/compensation, and of a Class II nature. Instead, EIS/EIR could use data provided by the 2007 Rare Plant Survey.

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Chapter #	Page #	Paragraph #	Comment
D.2.5	79	1	This discussion assumes all soil alterations (i.e. grading) results in the loss of seed banks in topsoil and topographic alterations which impair the establishment of native vegetation. Topsoil can and often is salvaged for use in revegatation efforts because of the seedbank present in the topsoil and topography changes resulting from soil alterations can enhance or inhibit the establishment of native plant species. SDG&E already salvages topsoil and native whole plants where applicable for use in revegetation efforts which are subject to temporary impacts. The Draft EIR/EIS also incorrectly assumes that disturbed conditions only favor non-native plant species. Many native plant species benefit from disturbance.
D.2.5	80	2	Impact acreages and mitigation ratios are assumed based on preliminary project design and assumed requirements by the regulatory agencies. Revise ratios and acreages to account for no temporal loss of habitat and allowances for final proposed impact acreages based on final project design.
D.2.5	80	3	Impact acreages are proposed based on preliminary project design but actual impact acreages will likely be significantly less with the project final design. The Draft EIR/EIS should state that the acreages are anticipated impact acreages based on the preliminary project design and mitigation acreages will be based on final project design and any impacts to sensitive habitats, plant and animal species, and state and federal waters outside of the final design footprint will be mitigated as appropriate.
D.2.5	80	6	Vernal pools are naturally occurring habitat types which have distinct floral and faunal components distinctly different from adjacent upland habitat types. There are no vernal pools, by the strict ecological definition, which will be impacted by the Proposed Project. The Draft EIR/EIS should state that the majority of the impacts from the Project are to potential San Diego fairy shrimp habitat.
D.2.5	81	1, 2, and bullet points	The number of trees projected to be impacted by trimming and removal is inflated. Trimming of native trees and removal of non-native trees do not by default equate with significant impacts. Mitigation for impacts to native trees should be based on final design specifications with definitions and mitigation ratios for various levels of significance for removal and trimming of native and non-native trees along with a firm definition of the term 'tree'.

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Chapter #	Page #	Paragraph #	Comment
D.2.5	82	1	This discussion assumes any tree with 70% of its crown will die. Many native and non-native tree species can survive greater than 30% trimming or natural fall. Tree mitigation should be based on final design specifications and trees which receive significant trimming (i.e. >30%) should be monitored and mitigated if mortality is directly attributed to trimming.
D.2.5	85	1	This discussion assumes out-of-kind mitigation will be the only method available to mitigate for project related impacts. Out-of-kind mitigation may be necessary in some instances depending on requirements by the regulatory agencies, however, where out-of-kind mitigation is required it would likely be in the favor of higher tier habitat (i.e. impacts to unvegetated channel and preservation of mule fat scrub etc.). Begin identification of potential mitigation lands as soon as possible based on proposed impacts.
D.2.5	85-87	Table D.2-7	Assumption that scrub oak chaparral is dominated by Quercus dumosa within the ROW therefore should be mitigated at a 2:1 ratio because of the sensitivity status of the species. Q. dumosa is not found east of proposed structure C46 in the Coastal Link and scrub oak chaparral is found further east in the ROW. Mitigate Q. dumosa dominated scrub oak chaparral in the Coastal Link at 2:1 ratio and all other scrub oak chaparral impacted within the ROW at 1:1 ratio.
D.2.5	88	1	The DEIS/EIR suggests that restoration shall be maintained and monitored for five years. But the typical requirement is that sites can be signed off before the five year period is complete if the meet established success criteria. The final EIR/EIS should state that monitoring can end before five years if the restoration sites meet the established success criteria.
D.2.5	92	4, 5, 6, and 7	The EIR/EIS states that there are proposed impacts to vernal pools within the ROW. There are only two features that meet the very liberal City of San Diego definition of vernal pool within the ROW. Clarify that the majority of proposed impacts are to road ruts which act as fairy shrimp habitat and may support limited vernal pool plant species.
D.2.1.2.6	50	Table D.2-4	Footnote 2 (superscript) should also define the criteria for high, moderate, low, etc.

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Chapter #	Page #	Paragraph #	Comment
D.2.1.2.6	47	Table D.2-4	Prairie falcon - ARCADIS biologists observed a prairie falcon about 1/4 mile away from the ROW at MP53 on the IMP link during the desert tortoise survey in 2007. Change table to read Present - CEN and IMP links and Moderate - ANZ link.
D.2.1.2.6	47	Table D.2-4	Southwestern willow flycatcher - ARCADIS survey results suggest the potential for occurrence to be low in the ANZ link along the proposed route; however, the table states that it is high. Change table to read Low - IMP, ANZ, CEN, INV, and CST Links.
D.2.1.2.6	47	Table D.2-4	White-tailed kite - ARCADIS biologists observed a pair of white-tailed kites about 1/2 mile east of MP18 in the IMP link during the mountain plover survey in 2007. Change table to read Present - IMP and CEN Links and Reconductor Sycamore Canyon to Elliot 69 kV Line.
D.2.2.1	51	3	"The Imperial Valley Link of the Proposed Project is an approximately 83-mile route that extends from the Imperial Valley Substation near El Centro, Imperial County north and west to the eastern boundary of Anza-Borrego Desert State Park." 83 miles seems to be the length of the original Imperial link. Now that the link has been split into the IMP/ANZ link, the correct length for the IMP link should be approximately 61-miles.
D.2.2.1	51	5	"Special Status Plant and Wildlife Species and Documented Sensitive Biological Resources. The following special status plant and wildlife species were observed or have been documented in the Imperial Valley Link Proposed Project PSA: desert pupfish, flat-tailed horned lizard, burrowing owl, and Swainson's hawk. A total of 22 other special status plant species and 36 other special status wildlife species have potential to occur along this route (see Tables D.2-3 and D.2-4)." ARCADIS biologists observed prairie falcon and white-tailed kite along the IMP link as well - add these two species in after Swainson's hawk. Also, change 36 other special status, to 34 other special status.
D.2.2.1	51	6	"travels across approximately 20 miles of bighorn sheep critical habitat." - The proposed project does not cross any DCH for bighorn sheep in the IMP link (confirmed on Figure D.2-1). The project would cross LESS THAN 20 miles of bighorn sheep DCH in the ANZ (confirmed on Figure D.2-2); therefore this statement should be moved to section D.2.2.2.

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Chapter #	Page #	Paragraph #	Comment
D.2.4.2	76	Table D.2-5	BIO-APM-21 Structures shall be constructed to conform to "Suggested Practices for Raptor Protection on Power Lines" (Raptor Research Foundation, Inc., 1981) to minimize impacts to raptors The guidelines that are recommended and accepted by agencies such as the U.S. Fish and Wildlife Service are the Avian Power Line Interaction Committee (APLIC) guidelines. This APM should reference APLIC 1994 for collision protection and APLIC 1996 and 2006 for electrocution protection.
D.2.11	108	5	ARCADIS biologists observed a prairie falcon about 1/4 mile away from the ROW at MP53 on the IMP link during the desert tortoise survey in 2007.
D.2.11	108	7	ARCADIS biologists observed a pair of white-tailed kites about 1/2mile east of MP18 in the IMP link during the mountain plover survey in 2007.
D.2.11	109	2	ARCADIS biologists observed yellow warblers in the Coastal and Central links - per the WIFL survey report at Site 2 (roughly MP145-146 Coastal Link) and 7 (roughly MP107 Central Link) during the southwestern willow flycatcher surveys in 2007.
D.2.11	125	3	Impact B-7g Desert tortoise this impact is classified as Class II; however, desert tortoise surveys were conducted in 2007 and no tortoises nor burrows were located. The fact that no burrows were found is strong evidence that tortoises have not occupied this "habitat" for years; paired with data from the ABDSP that indicates the only tortoise in this area were introduced (pets), these are not significant impacts to the tortoise. It should be classified as a Class III impact.

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Chapter #	Page #	Paragraph #	Comment
D.2.11	127	3	Impact B-7h The EIR/EIS states "One of these nest areas occurs less than 4,000 feet from the Proposed Project route in the Anza-Borrego Link, and there is direct line-of-sight between this nest area and the project. Impacts to this eagle pair would be significant and not mitigable to less than significant levels (Class I) because of the distance between the nest area and the project (less than 4,000 feet) and the direct line-of-sight that would occur. Implementation of Mitigation Measure B-7h, which states that no construction or maintenance activities shall occur during the eagle breeding season, is still required to minimize the impact, however." This impact should be categorized as Class II. There are several issues with classifying this impact as Class I. 1) 4,000 foot buffer is arbitrary and does not seem to have any citations to back it up. Typically, raptor nests (including eagle nests) have a buffer of 1/4 to 1/2 mile around them only when active.
D.2.12	142	2	Pandion, SDG&E's raptor expert, has done studies on the effects of noise on birds and has provided comments on that study. The 60 dB noise threshold that FWS uses is based on the Frank Aubrey noise study that was conducted on least bell's vireo in the 1980's. FWS has expanded that threshold to include all species and is now a standard requirement for construction projects. Newman has found that birds are not disturbed by the noise level but rather the noise frequency and the 60 dB noise threshold seems to be without basis. Please see his comments and recommendations. Additionally, impacts to migratory birds from noise are not a violation of the Migratory Bird Treaty Act; therefore, remove the requirement to have a qualified acoustician conduct surveys with a biologist. Nest surveys should still be completed to ensure that active nests, birds, or eggs are not physically destroyed from construction activities, but this requirement to conduct breeding bird surveys should be limited to the ROW only.

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Chapter #	Page #	Paragraph #	Comment
D.2.16, D.2.16	150-151	last , 11	"Maintenance activities (i.e., all but Nos. 2 and 3 above), would impact the coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and burrowing owl if the noise threshold (i.e., 60 dB[A] Leq hourly) is met or exceeded at the edge of their nesting territories during their breeding seasons." Noise impacts on burrowing owl, because it is not listed under the FESA or CESA, is not a violation of the MBTA so this species should be removed from this requirement. The MBTA prohibits the following, "Unless and except as permitted by regulation, it shall be unlawful to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, or any part, nest, or egg
			of any such bird (16 USC 703)" Take under the MBTA, as defined in 50 CFR 10.12 is: "Pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt any of these acts". There is no provision prohibiting "harassment" like there is in the ESA. Therefore, indirect disturbance resulting from noise (construction or maintenance) to birds covered under the MBTA (such as the burrowing owl) is not a "take" and therefore is not a violation of the MBTA.
D.2.21.1, D.2.21.2, D.2.21.3	274, 285, 296	9, 4, 4	Impact B-1: Construction activities would result in temporary and permanent losses of native vegetation (Class I for sensitive vegetation and type conversion; Class II for vegetation management; Class III for non-sensitive vegetation) If there are no special status species, Class I should not be assigned for sensitive vegetation.
D.2.21.1, D.2.21.2, D.2.21.3	276, 287, 298	last, last, last	The discussion on Type Conversion seems to be a moot point.  There are references to vegetation being fire-adapted in San Diego County but this alternative is in the desert in Imperial County, which has a lower likelihood of catastrophic fire. Suggest removing as an impact in the Final EIR/EIS.
D.2.21.1, D.2.21.2, D.2.21.3	277, 288, 299	3, 3, 3	Mitigation Measures for Impact B-1: Construction activities would result in temporary and permanent losses of native vegetation. Requires restoration/compensation for impacted sensitive vegetation communities. There should not be any mitigation because there are no sensitive vegetation communities.

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Chapter #	Page #	Paragraph #	Comment
D.2.21.1, D.2.21.2, D.2.21.3	278, 289, 300	4, 3, 3	Impact B-5 Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants (Class I). Text states no listed or sensitive plants. Remove impact from Final EIR/EIS.
D.2.21.1, D.2.21.2, D.2.21.3	279, 290, 300	2, 2, last	Remove Mitigation Measures B-1a, B-1c, B-2a, and B-5a because no listed or sensitive plants occur so no mitigation is appropriate.
D.2.22.1	320	3	The Partial Underground 230 kV ABDSP SR78 to S2 Alternative would permanently impact 0.26 acres of occupied vireo habitat and would temporarily disturb 0.29 acres of occupied vireo habitat. This should say flycatcher instead of vireo. This paragraph was taken from the Impact B-7e "Direct or indirect loss of southwestern willow flycatcher or direct loss of habitat (Class II)"; therefore this is a typo and vireo should be replaced with southwestern willow flycatcher.
D.2.22.2	344	last	"No desert tortoise, or sign of desert tortoise, was observed during the survey. Still, the desert tortoise is a mobile species and could move into the alternative area prior to construction. Any direct or indirect impact to the desert tortoise or its occupied habitat (e.g., vehicle crushing a tortoise, occupied habitat removal) would be significant according to Significance Criterion 1.a. (substantial adverse effect on one or more individuals of a species that is federal or State listed). These impacts would be significant but mitigable to less than significant levels (Class II) with implementation of Mitigation Measures B-1a, B-1c, B-2a, and B-7g." Impact B-7G: Direct or indirect loss of desert tortoise or direct loss of habitat (Class II) - Based on the historic data and field survey data this impact should be changed to Class III. The likelihood of tortoise occurring here is low and the habitat is not occupied, therefore this is not a significant impact.

