

Comment Set E.4: Applicant – Description of Proposed Project/Action and Alternatives

**ANTELOPE-PARDEE 500kV TRANSMISSION PROJECT
SCE COMMENTS & SUGGESTED REVISIONS ON DEIR/DEIS
DESCRIPTION OF PROPOSED PROJECT/ACTION AND ALTERNATIVES**

October 2006

Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve
1	B.1	B-1	Paragraph 1, Line 5	The DEIR/DEIS references section B.2.1.4 – Planned Generation Facility. This section does not exist and should not be included, if inadvertently omitted, since the proposed project is not linked to “the Planned Generation Facility (B.2.1.4).”	Remove the reference to section B.2.1.4.
2	B.1	B-2	Paragraph 1, Line 3	The DEIR/DEIS states that “the proposed Project would require several amendments to the ANF Land Management Plan...along the proposed utility corridor...” This statement is incorrect. The proposed Project would be within an existing utility corridor designated as such by the ANF.	Revise language to state that the proposed Project is within an existing designated utility corridor.
3	B.1	B-2	Table B.1-1 Overall Project Construction	The first bullet inaccurately states the proposed project construction duration as 13 months. The correct duration is 18 months as stated in SCE’s PEA. The first bullet also states that construction is proposed to begin March 2008. The estimated start of construction will be upon receipt of approval for the proposed Project from the lead agencies (and approval of any pre-construction mitigation measures required).	Change construction duration to 18 months. Change language to read “upon receipt of approval”.
4	Table B.1.1 Summary of Proposed Project Components	B-2	Overall Project Construction, last bullet	States that 122 acres of land disturbance would result from the proposed project and that 64 acres would be restored. These numbers are inaccurate.	See comments for Table B.2-7 Estimates of Project Land Disturbance for the Proposed Project.

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Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve	
5	B.2.1.1	B-14	Figure B.2-6	This Figure B.2-6 is misnamed. It depicts the crossing of the existing ROW and not the proposed new ROW as labeled. The 180' notation is therefore incorrect and should be removed.	Rename the Figure 'Crossing Existing ROW Configuration' and delete the 180' notation.	E.4-5
6	B.2.1.1	B-16	Figure B.2-8 Proposed	The range of tower height for the proposed towers is incorrect.	Change text to read: "...113 to 178 feet".	E.4-6
7	B.2.1.1	B-17	Figure B.2-9 Proposed	The range of tower height for the proposed towers is incorrect.	Change text to read: "...113 to 178 feet".	E.4-7
8	B.2.1.1	B-21	Figure B.2-12	The Figure states that approximate typical heights are shown. There are no tower heights depicted in this Figure.	Add approximate typical tower heights to figure or delete text stating that this information is shown on the figure.	E.4-8
9	B.2.1.2	B-22	Line 3 and bullets 1 and 2.	States that four 220kV lines positions would be installed, however bullets 1 and 2 describe the installation of 500kV lines at positions 10 and 11.	For clarity, please modify the first two bullets describing Positions 10 and 11 to indicate "...500 kV lines (initially energized at 220 kV)".	E.4-9
10	B.2.1.2	B-23	Pardee Substation - 1st Paragraph	States that 500 kV line terminates at an existing switchrack position, which implies a 500 kV position.	For clarity, please modify the following statement: "The proposed 500-kV transmission line terminates at an existing switchrack position." to read as follows: "The proposed 500-kV transmission line (initially energized at 220-kV) would terminate into an existing 220-kV switchrack position."	E.4-10
11	B.2.1.2	B-24	Table B.2-1	The construction duration is incorrectly stated as 13 months. The source document cited, SCE, 2005 AQ-09, is incorrect and should be AQ-01.	Correct construction duration to state 18 months as written in SCE's PEA. Correct source document to read: "SCE, 2005(AQ-01).	E.4-11
12	B.2-13	B-25	Map	Figure B.2-13 is incorrect.	The figure should be modified to reflect that the 220 kV improvements are within existing SCE owned property. (See modified figure attached)	E.4-12
13	B.2.2	B-27 through B-29	Tables B.2-3 and B.2-4	These 2 tables are confusing because it uses check marks instead of numbers.	SCE recommends using the tables provided in the PEA.	E.4-13

Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve
14	B.2.2	B-31	Land Disturbance, first sentence in paragraph	States that approximately 122 acres of land disturbance would result from the proposed project and that approximately 63 acres would be restored. These numbers are inaccurate.	See comments for Table B.2-7 Estimates of Project Land Disturbance for the Proposed Project
15	Table B.2-7	B-32	Staging Areas and Equipment (Secondary Marshalling Yards)	The amount of land disturbance is calculated with incorrect assumptions. For secondary marshalling yards, 5 acres per yard was used to determine the amount of land disturbance. However, secondary marshalling yards typically require a 200 ft by 200 ft site, approximately 0.9 acres. Since it is estimated that 4 secondary marshalling yards are required for the proposed project, the amount of land disturbance would be 3.6 acres, instead of the 20 acres listed on the table. This information was stated in the Antelope Transmission Project, Segment 1, PEA section 3.2.2.3.2 on page 3-11. Also, in Segment 1 Data Request #3, PD-15 restated that secondary marshalling yards typically require a 200 ft by 200 ft (0.9 acre) site. In Data Request #3 T-01, it was stated that 4 secondary marshalling yards for the proposed project would be required. In addition, Data Request #3 VIS-05 provided a map of all 4 locations as well as the corresponding address.	Revise Table B.2.7: The amount of acres disturbed during construction for secondary marshalling yards would be 3.6 acres. This amount of acreage which would also be restored after construction.

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Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve	
16	Table B.2-7	B-32	Total Estimated	In the Acres Disturbed During Construction column and the Acres to be Restored column, the arithmetic is incorrect. According to the numbers listed in the table, the total amount of land disturbance during construction adds up to 126.85 acres, instead of the 121.8 acres listed. The total amount of acres to be restored adds up to 68.33 acres, instead of the 63.3 acres listed. However, since wrong assumptions were used to calculate the land disturbance for secondary marshalling yards, the new totals listed are also incorrect. Therefore, a new corrected total of approximately 111 acres of land would be disturbed, while approximately 52 acres would be restored after construction is complete.	Revise Table B.2.7: The total amount of acres disturbed during construction would be 110.45 acres and the total amount of acres to be restored after construction would be 51.93 acres.	E.4-16
17	B.2-8	B-34	Antelope Substation, Soil/Vegetation	States that 13,500,000 pounds of waste will be generated and can be reused on site.	The industry standard for calculating volumes of waste is in cubic yards. Provide methodology for calculating pounds of waste from acres of disturbance.	E.4-17
18	B.2.2.1	B-35	Secondary Marshalling Yards, first sentence in last paragraph	Assumes that Secondary Marshalling yards would be similar to Primary Marshalling yards and impact an area of approximately 5 acres.	Secondary Marshalling yards typically require a 200 ft by 200 ft site, approximately 0.9 acres. See comments for Table B.2-7	E.4-18
19	B.3.2.3	B-53		Given that this is SCE's proposed project, the document should contain only one purpose and need statement (SCE's). The purpose of the lead agencies is to evaluate the proposed project.	The DEIR/DEIS should be modified to remove any reference to agencies' purpose and need.	E.4-19

Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve
20	General B.4.1	B-67	21-22	The placement of a 500 kV transmission line underground may cause unexpected impacts to existing infrastructure. For example, existing traffic lights use inductive coils to trigger the traffic signals. These coils and their computer controls may be damaged or may not function at all due to their close proximity to the electromagnetic fields generated by the underground conductors. Also, the electromagnetic fields may have an adverse affect on modern vehicle computer systems.	DEIR/DEIS should account for possible impacts to the existing infrastructure on San Francisquito Canyon Road and Copper Hill Drive that can not be moved. AM radio reception may also be adversely affected.
21	B.4.1.1	B-67	5-6	Local public works department would prefer to bury the underground transmission line as far down as possible so as not to limit future improvements to the roads. But, the lower a transmission line is buried, the less it can dissipate the heat it generates.	The design of the underground transmission line may adversely affect future improvements to San Francisquito Canyon Road and Copper Hill Drive.
22	B.4.1.1	B-67	21-22	The description continued from page B-66 describes the proposed underground near Pardee Substation in the city of Santa Clarita. The total length of this segment is approximately 3.3 miles in length. Figure B-4-6, page B-77, shows an approximate configuration of the underground right of way in a city street.	Edison would require a 10 foot free zone either side of the of the duct banks for thermal dissipation of heat generated by the cables and protection from excavation activities undertaken by others. If other municipal utilities, such as but not limited to, sewers, gas, water, distribution circuits, cable and communication facilities, are in the vicinity of this route, they would need to be removed prior to the start of construction. The cumulative impact of relocating all the existing municipal utilizes in the proposed route have not addressed in this document.

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Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve	
23	B.4.1.1	B-67	5-6	Alt 1 requires an approximate 570 foot crossing of San Francisquito Creek. It is estimated that each cable will weigh approximately 26 lbs per foot or a total of 234 lbs per foot for the nine required cables, not including the facilities necessary to support or contain the cables. Experience has demonstrated that a typical bridge, such as that crossing San Francisquito Creek, does not possess sufficient strength on its underside to support the attached cables.	It will be necessary to construct an independent support structure for the crossing of San Francisquito Creek.	E.4-23
24	B.4.1.1	B-67	6,7, and 8	The transition facility proposed at Pardee Substation must be constructed adjacent to the 500kV switchyard, instead of being incorporated into the switchyard itself as indicated in the description. If system studies indicate the need for shunt reactors at Pardee Substation, additional property may be required for the transition yard.	There may not be sufficient available property outside of Pardee Substation to accommodate a new transition station.	E.4-24
25	B.4.1.2	B-68	3 rd Bullet	The DEIR/DEIS item addresses the physical properties of the splicing vaults. Not discussed are the land and access requirements necessary for construction and operation and maintenance.	<p>The need to move construction equipment to, from and around a vault during construction or maintenance activities requires that a pad be constructed that is 16 feet in width, measured from both sides of the vault and 100 feet in length, measured from both ends of the vault.</p> <p>In addition, a through road must be provided at each splicing vault location to allow access to the site of trailers or other long vehicles with out the need to turn the vehicle at the site. The maximum acceptable ground slope at and adjacent to the vault is two percent.</p>	E.4-25

Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve
26	B.4.1.2	B-68	4 th Bullet	Street improvements that require the relocation of underground utilities are normally paid for partially by local public works departments. If this was ever to occur, the cost to move the 500kV underground facilities would be prohibitively expensive for SCE and the local public works departments, thereby limiting future improvements to San Francisquito Canyon Road and Copper Hill Drive.	A Joint Use Agreement would need to be in place that would protect SCE from the expense of relocating the circuit in the future for infrastructure modifications that might be proposed by others. Local public works departments must be aware of the financial and logistics impacts to San Francisquito Canyon Road and Copper Hill Drive.
27	B.4.1.2	B-68	6 th Bullet	The DEIR/DEIS item discusses the transition stations. Not discussed is the need for a power source for the station for the operation of any protective or communication equipment that may be required and the need for security lighting for the facilities that are proposed within the ANF.	The 12 kV distribution circuit closest to each transition station would probably provide the power. Any new construction would be placed underground and could result in additional construction activities. In addition, an all-weather road would be required from existing public highways to each transition station.
28	B.4.1.2	B-68	7 th Bullet	The DEIR/DEIS item addresses the space requirements adjacent to the splicing vaults. These construction pads will be permanent structures. If an emergency should develop at a splicing vault, Edison will require immediate access for construction equipment. That requirement cannot happen if the materials used to construct the construction pad have been removed.	
29	B.4.1.2	B-68	8 th Bullet	The DEIR/DEIS item discusses the need to improve roads along the proposed cable route within the ANF.	A road wider than 16 feet will be required to allow the passing of large construction vehicles when a vehicle is positioned for work.

