

# Addendum

REVISED WHIRLWIND SUBSTATION

ON SOUTHERN CALIFORNIA EDISON'S APPLICATION FOR THE

## **Tehachapi Renewable Transmission Project**

Application No. A.07-06-031

SCH No. 2007081156

Prepared By:



January 2011

## Table of Contents

|           |   |   |
|-----------|---|---|
| <b>A.</b> | <b>Introduction and Background</b> .....                              | 1 |
| <b>B.</b> | <b>Overview of the Approved Project</b> .....                         | 1 |
| <b>C.</b> | <b>Modifications to the Project</b> .....                             | 2 |
| <b>D.</b> | <b>Evaluation of Modification</b> .....                               | 3 |
|           | D.1 Issue Areas Where Modifications Result in a Potential Change..... | 4 |
|           | D.2 Issue Areas Where Modifications Result in No Change.....          | 6 |
| <b>E.</b> | <b>Other CEQA Considerations</b> .....                                | 6 |
|           | E.1 Significant Unavoidable Impacts .....                             | 6 |
|           | E.2 Irreversible and Irretrievable Commitment of Resources .....      | 6 |
|           | E.3 Growth Inducing Effects .....                                     | 6 |
|           | E.4 Cumulative Impact Analysis .....                                  | 7 |
| <b>F.</b> | <b>References</b> .....   | 7 |

## Appendix

A – Whirlwind Substation Vegetation Communities

B – Segment 9 – Whirlwind Substation Biological Review

## A. Introduction and Background

On June 29, 2007, Southern California Edison (SCE) submitted to the California Public Utilities Commission (CPUC) application A.07-06-031 for a Certificate of Public Convenience and Necessity (CPCN) and a Proponent's Environmental Assessment (PEA) for the construction and operation of the proposed Tehachapi Renewable Transmission Project (TRTP or Project). The TRTP includes new and upgraded transmission infrastructure along approximately 173 miles of new and existing rights-of-way (ROW) in southern Kern County, portions of Los Angeles County, including the Angeles National Forest (ANF), and the southwestern portion of San Bernardino County, California, to interconnect new wind energy projects in eastern Kern County to the electrical grid. The Project will provide the electrical facilities necessary to integrate levels of new wind generation in excess of 700 megawatts (MW) and up to approximately 4,500 MW in the Tehachapi Wind Resource Area.

In reviewing SCE's 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 February 13, 2009, 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 October 30, 2009 (Aspen, 2009). The Final EIR was certified and a CPCN was granted by the CPUC (Decision 09-12-044, SCH #2007081156) on December 17, 2009 (CPUC, 2009).

Since that time, SCE has completed final engineering on portions of the approved Project. Based on final engineering, additional details on the construction of the Whirlwind Substation have been further defined, as presented in an email to the CPUC from SCE dated December 10, 2010 (SCE, 2010). This Addendum is required 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. These modifications are described in detail in Section C, below. A description of the Project, as approved by the CPUC, is also provided below (Section B).

Based on the evaluation of SCE's proposed modifications to the approved Project described in Section D 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 C, below.

## B. Overview of the Approved Project

The Project, as approved by the CPUC, includes the installation of new and upgraded transmission infrastructure along approximately 173 miles of new and existing ROW in southern Kern County, portions of Los Angeles County, including the ANF, and the southwestern portion of San Bernardino County, California.

For descriptive purposes, the Project is separated into eight distinct segments, referred to as Segments 4 through 11. Segments 4 through 8, as well as Segments 10 and 11 of the Project are transmission facilities, while Segment 9 addresses the addition and upgrade of substation facilities. The Project's major components include (see Section 2 of the Final EIR for a detailed description of the Project):