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Chapter #	Page #	Paragraph #	Comment
D.2.22.2, D.2.23.1	345, 361	2, last	"Impact B-7H: Direct or indirect loss of golden eagle or direct loss of habitat (Class I for nests within 4,000 feet; Class II in existing transmission corridor)." Impacts to active nests can be mitigated to less than significant levels by limiting construction activities within 4000 feet of a nest during the nesting season. This should be a Class II impact. Page D.2-377 assigns a Class II impact to the golden eagle "because the project would be underground within 4,000 feet of the nest area". It was previously stated the golden eagle's have acute eyesight and collisions are not an issue. Assuming this is Class I because of potential collision (this is inferred not stated in the document), this is mitigable to less than significant levels. There are several issues with classifying this impact as Class I: 1) 4,000 foot buffer is arbitrary and does not have any citations to back it up. Typically, raptor nests (including eagle nests) have a buffer of 1/4 to 1/2 mile around them only when active.
			Therefore, if SDG&E conducts nesting surveys during the appropriate season and finds an active nest, they could avoid construction within 1/4 mile during nesting season and not disturb the eagles. If it is inactive, there should be no restrictions on construction even during nesting season. 2) SDG&E would avoid construction within the buffer zone at active eagle nests. This is a Class II impact that is mitigable to less than significant levels.
D.2.22.2	350	2	For Mitigation Measure B-7g "Implement appropriate avoidance/minimization strategies for desert tortoise," The Final EIR/EIS should add "when appropriate" to the end of the sentence. Do this for proposed action and all alternatives along the proposed action.
D.2	D.2-1	4	A pre-construction protocol survey measuring special status species within 500 feet of construction activities is excessive. (500 ft. is too great, recommend 300 ft. as standard practice. There is no appreciable benefit with the additional 200 ft.)
D.2	D.2-1	4	The protocol surveys (same as comment #2) regarding avoidance/minimization measures for special status species are not needed if already done for EIR/EIS. Recommend modified protocol surveys with reduced frequency for those areas with existing ROW; full protocol surveys would be done for new ROW areas.
D.2	throughout		"quino" should read: "Quino"

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Chapter #	Page #	Paragraph #	Comment
D.2	D.2-2	2	San Diego County has prepared a draft subarea plan for MSCP North and is drafting MSCP East. Both plans provide a landscape level context for SRPL. While only a draft, a significant amount of specialized information could be integrated into the SRPL EIR/EIS. For example, the Sunrise project is treated as if it is to be constructed independently of the landscape-level habitat conservation plan context through which it traverses. SDG&E transmission corridors have been used since 1996 as the "skeleton" for the assemblage of the San Diego regional preserve system. The EIR/EIS treats the Sunrise project as biologically negative, rather than recognizing the positive role major parts of the existing SDG&E transmission grid fills today in the MSCP and MHCP plans. For example, the only good habitat connection remaining between Oceanside and Carlsbad is along the SDG&E right of way. Resource surveys for the Sunrise project confirmed the effectiveness of SDG&E's operational practices in avoiding impacts to biological resources, insofar those studies found a diversity and richness of habitat
			coexisting with the long standing utility use of the land.
D.2	D.2-2	4	line 7 sentence should read: "However, subsequent engineering done for the Proposed Project showed that there would be impacts to fairy shrimp habitat, and by the time the impacts were determined, it was too dry to conduct the surveys."
D.2	D.2-9	2, bullet-point 4	Survey areas not always including all of the proposed impact areas is not a significant problem, as long as construction changes can be made to avoid impacts in the field.
D.2	D.2-9	3	last line: "species would be assumed to be present (where appropriate), and mitigation would be developed based on that assumption" overstates probable impacts to the point of misrepresenting the scope of likely actual impacts. Recommend a more explicit disclaimer that points out that pre-construction surveys will provide accurate information and that these analyses indicate a very low level of impacts.

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Chapter #	Page #	Paragraph #	Comment
D.2	D.2-11	2	Because the climate in the PSA is extremely variable, and because of the great distance SRPL travels, a regional-scale mitigation package is most appropriate for the project. Species-by-species, habitat-by-habitat mitigation will not allow regional planning to take full advantage of the synergies attendant to comprehensive resource management when SDG&E coordinates its offsite mitigation package with state, federal and local regional planning. Recommend especially close coordination with the County of San Diego.
D.2	D.2-11	3	USFWS has found traversing habitat areas acceptable in all Section 7 consultations carried out for SDG&E. As long as operational protocols are followed, impacts have been found acceptable.
D.2	D.2-11	3	Change "Multiple Species Habitat Conservation Plan" to "Multiple Species Habitat Conservation Program"
D.2	D.2-15	2	last sentence: "eight more species currently meet the criteria to be listed but have yet to receive the designation" needs further explanation here as to why this has not happened
D.2	D.2-17	1	Change "void" to "devoid", "The MSCP designates regional preserves intended to be mostly devoid of development activities, while allowing development of other areas subject to the requirements of the program.
D.2	D.2-17	2	The section on Multiple Species Habitat Conservation planning needs to be expanded to properly address the role played by linear utilities, especially water, gas, and electric providers, who have all been reducing operational impacts in numerous ways (e.g., helicopter construction and maintenance to reduce roads and trave disruption) since the mid-1990's in response to an increased level of endangered species listings. The reduction in impacts has been also accompanied by improvements in onsite restoration. Further, the somewhat unique ability of utilities to fulfill key mitigation needs at a regional level while still minimizing the ground level impacts of their activities has facilitated the completion of regional habitat preserves ahead of schedule. For example, SDG&E and the San Diego County Water Authority have provided the funds to acquire the first pieces of land in the San Diego National Wildlife Refuge, key California gnatcatcher linkage areas in East San Diego County, and the City of San Diego's largest block of gnatcatcher core habitat.

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Chapter #	Page #	Paragraph #	Comment
			Due to the regional habitat planning context that has been the approach of regional and local government since 1991, planning for linear utilities has always been part of the MSCP process since its inception. In many cases, utility rights of way were the initial (and sometimes sole start points) elements of MSCP and MHCP preserve planning. This crucial interrelationship needs to be expanded in the Final EIR/EIS.
D.2	D.2-17	5	Change "County of San Diego MSCP Subarea Plan" to "County of San Diego MSCP Subarea Plan South"
D.2	D.2-18	2	In regards to the North San Diego County MSCP Subarea Plan, the plan is notable for its lack of both large blocks of habitat and the interconnections between the blocks of habitat. Therefore, utility rights of way would be useful in connecting areas within the plan.
D.2	D.2-19	4	Change first sentence of "Sycamore Canyon/Goodan Ranch Open Space Preserve" to read: "The Sycamore Canyon/Goodan Ranch Open Space Preserve (a joint City of Santee, Poway, and County of San Diego preserve) covers approximately 1,820 acres in southeast Poway."
D.2	D.2-20	2	change "Pomo" to "Pamo"" the Focused Planning Area (FPA) for the park extends along a 55-mile corridor that encompasses the San Dieguito River Valley and its major tributary canyons, as well as Lake Hodges, San Pasqual Valley, Boden Canyon and Pamo Valley, Lake Sutherland"
D.2	D.2-20	3	add "large areas of" "The INRMP describes the biological resources on MCAS Miramar and designates five levels of management areas (MAs): MA1 contains the largest extant areas of vernal pools in San Diego County;"
D.2	D.2-21	3	Regarding USFWS designation of the Quino Checkerspot Butterfly, it is being redesignated in spring 2008 by Court order. This should be included in the Final EIS/EIR.
D.2	D.2-23	3	Under the section "The PSA includes upland and wetland vegetation community types. All Chaparal Comunity should not be deemed sensitive. Regional habitat planning generally considers only southern maritime chaparral sensitive. Other types such as chamise and mixed chaparral are assigned the least sensitive category for native habitat types. Recommend moving to the less sensitive list.

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Chapter #	Page #	Paragraph #	Comment
D.2	D.2-23	4	Under heading "All vegetation communities in the PSA are considered sensitive with the exception of those that occur in the following areas" Eucalyptus woodland can be very sensitive if certain raptors nest in it. Recommend revising to provide more accurate characterization of the blurring between native and nonnative habitat value. A significant example is for many years now, non-native grassland has filled the role that native grassland used to fill, and while its species constituents are problematic in some ways (fire risk), it is more appropriate to see natural land (native or non-native) as all having a role to play in regional planning. Recommend revising the text to reflect this reality.
General Comment for Proposed Project			Many of the impacts to biological resources cited throughout the DEIR/EIS are overstated. Impacts are not concentrated in one area, as a large residential or commercial development, but are "diffuse" over a large area. Three of the linkages (Desert, Central and Inland Valley) traverse large areas of extensive native habitats where the impacts would even be more "diffuse". For a majority of two of the links (Coastal, Inland Valley), the project is sited in an existing ROW. For a large portion of the Desert East Linkage, the proposed project parallels an existing utility corridor. In these areas the Proposed Project follows corridors originally designed and approved for this specific use. There are approximately 450 acres of permanent impacts to native habitats from the Proposed Project. These impacts extend over a 150-mile corridor, many of which are adjacent to existing transmission lines that, as the results of the 2007 surveys indicate, support a high diversity of species, both common and rare despite the presence of existing transmission lines.
			There are approximately 1,000 acres of temporary impacts, most of which would be restored. In the western portion of the San Diego County, existing SDG&E rights of way, and mitigation lands play a critical role in the overall preserve network within the MSCP and MHCP Plan areas yet this project is assessed as having a relatively high number of Class I impacts to biological resources.

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Chapter #	Page #	Paragraph #	Comment
General Comment for Proposed Project and Alternatives			All of the alternatives were assessed as having Class I impacts for sensitive vegetation, listed or sensitive plant species and non-listed wildlife species. The analysis was not based on quantification, i.e., no threshold level in terms of amount of habitat lost, or number of individuals lost, for the impact to be considered Class I. Any direct loss, and in some instances, assumed potential loss, was considered a Class I despite differences in the amount and level of impacts to these resources from all the different alternatives. Since all were assessed equally for these resources despite different levels of impacts, impacts to these resources had no "weight" in the analysis and hence no effect on the selection of the environmentally superior alternative (since each alternative was assessed the same for these resources, each of these canceled themselves out).
General Comment for Proposed Project and Alternatives			The Proposed Project and all of the alternatives were assessed as having Class II impacts for jurisdictional waters and wetlands. Since the primary criteria for ranking the environmentally superior alternative was the number of Class I impacts, impacts to jurisdictional waters were not considered for the selection of the environmentally superior alternative despite likely (since delineations were not conducted on all alternatives) significant differences between the alternatives.
D.2	71-72	entire pages	The Significance Criteria (Section D.2.4.1) do not seem to provide any criteria for what constitutes a Class I impact. Many of the Class I impacts are not based on any scientific data or justifications (see specifics below). In fact several of the Class I impacts are based on speculative conclusions without any data to support the statements e.g., inconclusive surveys, uncertainty over available mitigation lands, etc.

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Chapter #	Page #	Paragraph #	Comment
D.2	85 &Table D.2-7 pp. 85-87;	1st on p.85	The DEIR/EIS states that "Based on the data in Table D.2-7 and Mitigation Measure B-1a, nearly 1,360 acres of mitigation land will be required to fully mitigate this impact. It is anticipated that adequate acreage of mitigation land will be available for this project based on the availability of potential mitigation land in ABDSP, FTHL MAs, unincorporated areas of San Diego, and other jurisdictions. The final mitigation package for this project must be acceptable to the CPUC, BLM, USFS, CDFG, State Parks (for impacts to ABDSP), and USDA Forest Service (for impacts to forest lands). However, due to the large number of vegetation types; the large acreage of mitigation; and the vast area, different jurisdictions, and biomes that a long linear project like this one traverses, it is not likely that all the sensitive vegetation communities can be mitigated "in-kind" or that all the mitigation will occur within close proximity to the impacts. Therefore, the impacts to sensitive vegetation communities would be significant and are not mitigable to less than significant levels (Class I)."
			The statement that there is enough acreage in San Diego to mitigate but not likely enough in close proximity to the impacts seems contradictory. As a linear project the impacts and hence mitigation (1,360 acres) are spread out over a large area and certainly over a 150 mile stretch there is very likely to be high quality available properties in close enough proximity to the site to capture "in-kind" communities. There is no data to support the assumption that there are not. The current status of declining property values in the County, due to the recent fires and financial lending crisis, only increases the probability of more potential mitigation lands becoming available.

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Chapter #	Page #	Paragraph #	Comment
D.2	85 &Table D.2-7 pp. 85-87;	1st on p.85	Similarly, there is no data to support the assumption that there is not enough mitigation land to mitigate all communities in-kind. Of the approximately 50 different vegetation communities listed in Table D.2-7, only four communities, Sonoran creosote bush scrub (approximately 700 acres), northern mixed granitic chaparral (116 acres), coast live oak woodland (88 acres) and Engelmann oak woodland (56 acres) have offsite mitigation requirements greater than 50 acres. These are still relatively common communities in San Diego. Mitigation sites should be available for these. All of the remaining community mitigation requirements are under 50 acres each. It is reasonable to assume that 50 acres of in-kind replacement habitat can be found for each of these communities within close proximity to the project site. With the exception of the desert communities, many of the remaining mitigation requirements could be feasibly fulfilled with the acquisition of 1-2 high quality properties. The desert habitats may require more properties, but given the extensive expanses of many of these
			habitats, and the checkerboard land ownership pattern of public and private lands along or in the immediate vicinity of the Proposed Project, (ABDSP actively acquires minor and major in-holdings) it is reasonable to assume that adequate lands are available for mitigation that would mitigate both in-kind (capturing high amounts of both floristic and genetic diversity of the impacted communities) and in reasonable distance from the impacts.

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Chapter #	Page #	Paragraph #	Comment
	85 &Table D.2-7 pp. 85-87;	1st on p.85	Because this is a long-linear project, the impacts and mitigation requirements (1,360 acres) are also spread out over the 150 miles so that the mitigation requirement would be relatively small in any geographic area. However, the type of mitigation that would result from the logic presented in the DEIR/EIS (depending on what exactly "close proximity" means) could result in the type of mitigation, i.e., postage stamp preserves, that are no longer acceptable as likely more, smaller properties would be required the "closer" the distance restriction. There is no data given to determine what "close proximity" for the distance between mitigation lands and project impacts should be. Floristic and genetic composition vary over gradients, yet studies on the vegetation communities and their representative species of concern are either lacking or scant at best. Any qualitative estimate on "close proximity" even the intuitive axiom "closer is better" is still highly speculative in the absence of data. Instead of making "close proximity" a high priority (i.e. a Class I impact if
			not met), which may result in over valuing lower quality habitats, the highest priority should be given to the acquisition of high quality habitats, within the County, that preserve significant biological resources that would be impacted by the project, but could also provide important additions to existing preserve system(s). The offsite acquisition of 1,360 acres of high quality habitat that meets these criteria would mitigate the impacts to sensitive vegetation from the Proposed Project to a Class II.

