

# **SUPPLEMENTAL EVALUATION 2 FOR PROJECT MODIFICATION**

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

**Antelope Transmission Project, Segments 2 & 3**

Application No. A.04-12-008

SCH No. 2006041160

Prepared By:



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## Table of Contents

<b>A.</b>	<b>Introduction and Background</b> .....	1
<b>B.</b>	<b>Overview of the Approved Project</b> .....	2
<b>C.</b>	<b>Modification to the Project</b> .....	3
C.1	Water Well for Windhub Substation Grading and Construction .....	3
<b>D.</b>	<b>Evaluation of Modification</b> .....	4
D.1	Hydrology and Water Quality .....	5
<b>E.</b>	<b>Other CEQA Considerations</b> .....	9
E.1	Significant Unavoidable Impacts.....	9
E.2	Irreversible and Irretrievable Commitment of Resources .....	9
E.3	Growth Inducing Effects .....	10
E.4	Cumulative Impact Analysis.....	10
E.5	Effects Found Not to be Significant.....	11
<b>F.</b>	<b>References</b> .....	11

### Figures – Located at the end of this document

A-1	Approved Project Route and Modifications
C.1-1	Proposed Well Location

## A. Introduction and Background

On December 9, 2004, Southern California Edison (SCE) submitted to the California Public Utilities Commission (CPUC) application A.04-12-008 for a Certificate of Public Convenience and Necessity (CPCN) and a Proponent's Environmental Assessment (PEA) for the construction and operation of the proposed Antelope Transmission Project, Segments 2 & 3 (Project). Segment 2 includes construction and operation of the Antelope-Vincent 500-kV transmission line, initially energized at 220 kV; Segment 3 includes construction and operation of the Antelope-Tehachapi 500-kV transmission line, connecting Antelope Substation to a new substation in Tehachapi and a 220-kV transmission line connecting two new substations within Tehachapi (see Figure A-1 located at the end of this document). However, the December 2004 filing did not have complete environmental studies in the accompanying PEA or reflect substantial changes to the transmission line route that were suggested by land owners and developers. Therefore, SCE submitted an amended application and PEA on September 30, 2005, to include such changes.

In reviewing SCE's amended application, the CPUC determined that the proposed Project could cause a significant adverse effect on the environment and, therefore, determined that the preparation of an Environmental Impact Report (EIR) would be needed. The CPUC filed a Notice of Preparation (NOP) with the State Clearinghouse in the Office of Planning and Research as an indication that a Draft EIR would be prepared. A Draft EIR was prepared and distributed on August 24, 2006, for public review and comment in accordance with CEQA procedures (State CEQA Guidelines §15087). Responses to substantive comments received on the Draft EIR were prepared by the Lead Agency (CPUC) and published in the Final EIR (State CEQA Guidelines §15088) on December 26, 2006. The Final EIR was certified and a CPCN was granted by the CPUC (Docket #A.04-12-008, SCH #2006041160) on March 15, 2007.

Since that time, 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, as presented in a letter to the CPUC from SCE dated January 29, 2009 (Note: actual date on letter incorrectly shown as January 29, 2008). A supplemental evaluation was completed to determine whether or not these modifications to the Project were previously covered by the analysis completed in the Final EIR or would result in any new or different impacts from what was previously analyzed in the Final EIR. Descriptions of these modifications, which include five different Project components, are described in the First Supplemental Evaluation (March 2009), which concluded that the modifications would not introduce new impacts and no new mitigation measures would be required.

This Second Supplemental Evaluation addresses an additional modification to the approved Project that was submitted to the CPUC on March 12, 2009. A description of this modification is described below in Section C. A description of the Project, as approved by the CPUC, is also provided below.

Based on the evaluation of SCE's proposed modification to the approved Project described in Section D below, no new or substantially different impacts have been identified and no new mitigation is necessary. Therefore, there is no need for any additional CEQA analysis.