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Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve
30	B.4.1.2	B-68	9 th Bullet	The DEIR/DEIS item discusses the location of the proposed underground segment on and compatibility with a fuel break. Maintenance activities used to maintain the functionality of the fuel break would probably require scraping of the ground surface.	This scraping activity will not be acceptable to SCE because it could eventually result in exposure of one or more of the 500 kV duct banks.
31	B.4.1.3	B-72	2 nd Paragraph	The DEIR/DEIS addresses the extended construction timeframe required to place the circuit underground. It references the need to remove all vegetation during the construction process.	The construction schedule should also take into account the time required to relocate all the necessary municipal utilities. DIER should also indicate that the strip of land would continue to be kept clear of large vegetation once the cable system is installed.
32	B.4.1.3	B-72	1 st Bullet	The DEIR/DEIS item discusses the need for extensive grading along the underground route. In areas where it will be necessary to install fill material, the disturbed area of the right of way will need to be much wider than the indicated 85 feet to allow for the installation of stable fill material. As indicated above, the strip of land will continue to be kept clear of large vegetation once the cable system has been installed. To quote a TVA web site 'At first look, burying a transmission line may appear to be a good alternative to installing an overhead line; however, digging a miniature "Panama Canal" and filling it back in with the power lines at the bottom has a far greater effect on the environment and community, with no guarantee that it won't have to be dug up again just a few years down the road.'	Structural grading would be necessary to properly compact and key the fill material to the existing terrain. After grading has been completed, erosion control measures would be necessary to ensure that the fill material will remain in place. Maintaining the fill material to ANF requirements after construction has been completed could prove to be a major maintenance activity.

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Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve	
33	B.4.1.3	B-72	3 rd Bullet	The DEIR/DEIS item discusses the need for improvements to the existing road system within the ANF.	In order to transport a reasonable length of 500 kV cable, special cable reels and trailers are used. The reels are of larger diameter than those used for overhead conductors and the trailers are of a "low bed" design. That trailer configuration will probably not be compatible with the roads usually found in the ANF, therefore; major new road construction will be required.	E.4-33
34	B.4.1.3	B-72	4 th Bullet	The DEIR/DEIS item states "...Trenches would be dug and large areas excavated for the duct banks and splicing vaults."	Because of the large amount of excavation required for the duct banks and vaults and the terrain to be traversed by the proposed cable system, it will be necessary to prepare and obtain approval for detailed grading plans prior to start of construction. These approval activities could significantly extend the project schedule.	E.4-34
35	B.4.1.3	B-72	5 th Bullet	The DEIR/DEIS item references the splicing vaults that are necessary for joining the cable segments together.	The need to move construction equipment to, from and around a vault require that a pad be constructed that is 16 feet in width, measured from both sides of the vault and 100 feet in length, measured from both ends of the vault. In addition, a through road must be provided at each splicing vault location.	E.4-35
36	B.4.1.3	B-72	6 th Bullet	The DEIR/DEIS item discussed the trips necessary to transport materials to the proposed underground cable route in the ANF.	The trips will be measured in the many thousands with at least 7,500 concrete truck trips alone.	E.4-36

Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve	
37	B.4.1.3	B-72	7 th Bullet	The DEIR/DEIS item discusses the transition station that would be located at Pardee Substation. Because of the space the transition station will require, it cannot be located within a 500 kV line position. It will instead need to be located between the north 500 kV buss and the north station fence.	Depending on the equipment required for the transition station, it may be necessary to extend the Pardee Station property to the north of its current location.	E.4-37
38	B.4.2.3 Alternative 2 Construction and Operation	B-89	Second to Last Sentence in first paragraph	States that new spur road construction would be approximately 0.7 miles off NFS lands and 0.3 miles on NFS lands	This implies detailed preliminary engineering was performed to determine the amounts of new spur road construction. What evaluations were performed to determine these amounts? Where the evaluations performed equally on all alternatives? Need to show methodology of engineering evaluations.	E.4-38
39	B.4.2.3 Alternative 2 Construction and Operation	B-89		The DEIR/DEIS states that Alternative 2 would require the expansion of the Pardee Substation. The only work that would be required is the equipping of an existing position.	Revised the DEIR/DEIS to clearly indicate the no expansion is needed at Pardee.	E.4-39
40	B.4.2.3 Alternative 2 Construction and Operation	B-90	Workforce, Second sentence in first paragraph	States approximately 8.8 miles of new and/or improved access roads would be required for remote access for Alternative 2	This implies detailed preliminary engineering was performed to determine the amounts of new road construction. What evaluations were performed to determine these amounts? Where the evaluations performed equally on all alternatives? Need to show methodology of engineering evaluations.	E.4-40
41	B.4.2.3 Alternative 2 Construction and Operation	B-90	Land Disturbance, first sentence in paragraph	States a total of approximately 117 acres of land would be disturbed, of which approximately 59 would be restored. These amounts are incorrect.	See comments for Table B.4-10 Estimates of Project Land Disturbance for Alternative 2	E.4-41
42	Table B.4-10, Estimates of Land Disturbance for Alternative 2	B-91	New and/or improved Roads	States approximately 10.39 miles (on NFS lands) and 0.51 miles (off NFS lands) of new and/or improved access roads would be required for Alternative 2	This implies detailed preliminary engineering was performed to determine the amounts of new road construction. What evaluations were performed to determine these amounts? Where the evaluations performed equally on all alternatives? Need to show methodology of engineering evaluations.	E.4-42

Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve	
43	Table B.4-10, Estimates of Land Disturbance for Alternative 2	B-91	Radius from access road to spur road; and spur road related temporary disturbed areas	States an amount of acres disturbed during construction, however does not list a quantity.	Place quantities into appropriate table rows.	E.4-43
44	B.4.4.3 Alternative 4 Construction and Operation	B-101	Land Disturbance, first sentence in paragraph	States a total of approximately 126 acres of land would be disturbed, of which approximately 64 would be restored. These amounts are incorrect.	See comments for Table B.4-16 Estimates of Project Land Disturbance for Alternative 4	E.4-44
45	Table B.4-16 Estimates of Project Land Disturbance for Alternative 4	B-102	Radius from access road to spur road; and spur road related temporary disturbed areas	States an amount of acres disturbed during construction, however does not list a quantity.	Place quantities into appropriate table rows.	E.4-45

Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve
46	Table B.4-16 Estimates of Project Land Disturbance for Alternative 4	B-102	Staging Areas and Equipment (Secondary Marshalling Yards)	<p>The amount of land disturbance is calculated with incorrect assumptions. For secondary marshalling yards, 5 acres per yard was used to determine the amount of land disturbance. However, secondary marshalling yards typically require a 200 ft by 200 ft site, approximately 0.9 acres. Since it is estimated that 4 secondary marshalling yards are required for the proposed project, the amount of land disturbance would be 3.6 acres, instead of the 20 acres listed on the table. This information was stated in the Antelope Transmission Project, Segment 1, PEA section 3.2.2.3.2 on page 3-11. Also, in Segment 1 Data Request #3, PD-15 restated that secondary marshalling yards typically require a 200 ft by 200 ft (0.9 acre) site. In Data Request #3 T-01, it was stated that 4 secondary marshalling yards for the proposed project would be required. In addition, Data Request #3 VIS-05 provided a map of all 4 locations as well as the corresponding address.</p>	<p>Revise Table B.4-16: The amount of acres disturbed during construction for secondary marshalling yards would be 3.6 acres. This amount of acreage which would also be restored after construction. Adjust total estimate accordingly.</p>