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Chapter #	Page #	Paragraph #	Comment
D.2	85	3	The DEIR/EIS states that "Much of the western end of the project route extends through the MSCP area, where mitigation ratios vary depending on the location of the impact and the location of the mitigation. In this case mitigation ratios are conservatively calculated based on an assumption that all impacts occur in preserve areas and that all mitigation will occur in preserve areas. The assumption that all impacts will occur in preserve areas is conservative since all impacts will not occur there, but the higher ratios are being used to help offset the impacts to the preserves that regional conservation plans rely on." This is disproportional mitigation. The project route was known, the MSCP preserve areas have boundaries, this project shouldn't have to mitigate for impacts outside of the preserve as if they were inside the preserve. That is why there are different ratios for the location of impacts.
D.2	82	1	The DEIR/EIS states that for the Proposed Project "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 for Mitigation Measure B-1a for restoration and/or acquisition may not be available." See Comments above regarding availability of mitigation land.
D.2	82	2	The DEIR/EIS states that "If the project were to cause a fire or inhibit fighting of fires and this leads to type conversion of sensitive vegetation communities, the impact would be significant (Class I) according to Significance Criteria 1and/or 2". These significance criteria do not define why such an impact is a Class I. Vegetation type conversion occurs as the result in an increase in frequency and sometime intensity of fires, primarily due to changes in land use at the landscape level. So there are a lot of contributing factors to setting the stage for type conversion. Type conversion in southern California cannot be attributable to a single fire event, as previous fire history and land use both at the landscape level are just as much contributing factors. The analysis does not attempt to provide any threshold level, only assumes that any conversion is a Class I.

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Chapter #	Page #	Paragraph #	Comment
D.2	99	3	The DEIR/EIS states that for the Proposed Project, "although some special status plant species were found, the results of the surveys are inconclusive because the poor rainfall conditions likely prevented the germination of many annual species. Habitat for special status species may also occur where ROE permission was not granted." And "Because it is not possible to completely assess the impacts to all special status plant species (i.e., those with potential to occur [see Table D.2-3] since the survey results were inconclusive and some areas could not be surveyed), and because the possibility exists that the results of complete conclusive surveys would result in a significant impact, the overall impacts to special status plant species are considered significant and not mitigable to less than significant levels (Class I)". These statements are misleading and in some cases without justification for the following reasons:
D.2	99-102	3	No assessments were made for individual species to determine significance on a individual species basis. Implying that because an assessment for every sensitive species could not be made so no assessment of any sensitive species can be made has no justification. The statement that the 2007 survey data for such species as summer holly, Del Mar manzanita, Borrego bedstraw, San Diego barrel cactus, Nuttall's scrub oak, and other large woody or succulent perennials is inconclusive due to low precipitation and annuals didn't germinate has no justification. These are long-lived relatively large species, and population sizes are not going fluctuate due to short-term drought conditions. The 2007 survey data presented on pages 99-102 is more than adequate to assess
			the impacts to these species and for species with similar life-forms that have the potential but were not observed during the surveys. Given their life form these species would have been observable (and is stated as such in Table D.2-7 of the DEIR/EIS). There is no justification for claiming that the survey results were not conclusive for assessing these species.

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Chapter #	Page #	Paragraph #	Comment
D.2	99	3	Floristic diversity, including ephemeral species which would likely be the most affected by the drought conditions were surprisingly good in the Coastal, Inland Valley and Central Links. A total of 492 taxa were observed during the 2007 rare plant surveys of the Proposed Project which accounts for 21% percent of the County's Flora (Rebman and Simpson, 2006). This is an extremely high diversity considering that the surveys did not extend east of Tamarisk Grove Campground in ABDSP and this was just a general inventory and was not meant to be a complete inventory. Twenty four sensitive plant species were observed during surveys in 2007. These include several CNPS List 4 species that were not addressed as sensitive species in the DEIR/EIS, nor are they required to be given their relatively low sensitivity status. The point to be made is that despite the low rainfall a high number of: 1) plant species; 2) sensitive plant species; and 3) ephemeral species, e.g. annuals, and geophytes were observed along the Proposed Project in western San Diego County.
			These include sensitive annuals such as delicate clarkia and San Diego thornmint; and perennial herbs such as felt-leaved monardella, San Felipe monardella, San Diego button celery, San Diego sunflower. Lastly as part of the rare plant survey protocol on the Proposed Project, several known sensitive plant reference populations were periodically visited to determine their phenological state. Though population levels at these sites would be expected to be lower than in other years, these populations seemed to be fairly robust in size and distribution. Though no survey can ever be "scientifically conclusive", and subsequent surveys in more favorable climatic years may have different results, at least for the Coastal, Inland Valley and Central Linkages along the Proposed Project, the data is more than sufficient to analyze the impacts to sensitive plant species. These impacts should be Class II because they can be mitigated.
D.2	102	Last	Please define the criteria of "complete conclusive surveys". The DEIR/EIS makes the statement that the survey results were inconclusive for the Proposed Project, but does not define what "complete conclusive surveys" are. Mitigation Measure B5-a states that "A qualified biologist shall survey for special status plants in the spring prior to construction activity…"

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Chapter #	Page #	Paragraph #	Comment
D.2	102-103	Last on 102; 1st on 103	Even if "complete conclusive surveys" were possible and these surveys determined that there were significant impacts, the DEIR/EIS assumes that any of these potential impacts are inherently unmitigable. This conclusion is not supported by any data and should be recharacterized to allow for mitigation.
D.2	109	Last	The DEIR/EIS states that for the Proposed Project "Most of the non listed species habitats are sensitive vegetation communities (Table D.2-7); the mitigation for the loss of sensitive vegetation communities (Mitigation Measure B-1a) would normally compensated for the potential loss of these sensitive species and their habitats. However, since adequate land required by Mitigation Measure B-1a may not be available, the impacts to non-listed wildlife sensitive species are considered significant and not mitigable to less than significant levels (Class I)." These findings are overstated for the following reasons:
			The argument posed in the DEIR/EIS for the reasoning for the Class I impacts to sensitive vegetation is "it is not likely that all the sensitive vegetation communities can be mitigated "in-kind" or that all the mitigation will occur within close proximity to the impacts. Therefore, the impacts to sensitive vegetation communities would be significant and are not mitigable to less than significant levels (Class I)." The argument for a Class I impact for wildlife based on an assumption that "in-kind" for sensitive habitats is flawed and unlogical. Even if mitigation for all the sensitive habitats cannot be accomplished to meet the "in-kind" scenario that the DEIR/EIS envisions, this has absolutely no bearing on the ability to acquire habitat for mitigation for sensitive wildlife species as many reside in more than one habitat. Not meeting the in-kind requirement sensitive vegetation (as proposed in the DEIR/EIS) doesn't automatically mean that the mitigation for wildlife species cannot be met.

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Chapter #	Page #	Paragraph #	Comment
D.2	107-109	All	The DEIR/EIS does not assess mitigation habitat compensation for individual non-listed wildlife species. As such, not stated in the DEIR/EIS what the actual mitigation would be for these non-listed wildlife species. The DEIR/EIS however assumes that there is potentially unavailable mitigation for sensitive vegetation, and hence unavailable mitigation for sensitive wildlife species and hence Class I impacts. This is speculative reasoning without any justification, i.e., it's not stated what habitat compensation acreage should be. By not assessing individual impacts and compensation the DEIR/EIS and using the acreage numbers in Table D.2-7, in essence the benchmark threshold for determining between Class I and Class II, the analysis assumes that all the sensitive habitats impacted were occupied by sensitive wildlife species. This assumption results in an over-estimation of impacts as indicated by the species-by-species assessment on pages 107-109 which indicates that 13 non-listed sensitive wildlife species observed during the surveys of the Proposed Project.
			Relatively small numbers of these individuals were observed, as would be expected with a narrow ROW and many of the species were assessed as not being affected. If species by species mitigation were calculated in the DEIR/EIS it would have resulted in lesser impacts to occupied habitat and lower mitigation requirements that stated in Table D.2-7. The lower offsite habitat mitigation requirement would further argue that impacts to non-listed sensitive wildlife species should are Class II.

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Chapter #	Page #	Paragraph #	Comment
D.2	111	2&3	The DEIR/EIS states that for the Proposed Project impacts to the flat-tailed horned lizard "are significant and not mitigable to less than significant levels (Class I) because adequate mitigation land may not be available." Again this analysis is skewed because the assumption is based on speculation, i.e. that there may not be available land, with no data presented to support this assumption. Additionally, the DEIR/EIS correctly states that the FTHL Rangewide Management Strategy allows for "compensation for FTHL habitat impacts could involve purchase of FTHL habitat and/or monetary compensation." Since monetary compensation is an option as defined by the FTHL Rangewide Management Strategy, an assessment of all Class I impacts to the FTHL (mortality, harassment, loss of habitat, predation) because adequate mitigation land may not be available is unjustified as it assumes that the entire mitigation compensation to be habitat acquisition. Impacts to this species should also be a Class II.
General Comment for Proposed Project and Alternatives			The alternatives were ranked strictly by Class I impacts. Many of the biological Class I impacts were assessed strictly by various assumptions that with a reassessment of the existing analysis to include the implementation of APM's, may turn out to be Class II, Class III or no impact, which could alter the eventual ranking as there was only a difference of approximately 10 Class I impacts between the preferred alternatives compared. The assessment did not appear to take into account the implementation of APM's which promote pre-construction studies and relocation of facilities to avoid impacts as the primarty mitigation directive, which has been incorporated into the project, automatically changing the Class I impacts minimally to Class II.
General Comment for Proposed Project and Alternatives			Additional data, is likely to reduce the number of Class I impacts assessed in the DEIR/EIS. This is because the DEIR/EIS assumed worst-case scenario, i.e. occupied habitat, etc., for areas not surveyed or not complete enough. Many of these areas are just as likely to be unoccupied as occupied especially for assumptions of occupied habitat in areas generally outside of the known range of some of these species.

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Chapter #	Page #	Paragraph #	Comment
General Comment for Proposed Project and Alternatives			The Class I impacts above (B-1, B-5, B-7, B-7A, B-7B, B-7H, B-7J, B-7L, B-7O, B-10, B-12) were all assessed equally across all of the alternatives, i.e., all the alternatives had a Class I impact on native vegetation, sensitive plants, etc. In reality, impacts to all these resources would not be the same from each alternative and in combination with the future surveys a reanalysis and comparison of the alternatives could alter the ranking system.
D.2	113, 256	D.113 paragraph 1 D.256 Mitigation Measures B-1a thru B-7c	The EIR/EIS overstates Class I Impacts on bighorn sheep. These include: 1) personal communications; 2) the Recovery Plan for desert bighorn sheep in the Peninsular Ranges - an outdated document that contains much speculation regarding threats to bighorn sheep and a Critical Habitat mapping approach that was recently rejected by the Court; and 3) a single peer reviewed publication (Rubin et al. 1998) was cited in support of presumed threats, however, the quantitative analyses in this paper only dealt with bighorn distribution and the delineation of subpopulations. Rubin, E.S., W.M. Boyce, M.C. Jorgensen, S.G. Torres, C.L.Hayes, C. S.O'Brien, and D.A. Jessup (1998) Distribution and abundance of bighorn sheep in the Peninsular Ranges, California. Wildlife Society Bulletin 26:539–551.
D.2	113-116 and throughout document		No mention is made of the fact that bighorn sheep Critical habitat a court remanded for new rule making, resulting in the Proposed Rule (USFWS 2007) to revise Critical Habitat for bighorn sheep in the Peninsular Ranges. This is significant because the proposed Critical Habitat designation would substantially reduce the amount of Critical Habitat traversed by the proposed project and alternative alignments. Offsite mitigation would be reduced. Consider both the current and proposed Critical Habitat designations in weighing alternatives.
D.2	113-116 and throughout document		The Draft EIR/EIS makes statements regarding impacts to justify a Class 1 Unmitigatable Impact to bighorn sheep (these are listed below):

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Chapter #	Page #	Paragraph #	Comment
D.2	113-116 and throughout document		There is no documented basis that bighorn sheep abandoned lambing habitat during construction activities. There are examples from Palo-Verde Devers No. 1 that bighorn sheep ewes were either not affected by transmission line construction or were attracted to it. (e.g. "PBS were found to be more sensitive to disturbance during spring and fall, corresponding with the lambing and rutting seasons, and abandonment of lambing habitat was observed while construction activities were ongoing (USFWS, 2000)."). Smith, E.L., Gaud, W.S., Miller, G.D., and M.H. Cochran (1986) Studies of desert bighorn sheep (Ovis canadensis mexicana) in western Arizona: Impacts of the Palo Verde to Devers 500 kV Transmission Line. Final Report-Volume II. E. Linwood Smith and Associates, Tucson, AZ. Submitted to Southern California Edison Co. and Arizona Public Service Co. 51.
D.2	113-116 and throughout document		The EIR/EIS speculates that: "Moist air and rain may cause unstable irregularities in the electrical field around conductors and insulators of transmission lines, which can generate a crackling noise. The effects of this noise on PBS are not known. PBS could avoid the area subjected to the noise. Also, the noise could prevent PBS from hearing approaching predators.") There was no report of any negative effect from noise from the Palo Verde Devers No. 1 study. Bighorn sheep crossing rates increased after the transmission line was completed and energized. There was no mention of noise in an investigative report of bighorn sheep declines in the Kofa National Wildlife Refuge nor in management plan for these mountain ranges recently authored by the Arizona Game and Fish Dept. and US Fish and Wildlife Service (2007). Arizona Game and Fish Department (2007) Kofa Mountains Complex predation management plan. Unpublished report, Arizona Game and Fish Department, Phoenix, Arizona, April 2007.