## B. Overview of the Approved Project

The Project, as approved by the CPUC, consists of two primary elements, the Antelope-Vincent 500-kV transmission line, or Segment 2, and the Antelope-Tehachapi 500-kV and 220-kV transmission line, or Segment 3. Segment 2 involves the construction of a 21.0-mile 500-kV transmission line initially energized to 220 kV (includes implementation of Option A) and a 0.6-mile 220-kV transmission line between SCE's existing Antelope and Vincent Substations. The Antelope Substation is located in the city of Lancaster and the Vincent Substation is located near the community of Acton, both of which are located in northern Los Angeles County. Segment 3 involves the construction of two substations, a 25.6-mile 500-kV transmission line initially energized to 220 kV from the existing Antelope Substation to a new substation located on Oak Creek Road west of the Mojave area (Substation One, also known as Windhub Substation), and a 9.6-mile 220-kV transmission line from Substation One (Windhub Substation) to a new substation (Substation Two) located near Tehachapi Boulevard in the Monolith area. Both substations will be located in Kern County. The Project consists of the following major components (a detailed description of the Project is provided in Section B of the Final EIR):

### Segment 3: Antelope-Tehachapi 500-kV and 200-kV Transmission Line

- Construction of Substation Two, a 220/66-kV substation located south of Tehachapi Boulevard near the Monolith area;
- Construction of Substation One (Windhub Substation), a 500/220/66-kV substation on Oak Creek Road west of the Mojave area;
- Construction of a 9.6-mile 220-kV single-circuit transmission line from Substation Two (Mile S3-0.0) to Substation One (Mile S3-9.6), where 1.7 miles would be new right-of-way (ROW) and 7.9 miles would be expanded ROW;
- Construction of a 25.6-mile 500-kV single-circuit transmission line, initially energized to 220 kV, from Substation One (Mile S3-9.6) to the Antelope Substation (Mile S3-35.2), where 22.7 miles would be new ROW and 2.9 miles would be expanded ROW;
- Installation and repair of new and existing access roads and spur roads to access structure locations;
- Installation of approximately 15 new pulling locations, 10 new tensioner locations, and 9 new splicing locations;
- Modification of Antelope Substation; and
- Installation of associated telecommunication infrastructure.

### Segment 2: Antelope-Vincent 500-kV Transmission Line

- Construction of a 500-kV single-circuit transmission line, initially energized to 220 kV, from the Antelope Substation (Mile S2-0.0) to Mile S2-8.1 adjacent to the existing Midway-Vincent ROW (expanded ROW);
- Acquisition of new ROW over private land for the new segment of the Antelope-Vincent 500-kV transmission line from Mile S2-8.1 to Mile S2-10.6;
- Construction of a 500-kV single-circuit transmission line, initially energized to 220 kV, from Mile S2-10.6 to Mile S2-14.8 adjacent to the existing Midway-Vincent No. 1 500-kV ROW (expanded ROW);

- Appropriation of the existing SCE Midway-Vincent No. 3 (MV#3) transmission line from approximately Mile S2-14.8 to the Vincent Substation to form the Antelope-Vincent 500-kV transmission line;
- Construction of a 500-kV single-circuit transmission line, initially energized at 220 kV, from approximately Mile S2-14.8 to the Vincent Substation (Mile S2-21.0) adjacent to the existing Midway-Vincent ROW (expanded ROW) to replace the appropriated portion of the MV#3 transmission line;
- Construction of a 0.5-mile 220-kV single-circuit transmission line (Mile S2-21.0 to Mile S2-21.6) to connect the new Antelope-Vincent 500-kV transmission line to the Vincent Substation 220-kV switchrack (expanded ROW);
- Demolition and relocation of 4.4 miles of 66-kV subtransmission line (double-circuit wood poles) 180 feet west of and parallel to its existing location (immediately south of Antelope Substation, S2-0.0 to S2-4.4) on the westerly edge of the proposed ROW;
- Installation and repair of new and existing access roads and spur roads to access tower locations;
- Installation of approximately 19 new pulling locations, 20 new tensioner locations, and 9 new splicing locations;
- Modification of Antelope and Vincent Substations; and
- Installation of associated telecommunication infrastructure.