- Two new single-circuit 220-kilovolt (kV) transmission lines traveling in parallel approximately 4 miles over new right-of-way (ROW) from the Cottonwind Substation to the proposed new Whirlwind Substation (Segment 4 - 220 kV).
- A new single-circuit 500-kV transmission line, initially energized to 220 kV, traveling approximately 15.6 miles over new ROW from the proposed new Whirlwind Substation to the existing Antelope Substation (Segment 4 - 500 kV).
- Replace approximately 17.4 miles of the existing Antelope-Vincent 220-kV transmission line and the existing Antelope-Mesa 220-kV transmission line with only one new transmission line built to 500-kV standards in existing ROW between the existing Antelope Substation and the existing Vincent Substation (Segment 5).
- Rebuild approximately 31.9 miles of existing 220-kV transmission line to 500-kV standards from existing Vincent Substation to the southern boundary of the Angeles National Forest (ANF). This segment includes the rebuild of approximately 26.9 miles of the existing Antelope-Mesa 220-kV transmission line and approximately 5 miles of the existing Rio Hondo-Vincent 220-kV No. 2 transmission line (Segment 6).
- Rebuild approximately 15.8 miles of existing 220-kV transmission line to 500-kV standards from the southern boundary of the ANF to the existing Mesa Substation. This segment would replace the existing Antelope-Mesa 220-kV transmission line (Segment 7).
- Rebuild approximately 33 miles of existing 220-kV transmission line to 500-kV standards from a point approximately 2 miles east of the existing Mesa Substation (the "San Gabriel Junction") to the existing Mira Loma Substation (Segment 8A). This segment would also include the rebuild of approximately 7 miles of the existing Chino-Mira Loma No. 1 line from single-circuit to double-circuit 220-kV structures (Segment 8B). A new circuit between Chino Substation and approximately 0.8 mile west of the Mira Loma Substation (6.4 miles) would also be installed on the new double-circuit 500-kV structures built as part of Segment 8A (Segment 8C).
- Whirlwind Substation, a new 500/220-kV substation located approximately 4 to 5 miles south of the Cottonwind Substation near the intersection of 170th Street and Holiday Avenue in Kern County near the TWRA (Segment 9).
- Upgrade of the existing Antelope, Vincent, Mesa, Gould, and Mira Loma Substations to accommodate new transmission line construction and system compensation elements (Segment 9).
- Build a new 500-kV transmission line traveling approximately 16.8 miles over new ROW between the approved Windhub Substation (not part of this project) and the proposed new Whirlwind Substation (Segment 10).
- Rebuild approximately 18.7 miles of existing 220-kV transmission line to 500-kV standards between the existing Vincent and Gould Substations. This segment would also include the addition of a new 220-kV circuit on the vacant side of the existing double-circuit structures of the Eagle Rock-Mesa 220-kV transmission line, between the existing Gould Substation and the existing Mesa Substation (Segment 11).
- Installation of associated telecommunications infrastructure.

## C. Modifications to the Project

Based on final engineering completed to date by SCE for the TRTP, additional modifications to the Project have been identified for the Whirlwind Substation. As identified in the Final EIR, the Whirlwind Substation would be a new 500/220-kV substation located approximately 4 to 5 miles south of the Cottonwind Substation near the intersection of 170<sup>th</sup> Street and Holiday Avenue in Kern County.

The following table describes the proposed modifications in comparison to the original Notice to Proceed Request (NTPR) for the Whirlwind Substation.

| Original NTPR   | Proposed Modification  | Comments  |
|---|--|---|
| 82 acres for pad and future expansion   | 118 acres  | Pad/future expansion area remains at 82 acres, 26 acres for drainage/diversion berms and spreader |
| 102 acres of total land disturbance   | 124 acres  | Total now includes temporary and tortoise exclusion fencing (linear feet total below)             |
| 270,000 cubic yards of soil for grading   | 285,000 cubic yards  | Revised to include final design of drainage/diversion berms and spreader                          |
| Precast concrete wall and gates around substation   | Additional 11,500 linear feet of temporary perimeter chain link and tortoise exclusion fencing | 15 feet past grading limits   |
| Two permanent access roads <ul style="list-style-type: none"> <li>• 40 feet wide by 800 feet long</li> <li>• 40 feet wide by 1,200 feet with 5-foot dirt shoulders</li> </ul> | One permanent access road  | 30 feet wide and 1,600 feet long with 5-foot wide dirt shoulders                                  |

Additional construction activities include the conversion of an existing onsite well to a grounding well and the installation of four additional grounding wells.

As described in the Final EIR, a +/- 15% for land disturbance numbers was stated since final engineering was not yet completed. There is a difference of approximately 21 acres (SCE’s latest revision = 118 acres, Final EIR states 97 acres) from what SCE is now proposing compared to what is stated in the Final EIR, which is over the +15% acreage by about 6.5 acres.

### D. Evaluation of Modifications

After review of the Final EIR, the CPUC has determined that the proposed modifications would not result in any impacts that are new or substantially different from those described in the Final EIR, as discussed below. Those environmental issue areas for which a potential change in the nature or magnitude of an impact could occur as a result of the proposed modifications are discussed in Section D.1 and are indicated in Table 1 below. The determination made from this evaluation is that all impacts from the proposed modifications are either within the range of impacts already discussed in the Final EIR or are substantially similar to those impacts. No new significant impacts would result from the proposed modifications and there would be no significant change in the magnitude of impacts previously disclosed in the Final EIR. As a result, no new mitigation measures are needed. Those issue areas for which it was determined that no change in impacts would occur as a result of the proposed modifications are discussed briefly in Section D.2.