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Chapter #	Page #	Paragraph #	Comment
D.2	113-116 and throughout document		It is suggested that the cited threats will preclude recovery of the ESA listed bighorn sheep population: (e.g. " All of these potential effects would adversely affect survival and recovery of the species."). Although there is no quantitative basis for inferring that bighorn sheep population recovery in the Peninsular Ranges would be precluded, there is an potential Endangered Species Act (ESA) legal argument being presented here in the EIR/EIS. A recent 9th Circuit Court decision raises the bar on jeopardy analyses such that these must show that actions will not preclude the recovery of species. The Final EIS/EIR should state important counterarguments to these assertions include: 1) the lack of quantitative basis for these hypothetical worst-case effects; 2) noting that bighorn sheep in the Peninsular Ranges are already at recovery levels (25 ewes per subpopulation; > 700 bighorn sheep overall; with the exception of the San Jacinto subpopulation in the
			northernmost part of the range); 3) previous construction of the existing transmission line and SR 78 did not result in the decline of this population; 4) no negative effects were reported from the construction or operation on Palo-Verde Devers No. 1.; and 5) mitigation measures could enhance this population in such a way that it will be better off than before transmission line construction.
D.2	113-116 and throughout document		The assertion that metapopulation dynamics (e.g. movement of bighorn sheep between populations which contributes to genetic exchange) will be disrupted is unsupported by any empirical evidence. For example, the EIR/EIS asserts: "The other aspect deals with the overall impacts to the population affected by the Proposed Project. One of the goals for recovery of the PBS is to reconnect the entire range of the PBS metapopulation. A metapopulation maintains stability through unobstructed movement between geographically separated subpopulations (such as the southern San Ysidro Mountains ewe group). This interchange allows natural levels of genetic heterogeneity and demographic augmentation that compensates for temporary declines at the subpopulation level and maintains population stability over time across the entire metapopulation.") However, experience with Palo Verde Devers No. 1 showed no such effect with limiting crossings (Smith et al. 1986), nor have any been reported from the Old Dad Mountains of California where a transmission line

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			traverses part of bighorn population range. Transmission lines are inatimate objects in the environment that pose no threat to bighorn sheep or impediment to their crossing.
D.2	113-116 and throughout document		(For example, the EIR/EIS asserts the following: " 1.a.) the Proposed Project would have a substantial adverse effect through any impact to one or more individuals of a federal or State listed species; 1.f.) the Proposed Project would have a substantial adverse effect by any impact that directly or indirectly causes the mortality of special-status wildlife species; 4.a.) the Proposed Project would have a substantial adverse effect by preventing access to foraging habitat, breeding habitat, water sources, etc.; 4.b.) the Proposed Project would have a substantial adverse effect by interfering with connectivity between blocks of habitat or block or interfere with a wildlife corridor; and (4.c.) the Proposed Project would have a substantial adverse effect by fragmenting a species'
			population."). These purported impacts are overstated/or unsupported.
D.2	113-116 and throughout document		The EIR/EIS proposes as series of unnecessary restrictions on construction and maintenance that constrain these into a narrow range of dates that will result in construction delays: "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 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 EIR/EIS suggests restricting activities during the period of greatest water need (May-September). This restriction is unnecessary if water sources are nowhere near the transmission line corridor. In fact, construction during this period could result in less disturbance to bighorn. That is because bighorn are more likely to be concentrated near water sources.

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Chapter #	Page #	Paragraph #	Comment
D.2	113-116 and throughout document		There is no basis for the assertion that mainenace would result in a Class I impact to bighorn sheep: ("Impact B-12: Maintenance activities would result in disturbance to wildlife and could result in wildlife mortality (Class I for Peninsular bighorn sheep; Class II for other special-status wildlife and nesting birds; Class III for barefoot banded gecko, desert pupfish, and nonsensitive wildlife"). Experience with Palo Verde Devers No 1. (Smith et a. 1986; Arizone Game and Fish 2007) shows no basis for the assertion that transmission mainenace is a Class I impact to bighorn sheep.
			Arizona Game and Fish Department (2007) Kofa Mountains Complex predation management plan. Unpublished report, Arizona Game and Fish Department, Phoenix, Arizona, April 2007. Kofa National Wildlife Refuge and Arizona Game and Fish Department (2007) Investigative report and recommendations for the Kofa bighorn sheep herd. Unpublished report, Kofa National Wildlife Refuge and Arizona Game and Fish Department, Phoenix, Arizona, April 2007. Smith, E.L., Gaud, W.S., Miller, G.D., and M.H. Cochran (1986) Studies of desert bighorn sheep (Ovis canadensis mexicana) in western Arizona: Impacts of the Palo Verde to Devers 500 kV Transmission Line. Final Report-Volume II. E. Linwood Smith and Associates, Tucson, AZ. Submitted to Southern California Edison Co. and Arizona Public Service Co. 51.
D.2	113-116 and throughout document		The EIR/EIS refers to bighorn sheep in the Peninsular Ranges as Ovis canadenis cremnobates. That is an outdated taxonomic designation that was revised in 1993 and no longer in use by the USFWS. The revised taxonomy (Wehausen and Ramey 1993) synonymized this subspecies with desert bighorn sheep (Ovis canadensis nelsoni). The fact that Peninsular bighorn sheep is not a valid subspecies is why this population was instead listed as a Distinct Vertebrate Population Segment under the Endangered Species Act. The title of the Recovery Plan reflects this: "Recovery Plan for desert bighorn sheep in the Peninsular Ranges of California". Wehausen, J.D. and R.R. Ramey. (1993). A morphometric reevaluation of the Peninsular bighorn subspecies. Desert Bighorn Council Transactions 37:1-10.

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Chapter #	Page #	Paragraph #	Comment
D.12.13	D.12-78	4	The text states: "No significant unavoidable impacts were found." This means no Class I impacts are expected. Three comments pertaining to this are: (1) The primary driver for ranking the environmentally superior option are the number of Class I impacts that are expected, which means impacts to watercourses are not being taken into consideration when developing the environmentally superior option. (2) Ranking impacts to jurisdictional waters as Class II impacts means that these impacts are significant but will be mitigated. However, avoidance would be implemented by SDG&E. Avoidance measures include utilizing helicopter construction and following existing transmission lines with existing access roads. The DEIR/EIS (page B-51) also mentions minimizing the effect of new access road construction by using
			"existing streets and access roads" wherever possible. (3) A significant caveat to the above analysis, as discussed on page D.2-212, is that there could be Class 1 impacts to riparian vegetation if adequate mitigation lands are not available to compensate for significant impacts.
D.12.2.1	D.12-11	1	For the Imperial Valley Link, "there are at least 49 identified watercourse crossings", but in Table D.12-1, only 41 crossings are listed.
D.12.2.2	D.12-12	3	For the Anza-Borrego Link, "there are at least 33 identified watercourse crossings", but in Table D.12-2, only 26 crossings are listed.
D.12.2.3	D.12-13	2	For the Central Link, "there are at least 36 identified watercourse crossings", but in Table D.12-3, only 28 crossings are listed.
D.12.2.4	D.12-14	1	For the Inland Valley Link, "there are at least 29 identified watercourses", but in Table D.12-4, only 24 crossings are listed.
D.12.2.5	D.12-14	3	For the Coastal Link, "there are at least 25 identified watercourses", and in Table D.12-5 all 25 crossings are listed.

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Chapter #	Page #	Paragraph #	Comment
D.12.2.1 - D.12.2.5	D.12-11 - D.12-14	varied	Use the definition of direct impacts and indirect impacts in section D.2.20 on page D.2-264 to identify which type of impact applies to which stream in Table D.12-1 through D.12-5. In other words, streams that would be affected by the construction of new access roads would have direct impacts from vegetation removal and fill, whereas streams where no new roads are constructed would either have no impacts or indirect impacts (streambank erosion and stream sedimentation).
D.2	collisions mentioned 199 times, D.2-144		Overstated impact discussions on Raptors at Risk from Collisions (Impact B-10) are not supported by the literature referenced below. DEIR/EIS reference to Bittner 2007 as local expert who says that "eagles do not tend to be collision victims" and impact analysis on golden eagle collision risk appears to contradictory to the this statement and in Section D.2.14, Page D.2-144 contradicts this conclusions.  The Final EIS/EIR should consider the following references: Avian Power Line Interaction Committee (APLIC). 1994. Mitigating bird collisions with power lines: the state of the art in 1994. Edison Electric Institute/Raptor Research Foundation, Washington, D.C. Bevanger. K. 1994. Bird Interactions with utility structures: collision and electrocution, causes and mitigating measures. Ibis 136:412-425 Faanes, C. A. 1987. Bird Behavior and Mortality in Relation to Power Lines in Prairie Habitats. U.S. Fish and Wildlife Service Technical Report No. 7. 24pp Hunting, K. 2002. Roadmap for PIER Research on Avian Collisions with Power Lines in California. California Energy Commission, Con

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Chapter #	Page #	Paragraph #	Comment
D.2 Listed or Sensitive Wildlife Species including discussion on noise impacts to species in different linkages	107, 108		Human disturbance (B-7H) especially noise from construction and maintenance of the power line and on birds, in particular raptors such as the golden eagle, is also not supported by the literature. Birds have different auditory thresholds and are unlikely to hear construction noise. This is also true for grasshopper sparrows, Northern Harrier, Southern California Rufous-Crowned Sparrow, White-Tailed Kite. Yellow Warbler. Please refer to: Dooling, R.J. (2002) Avian Hearing and Avoidance of Wind Turbines. National Research Energy Laboratory. Technical Report NREL/TP-500-30844, Dooling, R. J. 2007. The Effects of Highway Noise on Birds. The California Department of Transportation, Division of Environmental Analysis. Sacramento, California. Yamazaki. Y., H. Yamada, M. Murofushi, H. Momose and K. Okanoya. Estimation of hearing range in raptors using unconditioned responses. Ornithological Science 3:85-92
D.2.12 Nesting Birds, B-8a	D.2-113-114	End and top	Noise mitigation not needed. Birds unlikely to hear construction noise as described above.
D.2	Golden Eagles and Bald Eagles disturbance and set back discussed 18 times		All impact discussions on disturbance, noise and distance set back are overstated and not fully supported by literature review.

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Chapter #	Page #	Paragraph #	Comment
D.3	D.3-5	4	The text presents Interim VRM classes for BLM lands in the vicinity of the Proposed Project. Briefly describe whether Interim classes were developed for this project or by the BLM for BLM lands in the Field Office.
D.3	Figures D.3- 15B, D.3-17B, D.3-38C		KVP 14: Visual Simulation, KVP 16: Visual Simulation, and KVP 36: Visual Simulation. The soil color selected for the new access road is too light, which overemphasizes the color contrast of the new road. The highly visible access road as shown in the simulation would be temporary, as the strong line and color contrasts would be mitigated by revegetation. In the event there is no revegetation, the natural revegetation would occupy the cleared roadway, significantly softening contrasts. Typical transmission line access roads (long-term) are visible as a lightly-used two-track road. It should be disclosed that the visual impact of the new access road is temporary, or the simulated access road should be replaced with a two-track road.
D.3	D.3-109, D.3- 117	2, 2	The visual impact is overstated for the proposed transmission line as viewed from KVP's 14 and 16. The new pole structures would repeat elements found in the existing landscape, which includes an existing transmission line. The new pole structures would be set back at a distance too far from SR 79 to block any portion of the view, as the structures are small in scale relative to other landscape features; therefore, view blockage is low. There is no significant sky-lining of the poles because hills form a backdrop that is higher in elevation that the poles as seen from the highway. The very small portion of the new poles that extends above the horizon for some structures would be unnoticeable for many viewers. In addition, textural and color variations of the background of rolling hills provide some screening for the poles. The contrast of the poles with the landscape would be low.
			The scale of the structures is small relative to the surrounding landscape elements, and so would be subordinate rather than codominant. Because the character of the landscape would not be degraded from the introduction of the poles into the landscape, and the overall visual change would be low. Impacts V-17 and V-19 for KVPs 14 and 16 should be changed to Class III, as the impact is less than significant.

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Chapter #	Page #	Paragraph #	Comment
D.3	D.3-121, D.3- 139, D.3-241, D.3-254, D.3- 268	2, 2, 1, 2, 3	The visual impact is overstated for the proposed transmission line as viewed from KVPs 17, 21, 32, 34, and 36. The new pole structures would repeat elements found in the existing landscape, which includes an existing transmission line. Individual new pole structures have a narrow profile, and lack the mass to cause any substantial view blockage; therefore, view blockage is low. Some poles are partially sky-lined. In addition, textural and color variations of the background of rolling hills provide some screening for the poles. The contrast of the poles with the landscape would be low to moderate, as color and form contrasts are low to moderate. The scale of the structures is small relative to the surrounding landscape elements, and so would be subordinate rather than co-dominant. The character of the landscape would not be degraded from the introduction of the poles into the landscape, and the overall visual change would be low to moderate. Impacts V 20, V-24, V-39, V41, and V-44 should be changed to Class III, as the impact is less than significant.
D.3	D.3-129	2	Please Indicate whether there is an access road to the substation that would be visible or blocked by the terrain as seen from this KVP.
D.3	D.3-186	2	Despite the lengthy construction period, the impact is not permanent. Once construction activities are completed, the impact will cease regardless of any mitigation. A Class I level impact is not appropriate for construction activities. The Class I level should be changed to Class III.
D.3	D.3-192, D.3- 237	2, 1	Individual new pole structures have a narrow profile relative to the overall landscape, and lack the mass to cause any substantial view blockage. In addition, the lattice structure provides numerous openings through which the background is visible, which provides some screening; therefore, view blockage is low to moderate, not moderate to high.

47 **6**f 83 D.3 Visual

Chapter #	Page #	Paragraph #	Comment
D.4	D 4-1, D4-2	2, 1	This paragraph appears to give the false impression that the route would cross all the lands "located within, or would pass adjacent to, or near the boundaries of various state, local, and Federal jurisdictions, including BLM, NPS, DOD," etc. Some of these lands would not be affected by the route. For example, the Project does not cross DOD lands as the text implies. SDG&E suggests rewording the paragraph to identify which agency lands the project crosses through and which agency lands it does not.
D.4	D 4-4	5	This may give the impression that Tamarisk Grove is a cultural site when the word "and" was omitted. Re-word to "Tamarisk Grove Campground and a cultural resource site."
D.4	D.4-4 to 4-5, D.4-72, D.4-77		In describing agency jurisdiction through ABDSP, the EIR/EIS suggests that BLM only has jurisdiction over MP83-83.5 (western boundary of park and outside of park). The Final EIR/EIS should note that BLM has asserted its continuing federal interest/jurisdiction over those portions of existing corridor through the park.
D.4	D.4-9	2	It is incorrect to describe SDG&E's ROW as a utility ROW dedicated to SDG&E, it should be stated as granted.
D.4	D 4-16	3	Table D 4-12 does not define what constitutes a Class I impact. Information needs to be provided that identifies why certain impacts are Class I. For example, Impact L2 - "divide an established community or disrupt land uses at or near the alignment" is too broad a definition. Revise to state the type of disruption of land uses would constitute a significant impact within the text first, and then explain why the Project would result in the impact (to the extent it does, if at all) with supporting justification.
D.4	D.4-19	4	States that SDG&E shall obtain a license from IID for canal crossings. This should not be so narrowly focused. SDG&E would obtain the required rights determined appropriate but would not be limited to a license.
D.4	D.4-61	2	States that after construction, access to and around transmission lines and towers would be fully restored. If fully restored means revegetated or removed from use, the EIR/EIS should note that access roads and maintenance pads required for long term maintenance would remain in place after construction.

