

SUPPLEMENTAL EVALUATION

**CONVERTING TEMPORARY ACCESS ROADS
(SR3, SR5, AR12, SR20, SR26, SR97)
TO PERMANENT ROADS IN SEGMENT 1**

&

**LEAVING EXISTING 220-kV TOWER FOUNDATIONS
IN PLACE IN SEGMENT 1
[29-1, 27-5, 28-3 (Tower Legs A and B),
28-2 (Tower Leg A), 27-3 (Tower Leg C)]**

**ON SOUTHERN CALIFORNIA EDISON'S
APPLICATION FOR**

Antelope Transmission Project, Segment 1

Application No. A.04-12-007

SCH No. 2005061161

Prepared By:



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- B – Biological Resources, Segment 1 Map
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A. Introduction and Background

The Final Environmental Impact Report/Statement (EIR/EIS) for the Antelope-Pardee 500-kV Transmission Project, (Project) (Aspen Environmental Group, 2006) was certified and a Certificate of Public Convenience and Necessity (CPCN) was granted by the California Public Utilities Commission (CPUC) (Docket #A.04-12-007, SCH #2005061161) on March 1, 2007. For a history, background, and overview of the Project, please see Section A of the Final EIR/EIS.

Southern California Edison (SCE) has completed final engineering on the approved Project and has begun building portions of the Project. Based on final engineering, additional details of various components of the Project have been further defined. This Supplemental Evaluation addresses modifications to the approved Project per communication submitted by SCE to the CPUC on July 31, 2009. These modifications are described in detail in Section B, below.

Based on the evaluation of SCE's proposed modifications to the approved Project described in Section C below, no new or substantially different impacts have been identified, no changes to impact significance conclusions are needed, and no new mitigation is necessary. Therefore, there is no need for any additional CEQA analysis of the project modifications described in Section B, below.

B. Modifications to the Project

Based on final engineering and construction completed to date by SCE on Segment 1, additional modifications to the Project have been identified. These modifications include the following:

- Reclassifying temporary spur road (SR) 3 as a permanent dirt road;
- Reclassifying temporary SR 5 as a permanent dirt road;
- Reclassifying temporary SR 20 as a permanent dirt road;
- Reclassifying temporary SR 26 (A, B, C) as a permanent dirt road;
- Reclassifying temporary SR 97 as a permanent dirt road;
- Reclassifying temporary access road (AR) 12 as a permanent dirt road;
- Leaving existing foundation for tower 27-3 (C) in place;
- Leaving existing foundation for tower 27-5 in place;
- Leaving existing foundation for tower 28-2 (A) in place;
- Leaving existing foundation for tower 28-3 (A, B) in place; and
- Leaving existing foundation for tower 29-1 in place.

Proposed Permanent Spur and Access Roads in Segment 1

Existing roads have been utilized to the maximum extent practicable in Segment 1. However, additional permanent access roads are required for Section 1 and Section 3 because previously approved existing roads do not provide the access required for ongoing operations and maintenance of the new 500-kV transmission line. Permanent roads are necessary at certain structures in both

Section 1 and Section 3 because the new 500-kV line will form the backbone of the SCE transmission system and regular access for maintenance and emergencies will be necessary after construction. New permanent access roads are not needed for Section 2 of Segment 1 as structures within this section will be accessed via existing access roads and/or helicopters. Helicopter access is infeasible in Section 1 and Section 3 due to noise and public safety concerns with the nearby residential communities. Table 1 summarizes the justification and necessity of the spur and access roads (Figures B.1-1 through B.1-7) discussed above to remain permanent.