## C. Modification to the Project

Based on final engineering completed by SCE, an additional modification to the Project has been identified, as presented in electronic communication dated March 12, 2009. Because this Project detail could not be fully analyzed in the Final EIR due to the lack of specificity available at the time the Final EIR was prepared, an analysis of this modification to the Project has been conducted herein to determine whether or not any new or significant impacts would result. A description of the modification is provided below.

### C.1 Water Well for Substation Grading and Construction

As part of the Project, construction of Substation One (Windhub Substation) was approved under Notice to Proceed (NTP) #19 issued by the CPUC on November 21, 2008. It has been determined that water would be required on-site during grading and construction for minimizing fugitive dust and soil compaction. Future needs would also include a potable water source for the substation facilities. It is estimated that approximately twelve millions gallons would be required (2 million gallons per month for six months) during the initial construction and grading operations. A local water source (well) would drastically cut down on off-site construction truck trips and emissions, as well as minimize any impacts on the community of Mojave's potable water resources. Therefore, SCE is proposing to install a well to support construction at the Substation One (Windhub Substation) site.

Substation One (Windhub Substation), in the Tehachapi Wind Resource Area, will be located at Mile S3-9.6 of the Project route on Segment 3A (Figure A-1). The site is desert terrain with a three to four percent slope from northwest to southeast that is diagonal to the Substation equipment layout. It will be necessary to alter the existing topography to be parallel with the equipment and to reduce the grade to 1.5-2.0 percent.



The Substation property measures 1,660 feet by 2,317 feet and contains 88.3 acres of land. The total area of land disturbance within the property associated with the construction of Substation One (Windhub Substation) will be 83.7 acres. The total area inside of the perimeter wall will measure 1,310 feet by 2,000 feet and contains 60.1 acres. A graded terraced pad (the area containing the enclosed substation and a minimum 10-foot wide safety buffer around all sides) will measure 1,330 feet by 2,020 feet and contains 61.7 acres.

The site is underlain by Quaternary alluvial fan deposits originating from Oak Creek Canyon to the northwest and is part of the Fremont Valley groundwater basin. The groundwater in this basin is usually found in an unconfined condition within the alluvial deposits. Well data from the California Department of Water Resources (DWR) suggests that groundwater is approximately 350 feet below the ground surface and the average well yield within the Fremont Valley Groundwater Basin is approximately 530 gallons per minute (DWR, 2003).

The estimate of 2 million gallons of water per month, pumping for 12 hours a day, 6 days a week, would require a well capable of producing 120 gallons per minute (gpm). Water would be pumped into a water tower to fill water trucks during grading operations. A well 500 feet in depth and 8 inches in diameter would be required based on the anticipated depth to groundwater (350 feet) and the daily water requirements of 120 gpm.

The proposed well would be located on the southwest corner of the substation property, outside of the perimeter wall (Figure C.1-1). It would require an approximately 8' x 8' concrete pad, with a box for electrical controls mounted on a pedestal. Typically, this would be surrounded by a chain link fence (12' x 12').

Construction of the proposed well would require approximately 2 weeks for well drilling and casing installation. Construction equipment would include the following: Mud-rotary drill rig (diesel engine), circulating pit (with small diesel motor to run a pump), backhoe (gas or diesel), compressor (diesel), generator (diesel), and two support pickup trucks (crew truck and supervisor truck, gas or diesel).

Construction would also require approximately 2 weeks for pump installation, well testing and development, using the following equipment: Development rig (small diesel engine), generator (gas or diesel) to operate submersible pump, forklift (diesel), and a support pickup truck.

Drilling fluids would be discharged on-site for dust control under a de minimus discharge permit. All necessary permits would be obtained from the contractor installing the well. A report/permit with the County Health Department and the DWR would also be on file. Copies of all permits would be submitted to the CPUC prior to the start of well construction.