48 df 83 D.4 Land Use

Chapter #	Page #	Paragraph #	Comment
D.5	D.5-21	5	The EIR/EIS does not but should clearly explain that the existing ROW and access roads were not included in the designated wilderness areas. They only point to the ROW. This occurs again on p. D.5-23.  The EIR/EIS should state that General Plan acknowledges
D.5	D.5-23	1st	possibility that utilities might seek to expand existing utilities through the Park.
D.5	D.5-29, D.5-32, D.5-46, D.5-58, D.5-60, D.5-88, D.5-89, D.5-95, D.5-107	3, 2, 4, 1, 2, 3, 3, 3, 5	The Class I impact level is overstated for corona noise. The addition of project-related corona noise is permanent; however, the significance of the impact is lessened because it is intermittent, not continual, as the conditions necessary for corona noise are intermittent (primarily wet weather; see Noise section). There would a significant impact only if there were a sensitive receptor within a distance such that corona noise would be audible over the ambient noise levels. With the exception of developed facilities located in close proximity to the ROW, the effect on recreation uses or wilderness areas would not be significant because an insignificant number of people, if any, would use a transmission line ROW and nearby areas for recreation activities, particularly during wet weather. Encounters in most locations, if any, would likely be brief; and therefore insignificant.
D.5	D.5-31	2nd	Statement that if construction activities occurred for duration of person's visit to Park is subjective and unsupportable. Such an assumption would convert any temporary effect to a permanent one. In addition, effect could be mitigated, i.e., by constructing at different time of year.
D.5	D.5-32	3rd	Statement that Proposed Project would cause visitors not to visit Park is conclusory and unsupported by evidence. Backcountry policy means hundreds of thousands of acres of open space available for recreation and camping.
D.5	D.5-35, D.5-47, D.5-82, D.5-88		Statement that recreationists would be precluded from using trails because transmission structures would be sited on or immediately adjacent to trails is conclusory and unsupported by evidence. No plans to locate structures on trails, and potential effect is mitigated by locating structures off of trails.
D.5	D.5-74	3rd	Statement that construction would dissuade visitation or block access roads is conclusory and unsupported by evidence. Effects would be temporary and could be mitigated.

49 df 83 D.5 Wilderness

Chapter #	Page #	Paragraph #	Comment
D.6	D6-12	2&3	The criteria used to determine impacts to agricultural lands are based on erroneous information. The EIR/EIS states that significance criteria used in the analysis of impacts was derived from Appendix G of the State CEQA Guidelines. That is incorrect – the wording in the Appendix G Guidelines differs greatly from the criteria used in the EIR/EIS and leads the EIR/EIS to incorrectly conclude that there are some significant and not mitigable agricultural impacts based on this erroneous information. The draft document states that "the following significance criteria were derived from previous environmental impact assessment and the CEQA Guidelines (Appendix G, Environmental Checklist Form). Impacts to agriculture would be significant if the Proposed Project would convert 10 or more acres of DOC Farmland to non-agricultural use. The State CEQA Guidelines, Appendix G, state if "the project Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use".
D.6	D6-12	3	One criteria used in the EIR/EIS to identify significant agricultural impacts is if 10 or more acres of Department of Conservation farmlands would be disturbed by the proposed project. The State CEQA Guidelines do not provide acreage threshold criteria for impacts to agricultural resources that are classified as prime farmland, unique farmland and farmland of statewide importance. The EIR/EIS should provide logical and defensible basis for this significance criteria and/or add citations as to where it was developed or derived.
D.6	D6-18	5	Aerial spraying impacts from airplanes that spray pesticides on agricultural fields are identified in the EIR/EIS as significant and not mitigable (Class I impacts) due to hazards associated with power lines. This impact can be mitigated through public education and notification programs that could be initiated by the project proponents, that are already recommended in the EIR/EIS as mitigation measures (See Mitigation Measure AG-3b). To conclude that these impacts are significant and not mitigable appears to have no basis. Please provide a citation or a logical and defensible basis for this significance determination or revise the significance determination. Aerial sprayers already spray fields along I-8 adjacent to existing power lines with no exceptional risk and with no reported incidents of accidents.

50 df 83 D.6 Agriculture

Chapter #	Page #	Paragraph #	Comment
D.6	D.6-26	4	States that proposed project has potential to convert a total of 663.4 acres of DOC Farmland. If conversion is the same as displacement due to permanent impacts, this is not consistent with Table D.6-8 on page D.6-15 which indicates a total of 344.7 acres of permanent impact to DOC Farmland for the entire project.
D.6	D.6-46	3	Provides figures for acres of significant and unmitigable permanent impacts to agricultural lands. These figures are lower than the permanent impacts in Table D.6-8 but there is no discussion of how the lower significant unmitigable acreages were derived. If they are derived using Table D.6-9 that should be stated.
D.6	D.6-47 to 49	Table D.6-9	There should be some discussion/definition of what the term "permanently convert" means. Does this mean conversion occur merely due to presence of the R/W (easement)? Or, does it mean where land is actually converted due to presence of a physical (structure, road) improvement? Clarifying this would lead to a more realistic assessment of actual permanent impacts discussed in the whole of Chapter D.6.

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Chapter #	Page #	Paragraph #	Comment
D.7	D.7-001	6	The definition of traditional cultural property (TCP) is no longer bound or limited by Native American or ethnic communities. They can also include multi-ethnic socioeconomic classes/groups/neighborhoods like the East End neighborhood of Cincinnati, Ohio (King 2005:73-74; Halperin 1998). Paragraph 6 text should read "A traditional cultural resource or TCP can include but is not limited to Native American sacred sites, as well as traditional resources of any community that are important for maintaining the cultural traditions of any group (National Register Bulletin 38). Examples of Native American TCPs can include places such as traditional landscapes, sacred mountains, buildings, or areas where plants are collected for food, medicine, basket weaving, and ceremonial uses."
D.7	D.7-002	3	In the Approach to Data Collection the document utilizes the Proposed Project cultural data as a BLM Class II sample survey because it opted to use 91% of the survey data (from the July 2007 data submittal). The Proposed Project however, was intended to be a Class III survey and should be identified as such in the text.
D.7	D.7-010	1	The Gallegos & Associates survey of the Proposed Project defined "isolate" as 1 or 2 artifacts, while the Draft EIR/EIS for the Alternatives defined it as 3 or fewer artifacts. Therefore, when comparing the Proposed Project to the Alternatives the DEIR may indicate relatively fewer sites and more isolates in the Alternatives. Individual site records from the Proposed Project should be reviewed and number of sites and isolates recalculated for consistency.
D.7	D.7-011/Table Ap.9B-2	4	The DEIR/EIS notes the uncertainty in the location of Museum of Man site SDM-C-141A. Recent (June 2007) detailed research of original documentation at the Begole Archaeological Center by SDGE's consultant has clarified that the site area is located within the boundaries of D2-S-106. Site location verification should be updated in table and text to reflect updated location
D.7	D.7-011	6	No "San Diego Mountains" placename exists in San Diego County.  Narrative description should read individual mountain range name or "the mountains of San Diego County".

52 df 83 D.7 Cultural

Chapter #	Page #	Paragraph #	Comment
D.7	D.7-013	6	Mentions NRHP (Johnson Taylor Ranch Headquarters) in Coastal Link but does not mention that it's not in the Proposed ROW. This error occurs throughout the document especially with TCPs. The last sentence in paragraph 6 should read "There are also several historical building and building complexes within 0.5 mi. of the Coastal Link ROW, including Johnson Taylor Ranch Headquarters, which is listed in the NRHP." Other TCPs that are not located within the Proposed ROW should be clearly identified as such.
D.7	D.7-26 and throughout document.	Table D.7-4	"Construction of the project would cause an adverse change to unknown significant buried prehistoric and historical archaeological sites or buried human remains." The word "could" is a more accurate statement, since the presence of these sites is unknown. This comment applies generally throughout the DEIR/EIS, although for the All-Source Generation alternative, the word "could" is used (pp. E.6-128, E.6-135). The text and the impact tables (for impact C-3) for the Proposed Project and the Alternatives should be consistent and the word "could" should replace "would".
D.7	D.7-027	1	The text on page D.7-27 incorrectly lists the Chapel of Santa Ysabel as a TCP in the Anza-Borrego Link, which inflates the number of TCPs in the Anza Borrego Link and gives the reader a skewed opinion of the amount of Class I impacts to TCPs in the Anza Borrego Link. Other areas of the document and in Table Ap.9B correctly lists the Chapel within the Central Link. In addition, for the Proposed Project the Chapel is within 0.5 mi. of the ROW and not directly in the ROW. The text in the Summary of Findings (p. D.7-27, paragraph 1) should record the correct link (Central).
D.7	D.7-041	1, 5	DEIR/EIS states four sites with human remains are in areas of direct impact. It also states (paragraph 5) that all four sites are too large to span. One of the sites is very small and can be spanned; one has "modern" cremated remains and site avoidance is proposed, and two site numbers represent the same location. Since it is SDG&E's goal is to avoid direct impacts to all such sites, these comments should be included in the text and the number of sites to be directly impacted should be re-calculated.
D.7	D.7 45 thru 47		SDI-17,285 is a very large previously recorded village site with human remains. Its location was field verified on VID property within the Proposed ROW, but it is not mentioned in the text (only listed in Table Ap.9B). The site is considered to be potentially eligible for the NRHP and the text should include a sentence about this site.

53 **df** 83 D.7 Cultural

Chapter #	Page #	Paragraph #	Comment
D.7	D.7-046; D.7-47	5; 4	In the first citation (p. D.7-46), visual impacts to the Chapel of Santa Ysabel (a TCP) would remain Class I after mitigation. In the second citation (p. D.7-47), visual impacts to the qualities of the Chapel of Santa Ysabel (setting/feeling impacts to a historical architectural resource) would be reduced to Class II because of the removal of the existing 69 kV line. Please provide clarification for this contradiction.
D.7	D.7-051	3	A Class I impact is described for SDM-W-278, a Malcolm Rogers site recorded in 1939 as containing two (removed) cremations and many bedrock milling elements. Survey of the 3-acre recorded (rectangular) site area within the corridor found no archaeological evidence, and it was concluded that the SDM-W-278 is not located within the corridor. Impact assessment for this site should be reevaluated and text and tables corrected.
D.7	D.7-096	1	"Direct impacts to site withhuman remains cannot be mitigated" This is unclear. Is the intent that any impact (i.e., use of existing access road, or just if human remains are impacted?) Text should call out source of direct impacts to sites with human remains (construction and/or operational actions).
D.7	D.7-116	1, 3	Paragraph 1 states CA-SDI-17252 contains human remains, and the site will be adversely affected. Paragraph 3 says no human remains are recorded in the Partial Underground 230 kV ABDSP SR78 to S2 Alternative. Since the site is within this Alternative, paragraph 3 needs to be changed to reflect the correct statement about sites with human remains in this Alternative.
D.7	D.7-151	5	SDI-5193, consisting of two adobes and Native American artifacts, is mentioned on p. D.7-150 and in Table Ap.9B-73, but the historic structures are omitted from impact discussions here. Text should include historic impacts.

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Chapter #	Page #	Paragraph #	Comment
D.8	D.8-1	4, last sentence	to public health." is not referenced. Provide a reference. Define what "adverse to public health" means.
D.8	D.8-1	5, next to last sentence	The statement "Noise levels above 45 dBA at night can result in the onset of sleep interference effects." is not referenced. Provide reference.
D.8	D.8-10	Tables D.8- 7/D.8-8	The standard of measure for which noise levels will be measured against is not clear. EPA recommended Levels are cited in Table D.8-7. Because these are recommendations it should be made clear to the reader that the standard of measure will be against the enforceable local ordinances, plans and codes. State guidelines are cited in Table D.8-8. The reader should understand that the standard of measure will be against the enforceable local ordinances which sometimes reference the state guidelines. Clearly state what regulations, guidelines, and/or recommendations will be used to measure compliance.
D.8	D.8-15	1st bullet	Applicable noise restrictions or standards and regulatory agencies are not defined. The first bullet states that noise impact will be significant if: "The Proposed Project would conflict with applicable noise restrictions or standards imposed by regulatory agencies." State which standards from which regulatory agencies will be used to measure compliance. "Conflict" is not defined. Clarify whether conflict means violate.
D.8	D.8-15	2nd bullet and 3rd paragraph	The second bullet states that noise impact will be significant if: "The Proposed Project would expose persons to or generate excessive groundborne vibration or groundborne noise levels." Define the limit that makes groundborne vibration excessive. For example, noise is sometimes perceived as a nuisance, but there are quantifiable limits imposed by ordinances. Section D.8.3.4 states that no standards would apply to groundborne vibration related to construction. If standards will not be violated than this implies that groundborne levels will not be excessive. Recommend excessive be defined as physical damage to property. This is quantifiable.

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Chapter #	Page #	Paragraph #	Comment
D.8	D.8-15	3rd and 4th bullet	The phrase "without the project at sensitive receptor locations" is not clear. The phrase "without the project at sensitive receptor locations" is used in both the 3rd and 4th bullets. This could mean 1) above ambient levels prior to installation of transmission line or 2) above levels recorded for the transmission line at other areas where there are no sensitive receptors. Clarify what "without the project at sensitive receptor locations" or restate it so that it is clear.
D.8	D.8-15	3rd and 4th bullet and paragraph 2	Five dBA is arbitrary. The 3rd bullet defines substantial as more than 5 dBA. In the 4th bullet it is inferred that substantial is more than 5 dBA. Although the Imperial County Policy defines an increase equal to 5 dBA or greater as significant it is prefaced with whether the future noise is within the normally acceptable range given in Table D.8-8. Other ordinances, plans, and codes cited in the document do not define significant as 5 dBA. Recommend using the approach in Devers-Palo Verde No. 2 EIS where significance is measured against ordinance violations.
D.8	D.8-15	3rd bullet	'Ambient levels' is not defined. The third bullet defines significance as "would result in a substantial permanent increase in ambient noise levels." Ordinances, plans and codes cited in the document reference various time periods over which noise levels can not exceed, including the 24-hour Ldn, CNEL, 8-hour Leq, and 1-hour Leq. Exceedance of these levels are the measure of significance. The ambient levels above which a substantial permanent increase would occur are defined as the periods over which noise levels can not exceed as defined in the various ordinance, plans and codes.
D.8	D.8-15	4th bullet	It is not clear if the 4th bullet refers to construction only. The fourth bullet defines significant as "The Proposed Project would result in a temporary or periodic increase". Temporary and periodic are defined as intermittent. The assumption is that temporary, periodic and intermittent are being applied to construction noise from the proposed project. This is assumed, because bullet 3 specifies operation of the proposed project. Clarify if bullet 4 applies to construction only. The measure by which temporary and periodic increases are compared is not defined. Assuming that bullet 4 applies to construction only, then the measure would be against the construction standards defined in the ordinances, plans and codes. Define the measure by which temporary and periodic are defined. Describe the temporary time period for a specific receptor. A temporary, intermittent impact of 10 minutes, 5 times a day would not likely be significant.

