Comment Set E.11: Applicant – Hydrology and Water Quality

ANTELOPE-PARDEE 500kV TRANSMISSION PROJECT
SCE COMMENTS & SUGGESTED REVISIONS ON DEIR/DEIS
C.8 HYDROLOGY AND WATER QUALITY

October 2006

Comment No.	Section	Page	Line	Comment	Remarks/How Suggested to Resolve	
1	C.8.1.2 Surface Hydrology	C.8-11	Bouquet Reservoir and Castaic Lake, first sentence	States that the proposed project and Alternatives 1 through 4 cross the western end of Bouquet Reservoir. This is an incorrect statement. Alternative 2 crosses the eastern end of the reservoir.	Revise sentence to state that Alternative 2 crosses the eastern end of Bouquet Reservoir.	E.11-1
2	C.8.5 Impact Analysis: Proposed Project/Action	C.8-22	Impact H-1 Line 6 through line 8	States that "...the hazard of erosion on roads and trails along the proposed project route have HER ranging from Moderate to Severe. See comments for Table C.5-2.	See comments for Table C.5-2	E.11-2
3		C.8-22		The DEIR/DEIS is inconsistent in its statements regarding slope instability and erosion.	Modify language to reflect that the proposed project has the "potential to cause slope instability and erosion" as correctly stated on page C.8-23.	E.11-3
4	C.8.5 Impact Analysis: Proposed Project/Action	C.8-23	Third Paragraph, second sentence	States that the proposed project would require upgrades to existing OHV routes from Maintenance Level 2 to a Maintenance Level 3.	SCE access and spur roads would not need to be improved to a maintenance level 3. According to NFS definition of the various maintenance levels, SCE would only require a maintenance level 2 to accommodate construction and maintenance actives.	E.11-4
5		C.8-24-25	Mitigation Measure for impact H-1	Multiple mitigation measures listed under Mitigation Measure H-1 require prior approval of several plans and mitigation compliance documents prior to approval of the Special Use Authorization. Many of the plans or documents required by H-1 for approval prior to issuance of the Special Use Permit require final engineering. SCE cannot complete final engineering until approval (Special Use Authorization) of a project. Thus the requirement for prior approval of these plans and documents is infeasible.	SCE can and is willing to submit these plans and documents to the CPUC and USFS for approval prior to the start of construction (after final engineering). The requirement to obtain approval of these plans or documents prior to approval of the Special Use Permit should be deleted.	E.11-5

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6	C.8.5 Impact Analysis: Proposed Project/Action	C.8-25	Mitigation Measure for impact H-1: H-1b	States that access or spur roads shall not have a gradient to be greater than ten percent. This is more stringent that SCE standards, which allow gradients up to 12 percent.	Revise H-1b to state a maximum gradient no greater than 12% would be permitted on NFS lands. On non-NFS lands grades of 14% will be permitted when such grades are located more than 50 feet from any other excessive grade, or from any curve, and are not more than 40 feet in length along the centerline. Steeper grades may be permitted on spur road, when approved by the engineer.	E.11-6
7	C.8.5 Impact Analysis: Proposed Project/Action	C.8-25	Mitigation Measure for impact H-1: H-1d	Mitigation calls for constructions only during the "dry season".	SCE will construct only in dry seasons to the extent feasible. However, SCE may be required to construct during wet seasons to meet the project objectives and schedule. If SCE is required to construct during wet seasons, SCE will implement the BMP's as proposed in Mitigation Measure H-1a which would minimize impacts to water quality.	E.11-7
8		C.8-27	Mitigation Measure for impact H-4	The DEIR/DEIS states that "Project-related excavation is not expected to result in disturbance of existing groundwater resources." This would imply that the project would not result in any impact to groundwater and therefore no mitigation measure is required.	Delete Mitigation Measure H-4.	E.11-8
9	C.8.5 Impact Analysis: Proposed Project/Action	C.8-28	Second to last sentence in first paragraph	States "...the hazard of erosion on roads and trails along the proposed project route have HER ranging from Moderate to Severe. See comments for Table C.5-2.	See comments for Table C.5-2	E.11-9
10		C.8-29	Mitigation Measure for Impact H-7	This analysis does not show that there is a significant impact. This mitigation measure is infeasible and overly burdensome.	This mitigation measure should be changed to read "Appropriate design of tower footing foundations, such as raised foundations and/or enclosing flood control dikes, will be used to prevent scour and/or inundation by a 100-year flood."	E.11-10
11		C.8-34	Mitigation Measure for Impact H-5	Mitigation calls for the use of "untreated crushed rock or a comparable material..." on areas where a cap is required over the natural or existing ground cover, including "graded access roads" outside of ANF.	SCE does not typically apply crushed rock to our access roads. In particular, crushed rock is not required outside the lands administered by the USFS which is implied by this mitigation measure. Please clarify this mitigation measure.	E.11-11