Table 1 – Spur and Access Road Descriptions and Justifications

Road	Tower Number	Road Length (feet)	Justification
SR 3	Construct 3	310	Needed to access the tower for Office and Maintenance (O&M). This new road will remain permanent as it is located in steep terrain where major road grading is required. Due to the steep slope at this site, restoration of this road would have a greater chance of failing and it would be unsafe for SCE crews to perform maintenance. Tower located near residences where helicopter maintenance would cause noise and safety concerns. Due to the height of the tower, it is necessary to be able to utilize the existing pad that is on the new spur road.
SR 5	Construct 5	650	Needed to access the tower for O&M and to avoid unsafe backtracking and excess travel. Due to the steep slope at this site, restoration of this road would have a greater chance of failing and it would be unsafe for SCE crews to perform maintenance. Tower located near residences where helicopter maintenance would cause noise and safety concerns. Due to the height of the tower, it is necessary to be able to utilize the existing pad that is on the new spur road.
AR 12	Construct 12	265	Needed to access the tower for O&M and to avoid unsafe backtracking and excess travel. Tower located near residences where helicopter maintenance would cause noise and safety concerns. Small stretches of previously existing service roads that lead to this tower have been built/improved for construction, however SCE crews would like to keep this through access in case they ever have to access or repair the down conductor.
SR 20	Construct 20	141	Needed to access the tower for O&M and to avoid unsafe backtracking and excess travel. Tower located near residences where helicopter maintenance would cause noise and safety concerns.
SR 26 A, B, C	Construct 26 A, B, C	1,299	Needed to access the towers for O&M. This new road will remain permanent as it is located in steep terrain where major road grading is required. Restoration of this road would have a greater chance of failing due to the steep slope at this site.
SR 97	Construct 97	341	Needed to access the tower for O&M and to avoid unsafe backtracking and excess travel. This tower is accessible by helicopter, but SCE would prefer to minimize helicopter travel when possible especially if the area is easily accessible by vehicle.

These new spur and access roads involve a 15-foot road base, with a three-foot berm on either side for a total road width of 21 feet to accommodate large construction equipment to access each tower location. Any new roads not required for ongoing maintenance of the new 500-kV transmission line will be recontoured, restored, and revegetated in accordance with Mitigation Measure B-1a (Habitat Restoration and Revegetation Plan) of the Final EIR/EIS for the Project.

Some of the new spur and access roads that are needed to remain permanent exceed the stipulations of Mitigation Measure H-1b, which requires that new roads, whether temporary or permanent, not exceed a gradient of 10%. These access roads are SR 3, and SR 26 A, B, and C. Of these roads, the maximum gradient constructed is 30% on SR 3 for approximately 45 feet. The higher gradients were needed to avoid longer cutbacks, which ultimately created shorter permanent new roads and less ground disturbance. This information was provided to the CPUC in the Notice to Proceed for Section 1 of Segment 1 and approval was granted when confirmation was received from the California Department of Fish and Game (CDFG) that a streambed alteration agreement was not required for construction of these new access roads.

Existing Tower Foundations to Remain in Segment 1, Section 1

The final section of the old Santa Clara-Vincent 220-kV transmission line will be removed in Section 1 of Segment 1. However, foundations for wreck-out tower 29-1 next to Construct 6, wreck-out tower 27-5 next to Construct 11, tower legs "A" and "B" of wreck-out tower 28-3 next to Construct 8, tower Leg "A" of wreck-out tower 28-2 next to Construct 9, and tower Leg "C" of wreck-out tower 27-3 next to Construct 13 will need to remain in place rather than be removed. These particular tower foundations are located either on steep hillsides and/or building access roads to these foundations would cause greater resource damage (see Appendix A). It is necessary to leave these foundations in place in order to minimize ground disturbance, especially since they are located in areas difficult to access. Cutting the stub angles, but leaving the cement footings in place will reduce the amount of disturbance and minimize the potential for disturbing any biological or cultural resources in the surrounding areas. Additionally, leaving existing foundations in place would not require further biological or cultural surveys to be performed. Variance #10 for Construct 25 and Variance #21 for Construct 22 have been previously approved for the same actions.