E.4-46

Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve
47	Table B.4-16 Estimates of Project Land Disturbance for Alternative 4	B-102	Total Estimated	In the Acres Disturbed During Construction column and the Acres to be Restored column, the arithmetic is incorrect. According to the numbers listed in the table, the total amount of land disturbance during construction adds up 130.5 acres, instead of the 125.5 acres listed. The total amount of acres to be restored adds up to 69.3 acres, instead of the 64.3 acres listed. However, since wrong assumptions were used to calculate the land disturbance for secondary marshalling yards, the new totals listed are also incorrect. Therefore, a new corrected total of approximately 114 acres of land would be disturbed, while approximately 53 acres would be restored after construction is complete.	Revise Table B.4-16: The total amount of acres disturbed during construction would be 114.10 acres and the total amount of acres to be restored after construction would be 52.90 acres.
48	B.4.5.3 Alternative 5 Construction and Operation	B-109	Land Disturbance, first sentence in paragraph	States a total of approximately 146 acres of land would be disturbed, of which approximately 87 would be restored. These amounts are incorrect.	See comments for Table B.4-21 Estimates of Project Land Disturbance for Alternative 5
49	Table B.4-21, Estimates of Land Disturbance for Alternative 5	B-109	New and/or improved Roads	States approximately 1.15 miles (on NFS lands) and 8.33 miles (off NFS lands) of new and/or improved access roads would be required for Alternative 5.	This implies detailed preliminary engineering was performed to determine the amounts of new road construction. What evaluations were performed to determine these amounts? Where the evaluations performed equally on all alternatives? Need to show methodology of engineering evaluations.
50	Table B.4-21, Estimates of Land Disturbance for Alternative 5	B-109	Radius from access road to spur road; and spur road related temporary disturbed areas	States an amount of acres disturbed during construction, however does not list a quantity.	Place quantities into appropriate table rows.

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Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve
51	Table B.4-21, Estimates of Land Disturbance for Alternative 5	B-109	Staging Areas and Equipment (Secondary Marshalling Yards)	The amount of land disturbance is calculated with incorrect assumptions. For secondary marshalling yards, 5 acres per yard was used to determine the amount of land disturbance. However, secondary marshalling yards typically require a 200 ft by 200 ft site, approximately 0.9 acres. Since it is estimated that 4 secondary marshalling yards are required for the proposed project, the amount of land disturbance would be 3.6 acres, instead of the 20 acres listed on the table. This information was stated in the Antelope Transmission Project, Segment 1, PEA section 3.2.2.3.2 on page 3-11. However, since Alternative 5 is 45% longer than the proposed project, more than 4 secondary marshalling yards may be required for this alternative.	Revise Table B.4-21: The amount of acres disturbed during construction for secondary marshalling yards would be the number of marshalling yards times 0.9 acres. This amount of acreage which would also be restored after construction. Adjust total estimate accordingly.
52	Table B.4-21 Estimates of Project Land Disturbance for Alternative 5	B-110	Total Estimated	In the Acres Disturbed During Construction column and the Acres to be Restored column, the arithmetic is incorrect. According to the numbers listed in the table, the total amount of land disturbance during construction adds up 150.6 acres, instead of the 145.6 acres listed. The total amount of acres to be restored adds up to 91.6 acres, instead of the 86.6 acres listed. However, since wrong assumptions were used to calculate the land disturbance for secondary marshalling yards, the new totals listed are also incorrect. Therefore, a new corrected total of approximately 134 acres of land would be disturbed, while approximately 75 acres would be restored after construction is complete.	Revise Table B.4-21: The total amount of acres disturbed during construction would be 134.20 acres and the total amount of acres to be restored after construction would be 75.20 acres.