## **D. Evaluation of Modification**

The following section evaluates the environmental impacts associated with the modification to the Project as identified by SCE in their electronic communication dated March 12, 2009. The discussion of environmental impacts has been organized by issue area and impact significance criteria, as defined in the Final EIR (Aspen, 2006).



## D.1 Hydrology and Water Quality

The Project modifications identified by SCE would occur at the Windhub Substation, located in the South Lahontan Hydrologic Area (watershed) of southern Kern County, where water quality regulation is governed by the Lahontan Regional Water Quality Control Board (RWQCB). Several unnamed, ephemeral streams, which only exist for a short period immediately following a precipitation event, are located within approximately one-half mile of Windhub Substation. The Windhub Substation is not located within a 100-year flood zone, or Flood Hazard Area, as defined by the Federal Emergency Management Agency (FEMA) and identified on FEMA's Flood Insurance Rate Maps (FIRMs).

The proposed well at Windhub Substation would draw water from the Fremont Valley Groundwater Basin, which underlies approximately 523 square miles of alluvial valley in eastern Kern County and northwestern San Bernardino County. The Fremont Valley Groundwater Basin is bounded on the northwest by the Garlock fault zone against impermeable crystalline rocks of the El Paso Mountains and the Sierra Nevada. This basin is bounded on the east by crystalline rocks of the Summit Range, Red Mountain, Lava Mountains, Rand Mountains, Castle Butte, Bissel Hills, and Rosamond Hills. The basin is bounded on the southwest by the Antelope Valley Groundwater Basin along a groundwater divide approximated by a line connecting the mouth of Oak Creek through Middle Butte to exposed basement rock near Gem Hill (DWR, 2003).

The water-bearing materials of the Fremont Valley Groundwater Basin are dominated by Quaternary alluvium and lacustrine deposits. Groundwater in the alluvium is generally unconfined, although locally confined conditions occur near Koehn Lake. Natural recharge of the Fremont Valley Groundwater Basin includes the percolation of ephemeral streams that flow from the Sierra Nevada. The general groundwater flow direction is toward Koehn Lake at the center of the valley. There is no appreciable quantity of groundwater flowing out of the basin. (DWR, 2003)

The total storage capacity of the Fremont Valley Groundwater Basin is calculated to be approximately 4,800,000 acre-feet (af). Hydrographs indicate that groundwater elevations declined in the southwestern part of the basin by approximately nine feet between 1957 and 1999 (DWR, 2003). Depth to groundwater near Windhub Substation is greater than 100 feet below ground surface (USGS, 2003). No primary Maximum Contaminant Levels (MCLs) are exceeded in the Fremont Valley Groundwater Basin. However, groundwater in parts of the basin has high concentrations of Total Dissolved Solids (TDS), including fluoride and sodium (DWR, 2003).

As defined in the Final EIR, a significant impact to Hydrology and Water Quality would occur if Project actions meet any of the following significance criteria:

- **Criterion HYD1:** Violates any water quality standard or waste discharge requirement, or otherwise degrades water quality, including through providing substantial additional sources of polluted runoff.
- **Criterion HYD2:** Substantially depletes groundwater supplies or interferes with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).
- **Criterion HYD3:** Substantially alters the existing drainage pattern of the site or area, which includes the redirection of existing watercourses, creation of new discharge concentration



points, or increasing the amount, frequency and rate of runoff, such that a substantial increase in downstream flooding, erosion, or siltation will occur.

- **Criterion HYD4:** Creates or contributes runoff water that would exceed the capacity of existing or planned stormwater drainage systems.
- **Criterion HYD5:** Places housing or structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or within a watercourse, which would impede or redirect flood flows to the detriment of adjacent property through flooding, erosion, or sedimentation.
- **Criterion HYD6:** Exposes people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- **Criterion HYD7:** Results in or is subject to damage from inundation by seiche, tsunami, or mudflow.

