CH#	Pg#	Par#	Comment	1
E.1.2,	Discus	T GI #	The DEIR/EIS assessed impacts to specific biological resources equally for	-
E.2.2,	sed		each alternative regardless of extent or intensity of those impacts between	E0003-76
E.3.2,	throug		alternatives, i.e. all impacts to Quino were assessed as Class I despite the fact	
E.4.2,	hout		that some alternatives impacted critical habitat while others likely do not impact	
E.5.2,	entire		the species. Other examples of this discrepancy in analysis include: 1)	
E.6.2,	Biologi		Approximately 24 acres of Quino checkerspot butterfly critical habitat will be	
E.7.1.2,	cal		impacted by the Environmentally Superior SWPL Alternative. The DEIR/EIS	
E.8.2	Resour		states that the Proposed Project would not likely impact any occupied habitat,	
	Ces		yet it is assessed the same as an alternative that is known to impact critical	
	section		habitat. 2) Most impacts to the least Bell's vireo are from the Partial	
	S		Underground 230kV ABDSP SR78 to S2 Alternative with the All Underground Option. Only 2 migrants were found on the Proposed Project in 2007 surveys,	
	(i.e.;		yet the alignment with 19 known locations was ranked environmentally superior	
	section		to the Proposed Project. 3) Impacts to the southwestern willow flycatcher would	
	E.1.2		result from the Partial Underground 230kV ABDSP SR78 to S2 Alternative with	
	page		the All Underground Option; however, none were found on the Proposed	
	31		Project in 2007 surveys so the alignment with 24 migrants should not be	
	paragr		selected as the environmentally superior alternative to the Proposed Project. 4)	
	aph 5)		Impacts to the yellow-billed cuckoo would result from the Partial Underground	
			230kV ABDSP SR78 to S2 Alternative with the All Underground Option;	
			however, this species is not known to occur along the Proposed Project so the	
			alignment with 24 migrants should not be selected as the environmentally	
			superior alternative to the Proposed Project.	-
E.1	1	6	Additional I-8 route options exist to improve on the preliminary design or lessen	F0000 77
			the environmental impacts. These include; BCD South non motorized	E0003-77
			avoidance, Jacumba / SWPPL Breakaway Point, Plaster City Archeological	
			Site, Father Joe's non-motorized avoidance, Pine Valley non-motorized	
			avoidance, High Meadows - Hanson Quarry and Modified Route D Substation	
			Ingress / Egress. Shape files for these route options will be provided.	Ţ
E.1	5	1	500 kV underground technologies identified the fluid fill for "cooling" purposes,	+
			the fluid is in fact a dielectric fluid which is utilized to increase the dielectric	E0003-78
			properties of the paper insulation as well as in the event of a breach of the	
			protective jacket, the positive pressure from the fluid pressurization system will	
			keep impurities out of the cable, the fluid flow will maintain physical integrity of	
			the majority of the cable system minimizing the section requiring to be replaced.	
E.1	5	1	It is correct that 500 kV XLPE cable systems do not utilize a fluid cooling	
			system, however and 500 kV XLPE cable system would require a cooling	E0003-79
			system consisting of a minimum of a tunnel system with forced cooling fans and	
			controls. Depending on the ratings of the XLPE cable, the heat transfer	
			available with ambient air forced cooling may not be sufficient to maintain cable	
			ratings with out utilizing an air-conditioning system to chill outside air for	
			circulation in the tunnel system.	
				1

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E.1	5	2	The design stated would be for a SCFF system. An XLPE system would require a tunnel system with auxiliary forced cooling equipment and an auxiliary power system.	E0003-80
E.1	5	2, last bullet point	At the overhead to underground transition stations, oil storage tanks, pressurization pumps and auxiliary power would also be required.	E0003-81
E.1	6	1	XLPE systems would most likely require an air conditioning system to cool the forced air. This system would have the potential for refrigerant leaks. The system fans would also increase noise.	E0003-82
E.1.1	E.1.1-1	5	Text should note that the 400 foot separation of SWPL and SPL is measured from the R/W centerline.	E0003-83
E.1.1	E1.1-2	First Bullet	Text should clarify that although there are access roads along the existing SWPL line and this would incrementally reduce the amount of access roads required for a new line, additional roads and spur roads will be required and these additional roads will have impacts.	E0003-84
E.1	E.1.1-2 to 4	to be included in the route descriptio n section	Description of I-8 alternative should include that portion would cross Viejas reservation as noted on E.1.7-1.	E0003-85
E.1.1	E1.1-4	5	Text should be revised to note that the Campo Indian Reservation does not support the Campo North option or any other option that crosses tribal land.	E0003-86
E.1	E.1.1-5	1	Buckman Springs Option 500kv Underground. Self Contained Fluid Filled "SCFF" fluid is an insulating agent not a cooling agent. SCFF would require additional vaults for pumping and storage equipment for the insulating agent. Maintenance for these additional vaults would be required on a monthly not yearly basis. Additional duct bank conduits and path to SDG&E SCADA system would be required to monitor the high/low pressure fluid levels and cable temperature.	E0003-87
E.1	E.1.1-7	2&3	230 and 500kV Future Transmission System Expansion. "Two additional 230kV circuits could be installed within Alpine Boulevard, with appropriate compact duct banks and engineering to avoid, or possibly relocate, existing utilities." The current 230kV underground option for 8.1 miles of two 230kV Bundled Underground Circuits in Alpine Blvd maintaining the SDG&E preferred separation between circuits of 20', even reducing this separation to 15', along with relocating the two existing fiber optic backbone cables (on opposite sides of roadway) and relocating the existing water, sewer, communications and power on Alpine Blvd render the roadway area incapable of additional expansion. We are unaware of any current installation of "230kV compact duct banks" as referred to in Appendix 1 of DEIR in the United States.	E0003-88