**Table 1 – 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 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 type="checkbox"/> Transportation/Traffic             | <input type="checkbox"/> Utilities/Service Systems  | <input type="checkbox"/> Visual Resources                |

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

##### Air Quality

Air quality impacts associated with the proposed modifications would be similar to the impacts described in the Final EIR. The additional 10,000 cubic yards of grading would result in additional fugitive dust impacts. However, this type of impact was already described in the Final EIR and this increase would be very minor considering total Project emissions and would be mitigated through Mitigation Measures AQ-1a through AQ-1i. As a result, no new or substantially different air quality impacts would occur, and no new mitigation measures would be necessary. Air quality impacts associated with the Project would remain significant and unavoidable.

### **Biological Resources**

SCE performed a biological review of the proposed Whirlwind Substation in December 2010. A larger portion of native vegetation communities would be impacted by the requirement of a larger grading area due to the proposed modifications (Appendix A). Construction would result in permanent impacts on the vegetation communities described in Table 4-2 of Appendix B. These impacts will be mitigated off-site at a 1:1 ratio in accordance with Mitigation Measure B-1a (See Appendix B).

Grading will impact desert dry wash. This drainage feature is not a jurisdictional water of the United States, but is a water of the State. The State Water Resources Control Board is currently processing SCE's application for a Waste Discharge Requirement (WDR) permit for impacts on drainages regulated under the Porter-Cologne Act. In addition, the Project is subject to regulation under Sections 1600-1616 of the California Fish and Game Code. A Streambed Alteration Agreement (SAA) is currently being processed by the California Department of Fish and Game and any impacts on the desert dry wash will be mitigated based on the terms of the SAA and WDR permit. Impacts on desert dry wash were described in the Final EIR and will be mitigated off site at a 3:1 ratio in accordance with Mitigation Measure B-1a (See Appendix B).

The proposed substation area provides suitable habitat for the following special-status species: desert tortoise, horned lizard (California and San Diego), Mohave ground squirrel, Tehachapi pocket mouse, Townsend's big-eared bat (foraging only), American badger, burrowing owl, LeConte's thrasher, loggerhead shrike, Swainson's hawk, and several other raptor species, including northern harrier. All potential impacts on special-status species will be avoided through SCE's compliance with biological mitigation measures (B-5, B-7, B-10, B-18a, B-18b, B-19, B-22b, B-23, B-29, B-37, and B-38) presented in the TRTP Final EIR. Preconstruction surveys and preconstruction clearance sweeps will be performed prior to all work to avoid impacts on any potentially occurring special-status species and all raptor and bird nests. These surveys will ensure the avoidance of impacts on not only raptor species such as Swainson's hawk and burrowing owl, but also on other potentially occurring special-status species such as desert tortoise and Mohave ground squirrel. Biological monitoring will be provided to ensure the avoidance of impacts on any species that may enter the site prior to any ground disturbance activities.

The U.S. Fish and Wildlife Service (USFWS) was contacted to discuss the additional acreage disturbance due to the proposed modifications. The response from the USFWS stated that "The change in acreage does not constitute a significant change in the impacts analyzed in our biological opinion for the Tehachapi Renewable Transmission Project. Consequently, we do not believe that re-initiation of formal consultation is necessary as a result of the change in acreage of permanent and temporary disturbance" (USFWS, 2010).

For a list of Applicant Proposed Measures and TRTP Final EIR mitigation measures for the Whirlwind Substation, please see Appendix B. With implementation of the Project's mitigation measures, no new or substantially different biological resources impacts would occur and no new mitigation measures would be necessary.

## Cultural Resources

The proposed modifications would result in similar impacts to those described for the Project in the Final EIR. The additional acreage associated with the proposed modifications for the construction of the Whirlwind Substation is covered by two previously completed cultural resources surveys:

- Hamad, Jamie, K. Ross Way, Kari Jones 2009. Cultural Resources Inventory for the Whirlwind Substation in Support of the Tehachapi Renewable Resource Project (TRTP), Southern California Edison Company, Kern County, California. Prepared for Southern California Edison, Rosemead, CA. Report on file at Pacific Legacy, Inc. Berkeley, CA.
- Pacific Legacy, Inc. 2007. Cultural Resources Inventory of the Southern California Edison Company Tehachapi Renewable Transmission Project, Kern, Los Angeles and San Bernardino Counties, California. Prepared for Southern California Edison, Rosemead, CA. Report on file at Pacific Legacy, Inc., Santa Cruz, CA.

No additional cultural resources would be impacted by the increase in acreage reflected in the newly proposed disturbance footprint.