The following impact analysis is organized according to the significance criteria listed above, as originally identified in the Final EIR.

### **Violation of Water Quality Standards or Waste Discharge Requirements or Other Degradation of Water Quality (Criterion HYD1)**

Soil-disturbing activities required during construction of the proposed well at Windhub Substation could potentially cause erosion and sedimentation which may subsequently contribute to water quality degradation, if disturbed soils are mobilized prior to the application of Project mitigation measures identified in the Final EIR. The topography surrounding Windhub Substation is characterized as desert terrain, with a three- to four-percent slope that runs in a northwest-southeast direction, diagonal to the substation equipment layout. During construction activities at Windhub Substation, slope of the site would be altered to reduce the grade to approximately 1.5 – 2.0 percent, which would also reduce the potential for soil erosion and sedimentation to occur and to result in water quality degradation. The Storm Water Pollution Prevention Plan (SWPPP) included under Applicant-Proposed Measure (APM) HYD-1 and required by Section 402 of the Clean Water Act (CWA) would be implemented during construction and would include Best Management Practices (BMPs) for erosion and sediment control, as well as for the handling and disposal of construction waste. In addition, as described in the Final EIR, the following mitigation measures would be implemented in order to minimize construction-related soil erosion and sedimentation activities that could potentially result in water quality degradation: H-1a (Implementation of Best Management Practices for Erosion and Sediment Control); H-1b (Maximum Road Gradient); H-1c (Road Surface Treatment); H-1d (Timing of Construction Activities); and H-1e (Control of Sidecast Material, Right-of-Way Debris and Roadway Debris). These mitigation measures, which are described in full detail in the Final EIR, require specific BMPs that are not already included in Project APMs or that are not explicitly required by a regulatory body such as the State Water Resources Control Board (SWRCB) or the RWQCB, in order to avoid or minimize potential construction-related impacts to water quality. Impacts to water quality that may occur as a result of construction-related erosion and sedimentation would be the same as described in the Final EIR, and no new mitigation is required (Impact H-1).

As described in the Final EIR, surface water and groundwater quality could be affected through the accidental release of hazardous materials during construction activities; such materials may include diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, lubricant grease, and



other fluids. Accidentally spilled hazardous materials could pollute surface water through direct runoff into nearby waterways or water bodies, including ephemeral streams and desert washes. These materials could also pollute groundwater through soil infiltration or direct contact, if the groundwater table is exposed during excavation activities and such activities coincide with the occurrence of an accidental spill. As described in Section C.1 (Water Well for Substation Grading and Construction), the proposed well at Windhub Substation would be approximately 500 feet deep and 8 inches in diameter, secured in a concrete pad measuring 8' by 8'. Construction activities required to install the well and the concrete pad would introduce the potential for water quality degradation to occur as a result of accidentally released hazardous materials, as described above. Implementation of APMs HYD-1 through HYD-4 would minimize the potential for an accidental spill to occur, as well as minimize the potential that water quality contamination would occur if a release does happen. Furthermore, with implementation of Mitigation Measures HAZ-1a (Implement an Environmental Training and Monitoring Program), HAZ-1b (Implement a Hazardous Substance Control and Emergency Response Plan), HAZ-1c (Ensure Proper Disposal of Construction Waste), HAZ-1d (Emergency Spill Supplies and Equipment for Construction Activities), and HAZ-2b (Emergency Spill Supplies and Equipment for Operation and Maintenance Activities), the potential for degradation of water quality to result from the accidental release of hazardous materials during construction activities for the proposed modification would be the same as described in the Final EIR for the approved Project, and no new mitigation is required (Impact H-2).

The proposed well at Windhub Substation would primarily be used during construction of the Project; however, minimal use of the well may also occur during operation and maintenance activities. If use of the well during operation and maintenance activities occurs, the potential for an accidental release of hazardous materials would be introduced, and may result in water quality degradation. The potential for this to occur in association with the well at Windhub Substation would be less than as described in the Final EIR, and no new mitigation is required (Impact H-3).