Typically, foundations are removed to a depth of at least two feet below the ground surface. Removing foundations in a standard manner would require excavating hillslopes and increasing the possibility for a slope failure which, given the soils and drainage patterns in these areas, are highly likely. Footing dimensions are dependent upon topography, tower height, span length, and soil properties. On average, a typical footing will have an aboveground projection of approximately three feet. To demolish and remove the top two feet of the concrete foundations, crews use a crawler excavator with a breaker hammer. After the concrete is broken down and removed, the exposed reinforcing steel and tower stub angle is removed with the use of portable cutting equipment. Debris is then hauled off in accordance with Mitigation Measure V-4c of the Final EIR/EIS and the area is recontoured and restored to its original condition.

Leaving the foundations in place will avoid the aforementioned construction activity. To avoid ground disturbance, stub angles will be cut and the foundations will remain in place. To remove the stub angles, the crews will easily dig down with a shovel and cut the steel.

C. Evaluation of Modifications

After review of the Final EIR/EIS, it was determined that the proposed modifications would not result in any new or substantially different environmental impacts, as discussed below. Those environmental issue areas where a potential change in the nature or magnitude of an impact could occur as a result of the proposed modifications are discussed in Section C.1 and are indicated in Table 2 below. Those issue

areas for which it was determined that no change in impacts would occur as a result of the proposed modifications are discussed in Section C.2.

Table 2 – Environmental Issue Areas where Potential Change May Occur

<input type="checkbox"/> Agricultural Resources	<input checked="" type="checkbox"/> Air Quality	<input checked="" type="checkbox"/> Biological Resources
<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Geology/Soils/Paleontology	<input type="checkbox"/> Hazards and Hazardous Materials
<input checked="" type="checkbox"/> Hydrology/Water Quality	<input type="checkbox"/> Land Use	<input type="checkbox"/> Mineral Resources
<input checked="" type="checkbox"/> Noise	<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Public Services
<input checked="" type="checkbox"/> Transportation/Traffic	<input type="checkbox"/> Utilities/Service Systems	<input checked="" type="checkbox"/> Visual Resources

C.1 Issue Areas Where Modifications Result in a Potential Change in Impacts

Air Quality. Air quality impacts associated with the Project would be incrementally reduced as leaving the existing 220-kV tower foundations [29-1, 27-5, 28-3 (Tower Legs A and B), 28-2 (Tower Leg A), 27-3 (Tower Leg C)] in place would reduce impacts related to construction activities; however, the change would be minimal compared to the overall scope of the Project and air quality impacts would not differ from the approved Project. No new air quality impacts would result, no impact significance conclusions would change, and no new mitigation is necessary.

Biological Resources. Based on previous surveys of the project area addressed in the Final EIR/EIS (C.3-2-C.3-41), preconstruction plant and wildlife surveys and recent survey results (Appendix B), ground disturbance associated with the permanent spur and access roads are expected to have minimal impacts to biological resources. Findings include one special-status plant species, Pierson’s morning glory (CNPS List 4), one potential special-status species, an unidentified mariposa lily, one California Natural Diversity Database (CNDDB) ranked species, the western whiptail, and woodrat middens. Previous surveys have found a bushtit nest near Construct 3, two common raven nests at or near Construct 5, a red-tailed hawk nest at Construct 20, and a housefinch nest at Construct 26A. All resources will be flagged and avoided where practicable in accordance with APM-BIO 1 (Preconstruction Clearance Surveys), APM BIO-2 (Minimize Vegetation Removal) and APM BIO-5 (Biological Monitors), and re-surveyed prior to construction activities. No special findings were recorded within the vicinity of the new access road to Construct 97. The proposed new permanent spur and access roads would not result in any new or substantially different impacts on biological resources. No impact significance conclusions would change and no new mitigation is necessary.

It is not expected that leaving foundations in place will have an added biological impact. No impact significance conclusions would change and no new mitigation is necessary.

Cultural Resources. Previous cultural surveys have been conducted on the roads in Segment 1 and there will be no additional impacts to cultural resources as a result of leaving roads in place. Likewise, it is not expected that leaving foundations in place will have an added cultural resources impact. No impact significance conclusions would change and no new mitigation is necessary.

