

Supplemental Evaluation

SAGEBRUSH INTERSET TOWERS

ON SOUTHERN CALIFORNIA EDISON'S APPLICATION FOR THE

Tehachapi Renewable Transmission Project

Application No. A.07-06-031

SCH No. 2007081156

Prepared By:



April 2012

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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 associated with the construction of the Sagebrush single-circuit 220 kV transmission line (T/L) adjacent to the Segment 5 T/L have been further defined. This Supplemental Evaluation is required to determine whether or not this modification to the Project was 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. The 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 associated with the Sagebrush single-circuit 220 kV T/L adjacent to the Segment 5 T/L have been identified. The modifications consist of new tower construction (Sagebrush Interset Towers with H-frame structures), existing tower modifications, and installation of new conductor within the existing Sagebrush single-circuit 220 kV transmission T/L adjacent to the Segment 5 T/L. The new H-frame structures and conductor are needed to address a conductor clearance issue created by installing the Segment 5 T/L. After installation, the interest towers would slightly raise the height of the transmission line.

The construction activities for the Sagebrush Interset Towers are located approximately 2.25 miles west of Highway 14 in unincorporated Los Angeles County, California (refer to Figure 1 of Appendix A). The proposed new disturbance areas are intersected by existing CPUC-approved roads and/or occur adjacent to CPUC-approved disturbance areas. As such, no new roads would be needed for the proposed construction activities. At each proposed new work area, grubbing and light grading would be performed to create a level pad to support safe construction activities. The total additional disturbance area associated with the Sagebrush Interset Tower construction activities is approximately 6 acres.

Construction

The Sagebrush Interset Towers include construction of two H-frame steel structures (Constructs [CTs] 235A and 236A) interset within the existing Sagebrush single-circuit 220 kV T/L adjacent to the Segment 5 T/L. An example of an H-Frame steel structure is provided in Appendix B. Following structure installation, the existing conductor and ground wires would be replaced. Construction would last 12 weeks.

The structure and conductor construction would be located within the Florida Power and Light (FPL) ROW, adjacent to the SCE ROW. SCE would receive a Temporary Entrance Permit to allow work to be performed. Additional disturbance areas would be needed to provide work areas for structure construction and conductor installation activities. Specific construction activities are described below, and the required construction work areas are illustrated in Figures 2 and 3 of Appendix A.

- Two H-frame, steel interset structures (CTs 235A and 236A) would be constructed with a depth of 33 feet and a width of eight feet. The additional disturbance areas associated with these work areas are as follows:
 - CT 235A (Figure 2 of Appendix A):
 - Northern disturbance area: 0.8 acre
 - Southern disturbance area: 1.1 acre
 - CT 236A (Figure 3 of Appendix A): 2.5 acres
- Three existing structures along the Sagebrush T/L (CTs 235, 236, and 237) would be modified to accommodate the new conductor to be installed, due to design requirements. Only ground wire hardware would be replaced. Approximate 200-foot by 200-foot work areas would be added at each tower location. The additional disturbance areas associated with these work areas are as follows (note that the proposed disturbance areas overlap with existing CPUC-approved disturbance areas and, as such, only portions of the proposed disturbance areas are considered additional disturbance areas):
 - CT 235: 0.6 acres
 - CT 236: 0.4 acres
 - CT 237: 0.7 acres
- Following construction of the two new towers and modifications to the three existing towers, the existing conductor and ground wires would be removed and replaced. The disturbance areas at each tower (described above) would be sufficient for performing these activities.

D. Evaluation of Modification

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 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 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 checked="" type="checkbox"/>	Visual Resources

D.1 Issue Areas Where Modification Results in a Potential Change in Impacts

Air Quality

Air quality impacts as a result of the Sagebrush Interset Towers construction activities would be similar to the impacts described in the Final EIR. The proposed construction activities would result in an additional total ground disturbance area of approximately 6 acres. A minimal increase in the number of vehicle trips would occur. Therefore, any emissions 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

The disturbance areas associated with the proposed Sagebrush Interset Tower construction activities are situated within disturbed vegetation communities, and California annual grassland, mixed chaparral, and scrub oak chaparral vegetation communities. The surrounding area consists of the same vegetation communities, and also disturbed and undisturbed Mojave mixed woodland scrub in the vicinity of the CT 236A and CT 237 disturbance areas. Biological resources identified within the Sagebrush Interset Tower disturbance areas are summarized in Table 3 of the attached Biological Report (Appendix C).

A clearance sweep for biological resources would be performed by a CPUC-approved biological monitor prior to the start of construction. The total disturbance area associated with the proposed project component is approximately 6 acres. The acreages of the proposed disturbance areas by vegetation community are shown in the attached Biological Report (Appendix C). The disturbance areas associated with the proposed Sagebrush Interset Tower construction activities do not overlap suitable habitat for special-status species as included in the Incidental Take Permit or Biological Opinion.