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- E.4-10 Section B.2.1.2, under “Pardee Substation”, has been updated.
- E.4-11 See the response to Comment E.4-3 regarding construction duration.
- E.4-12 Figure B.2-13 has been updated.
- E.4-13 A more detailed equipment list is provided in the air quality calculations provided in Appendix 3. The information in Tables B.2-3 and B.2-4 were derived from PEA Table 3-3. Check marks denote the equipment that would be used for each activity. Exact numbers of equipment were not provided as these would be dependent upon how many simultaneous work areas would be occurring at any given time.
- E.4-14 See the response to Comment E.4-15 regarding land disturbance estimates shown in Table B.2-7.
- E.4-15 SCE’s PEA Table 3-1 states that the disturbed acreage calculation for staging areas materials and equipment is “3-5 acres per yard”. As such, a conservative estimate of 5 acres per secondary marshalling yard was assumed in Table B.2-7 of the Draft EIR/EIS.
- E.4-16 The totals provided in Table B.2-7 have been updated to reflect the correct summation of land disturbance.
- E.4-17 The construction waste estimates provided in Table B.2-8 of the EIR/EIS were taken directly from SCE’s PEA Table 3-4, which were provided in “pounds”.
- E.4-18 See the response to comment E.4-15 regarding land disturbance estimates shown in Table B.2-7.
- E.4-19 Please see the response to Comment E.3-17 for a discussion of purpose and need.
- E.4-20 Thank you for your comments. Impacts to underground utilities resulting from Alternative 1 are discussed in Section C.14.6.2 (Criterion UTL4).
- E.4-21 Thank you for your input. It will be shared with the decision-makers who are reviewing the Project at the USDA Forest Service and the CPUC.
- E.4-22 The underground segment within the City of Santa Clarita is estimated to be 3.5 miles long (Mile 22.7 to Mile 26.2). Thank you for your input regarding SCE’s requirements for underground transmission lines. As stated in Section C.14.6.2 (Criterion UTL4), “Actions taken to avoid utilities identified in accordance with California Government Code 4216-4216.9 would ensure that construction activities would not result in reductions or interruption of existing utility systems or cause a collocation accident.”
- E.4-23 Thank you for your input. Section B.4.1.1 has been updated to denote the possibility that an independent support structure may be required to cross San Francisquito Creek if the existing bridge is determined to be structurally unstable with the additional infrastructure attached.
- E.4-24 The proposed Project’s overhead 500 kV transmission line terminates at a “dead-end” structure inside the Pardee Substation. From the overhead termination point the line is connected through 500 kV line disconnect switches and circuit breakers. In the alternative where the 500 kV line enters the substation underground, the underground cable would terminate in the substation on a cable riser structure which would replace the overhead “dead-end” structure. From the underground termination point the line is connected through 500 kV line disconnect switches and circuit breakers.

It is likely that the use of 500 kV underground cable would require the installation of 500 kV shunt reactors. The shunt reactor installation will also require a separate set of 500 kV line disconnect switches. There may not be sufficient room in the existing Pardee Substation to accommodate the shunt reactors and line disconnect switches requiring an expansion of the substation.

If Alternative 1 were to be chosen by the Lead Agencies and detailed engineering determined that the design as described in the EIR/EIS was substantially different, then the Lead Agencies would need to determine whether or not supplemental analysis is required.