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Chapter #	Page #	Paragraph #	Comment
D.8	D.8-16	Table D.8-11 N-1 Class I	The document states that mitigation will avoid violations, but still classifies as a Class I. Impact No. N-1states that "Construction noise would substantially disturb sensitive receptors and violate ordinances". This is classified as a class I. Mitigation measure N-1a states that "At a minimum SDG&E shall employ noise suppression techniques to avoid possible violations of ordinances." When violations are avoided the impact is not a Class I and should be changed to a Class II. Compare to similar mitigating measures outlined in the Antelope Transmission Project where these mitigating measures lead to a classification of Class II. Provide documentation that would show impact would be significant. Noise levels can be predicted using additive noise rules and noise propagation rules. The analysis should provide calculations that demonstrates violations. For example, reference page D.8-20, Impact N-1, 1st paragraph. "the noise from construction would exceed 75 dBA at any location with 200 feet". It doesn't necessarily follow that the 75 dBA 8-hour average measured at the nearest receptor is violated.
D.8	D.8-19	N-1	The significance determination is in conflict with the Los Banos-Gates 500 kV Transmission Project and Jefferson-Martin Project where construction impacts are determined to be less than significant and similar mitigation measures are proposed for similar projects. The conclusions drawn from past EIRs where construction impacts for a 500 kV project are determined to be less than significant especially where land use and sensitive receptors are similar.

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Chapter #	Page #	Paragraph #	Comment
D.8	D.8-16	Table D.8-11, N-3 Class I	Quantitative demonstration of Class I impact across the Imperial Link is not provided. Impact No. N-3, Permanent noise levels would increase due to corona noise from operation and from other project components, is classified as Class I. Impact would only be incurred if addition of corona noise brings ambient to level that exceeds an ordinance. This is not quantitatively demonstrated for the entire link. Reference D.8-21, impact N-3, 2nd paragraph "Under the Imperial Plan any increase of 5dBA would be considered substantialin this way the Proposed Project would conflict with the applicable noise stds established by Imperial County." The Imperial Plan states an increase of 5 dB within the normally acceptable range. The normally acceptable range is 60 dB CNEL at the high end of the range. The predicted CNEL at the edge of the ROW is 52 dBA. Sound levels reported by SDG&E surveys range from 45.4 to 67.9. An increase of 5 dBA is not demonstrated for the entire Imperial Valley Link. The impact should be classified as Class I only at sensitive receptors where the ordinance is exceeded. Ordinances define where the noise level mi
			The reference to "naturally existing" noise levels of 35 dBA would presumably be referencing the Anza-Borrego Link (Section D.8.2.2) where the noise level is assumed, not measured. Additionally, a natural background noise level is not addressed in Table D.8-8 and is not clearly identified as a sensitive receptor.
D.8	D.8-21	N-3	A significant impact at Split Mountain is not demonstrated. Analysis of operational impacts states that "For rural residences at the ROW near Split Mountain Road, this increase would be significant." The CNEL near Split Mountain residences is not presented in Section D.8.2.1. The EIR/EIS should demonstrate how the impact is purportedly significant.
D.8	D.8-22	N-3a	The mitigation measure is not in agreement with the class designation. Mitigation Measure N-3a states that the repair and replacement of insulators and other transmission materials mitigates excessive noise. Mitigation of excessive noise should render the impact as Class II.
D.8	D.8-19	Table D.8-13	Table D.8-1 should be a stand alone table. It is not clear if this table is referring to operation only, addition of corona only and worst case scenarios. Table D.8-13 is referenced on page D.8-21. Here it appears that the table represents operation, represents the addition of corona noise only and represents worst case, rain and fog conditions. Add footnotes to table and identify all parameters.

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Page #	Paragraph #	Comment
D.8-5 through D.8-9	Section D.8.2	Background levels measured by SDG&E and reported in Section D.8.2 are reported as Ldn, Leq, and sometimes without the sampling period specified. This conflicts with the reporting of noise standards from noise ordinances in Section D.8.3.3. The standards are reported over varying times periods (CNEL, Leq for example). SDG&E suggests that the EIR/EIR include the full table (Table 4.4.2) of data from the PEA so comparisons can be made to the ordinances. Include a comparison table of measured background against ordinance limits.
D.8-11 thorughD.8-14	D.8.3.3 Local	Include information on how sensitive receptors are defined by the ordinances.
D.8-22	N-4	Class designation is in conflict with past EIRs for similar projects with similar inspection and maintenance programs. This should be Class III. Recommend adding discussion that compares the similarities of this analysis to the Antelope Transmission Project and to Antelope-Pardee 500 kV and Jefferson-Martin projects where impacts from similar inspection and maintenance are determined to be Class III. Should indicate where land use and sensitive receptors are similar
	D.8-5 through D.8-9  D.8-11 thorughD.8-14	D.8-5 through D.8-9 Section D.8.2  D.8-11 thorughD.8-14 D.8.3.3 Local

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Chapter #	Page #	Paragraph #	Comment
D.9	D.9-35 and D.9-146	D.9.7 Second from bottom of page and D.9.19 Top of page	Text states "SDG&E assumes that construction of the substation would take approximately 8 month to complete all necessary construction activities including excavation, grading, and below and above grade installations, among other activities on the 66 acre site." Eight (8) months is an incorrect number. Chapter B, Section B.4.7, page B-90 provides approximate durations for Substation Construction. Although various construction activities may take three to eight months as shown in Table B-13, all activities cannot take place at the same time. The total length of time for construction may be approximately two years.
D.9	21& 22	1 to 4 on p. 21; 2 on p. 22	Impact T-1 states that construction would cause temporary road and lane closure that would temporarily disrupt traffic flow. The description of the impact states that compliance with the APMs would result in the avoidance or reduction some impacts. It then states that the overall impacts would remain significant. The significance determination is conclusory.
D.9	23	2	Impact T-4 states that construction would temporarily disrupt pedestrian and/or bicycle circulation and safety. The description of the impact states that there are few locations along the Imperial Valley link where pedestrian and bicycle uses would occur. It then states that it is possible they might occur on local roads and any impact would be significant. There is also no data provided or cited for use of local roads by pedestrians and bicycles impacts to support the significance determination.
D.9	25, 26, 34-35	2, 3 on p. 25; 1- 4 on p. 26; 3 on p. 34 and 1 on p.35.	Impact T-9 states that construction would generate additional traffic on the regional and local roadways and identifies it as a Class II impact. The first part of the description states that the proposed project is not expected to generate significant impacts on the road, the Level of Service (LOS) would not be affected and that any

60 df 83 D.9 Traffic

Chapter #	Page #	Paragraph #	Comment
D.9	33	5	Impact T-4 states that construction would temporarily disrupt pedestrian and/or bicycle circulation and safety. The description of the impact states that there are no designated bicycle lanes, route or bikeways in the Central Link. It then states that bicyclists and pedestrians may potentially use the local roads. No documentation is shown to support the assertion that impact would be significant. There is also no data provided or cited for use of local roads by pedestrians and bicycles impacts to support the significance determination.
D.9.13	87	3	Impact T-7 states that construction would result in the short-term elimination of parking spaces. Parking space impacts has a Class III significance. The description of the impact states that the area is isolated, that traffic APMs would be implemented, and county ordinances complied with. It further states that the elimination of any parking spaces would not be a significant impact. The description then states that the impact should be considered a Class II to ensure that impacts are mitigated. The impact has already been shown to be less than significant so the impact should be shown as a Class III impact.

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Chapter #	Page #	Paragraph #	Comment
D.10.21	D.10-149	EMF Research	Changes should be made to the last paragraph on the page to clarify that only the epidemiological studies have provided mixed results: "Research related to EMF can be grouped into three general categories: cellular level studies, animal and human experiments, and epidemiological studies. These Epidemiological studies have provided mixed results, with some studies showing an apparent relationship between magnetic fields and health effects while other similar studies do not. Laboratory studies and studies investigating a possible mechanism for health effects (mechanistic studies) provide little or no evidence to support this weak link."
D.10.21	D.10-151	Scientific Panel Reviews	This section is top-heavy on the point of possible carcinogenicity. It should include a reference to the 2007 WHO EHC 238 and would be more balanced, for example, by inclusion of the statement from the 2007 EMF Bill Insert (used by all IOUs and approved by the CPUC): "The WHO [EHC 238] report concluded that:  • Evidence for a link between ELF magnetic fields and childhood leukemia "is not strong enough to be considered causal but sufficiently strong to remain a concern." "Virtually all of the laboratory evidence and the mechanistic evidence fail to support" this reported association.  • For all other diseases, there is inadequate or no evidence of health effects at low exposure levels."
D.10.21	D.10-153	National Guidelines	This section should mention the ACGIH guidelines.
D.10.21	D.10-154		This section should include a statement about the CDE Exemption Process Guidance and the lesser distances required regarding underground transmission lines.
D.10.21	D.10-155	CPUC Guidelines	Regarding D.06-01-042, this section should point out that the CPUC did "not request that utilities include non-routine mitigation measures, or other mitigation measures that are based on numeric values of EMF exposure"
D.10.22.1	D.10-155	EMF Data Applicable to Proposed Project	This section should include prominently (as found later in § D.22.4, p. D.10-161 and §D.10.28, p. D.10.168) this statement: "SDG&E's Proposed Project does incorporate low-cost and no-cost measures as mitigation for magnetic fields and excludes 'mitigation measures that are based on numeric values of EMF exposure', all in accordance with CPUC policy.

Chapter #	Page #	Paragraph #	Comment
D.10.22.1	D.10-157	Table D.10-25	In Table D.10-25 (page D.10-157), the left and right "change" values for MP 117.2-121.9 (Mt. Gower/SD Country Estates, 2 – 230 kV lines Underground; 60 ft ROW) should read +22, not +25. This correction requires that the values used in several statements in the subsequent discussion in D.10.22.2 be corrected from 25 mG to 22 mG:  • Anza-Borrego Link Alternatives  o Partial Underground 230 kV ABDSP SR78 to S2 Alternative  • Central Link Alternatives  o Santa Ysabel Partial Underground Alternative and the Santa Ysabel SR79 All Underground Alternative  • Inland Valley Link Alternatives  o Oak Hollow Road Underground Alternative  o Chuck Wagon Road Alternative  • Southwest Powerlink Alternatives  o New underground double-circuit 230 kV
D.10.22.1	D.10-158	Table D.10-24 - D.10-25	Based on the data in Tables D.10-24 and D.10-25, this change should be made:  • Imperial Valley Link Alternatives (p. D.10-158) should read: There are three transmission alternatives in the Imperial Valley Link: the FTHL Eastern Alternative, the SDG&E West of Dunaway Alternative, and the SDG&E West Main Canal–Huff Road Modification Alternative. Each of these alternatives would include a 500 kV transmission line in a new ROW, where no existing transmission lines exist. Therefore, the magnetic field levels would be similar to those in Proposed Project MP 4 to 7.6: from 41 to 46-43 milliGauss (mG).
D.10.22.1	D.10-159	Table D.10-24 - D.10-25	Based on the data in Tables D.10-24 and D.10-25, this change should be made:  • Chuck Wagon Road Alternative (p. D.10-159) should read: This alternative would include both underground and overhead segments of double-circuit 230 kV transmission line in a new ROW. The 230 kV underground portion would have similar magnetic fields to the Proposed Project's underground segment through San Diego Country Estates (Ramona):25 22 mG (noted above). The overhead segment would be similar to the Proposed Project segment from MP 91-97 (Vista Irrigation District): 7-8 6-7 mG at the edge of the ROW.

Chapter #	Page #	Paragraph #	Comment
D.10.22.1	D.10-159	Table D.10-24 - D.10-25	Based on the data in Tables D.10-24 and D.10-25, this change should be made:  • New overhead double-circuit 230 kV in new ROW under "Southwest Powerlink Alternatives" (p. D.10-159) should read: This would occur on the Interstate 8 Alternative and the Modified Route D Alternative after passing through the Interstate 8 and Modified Route D Substations. The magnetic field would be similar to the Proposed Project segment from MP 91-97 (Vista Irrigation District): 7–8 6-7 mG at the edge of the ROW.
D.10.22.3	D.10.160	SDG&E's Proposed EMF Mitigation	This section should state "In accordance with CPUC Decisions D.93-11-013 and D.06-01-042, SDG&E evaluated 'no-cost' and 'low cost' magnetic field reduction steps for the proposed transmission and substation facilities."
D.10.22.4	D.10.160	Summary Regarding EMF and Health Effects	This section should be updated to something like this: After several decades of study regarding potential public health risks from exposure to power line EMF, research results remains inconclusive. Several national and international panels have conducted reviews of data from multiple studies and state that there is not sufficient evidence to conclude that EMF causes cancer. More recently In recent years, the International Agency for Research on Cancer (IARC) and the California Department of Health Services (DHS) both classified EMF as a possible carcinogen. In 2007, the WHO issued its Environmental Health Criteria Monograph 238, concluding that:  • Evidence for a link between ELF magnetic fields and childhood leukemia "is not strong enough to be considered causal but sufficiently strong to remain a concern" and that "virtually all of the laboratory evidence and the mechanistic evidence fail to support" this reported association.  • For all other diseases, there is inadequate or no evidence of health effects at low exposure levels.
D.10.23	D.10.162	Cardiac Pacemakers	This section should include reference to and appropriate information from the 2004 EPRI review <i>Electromagnetic Interference with Implantable Medical Devices:</i> 1997-2003

Chapter #	Page #	Paragraph #	Comment
D.10.28	D.10.168	Overall Impacts of the Project - EMF and Field Related Concerns	The first paragraph should reiterate the statement from p. D.10-147 as shown underlined: Presently there are no applicable regulations or standards related to EMF levels from power lines; however, the CPUC has implemented, and recently re-confirmed, a decision requiring utilities to incorporate "low-cost" or "no-cost" measures for managing EMF from power lines. SDG&E's Proposed Project does incorporate low-cost and no-cost measures as mitigation for magnetic fields. This section does not consider magnetic fields in the context of CEQA/NEPA and determination of environmental impact, first because there is no agreement among scientists that EMF creates a health risk, and second because there are no defined or adopted CEQA/NEPA standards for defining health risk from EMF.
D.10	D.10-3 through D.10-146		It is important to clarify and differentiate between environmental contamination and identified hazardous material sites. This was done on page D.10-2, paragraph 2, but not for the identified hazardous material sites described for the links and other upgrades and expansions. For sections D.10.2.1 through D.10.4, differentiate between environmental contamination and identified hazardous material sites as was done on page D.10-2, paragraph 2.
D.10	D.10-1 through D.10-146	Global	It should be noted in the discussions of potential environmental contamination and Impact P-3 (Previously unknown soil and/or groundwater contamination could be encountered during grading or excavation), that contamination from petroleum products (oil, gasoline, diesel, etc.) would be the most likely types of contamination encountered and that visual and olfactory observations are generally able to detect these types of contamination.
D.10	D.10-3 through D.10-146	Global	It is important to reiterate under the discussions for each link, the difference between historic hazardous wastes that have been cleaned up (case closed status) versus those with current contamination. The definition of "case closed" is given on page D.10-2; however, many of the following text sections (for example, D.10.2.1 through D.10.2.4) do not clarify that most of the sites listed in the tables are active facilities using and storing hazardous materials rather than hazardous waste spill or remediation sites (see language on page D.10-16, 2nd paragraph, 1st sentence), with a few exception, such as LUSTs.