Geology, Soils, and Paleontology. Construction activities associated with grading operations for permanent access roads could result in slope instability, resulting in landslides, slumps, soil creep, or

debris flows. As discussed in Final EIR/EIS Section C.5 (Geology, Soils, and Paleontology), a geotechnical study would be performed to identify site-specific geologic conditions in enough detail to support good engineering practice (APM GEO-2). Additionally, MM G-1 (Protect Against Slope Instability) would ensure that appropriate support and protection measures shall be designed and implemented to maintain the stability of slopes adjacent to newly graded or regraded access roads and work areas during and after construction.

Permanent roads must meet the County's compaction requirement of 90%. Also, compaction of the outside road slope must be achieved. After finalization, roads are inspected by a geotechnical engineer to ensure that compaction, slope, and design are in compliance with the Los Angeles County Grading Permit.

No new geology, soils, and paleontology impacts would result, no impact significance conclusions would change, and no new mitigation is necessary.

Hydrology and Water Quality. Surface water runoff as a result of the conversion of SR3, SR5, AR12, SR20, SR26, and SR9 from temporary to permanent would slightly increase (greater impermeable surface area); however, as discussed in Final EIR/EIS Section C.8 (Hydrology and Water Quality, Impact H-5), potential impacts from spur roads and access roads would be localized and temporary and the Stormwater Pollution Prevention Plan (SWPPP) required by APMs HYD-2 and HYD-3 would include an erosion control plan to minimize any potential increase in surface water runoff resulting from new or improved roads.

Access roads SR 3 and SR 26 were constructed exceeding the maximum gradient of 10%. These roads will be built and maintained to SCE standards to ensure their long-term use as access roads. The same measures will be utilized as is the case on other permanent access roads that are steep gradients. These roads will be finalized with drivable dips to direct water flow and the appropriate insloping or outsloping will help reduce water flow along the road surface. The roads will then be inspected by a geotechnical engineer to confirm that the appropriate road surface compaction has been met.

Hydrology and water quality impacts would be the same as the approved Project.

Noise. The conversion of roads SR3, SR5, AR12, SR20, SR26, and SR9 to permanent facilities would not result in any additional construction activities. As such, noise impacts in the immediate area of this tower location would occur over a shorter duration.

Leaving the existing 220-kV tower foundations in place [29-1, 27-5, 28-3 (Tower Legs A and B), 28-2 (Tower Leg A), 27-3 (Tower Leg C)] would avoid increasing noise during construction activities. The overall impacts to noise would not differ from the approved Project.

Transportation and Traffic. Converting roads SR3, SR5, AR12, SR20, SR26, and SR9 to permanent facilities would not result in a change in traffic and transportation impacts compared to the approved Project, as these roads would be utilized strictly for operations and maintenance of the 500 kV transmission line. No new traffic or transportation impacts would result, no impact significance conclusions would change, and no new mitigation is necessary.

Visual Resources. The KOP's in Segment 1 that are affected by the spur and access roads are KOP 4-1, 5-12, 5-13, 10, 12, 13, and 14 (KOP Photos are included in Appendix C). The spur and access roads that fall within these KOP viewsheds are SR 3, SR 5, SR 12, SR 20, and SR 26 A, B, C. SR 97 does not fall within a KOP viewshed. None of the proposed new permanent access roads within KOPs are

visible from KOPs due to topography; the short length of each of the new permanent access roads, and perpendicular orientation of the road from the KOP. Maps depicting the approximate locations of these KOPs in relation to the ROW corridor are provided in Figures B.1-1 through B.1-7.

A new access road, which falls within the viewshed of KOP 4-1, was built for temporary use during the construction of Construct 26A, 26B, and 26C (see Table 1 above). This access road needs to remain permanent, however, is not visible from KOP 4-1 since the road runs along the ridge and is hidden from view.

A new access road, which falls within the viewshed of KOP 5-12, was built for temporary use during the construction of Construct 26A, 26B, and 26C. This access road leading to all three towers will need to remain as permanent, however, is not visible from KOP 5-12 due to its location on the ridgetop and existing mature trees in the viewshed of this KOP.