- E.4-25 Thank you for the additional information regarding splicing vaults and SCE's access requirements. This information will be shared with the decision-makers who are reviewing the Project at the USDA Forest Service and the CPUC.
- E.4-26 Thank you for your comment. The additional logistics and coordination required for Alternative 1 will certainly be shared and considered by the decision-makers who are reviewing the Project at the USDA Forest Service and the CPUC.
- E.4-27 Thank you for the submitting information on underground construction and operational requirements. As discussed in Section B.4.1.2, a 16-foot wide all-weather access road for equipment access and material deliveries is required for underground installation. Visual Resources Section C.15.6.2 discusses lighting associated with transition stations.
- E.4-28 Please see the response to Comment E.4-25.
- E.4-29 Thank you for your comment. Please see the response to Comment E.4-27.
- E.4-30 Thank you for your comment. As discussed in Section B.4.1.2, placement of the transmission line underground in the ANF within an existing fuelbreak is considered to be compatible by the USDA Forest Service. Your concerns will be shared with the USDA Forest Service.
- E.4-31 As stated in Section C.14.6.2 (Criterion UTL4), "Actions taken to avoid utilities identified in accordance with California Government Code 4216-4216.9 would ensure that construction activities would not result in reductions or interruption of existing utility systems or cause a collocation accident." No additional time has been allocated in the construction schedule.
- As discussed in Section B.4.1.3 under "Facility Operations and Maintenance", the area above the underground cables would "remain free from secondary surface development...The type of vegetation allowed to grow on land above the buried infrastructure would be permanently restricted and would be compatible with the vegetation maintenance needs of the existing fuelbreak on the ridge top."
- E.4-32 Thank you for the additional information and concerns regarding underground construction and maintenance. These will be shared with the decision-makers who are reviewing the Project at the USDA Forest Service and the CPUC.
- E.4-33 Thank you for your additional input regarding upgrades to existing roads to allow for transport of underground cable, equipment, and materials.
- E.4-34 Thank you for your comments. These will be shared with the decision-makers who are reviewing the Project at the USDA Forest Service and the CPUC.

- E.4-35 Thank you for the additional information regarding access to splicing vaults. This information will be shared with the decision-makers who are reviewing the Project at the USDA Forest Service and the CPUC.
- E.4-36 The additional vehicle trips required for underground construction associated with additional workforce requirements, as well as importing and exporting materials is discussed in Section B.4.1.3 under “vehicle trips”.
- E.4-37 Please see the response to Comment E.4-24.
- E.4-38 Estimates of new road construction for all alternatives were extrapolated based on the preliminary design information and road maps provided for the proposed Project. Detailed preliminary engineering was not performed. A note has been provided with each table presenting detailed numbers stating that “These are approximate numbers based on estimates derived from preliminary design concepts...Numbers are subject to change as the design is finalized.”
- E.4-39 It is stated that Alternative 2 would require expansion of the Pardee Substation consistent with the proposed Project, as described in Section B.2.2.2. This “expansion” includes installation of various equipment, upgrading existing circuit breakers, and within the Pardee Control Room, installation of protection relays and associated equipment.
- E.4-40 See the response to Comment E.4-38.
- E.4-41 The totals provided in Table B.4-10 have been updated to reflect the correct summation of land disturbance. See also the response to Comment E.4-43.
- E.4-42 See the response to Comment E.4-38.
- E.4-43 As discussed in the response to Comment E.4-38, estimates of new road construction for all alternatives were extrapolated based on the preliminary design information and road maps provided for the proposed Project. Land disturbance (acres) associated with “radius from access road to spur road” and “spur road related temporary disturbed areas” were also extrapolated. The exact number of each type was not determined as it would require a more detailed design approach to estimate. Therefore, these numbers have not been included in the land disturbance tables for any of the alternatives.
- E.4-44 The totals provided in Table B.4-16 have been updated to reflect the correct summation of land disturbance. See also the response to Comment E.4-43.
- E.4-45 See the response to Comment E.4-43.
- E.4-46 See the response to Comment E.4-15.
- E.4-47 See the responses to Comments E.4-15 and E.4-44.
- E.4-48 The totals provided in Table B.4-21 have been updated to reflect the correct summation of land disturbance.
- E.4-49 See the response to Comment E.4-38.
- E.4-50 See the response to Comment E.4-43.

- E.4-51 See the response to Comment E.4-15. As noted in the table, all numbers are approximate and subject to change as the design is finalized.
- E.4-52 See the response to Comment E.4-15 and E.4-48.