Mitigation measures and APMs associated with biological resources identified in the Final EIR would apply to the Sagebrush Interset Towers. No new or substantially different biological resources impacts would occur and no new mitigation measures would be necessary.

Cultural Resources

Potential impacts to cultural resources as a result of the Sagebrush Interset Towers construction activities were analyzed based on the results of the Final EIR and supplemental cultural resources investigations conducted in support of the Project (Ahmet et al., 2006; Pacific Legacy, 2007, 2010a, 2010b, 2010c; Tejada, 2011 and 2012). The results of these studies indicate that construction activities related to the Sagebrush Insert Towers would not have an adverse effect on significant cultural resources or historic properties.

If previously unidentified archaeological or historic sites are discovered during construction activities, work within the vicinity of the discovery would stop immediately and the qualified archaeologist monitoring the discovery would establish a buffer area to prevent further impacts/effects on the resources. SCE would implement appropriate measures to protect any find from adverse effects; the CPUC would 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 would 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 states “there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered... [has made the appropriate assessment, and] ...recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.” No construction activities would be allowed within 100 feet of the discovery until a Notice to Proceed is provided by the CPUC.

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

Geology, Soils and Paleontology

The increased amount of ground disturbance associated with the proposed modifications would incrementally increase erosion and the potential to disturb paleontological resources. 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). These measures would reduce any increase in erosion impacts.

A geotechnical engineering investigation was performed for the Sagebrush Interset Tower locations (Terracon, 2011). As required by MM G-4 (avoid placement of project structures on active fault traces), MM G-5a (reduce effects of ground shaking), MM G-5b (conduct geotechnical investigations for liquefaction), MM G-6 (conduct geotechnical studies to assess soil characteristics and aid in appropriate foundation design), the Geotechnical Engineering Report would be provided to the CPUC for approval prior to construction.

Potential impacts to paleontological resources as a result of the Sagebrush Interset Towers construction activities were analyzed based on the results of the Final EIR and the Paleontological Resources Management Plan prepared in support of the Project (Gust and Scott, 2009). The paleontological review indicates that the geology of the proposed modification area is characterized by igneous rocks. These types of rocks do not have the potential to yield paleontological resources; therefore, construction activities associated with the Sagebrush Interset Towers would not have significant impacts on paleontological resources and no paleontological monitoring is required. Additionally, implementation of APMs PALEO-5 (Construction Monitoring) and PALEO-6 (Recovery and Testing) would be implemented to reduce the potential for destruction of paleontological resources.

No new or substantially different geology, soils, or paleontology impacts would occur and no new mitigation measures would be necessary.

Hydrology and Water Quality

Construction of the Sagebrush Intersect Towers would result in a minor temporary 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 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.

Visual Resources

The two new intersect towers, CT 235A and CT 236A, would be installed within an existing FPL ROW and between two SCE T/L ROWs with existing high-voltage transmission structures. The new transmission structures would be consistent with the existing environment. No change to the visual character of the area and no additional impacts to visual resources are anticipated with the construction and installation of the Sagebrush Intersect Towers. Mitigation measures and APMs associated with visual resources identified in the Final EIR would apply to the Sagebrush Intersect Towers.

No change to the visual character of the area and no additional impacts to visual resources are anticipated. No new or substantially different visual impacts would occur and no new mitigation measures would be necessary.

D.2 Issue Areas Where Modification Results 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, hazards and hazardous materials, land use, mineral resources, noise, population/housing, public services, transportation and traffic, and utilities and service systems, 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

- Ahmet, Koral, Roger D. Mason, and Sara Bholat. 2006. Cultural Resources Survey Report for Antelope Transmission Project: Segments 2 & 3 Los Angeles and Kern counties. ECORP Consulting, Inc. Submitted to Aspen Environmental Group, Agoura Hills. Aspen Environmental Group (Aspen).
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- 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.
- Gust, Sherri and Scott, Kim. 2009. Paleontological Resource Management Plan for Tehachapi Renewable Transmission Project Segments 4 Through 11, Los Angeles, Orange, Riverside, and San Bernardino Counties, California: Prepared by Cogstone Resource Management, Inc., Orange, CA. Prepared for Pacific Legacy, Inc., Santa Cruz, CA. Submitted to Southern California Edison: Rosemead.
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- _____. 2010b. Supplemental Archaeological Survey Report #1, Tehachapi Renewable Transmission Project Segment 5, Los Angeles County, California. On file at SCE, Rosemead.
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Terracon. 2011. Geotechnical Engineering Report. Sagebrush 220kV Transmission Line, Los Angeles County. Prepared for Power Engineers, Inc. May.