A new access road for access to Construct 26A, 26B, and 26C falls within the viewshed of KOP 5-13. This access road will need to remain permanent; however, it is not visible from KOP 5-13 since the road runs along the ridgetop and is hidden from view.

A new permanent road to Construct 20 will be needed for future operation and maintenance access to the tower. Half of this road (50%) was built on a pre-existing trail. This access road falls within the viewshed of KOP 10, however, it is in an area already disturbed by water tanks, transmission lines, suburban development, and roads. This new permanent road is not visible from KOP 10.

A new permanent access road within the viewshed of KOP 12 is requested to Construct 12, however, two thirds of that access road is an existing access road. This access road is not visible from KOP 12 due to its location and is within a previously disturbed area, of multiple existing access roads, transmission lines, cellular tower structures, and residential buildings.

The new access road to Construct 5 falls within the viewshed of KOP 13. This access road will need to remain permanent for future operation and maintenance access. The area is already heavily disturbed by another construction project. Additionally, this access road is not visible from KOP 13 because the road is on the opposite side of the hill from this KOP.

New access roads to Construct 3 and Construct 5 fall within the viewshed of KOP 14. These structures will require permanent access roads for future operation and maintenance. As discussed above, the new access road to Construct 5 is in an already heavily disturbed area of another construction project with existing access roads, and residential development. Both of these access roads are not visible from KOP 14 due to the difference in elevations and existing obstructions in the viewshed.

The proposed new permanent spur and access roads would not be visible from the KOPs and would not result in any new or substantially different impacts on visual resources. No impact significance conclusions would change and no new mitigation is necessary.

It is not expected that leaving foundations in place will have an added visual impact. Visual impacts are expected to be minimal since the majority of the above ground cement foundation and stub angle will be cut and removed. No impact significance conclusions would change and no new mitigation is necessary.

C.2 Issue Areas Where Modifications Result in No Change

The proposed conversion of roads SR3, SR5, AR12, SR20, SR26, and SR9 to permanent access roads would occur within existing disturbance areas. Therefore, potential environmental impacts to agricultural resources, geology/soils/paleontology, hazards and hazardous materials, land use, mineral resources, population and housing, public services, and utilities and service systems are not expected to change or increase in severity from the approved Project.

D. Other CEQA Considerations

D.1 Significant Unavoidable Impacts

The environmental impacts of the approved Project are described in detail in Section C (Environmental Analysis) of the Final EIR/EIS, and for the proposed modifications, in Section C (Evaluation of Modification) of this supplemental evaluation. All the significant and unavoidable (Class I) impacts identified for the approved Project, as discussed in Section E.1.2 (Significant Environmental Effects Which Cannot Be Avoided if the Proposed Project is Implemented) of the Final EIR/EIS, would be the same as for the approved Project with implementation of the proposed modifications.

D.2 Irreversible and Irretrievable Commitment of Resources

Construction of the proposed modifications identified by SCE would result in the same irretrievable commitment of natural resources as described in the Final EIR/EIS. Please see Section E.1.3 of the Final EIR/EIS for a complete discussion of irreversible and irretrievable commitment of resources for the approved Project.

D.3 Growth-Inducing Effects

Construction and operation of the proposed modifications identified by SCE would not change the growth-inducing effects described for the approved Project in the Final EIR/EIS. Please see Section E.1.4 of the Final EIR/EIS for a complete discussion of growth-inducing effects for the approved Project.

D.4 Cumulative Impact Analysis

Construction and operation of the proposed modifications identified by SCE would not change the cumulative impacts described for the approved Project in the Final EIR/EIS. Please see Section C (Cumulative Impact Analysis by Issue Area) of the Final EIR/EIS for a discussion on the impacts of the Project that could potentially be “cumulatively considerable” or might be able to combine with similar impacts of other identified projects in a substantial way.

E. References

Aspen Environmental Group. 2006. Final Environmental Impact Report/Statement (EIR/EIS), Antelope-Pardee 500-kV Transmission Project. Report prepared for the California Public Utilities Commission. December.