CH#	Pg#	Par#	Comment	
E.1	E.1.1-7	1	Future transmission is along existing transmission corridors from Chicarita Substation to Escondido Substation. This route is congested with existing transmission and is along developed areas. Future transmission would require expansion of right of way impacting residences and business. The future transmission routes are a longer route to the northern cities of San Diego County. SDG&E's extra high voltage (EHV) transmission lines are along the coastal and in the southern areas of the County. The northern inland areas of the County have very little EHV lines. Thus, having a substation closer to the northern areas would provide the least impactful and cost effective way to serve these load centers. Additionally, the 500 kV along the northern route alternatives would be in less fire prone areas. That means fires would most likely occur on the 230 kV segments but would most likely impact one 230 kV circuit at a time. Whereas, the southern routes propose the 500 kV in fire prone areas so that a fire will more than likely put the 500 kV and 230 kV segments out of service.	E0003-89
E.1.2	7-8	5	The EIS/EIR states that this and all other alternatives are subject to mitigation requirements as the preferred route. It states that only topsoil from sensitive habitats will be salvaged and used in temporarily disturbed areas to facilitate regrowth. This should be expanded to include salvage of topsoil in all habitats for use in revegatation efforts along with whole plant salvage and native seed collection, where applicable. Non-sensitive habitats can also include species which can be beneficial in revegetation efforts and should also be included in all salvage efforts (i.e. create a plant list by species which should be identified for seed and topsoil collection and whole plant salvage).	E0003-90
E.1.2	9	4	This paragraph has an indirect reference to Mitigation B-7a. This proposed mitigation is inappropriate. It proposes to modify BIO-APM-14 so that trenches/excavations are covered at all times except when active. This would not be feasible or necessary, especially for long trenches or large excavations. Additionally, using silt fence where trenches can't be covered would not be effective at keeping any wildlife (except snakes) out and would be an unreasonable cost. As long as escape routes are provided in active trenches, BIO-APM-14 would be sufficient. If B-7a cannot be removed from the text, add the following language "shall be coveredor fenced when feasible". Inspecting trenches 3 times per day (vs. 2 times as proposed in the APM) also seems unreasonable and unnecessary.	E0003-91

CH#	Pg#	Par#	Comment	
E.1.2	10	4	The draft EIR/EIS states that: "The I-8 Alternative would cross Peninsular bighorn sheep (PBS) critical habitat in two areas: between MP I8-15.8 to MP I8 17.9 (Coyote Mountains) and between MP I8-22.8 and MP I8-30.4 (In-ko-pah Gorge)." In fact, the proposed I-8 alternative would pass south of the Coyote Mountains, along the edge and just inside of currently designated bighorn sheep Critical Habitat. However, this area has no documented use by bighorn sheep, follows an existing transmission line and dirt roads, and is below the toe of the slope outside of high quality habitat so impacts to PBS are not anticipated. The EIR/EIS should reflect this. As originally designated by the USFWS, Critical Habitat for desert bighorn sheep in the Peninsular Ranges was not developed using any quantitative analysis of empirical data. Instead, the USFWS used a highly subjective and qualitative approach, that was found by Turner et al. (2004, 2006) to include large areas that had a near zero probability of bighorn sheep use. The USFWS "model" used was purely descriptive and derived from the opinions of Recovery Team members. This meant that the way Critical Habitat was defined was not verifiable, and it included areas of no documented bighorn sheep use (Turner et al. 2004, 2006). Those areas of non-use included alluvial fans that extended one half mile from the toe of the slope, like the I-8 alternative, where bighorn sheep have not been documented. However, these areas are largely excluded from the Proposed Rule to revise Critical Habitat (USFWS 2007). These revisions were are result of Agua Caliente Band of Cahuilla Indians vs. Scarlett (Case No. 05-187 (C.D. Cal Aug. 11, 2006) and the USFWS 2007).	E0003-9
E.1.2	11	1	San Diego thorn-mint was identifiable during the 2007 survey season along other alternatives. Therefore, presence should not be assumed; the EIR/EIS should simply state it was present.	E0003-9