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12	C.8.7.2 Impacts and Mitigations Measures	C.8-36	Second to last sentence in first paragraph	States "None of the 56 transmission towers situated in mid slope locations east of Del Sur Ridge would require grade or leveled transmission tower pads."	It is probable most tower locations would not need a leveled pad pending final engineering. However, to state that none of the tower pad would require a level pad is premature before a detailed engineering analysis is performed.	E.11-12
13	C.8.7.2 Impacts and Mitigations Measures	C.8-36	Lines 6-8 in second paragraph	States "...Alternative 2 is dominated by four main soil types, all of which are categorized as having a Sever EHR." According to the Soil Survey of Angeles National Forest Area, California, 1980, the soils are ranked either as Low EHR (erosion hazard rating), Moderate EHR, High EHR, or Very High EHR. The rating of "Severe" is not listed as a rating for this area. Also, the range of EHR through ANF lands varies from Moderate to Very High.	Trigo-Exchequer = Very High, Lodo-Tujunga = Moderate to High, and Lodo-Modesto = Moderate to High. Revise sentence to state that the main soil types along Alternate 2 have a EHR rating ranging from moderate to very high.	E.11-13
14	C.8.7.2 Impacts and Mitigations Measures	C.8-36	Second to last sentence in second paragraph	States "construction of approximately 34 percent of hillside towers without the use of helicopters would require installation of spur roads and laydown or set-up areas in addition to temporary pulling and splicing set-ups along the hillside alignment."	This implies detailed preliminary engineering was performed to determine the amounts of new road construction. Please provide assumptions used to arrive at these conclusions.	E.11-14
15	C.8.7.2 Impacts and Mitigations Measures	C.8-37	First paragraph	States the soils along Alternative 2 have a severe EHR.	See comments for Table C.5-11	E.11-15
16	C.8.9.2 Impacts and Mitigation Measures	C.8-43	Lines 9-10 in first paragraph	Classifies the main soils types along Alternative 4 as severe EHR.	See comments for Table C.5-2	E.11-16

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17	C.8.10.2 Impacts and Mitigation Measures	C.8-48	Criterion HYD3; second sentence in second paragraph	States transmission towers constructed on hillside locations along Alternative 5 may require level transmission pads. However, for Alternative 2, the draft EIR/EIS states that leveled tower pads would not be required. What evaluations were performed to determine this information? Why may level tower pads be required for Alternative 5, but not for Alternative 2?	Need to show methodology of engineering evaluations.	E.11-17
18	C.8.10.2 Impacts and Mitigation Measures	C.8-48	Criterion HYD3; second to last sentence in second paragraph	States "Spur roads constructed in steep slopes would be cut in a switchback pattern, which greatly increases the land disturbance and new impervious area..." This statement is also true for Alternative 2; however, was not mentioned under Criterion HYD3 for Alternative 2. It is only stated that spur roads located on steep hillside would be cut in switchback pattern for safety reasons (page C.8-38). It does not mention that the switchback pattern greatly increases the land disturbance and the amount of new impervious areas.	Need to show methodology of engineering evaluations. Revise Criterion HYD3 for Alternative 2 to state the switchback pattern of spur roads greatly increases the land disturbance and the amount of new impervious areas.	E.11-18

Response to Comment Set E.11: Applicant – Hydrology and Water Quality

E.11-1 Section C.8.1.2, Surface Hydrology, has been revised to clarify that only the proposed Project and Alternatives 1, 3, and 4 cross the western end of the reservoir and Alternative 2 crosses the eastern end of the reservoir.