### **Interference with Groundwater Supply and Recharge (Criterion HYD2)**

As described above, natural recharge to the Fremont Valley Groundwater Basin, which has a storage capacity of approximately 4,800,000 acre-feet, occurs through percolation of ephemeral streams that flow from the Sierra Nevada, and there is no appreciable quantity of groundwater flowing out of the basin (DWR, 2003). Although the proposed well would include an 8' by 8' concrete (impermeable) pad on the surface, installation of the well would not have an effect on natural recharge or storage capacity of the Fremont Valley Groundwater Basin. It is estimated that approximately 12 million gallons, or roughly 36.8 acre-feet, would be pumped from the well for grading and construction activities at Windhub Substation; this pumping would occur at an estimated rate of two million gallons per month for six months and would therefore be a temporary impact. In addition, the 36.8 acre-feet of water that would be required during grading and construction represents a very small fraction of the basin's groundwater storage capacity and, because the groundwater would continue to be recharged naturally, use of the aforementioned 36.8 acre-feet required during construction would not have an effect on the basin's overall supply or storage capacity. Although it is possible that the well may be utilized during certain operation and maintenance activities at Windhub Substation, such use would be minimal and would not have the potential to affect the basin's groundwater supply and recharge. Implementation of Mitigation Measure H-4 (Develop and Implement a Groundwater Remediation Plan), as required in the Final EIR, would help to avoid or minimize potential impacts to groundwater resources associated with implementation of the proposed well



at Windhub Substation. As described above, and due to the temporary duration of pumping from the proposed well, this Project modification is not anticipated to alter the Project's potential to affect groundwater supply or recharge in the Fremont Valley Groundwater Basin, as described in the Final EIR for the approved Project, and no new mitigation is required (Impact H-4).

#### **Alter the Existing Drainage Pattern or Increase Surface Runoff (Criterion HYD3)**

The proposed well for grading and construction at Windhub Substation would require an 8' by 8' concrete pad on the surface, thus introducing an impermeable area of approximately 64 square feet. However, this area is located within Windhub Substation, which was previously considered in the analysis presented in the Final EIR for its potential to affect Hydrology and Water Quality, including through altering the existing drainage patterns or increasing surface water runoff (such as through the introduction of impermeable surfaces). In addition, all construction activities would occur in compliance with the National Pollutant Discharge Elimination System (NPDES) and the SWPPP, as well as local ordinances. Therefore, the potential for the proposed well to alter the existing drainage pattern at Windhub Substation, or increase surface runoff at the substation, is the same as described in the Final EIR for the approved Project, and no new mitigation is needed (Impact H-5).

#### **Create or Contribute to Runoff that Would Exceed the Capacity of a Stormwater Drainage System (Criterion HYD4)**

Implementation of the proposed well for grading and construction at Windhub Substation would not result in overloading of a local stormwater drainage system. All Project features would be designed and engineered to facilitate natural drainage patterns. The potential runoff generated by permanent Project features would be minimal due to the inclusion of drainage features in Project design. Effects on stormwater drainage system(s) resulting from the proposed modifications would be the same as described in the Final EIR for the approved Project, and no new mitigation is needed (Impact H-6).

#### **Place Structures within a 100-Year Flood Hazard Area or in a Watercourse Which Would Alter Flood Flows (Criterion HYD5)**

As described above, the proposed well is located within Windhub Substation, which is not within a 100-year flood zone, or Flood Hazard Area, as defined by the Federal Emergency Management Agency (FEMA) and identified on FEMA's Flood Insurance Rate Maps (FIRMs). In addition, the implementation of the specific construction standards and approvals required by Mitigation Measure H-7 (Protect Aboveground Structures against Flood and Erosion Damage) would avoid or minimize any potential impacts related to the creation of flood hazards as a result of the placement of permanent Project components. However, because the location of the proposed well is not within a Flood Hazard Area or a watercourse, potential impacts associated with placing infrastructure in such areas (Impact H-7) would not occur in connection with the proposed well, as described for the approved Project in the Final EIR; no impact would occur.