Chapter #	Page #	Paragraph #	Comment
D.10	D.10-8	3	Suggest a brief definition of the word "criteria" in CCR Title 22, such as are including the wording: "numeric limits on the concentration of each contaminant in the soil". In addition to provide a few examples, a small table listing criteria for a few common types of soil contaminants (gasoline, diesel ,etc.) would be useful.
D.10	D.10-17 & D.10- 18	Table D.10-6, P- 1 rows	Impact P-1, "Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction" is really referring to the potential for accidental spills or releases due to improper handling and/or storage resulting in soil and groundwater contamination. The correct language should be similar to and coincide with that used for Impact P-5 describing the potential for spills associated with operation. Impact P-1 should be changed to "Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and/or storage of hazardous materials during construction activities." The same text should be used to describe Impact P-1 in the following text sections.
D.10	D.10-19	Impact P-1 heading and all following references to Impact P-1 through out the text	The same text should be used to describe Impact P-1 as used in Table D.10-6. Impact P-1 should be changed to "Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and/or storage of hazardous materials during construction activities."
D.10	D.10-21	Global for Impact P-3	Insert text after third sentence: "Because lead is used in the manufacturing ordnance and ammunition, such as that used for small arms training, lead contamination can occur in soils as a result of the breakdown of ordnance and ammunition. Lead waste may be found at the gun and artillery practice ranges where lead munitions are used."
D.10	D.10-147	2	Need to define what corona means, such as: "Corona effects audible noise, electromagnetic interference with radio or television signals, visible light, and heat. Corona-generated audible noise is characterized as a crackling, hissing or humming noise, and is most noticeable during wet conductor conditions, such as rain or fog. During fair weather, audible noise is generally barely perceptible."

Chapter #	Page #	Paragraph #	Comment
D.10	D.10-147 through D.10- 168	Global	It is important to clarify that EMF impacts include both nuisance and health risk impacts. Recommend that this paragraph be rewritten to clearly differentiate these two categories by first discussing the nuisance and potential health risk impacts (corona, audible noise, radio, TV interference, etc., then discuss potential health risks (shock hazards and effects to pacemakers).
D.10	D.10-147	2	Add the following sentence to end of the 2nd paragraph: The effects of audible corona noise are evaluated in D.8 - Noise

Chapter #	Page #	Paragraph #	Comment
D.12	D.12-33 and D.12-130	D.12.7 Third from bottom of page and D.12.7 Second from top of page	Text states that Mitigation Measure H-1a (grading must be done during dry season) is required for substation construction.  Restriction of construction to the dry season has potential to impact the construction schedule. In conjunction with Mitigation Measure F 1a (see below, page D.15-246) the construction window could be reduced even more, with even greater impact to schedule.
D.12	D.12-31	Last paragraph (2nd sentence)	The EIR/EIS states for Impact H-4, "Dewatering for tower construction in the Warner Groundwater Basin could result in a local and temporary drawdown of groundwater levels which could temporarily reduce the yield of nearby water supply wells. Should this occur, APM WAPM 6 requires identification of wells with decreased wells and provision of alternate water supplies during the period of depletion." Substitute "decreased yield" for "decreased wells."

68 df 83 D.12 Hydrology

Chapter #	Page #	Paragraph #	Comment
D.13	D.13-56	D.13.7 Last Para on page	Text uses the term "control building". Term SDGE has been using is "Control Shelter"

69 df 83 D.13 Geology

Chapter #	Page #	Paragraph #	Comment
D.14	D.14-31	Footnote 6	Footnote should be revised as follows: "6 Fair market value" is a term in both law and accounting to describe an appraisal based on an estimate of what a buyer would pay a seller for any piece of property. It is a common way of evaluating the value of property when assessing damages to be awarded for the loss of or damage to the property, generally in a claim under tort or a contract of insurance. defined by California Code of Civil Procedure section 1263.320(a) as "the highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing, and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all the uses and purposes for which the property is reasonably adaptable and available." In addition, where the property acquired is a part of a larger parcel, the payment of severance damages may be required if the remaining property (remainder),
			after the portion acquired, has been diminished in market value when compared with the same remainder before the taking.

Chapter #	Page #	Paragraph #	Comment
D.15	D.15-246	D.15.21 Last Para on page	Text states that Mitigation Measure F-1a ( construction is prohibited during severe fire weather) applies. Since Mitigation Measure H-1a effectively restricts grading to dry seasons,
D.15.1.1	D.15-2	3	significant delays in the construction schedule could result Add additional bullet, "other 3rd party contacts, i.e. mylar balloons, kites, wildlife"
D.15.1.1	D.15-4	4	Add "these access roads can have a positive affect, by providing fire equipment access to previously inaccessible areas."
D.15.2.6	D.15-34	1	Entire 1st paragraph repeated from previous page, delete.
D.15.3.3	D.15-61	3	Add "SDG&E is a participating member of the BAFC"
D.15.4.2	D.15-63	3	No longer a draft document; change to read "contained in the Sempra Utilities Wildland Fire Prevention and Fire Safety Guide (2007)"
D.15.4.2	D.15-64	1	Eliminate "Extinguish any remaining pole fires once a fire has passed through the area" as this does not apply to project construction.
D.15.4.4	D.15-69-71	5	Table D.15.24; Impact F-1 in all firesheds could be reduced to Class II or Class III by constructing outside of fire season for those critical wildland areas.
D.15.6	D.15-81	6	No longer a draft document; change to read "contained in the Sempra Utilities Wildland Fire Prevention and Fire Safety Guide (2007)"
D.15.6	D.15-83	4	No longer a draft document; change to read "contained in the Sempra Utilities Wildland Fire Prevention and Fire Safety Guide (2007)"
D.15.6	D.15-84-85	2	Mitigation Measure F-1e, Defensible Space grants fund in all firesheds seems excessive. It takes the onus off of the private landowner for something required of them by law and will likely not produce an overall landscape less susceptible to fire damage. Contributions to land management agencies for special projects related to transmission line hazard reduction would seem more proportional to the potential impact.
D.15.6	D.15-85	1	Presence of overhead transmission lines could in fact reduce the probability of a wildfire where existing wooden structures are replaced with more robust steel structures.
D.15.6	D.15-87-89	4	Fuelbreaks need to be planned with the appropriate land management agency and not indiscriminately placed under a Transmission Line ROW. Mid-slope fuelbreaks are useless for containment purposes, so significant planning must go into placement of fuelbreaks. This fact applies to all fuelbreaks recommended as a mitigation measure.

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Chapter #	Page #	Paragraph #	Comment
D.15.6	D.15-85	3	Presence of overhead transmission lines could in fact reduce the probability of a wildfire where existing wooden structures are replaced with more robust steel structures.
D.15.7	D.15-102	4	Presence of overhead transmission lines could in fact reduce the probability of a wildfire where existing wooden structures are replaced with more robust steel structures.
D.15.7	D.15-109	1	Presence of overhead transmission lines could in fact reduce the probability of a wildfire where existing wooden structures are replaced with more robust steel structures.
D.15.12	D.15-144	6	No longer a draft document; change to read "contained in the Sempra Utilities Wildland Fire Prevention and Fire Safety Guide (2007)"
D.15.12	D.15-145	2	Mitigation Measure F-1e, Defensible Space grants fund in all firesheds seems excessive. It takes the onus off of the private landowner for something required of them by law. Contributions to land management agencies for special projects related to transmission line hazard reduction would seem more proportional to the potential impact.
D.15.13.2	D.15-147	7	Assuming all mitigation measures are accomplished in the initial stages, construction and/or maintenance in future expansion of system should not significantly increase the probability of a wildfire (class 1)
D.15.13.4	D.15-155	3	Fuelbreaks need to be planned with the appropriate land management agency and not indiscriminately placed under a Transmission Line ROW. Mid-slope fuelbreaks are useless for containment purposes, so significant planning must go into placement of fuelbreaks. This applies to all fuelbreaks recommended as a mitigation measure.
D.15.15	D.15-167	10	Construction impacts are generally overstated throughout assessment as work schedules can mitigate most critical fire weather concerns. Project fire plans can significantly reduce risk as well.
D.15.17.1	D.15-178		Construction impacts are generally overstated throughout assessment as work schedules can mitigate most critical fire weather concerns. Project fire plans can significantly reduce risk as well.
D.15.17.2	D.15-190	4	Construction impacts are generally overstated throughout assessment as work schedules can mitigate most critical fire weather concerns. Project fire plans can significantly reduce risk as well.

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Chapter #	Page #	Paragraph #	Comment
D.15.17.2	D.15.193	6	Fuelbreaks need to be planned with the appropriate land management agency and not indiscriminately placed under a Transmission Line ROW. Mid-slope fuelbreaks are useless for containment purposes, so significant planning must go into placement of fuelbreaks. This applies to all fuelbreaks recommended as a mitigation measure.
D.15.18.1	D.15-201	5	Mitigation Measure F-1b No longer a draft document; change to read "contained in the Sempra Utilities Wildland Fire Prevention and Fire Safety Guide (2007)"
D.15.18.1	D.15-202	5	Mitigation Measure F-1e, Defensible Space grants fund in all firesheds seems excessive. It takes the onus off of the private landowner for something required of them by law. Contributions to land management agencies for special projects related to transmission line hazard reduction would seem more proportional to the potential impact.
D.15.18.4	D.15-213	6	Mitigation Measure F-1e, Defensible Space grants fund in all firesheds seems excessive. It takes the onus off of the private landowner for something required of them by law. Contributions to land management agencies for special projects related to transmission line hazard reduction would seem more proportional to the potential impact.
D.15.19.4	D.15-228	1	F-1e, Defensible Space grants fund; in all firesheds it seems excessive. It takes the onus off of the private landowner for something required of them by law. Contributions to land management agencies for special projects related to transmission line hazard reduction would seem more appropriate.
D.15.20.1	D.15-236	1	F-1e, Defensible Space grants fund; in all firesheds it seems excessive. It takes the onus off of the private landowner for something required of them by law. Contributions to land management agencies for special projects related to transmission line hazard reduction would seem more appropriate.
D.15.21.1	D.15-251	6	F-1e, Defensible Space grants fund; in all firesheds it seems excessive. It takes the onus off of the private landowner for something required of them by law. Contributions to land management agencies for special projects related to transmission line hazard reduction would seem more appropriate.
D.15.22	D.15-254	7	No longer a draft document; change to read "contained in the Sempra Utilities Wildland Fire Prevention and Fire Safety Guide (2007)"

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Chapter #	Page #	Paragraph #	Comment
D.15.22	D.15-255	13	F-1e, Defensible Space grants fund; in all firesheds it seems excessive. It takes the onus off of the private landowner for something required of them by law. Contributions to land management agencies for special projects related to transmission line hazard reduction would seem more appropriate.
D.15.22	D.15-257	1	Fuelbreaks need to be planned with the appropriate land management agency and not indiscriminately placed under a Transmission Line ROW. Mid-slope fuelbreaks are useless for containment purposes, so significant planning must go into placement of fuelbreaks. This applies to all fuelbreaks recommended as a mitigation measure.

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Chapter #	Page #	Paragraph #	Comment
D.16	D.16-36 to 50		The EIR/EIS concludes in a number of instances that Proposed Project is "inconsistent" with ABDSP General Plan, but SDG&E disagrees with the interpretation of "inconsistent." Wilderness dedesignation is the only issue related to the proposed project and certain alternatives that would require an amendment to the General Plan. For all other issues defined as inconsistencies, the ABDSP General Plan provides general direction or management strategies to park staff none of which are violated by the project, the plan explicitly contemplates the possibility that projects such as this may be proposed, and it contemplates that individual environmental review of such projects would be necessary - not a General Plan amendment for every individual project.

75 df 83 D.16 Policy

Chapter #	Page #	Paragraph #	Comment
D.17	D.17-6		Chart does not reflect that partial underground option would require partial de-designation of wilderness given one mile segment of overhead line through Grapevine Wilderness Area and therefore would require a plan amendment.
D.17	D.17-13		The high scenic integrity objectives it is not clear if Table D.17-2 includes BCD-South, which also has high scenic integrity objectives and is in "Moreno Place". That should be added and clarified.
D.17	D.17-14 to 15		Omits mention that Forest Plan amendments may be required to "designate" a transmission line corridor within back country and back country motorized use restricted land use zones, as well as BCNM. CNF Plan requires "designation" of major utility corridors in these areas, but current Forest Plan does not include any designated T-line routes for this project.







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February 11, 2008

REVISED VERSION

VIA EMAIL

Ms. Billie Blanchard Energy Division California Public Utilities Commission 505 Van Ness Ave. San Francisco, CA 94102 Ms Lynda Kastoll El Centro Field Office Bureau of Land Management 1661 S. 4<sup>th</sup> Street El Centro, CA 92243

Dear Ms. Blanchard and Ms. Kastoll:

San Diego Gas & Electric Company (SDG&E) has received the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/DEIS) for the proposed Sunrise Powerlink transmission line.