CH#	Pg#	Par#	Comment	
E.1.2	12	5	The draft EIR/EIS states that several state or federally listed species (including subspecies and DPS): "have a moderate to high potential to occur within the vicinity of the I-8 Alternative." However, the draft EIR/EIS fails to note that the I-8 alternative would pass through a very short section of what only appears to be seasonally occupied habitat by a few bighorn at the very southern extent of the bighorn sheep range, in the Island Area of I-8 and In-ko-pah Gorge (Botta 2008, pers. com). The area of currently designated Critical Habitat south of the Coyote Mountains has no documented use by bighorn sheep, which should be acknowledged in the draft EIR/EIS. As originally designated by the USFWS, Critical Habitat for desert bighorn sheep in the Peninsular Ranges was not developed using any quantitative analysis of empirical data. Instead, the USFWS used a highly subjective and qualitative approach that was found by Turner et al. (2004, 2006) to include large areas that had a near zero probability of bighorn sheep use. The USFWS "model" used was purely descriptive and derived from the opinions of Recovery Team members. This meant that the way Critical Habitat was defined was neither verifiable nor repeatable, and it included areas of no documented bighorn sheep use (Turner et al. 2004, 2006). Those areas of non-use included alluvial fans that extended one half mile from the toe of the slope, like the I-8 alternative, where bighorn sheep have not been documented. However, these areas are largely excluded from the Proposed Rule to revise Critical Habitat (USFWS 2007). These revisions were are result of Agua Caliente Band of Cahuilla Indians vs. Scarlett (Case No. 05-187 (C.D. Cal Aug. 11, 2006) and the USFWS 2007).	E0003-94
E.1.2.3	13	Table E.1.2.3, Interstate 8 Alternativ e, Impact B-10 Impact, Table E.1.2.3, All Options, Impact B- Impact	 Impact B-10 is defined in the EIR/EIS as follows: "Presence of transmission lines may result in electrocution of, and/or collisions by, listed or sensitive bird species (No impact for electrocution; Class I for collision for listed species; Class II for collision for non-sensitive species or daytime migration)." The literature does not support the frequently stated impact discussions on Raptors at Risk from Collisions (Impact B-10) and the resulting proposed mitigation is questionable. In fact the EIS/EIR refers to Bittner 2007, a local expert, who said that "eagles do not tend to be collision victims." The impact analysis on Golden Eagle collision risk is contradictory to this statement and the literature, including: 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, Commission Staff Report. P500-02-071F. The Final EIR/EIS should change the Class II impact and the proposed mitigation. 	E0003-95

CH#	Pg#	Par#	Comment]
E.1.2.3	13-14	2	The EIS/EIR overestimates potential rare plant and vegetation impacts resulting in a 'Class I' designation. It states that this and all other alternatives are subject to mitigation requirements as the Proposed Project. Impact acreages and mitigation ratios are assumed based on preliminary project design and assumed requirements by the regulatory agencies. If projected mitigation acreage and HMP's are implemented prior to any ground disturbing activities are conducted as proposed throughout the biology sections in the EIR, the regulatory agencies typically will require lower mitigation ratios because there will not be temporal loss of habitat. Revise ratios and reduce acreages to account for no temporal loss of habitat and allowances for final proposed impact acreages based on final project design.	E0003-96
E.1.2.3	14	3	The EIS/EIR assumes all impacts are 'Class I' without presenting detailed data. The document should identify and categorize all impacts based on final project design and field review and should not rely on unfounded assumptions or should at least recognize the impacts have been grossly overstated.	E0003-97
E.1.2	15-17	Table E.1.2-4	The EIS/EIR assumes mitigation ratios which may not be applicable to calculate mitigation acreages. Impact acreages and mitigation ratios are assumed based on preliminary project design and assumed requirements by the regulatory agencies. If projected mitigation acreage and HMP's are implemented prior to any ground disturbing activities are conducted as proposed throughout the biology sections in the EIR the regulatory agencies typically will require lower mitigation ratios because there will not be temporal loss of habitat. Revise ratios and reduce acreages to account for no temporal loss of habitat and allowances for final proposed impact acreages based on final project design.	E0003-98
E.1.2	18	1	The EIS/EIR assumes impacts to RCA's without project specific details or referencing the Edison Electric MOU concerning transmission lines on federal lands. The projects final engineering design would be used to determine if there will be any impacts to RCA's; the document should reference and utilize all applicable elements of the MOU to facilitate the implementation of the project.	E0003-99
E.1.2	18	2	The EIS/EIR makes assumptions on the presence of species and classifying impacts. Impacts to RCA's may be allowable based on the Edison Electric MOU concerning transmission lines on federal lands. Recommend using the project's final engineering design to determine if there will be any impacts to RCA's and reference and utilize applicable elements of the MOU to facilitate the implementation of the project. 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.	E0003-100
E.1.2	19	2	The EIS/EIR assumes that implementation of the project will cause fires that will result in type conversion of habitats along and adjacent to the project ROW. This assumption does not reference any scientific study which would aid in confirmation of the assumption; therefore, include references that support this statement. Additionally, include in the discussion other factors that occur in the project area that cause type conversion, such as overgrazing which can convert perennial grasslands to annual grasslands.	E0003-101