#### **Expose People or Structures to Flooding as a Result of Failure of a Levee or Dam (Criterion HYD6)**

The proposed well for grading and construction at Windhub Substation would not have the potential to result in the failure of a levee or dam. This proposed modification is not located adjacent to a levee or dam and would not, in any way, create or contribute to water volume in a lake or reservoir to a degree



that could cause mechanical stresses on the dam or levee containing such volume. Effects would be the same as described in the Final EIR for the approved Project; no impact would occur.

### **Results in Damage from Inundation by Tsunami, Seiche, or Mudflow (Criterion HYD7)**

It is not expected that inundation of Project features by tsunami, seiche, or mudflow would occur, due to the Project location and natural features of the area. The proposed well for grading and construction at Windhub Substation would have no effect on the potential for inundation to occur. Effects would be the same as described in the Final EIR for the approved Project; no impact would occur.

## **E. Other CEQA Considerations**

### **E.1 Significant Unavoidable Impacts**

The environmental impacts of the approved Project are described in detail in Section C (Environmental Analysis) of the Final EIR, and for the proposed modifications in Section D (Environmental Analysis of Modifications) of this supplemental evaluation and Section D of the First Supplemental Evaluation (March 2009). All the significant and unavoidable (Class I) impacts identified for the approved Project, as discussed in Section E.1 (Significant and Unavoidable Impacts) of the Final EIR, would be the same as for the approved Project with implementation of the proposed modification, although the severity of hydrology and water quality impacts may slightly increase due to additional construction work associated with the proposed modification.

### **E.2 Irreversible and Irretrievable Commitment of Resources**

The State CEQA Guidelines (§15126.2(c)) require that an EIR identify significant irreversible environmental changes that would be caused by the Project. These changes include, for example, uses of nonrenewable resources or provision of access to previously inaccessible areas. These changes can also include project accidents that could change the environment in the long-term or project-related changes that could commit future generations to similar uses.

As discussed in Section E.2 (Irreversible and Irretrievable Commitment of Resources) of the Final EIR, the transmission line construction phase would require an irretrievable commitment of natural resources from direct consumption of fossil fuels, construction materials, the manufacture of new equipment that largely cannot be recycled at the end of the Project's useful lifetime, and energy required for the production of materials. Additionally, construction would require the manufacture of new materials, some of which would not be recyclable at the end of the Project's lifetime, and the energy required for the production of these materials, which would also result in an irretrievable commitment of natural 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.

Permanent loss of habitat may also occur from permanent Project features (e.g., substations) that would remain throughout the life of the Project. The proposed modification is not expected to, but may potentially disturb sensitive natural communities, listed or proposed wildlife species or critical habitat that occurs or has the potential to occur in the Project area, and special-status species and the movement of any native resident or migratory fish species. Implementation of mitigation measures described in the Final EIR would minimize these impacts. Therefore, the proposed modification would result in a



permanent loss of sensitive vegetation communities, rare plant communities, and sensitive plant and animal species, which would be less or substantially the same as the approved Project as described in the Final EIR.

As described in the Final EIR, construction activities associated with the approved Project would result in significant damage or destruction of a part or all of 31 culturally or historically sensitive sites as described in Section C.4 (Cultural Resources) of the Final EIR. The proposed modification is not expected to impact any additional cultural resources. Therefore, construction of the proposed modifications identified by SCE would not result in an increase in irretrievable commitment of cultural resources.

As described in Section C. 5 (Geology, Soils, and Paleontology) of the Final EIR, the approved Project could result in landslides or slope instability and could damage unique or significant fossils. Soil erosion and sedimentation would also occur as a result of grading and excavation necessary for tower pads and substation sites as well as for road construction. Construction of the proposed modification, with implementation of mitigation measures, would result in the same commitment of geological and paleontological resources as described in the Final EIR.