If previously unidentified archaeological or historic sites, or paleontological resources are discovered during construction activities, work within the vicinity of the discovery will stop immediately and the qualified archaeologist or paleontologist (as applicable) monitoring the discovery will determine a safe distance to redirect/relocate work to prevent further impacts/affects on the resources. SCE will implement appropriate measures to protect any find from adverse effects; the CPUC will be notified by SCE within 24 hours of any find and provide information regarding the location and nature of the discovery and steps taken by SCE to protect the find. Construction affecting the resource will not resume until SCE has received a Notice to Proceed from the CPUC.

Further, if human remains are unearthed during excavation, State Health and Safety Code Section 7050.5 state that “... no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and distribution pursuant to Public Resources Code Section 5097.98.”

No new or substantially different cultural resources impacts would occur and no new mitigation measures would be necessary.

## Hydrology and Water Quality

The proposed modifications would result in an increase in surface disturbance, which could contribute to the degradation of surface water quality. However, erosion and sedimentation impacts would be minimized by the implementation of the existing Erosion Control Plan (Mitigation Measure H-1a) and construction Storm Water Pollution Prevention Plan (SWPPP) (APMs HYD-1 and GEO-3). Therefore, no new or substantially different hydrology and water quality impacts would occur and no new mitigation measures would be necessary.

## Noise

The proposed modifications would change the level of noise expected to result from construction of the Whirlwind Substation. SCE has implemented APMs NOI-1 (Limit Hours and Days for Construction), NOI-3 (Advance Notification), NOI-4 (Establish Toll Free Number), as well as Mitigation Measures N-1a (Implement Best Management Practices for construction noise) and N-1b (Avoid sensitive receptors during mobile construction equipment use) to reduce the effects of construction noise on sensitive receptors during Project activities. However, Project impacts remain significant and unavoidable, same as the approved

Project. The proposed modifications would not introduce any new or substantially different noise impacts and no new mitigation measures would be necessary.

## **D.2 Issue Areas Where Modifications Result in No Change**

The proposed modifications do not change the characteristics or overall scale of the approved Project and involve only negligible changes to the Project's design. Therefore, potential environmental impacts to agricultural resources, geology, soils and paleontology, hazards and hazardous materials, land use, mineral resources, population/housing, public services, transportation/traffic, utilities and service systems, and visual resources are not expected to change or increase in severity compared to what was described for in the Final EIR of the approved Project.

## **E. Other CEQA Considerations**

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

The environmental impacts of the approved Project are described in detail in Section 3 (Effectuated Environment and Environmental Consequences) of the Final EIR, and for the proposed modifications, in Section D (Evaluation of Modification) of this Addendum. All the significant and unavoidable (Class I) impacts identified for the approved Project, as discussed in Section 5.1.3 (Adverse Environmental Effects that Cannot Be Avoided) of the Final EIR, would be the same as for the approved Project with implementation of the proposed modifications.

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

As described in the Final EIR, the approved Project would result in the irreversible and irretrievable commitment of resources. The proposed modifications, minor in comparison, would be similar to the approved Project. Construction of the proposed modifications identified by SCE would result in the same irretrievable commitment of natural resources as described in the Final EIR. Please see Section 5.1.2 of the Final EIR for a complete discussion of irreversible and irretrievable commitment of resources for the approved Project.

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

As described in the Final EIR, the primary purposes of the approved 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 modifications serve the same purposes and are minor in comparison to the approved Project. 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. Please see Section 5.1.4 of the Final EIR for a complete discussion of growth-inducing effects for the approved Project.

### **E.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. Please see Section 3 (Cumulative Impact Analysis by Issue Area) of the Final EIR for a discussion of 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.

## **F. References**

Aspen Environmental Group (Aspen). 2009. Final Environmental Impact Report, Tehachapi Renewable Transmission Project. Report prepared for the California Public Utilities Commission. October 2009. Agoura Hills, California.

California Public Utilities Commission (CPUC). 2009. Decision Granting a Certificate of Public Convenience and Necessity for the Tehachapi Renewable Transmission Project (Segments 4-11). Decision 09-12-044. December 17.

Southern California Edison (SCE). 2010. Email communication from Heather Neely of SCE to Jody Fessler of Aspen Environmental Group, “TRTP 4-11: Revised Whirlwind Substation Notice to Proceed Request \*\*TRANSMITTAL\*\*”. December 10.

U.S. Fish and Wildlife Service (USFWS). 2010. Email communication from Raymond Bransfield of USFWS to Nathan Sill of the U.S. Forest Service, “Updated Disturbance acreages from SCE for TRTP”. December 30.