In accordance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), SDG&E will submit substantial, detailed comments on the various elements and findings of the DEIR/DEIS within the 90-day comment period once our experts have completed their analysis of the document. To provide early input to the Energy Division and Bureau of Land Management on the DEIR/DEIS, SDG&E submits the following overview comments on some of the conclusions and findings.

SDG&E filed the initial application for the Sunrise Powerlink with the California Public Utilities Commission (Commission) more than two years ago. The line was proposed to meet three primary objectives and state policy, including:

- Improved reliability;
- Greater access to renewable energy to satisfy the state's Renewable Portfolio Standard (RPS) and more recently the AB 32 greenhouse gas (GHG) emission reduction mandates; and
- Lower cost for our customers

Since the initial filing, the Sunrise Powerlink has been compared to an unprecedented range of project alternatives on a technical, economic and now environmental basis.

Given the time and resources devoted to this task, SDG&E is surprised and concerned about the treatment in the DEIR/DEIS of several fundamental issues.

First, the DEIR/DEIS fails to consider how the project and alternatives meet or advance state energy and environmental policies, in particular, renewable development, GHG emission reductions, and resource procurement. Second, it

identifies various purportedly "environmentally superior" alternatives to the project in the face of evidence before the Commission and in the DEIR/DEIS that shows that such alternatives are, at best, speculative and hypothetical. Third, based on our preliminary review, it appears the Sunrise Powerlink is assigned impacts and costs that are not considered for the alternatives, which affects the comparison, screening and "ranking" of some alternatives with the proposed project.

Below we provide examples of our initial concerns, and we expect to provide more detail on these and other examples in future comments.

#### New In-Area All-Source Generation Alternative

The New In-Area All-Source Generation Alternative, which was selected as the environmentally superior alternative, calls for a new 620 MW base load power plant, four smaller "peaker" plants totaling about 250 MW and 203 MW of renewable resources. Eighty-two percent of the generation counted for reliability purposes proposed for this alternative would burn fossil fuels.

The alternative not only fails to meet most of the project objectives identified by SDG&E, but also conflicts with the policy decisions of Governor Schwarzenegger and the California Legislature mandating greater use of renewable resources and less fossil fuels to meet our customers' energy needs.

By building substantially more fossil generation in lieu of the Sunrise Powerlink, which would import up to 1,000 MW of renewable resources, this alternative will prevent SDG&E from meeting the state's RPS and AB 32 GHG emission reduction targets.

The 203 MW of renewable projects identified for this alternative – even if they were all economically or technically feasible – fall far short of what SDG&E needs to comply with state law. More importantly, no developer will believe the state is serious about renewable energy generation development when an important tool they need to be successful – new transmission capacity – is tossed aside in favor of fossil generation.

Adoption of this alternative will substantially impede efforts to develop the renewable power supplies in the Imperial Valley – the very resources the State of California is counting on to battle climate change.

The feasibility of this alternative is questionable at best, as it relies on several proposed generation facilities that are uncertain or have been completely abandoned by developers because of strong local opposition, as well as on the unproven ability to greatly expand solar photovoltaic generating capability. The DEIR/DEIS also correctly notes that several regulatory challenges with this option could lead to schedule delays.

For instance, the DEIR/DEIS fully analyzes the South Bay Replacement Project on the City of Chula Vista's bay front as a possible candidate for the new base load power plant despite the applicant, LS Power, having withdrawn its application from the California Energy Commission (CEC) due to opposition from the City of Chula Vista and the Port of San Diego. The DEIR/DEIS states in pertinent part:

"Decisions in February and March 2007 by the City of Chula Vista and the Port of San Diego indicate that the power plant faces opposition. In October 2007, the Applicant withdrew the AFC in the CEC proceeding." (E.6-5)

"...it now appears that a new power plant will not be constructed at the Chula Vista site." (E.6-10)

The DEIR/DEIS analyzes a second base load power plant called the San Diego Community Power Project (SDCPP) proposed near the City of Santee and concludes:

"The SDCPP's development status is unclear...The SDCPP has not submitted an application for certification (AFC) to the CEC." (E.6-11)

The DEIR/DEIS admits that a fossil generation alternative like this faces other challenges, including the lack of emission offsets and potential schedule delays:

"Generation projects are subject to various regulatory processes that can delay the project schedule...obtaining offsets would be a challenge because of the lack of available offsets in the San Diego basin (Eastman, 2006). Even if the CEC were to approve the project, the decision could contain conditions that would make development impractical." (C-80)

It is unclear how the DEIR/DEIS could select 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 the proposed project. The San Diego area's need for reliability improvements is <u>real</u> and <u>imminent</u>. Our customers deserve solutions that are real and feasible.

#### New In-Area Renewable Generation Alternative

The New In-Area Renewable Generation Alternative calls for 1,000 MW of wind, solar thermal, solar photovoltaics and biomass/biogas to be constructed in San Diego County.

SDG&E disagrees with the DEIR/DEIS that this option would meet the major project objectives of reducing costs and improving reliability. In fact, the DEIR/DEIS provides clear evidence that the alternative is highly uneconomic for ratepayers, provides marginal reliability benefits and could not be implemented in time to meet the reliability deficiency forecasted for 2010.

The centerpiece of this option is a <u>hypothetical</u> 2.3 square mile, 232 MW solar thermal project in Borrego Springs. As the DEIR/DEIS points out, "...no developers have identified sites in Borrego Springs for such a large solar thermal project..." (E.5.1.1). The DEIR/DEIS estimates such a project would not be developed until 2016 (C-75) despite the need to address a reliability deficiency in 2010.

The delayed in-service date for this option is not surprising considering the DEIR/DEIS indicates the need for a new 36-mile transmission line through the community of Borrego Springs and the Anza Borrego Desert State Park for this

option to be realized. Substantial upgrades to several substations and other power lines would also be needed (E.5-6). SDG&E is currently evaluating the upgrades that would probably be constructed in conjunction with this hypothetical generation project. Given these probable upgrades, the project is likely economically unjustifiable. Further, these additional upgrades would be similar to the proposed project from an environmental impact perspective while failing to deliver any of the import capabilities offered by Sunrise.

The option also counts on 105 MW (firm on-peak) from solar photovoltaics by 2010, requiring more than 20,000 residential and 85 commercial installations per year over the next three years (E-5.12). This is in addition to the photovoltaic systems expected to be installed even without the project, such as those resulting from the California Solar Initiative (E.5-12) which accounted for 270 residential and 2 commercial systems that were installed and funded in SDG&E's service territory in 2007. It is significant to note that only 1,000 photovoltatic systems were installed in SDG&E's service territory in 2007 for a total of 4.35 MW (firm on-peak).

The DEIR/DEIS acknowledges that such a massive expansion of rooftop photovoltaics is unlikely in the short term:

"The cost to achieve the anticipated levels of PV installation related to hundreds of individual PV systems would also likely be prohibitive" (C-74)

"Economic, legal, and technical feasibility challenges would need to be overcome in order to develop numerous individual PV installations throughout San Diego County." (C-75)

The DEIR/DEIS also recognizes that closure of more polluting gas-fired power plants – and the associated reductions in greenhouse gas emissions – would <u>not</u> occur under this alternative (H-137).

Basing San Diego's future on projects that are hypothetical and technically infeasible is dangerous and puts our customers' energy reliability at risk. The Sunrise Powerlink, on the other hand, meets the purported intent of this alternative – namely increased use of clean, renewable resources – while ensuring the reliability of the grid.

#### **LEAPS Transmission-Only Alternative**

The LEAPS Transmission-Only Alternative, as described in the DEIR/DEIS, is a 32-mile 500 kV line connecting the SDG&E and Southern California Edison (SCE) grids, a 48-mile 230 kV line in San Diego and a new 500/230 kV substation.

SDG&E disagrees with the DEIR/DEIS that this option would meet the major project objectives of reducing costs, improving reliability, and providing access to renewables allowing SDG&E to meet its RPS goals beginning in 2010. In fact, the DEIR/DEIS ignores that The Nevada Hydro Company (TNHC), as one of the sponsors of the Lake Elsinore Advanced Pumped Storage (LEAPS) project, including the Talega-Escondido/Valley-Serrano (TE/VS) transmission line, has filed a CPCN application, but only for the transmission line that supports the presence of the pumped storage unit.

TNHC has filed this application as a backstop in the event the FERC fails to license LEAPS, including the TE/VS transmission line. TNHC's Proponent's Environmental Assessment (PEA) accompanying the CPCN application describes the combined project. Elsewhere, TNHC has made statements that it does not plan to build the transmission line without the pumped storage component. Yet the DEIR/DEIS recognized that the LEAPS Transmission and Generation Alternative has far more significant environmental impacts than the Sunrise Project and thus is "ranked" environmentally inferior to the Sunrise Project.

This alternative relies, yet again, on what the DEIR/DEIS describes as a "hypothetical project" (E.7-1) that is not even supported by either of the co-applicants for the LEAPS project at the FERC. Recent comments in *The Press Enterprise* on November 9, 2007 by an EVMWD spokesperson sum it up best:

"The PUC should not be getting involved with the project because it is not a power-lines project," water district spokesman Greg Morrison said.

EVMWD has also submitted formal comments to the FERC (December 16, 2006) that objected to the issuance of a license that includes the 500 kV transmission interconnection as a separate project. To SDG&E's knowledge, neither sponsor intends to pursue a transmission-only project without the pumped storage component and, therefore, it is unclear why the DEIR/DEIS would consider such a phantom alternative.

Moreover, the LEAPS Transmission-Only Alternative also fails to meet the critical project objective of providing direct access to renewable resources in the Imperial Valley as acknowledged by TNHC during the Phase 1 hearing process (TNHC Opening Brief at p. 16).

The DEIR/DEIS agrees:

"...it would be less likely to meet objectives related to delivery of renewable energy." (C-69)

The DEIR/DEIS goes on to say this alternative would provide access to wind resources in Tehachapi and San Gorgonio (E.7-7). SDG&E issues Request for Offers for green energy resources each year to renewable developers. Since 2005, SDG&E has received limited offers for renewable resources located north of San Diego County that meet the "Least-Cost, Best-Fit" screening criteria established by this Commission. However, there is substantial developer interest in the Imperial Valley region, evidenced by the more than 6500 MW of renewable projects that are now in the California Independent System Operator queue.

San Diego needs <u>direct</u> transmission access to the Imperial Valley to reach the state's renewable energy goals. The Imperial Valley region is very unique in that it offers a full range of renewable technologies and resource types, including solar, wind and geothermal. Direct access is not provided by the LEAPS Transmission-Only Alternative. According to the California Energy Commission:

"One of the primary difficulties with the Renewable Portfolio Standard is the lack of adequate transmission to access

important renewable resources in...the Imperial Valley..." (IEPR Update, 2006)

Without new transmission capacity to this region, proposed renewable projects in the region that are counting on the Sunrise Powerlink and any future contracts that would access a new transmission connection to the San Diego area will likely fail or be delayed.

The LEAPS Transmission-Only Alternative, even if the line could be built absent the pumped storage component, also fails to meet the objective of reducing costs for customers and increasing the import capability into the San Diego area that is needed to address the reliability deficiency SDG&E and the CAISO forecast will occur by 2010. The DEIR/DEIS did not consider the substantial transmission upgrades within SDG&E's systems needed to provide a meaningful contribution to the San Diego area reliability requirements. SDG&E has performed studies suggesting it would take well over \$1 billion in additional transmission upgrades to make 795 MW of capacity available to the San Diego area. These costs would be in addition to the estimated \$588 million cost of the transmission line itself.

#### **Proposed Project and Routing Alternatives**

SDG&E continues to study these routing options for the Sunrise Powerlink and plans to provide substantial comments over the next 90 days. However, SDG&E maintains that the proposed project remains the superior and most cost-effective alternative that provides the greatest reliability and access to renewables for our customers.

The bulk of comments on the routing alternatives will be submitted at a later date. However, we raise one critical issue now.

It has been determined that the Environmentally Superior Southern Route (SWPL) Alternative will need to meet stricter performance reliability criteria than the proposed project by the Western Electricity Coordinating Council (WECC) Reliability Performance Evaluation Work Group and Reliability Subcommittee (RPEWG).<sup>1</sup>

After careful independent review, the RPEWG did not approve the southern route alternative for less stringent performance reliability criteria. The analysis determined that the southern route alternative would require the development of a system protection scheme whereby up to 1000 MW of load in the San Diego area would have to be dropped in the event both the Southwest Powerlink and Sunrise Powerlink are forced out of service simultaneously. The proposed project, on the other hand, was approved for the less stringent performance reliability criteria and will not require this mitigation scheme.<sup>2</sup>

A requirement to implement a load dropping scheme ultimately defeats a key purpose of building the Sunrise Powerlink – namely to improve service reliability for our customers.

#### Conclusion

<sup>2</sup> Subject to approval by WECC Board of Directors

<sup>&</sup>lt;sup>1</sup> WECC RPEWG Sunrise Powerlink recommendation 12-20-07 http://www.wecc.biz/documents/library/RPEWG/RPEWG%20Sunrise%20Powerlink%20recommendation\_rev1.doc

It is clear that the proposed project remains the only option that meets all of the major objectives of improving reliability, expanding access to renewable resources in the Imperial Valley and reducing cost for customers. We hope that the final EIR/EIS will consider these objectives in the context of established state energy and environmental policies, and will compare the project and alternatives on a more useful basis.

SDG&E is responsible for providing the infrastructure that keeps the lights on. We take that responsibility very seriously. That is why we cannot base the energy future of this region on infeasible and hypothetical projects that may never come to fruition.

Further, we must carefully consider the impacts on the environment as we develop our long-term resource plan. It is no longer acceptable to rely almost exclusively on fossil fuels to maintain a reliable grid, as proposed in the DEIR/DEIS.

California has reached an energy crossroads and a choice needs to be made: Do we ignore state policy, continue taking the easy road and build substantially more fossil-based power plants to satisfy the needs of our customers as called for in the DEIR/DEIS? Or do we embrace this unprecedented opportunity to "go green" in California and build needed transmission lines like the Sunrise Powerlink that will improve reliability, import clean energy supplies and help support the renewable revolution that's underway?

Governor Schwarzenegger and State Legislature have made their decision clear: the state will follow the path that leads to a greener energy future. With the Commission's support of needed projects like the Sunrise Powerlink, we can work cooperatively to implement this vision for a cleaner and more reliable California.

Sincerely,

Michael R. Niggli

Chief Operating Officer

San Diego Gas & Electric Company Southern California Gas Company

cc:

E. Gregory Barnes

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