### **E.3 Growth-Inducing Effects**

CEQA requires a discussion of the ways in which a proposed project could induce growth. The State CEQA Guidelines (§15126.2 (d)) identify a project to be growth-inducing if it fosters economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. As described in Section E.3.1 of the Final EIR, the construction and operation of the approved Project itself would not affect the employment patterns in the area, and it is anticipated that the majority of the construction personnel would come from the existing labor pool of Kern and Los Angeles Counties. Operation would be handled by current SCE employees. Construction and operation of the proposed modification would not add to the expected workforce for the approved Project and would use the same personnel. Therefore, no additional workforce is expected due to the proposed modification.

Both locally and regionally, the approved Project area is experiencing substantial population growth, which is reflected in the large number of proposed and planned future residential development projects. SCE is responding to sources of wind energy generation that are being proposed by independent generators for construction in the Antelope Valley and Tehachapi areas that are currently restricted by the Antelope-Mesa 220-kV transmission line operating at capacity. As described in Section E.3.2 (Growth Related to Provision of Additional Electric Power) of the Final EIR, the primary purposes of the Project are to accommodate potential renewable power generation in the Tehachapi area, prevent overloading of existing transmission facilities, and comply with reliability criteria for transmission planning. The proposed modification serves the same purposes. Like the approved Project, the proposed modification would not directly result in growth in the area, but its implementation would remove future obstacles to population growth by facilitating the transmission of future projected power generation in the Tehachapi Wind Resource Area. The proposed modification identified by SCE would not change the growth-inducing effects described for the approved Project in Section E.3.1 and E.3.2 of the Final EIR.



## **E.4 Cumulative Impact Analysis**

In accordance with State CEQA Guidelines (§15130 et seq.), the Final EIR includes an analysis of cumulative impacts. Per CEQA, “cumulative impacts” refers to two or more individual effects, which are considerable when combined, or which compound or increase other environmental impacts (State CEQA Guidelines §15355). Section E.5 (Cumulative Impact Analysis by Issue Area) of the Final EIR discusses 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. Below is a discussion of the cumulative impacts of the approved Project with implementation of the proposed modification.

### **Hydrology and Water Quality**

Construction of the proposed modification could potentially violate water quality standards or waste discharge requirements, and impact groundwater resources; however, impacts would be the same as the approved Project as described in Section D.6 (Hydrology and Water Quality). Construction associated with the proposed modification would not alter the existing drainage pattern or cause a notable increase in surface water runoff, and would not have the potential to cause the failure of a levee or dam, or alter the potential for inundation to occur. The proposed modification also would not place structures within a 100-Year flood hazard area. Therefore, hydrology and water quality impacts resulting from the activities associated with the proposed modification would not substantially change the magnitude of the Project’s impacts or change the cumulative conclusion of the Final EIR. As such, cumulative impacts related to hydrology and water quality would be the same as described in Section E.5.6 (Hydrology and Water Quality) of the Final EIR.

## **E.5 Effects Found Not to be Significant**

CEQA requires that an EIR briefly explain the reasons why certain effects associated with a proposed project have been determined not to be significant, and thus not discussed in detail in the EIR (State CEQA Guidelines §21100(c)). As discussed in Section E.6 (Effects Found Not to be Significant) of the Final EIR, impacts related to Hazards and Hazardous Materials, Mineral Resources, Public Services, and Utilities and Service Systems for the approved Project would not be significant.

The proposed modification identified by SCE would not result in any different or new impacts to these issue areas and as such would not change the impact significance as identified in the Final EIR.

## **F. References**

- DWR (California Department of Water Resources). 2003. California’s Groundwater. Bulletin 118, Update 2003.[online]:<http://www.groundwater.water.ca.gov/bulletin118/update2003/index.cfm>
- USGS (United States Geological Survey). 2003. United States Geological Survey. Simulation of Ground-Water Flow and Land Subsidence in the Antelope Valley Ground-Water Basin, California, Water-Resources Investigations Report 03-4016.