E.11-2 Please see the response to Comment E.8-5 regarding erosion severity classifications.

E.11-3 Impact H-1 states that "[d]isturbance of soil during construction could result in soil erosion and sedimentation" and that "[i]f slope stability and erosion were to occur…sediment deposition and subsequent elevated turbidity could cause a decrease in water quality." This indicates a potential to cause slope instability and erosion and is consistent with the discussion on page C.11-23. No change will be made to the discussion.

E.11-4 The EIR/EIS preparers have determined that according to USDA Forest Service standards SCE would need to improve access and spur roads to Maintenance Level 3 for construction activities. Consequently, no change will be made to the discussion.

E.11-5 Although it may be difficult for SCE to submit the Erosion Control Plan as a part of the Project SWPPP to be incorporated in the Special Use Authorizations to be issued by the USDA Forest Service, it would not be infeasible. Consequently, no change will be made to the mitigation.

E.11-6 While SCE standards may allow gradients up to 12 percent for access and spur roads, analysis of the erosion impacts that could be caused by construction activities has determined that to ensure that impacts would be less than significant, road gradients cannot be greater than ten percent. No change will be made to the mitigation.

E.11-7 The BMPs in Mitigation Measure H-1a were designed in conjunction with construction occurring only during the dry season, as required in Mitigation Measure H-1d. Both mitigation measures are required together to ensure that any impacts are less than significant. If construction were to occur outside of the dry season, even with BMPs, impacts could be significant. Consequently, no change will be made to the mitigation.

E.11-8 While project-related excavation is not expected to result in disturbance of existing groundwater resources, accidental disturbance of groundwater resources could occur. Mitigation Measure H-4 is designed to ensure that even accidental disturbance of groundwater resources would not be significant. No change will be made to the mitigation.

E.11-9 Please see the response to Comment E.8-5 regarding erosion severity classifications.

E.11-10 The placement of transmission towers within a Flood Hazard Area could result in a significant flood hazard impact, necessitating the requirements in Mitigation Measure H-7. No change will be made to the mitigation.

E.11-11 As the analysis specifically mentions construction in the City of Santa Clarita and Mitigation Measure H-5 (Permeability of Ground Cover) specifically addresses roads on National Forest System lands designated for OHV use, the application of crushed rock in Mitigation Measure H-5 applies both within and outside ANF.

E.11-12 According to the description of the Alternative 2 route and construction provided by SCE, none of the 56 transmission towers situated in mid-slope locations east of Del Sur Ridge would require graded or leveled transmission tower pads. Consequently, Alternative 2 was analyzed with this in mind. If Alternative 2 is selected to be the route for the 500-kV transmission line, SCE will need to ensure that these towers can be sited in a manner that do not require graded or leveled transmission tower pads.

E.11-13 Please see the response to Comment E.8-5 regarding erosion severity classifications.

E.11-14 This was an error in the text and the sentence has been removed.

E.11-15 Please see the response to Comment E.8-5 regarding erosion severity classifications.

E.11-16 Please see the response to Comment E.8-5 regarding erosion severity classifications.

E.11-17 Criterion HYD3 for Alternative 2 in Section C.8.7.2 has been revised to reflect that switchbacks greatly increase the land disturbance and new impervious area compared to spur roads that extend directly from the access road to the transmission tower site.

E.11-18 Please see the response to Comment E.11-14 regarding level transmission pads.