

Tehachapi Renewable Transmission Project



Project Overview



Southern California Edison (SCE) has filed an application (No. A.07-06-031) with the California Public Utilities Commission (CPUC) for a Certificate of Public Convenience and Necessity for the Tehachapi Renewable Transmission Project. SCE has also submitted an application for a Special Use authorization to the USDA Forest Service. The proposed Project would include construction of a series of transmission system improvements to help deliver electricity from new wind energy projects in eastern Kern County to the Los Angeles Basin.

The objectives of SCE's proposed Tehachapi Renewable Transmission Project (TRTP) are to: (1) build 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 (TWRA) to comply with California's Renewable Portfolio Standard; (2) address the reliability needs of the California Independent System Operator-controlled grid, due to projected load growth in the Antelope Valley; and (3) address the South of Lugo transmission constraints, an ongoing source of concern for the Los Angeles Basin.

The proposed transmission line (T/L) route would cross public and private lands, and would traverse multiple jurisdictions in Kern, Los Angeles, and San Bernardino Counties, including 17 cities and the Angeles National Forest (ANF). The proposed T/Ls would be constructed primarily within existing rights-of-way (ROWs).

The TRTP includes the following major components:

- Two new single-circuit 220-kilovolt (kV) T/Ls traveling approximately 4 miles along new ROW from the Cottonwind Substation to the proposed new Whirlwind Substation (Segment 4).
- A new single-circuit 500-kV T/L, initially energized to 220 kV, traveling approximately 16 miles along new ROW from the proposed new Whirlwind Substation to the existing Antelope Substation (Segment 4).
- Rebuilding approximately 18 miles of the existing Antelope-Vincent 220-kV T/L and the existing Antelope-Mesa 220-kV T/L to 500-kV standards along existing ROW between the existing Antelope Substation and Vincent Substation (Segment 5).
- Rebuilding of approximately 32 miles of existing 220-kV T/L to 500-kV standards from the existing Vincent Substation to the southern boundary of the ANF. Also rebuilding approximately 27 miles of the existing Antelope-Mesa 220-kV T/L and approximately 5 miles of the existing Rio Hondo-Vincent 220-kV No. 2 T/L (Segment 6).
- Rebuilding of approximately 16 miles of existing 220-kV T/L 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 T/L (Segment 7).



(Future Simulation) Looking north, northeast from Royal Oaks/Tocino intersection, Duarte. (Segment 7)



(Future Simulation) Looking south-southeast from Crooked Creek Drive, Diamond Bar. (Segment 8)

- Rebuilding approximately 33 miles of existing 220-kV T/L 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. Also rebuilding approximately 7 miles of the existing Chino-Mira Loma No. 1 line from single-circuit to double-circuit 220-kV structures (Segment 8).
- Building the new Whirlwind Substation, a 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).
- Upgrading the existing Antelope, Vincent, Mesa, Gould, and Mira Loma Substations to accommodate new T/L construction and system compensation elements (Segment 9).
- Building a new single-circuit 500-kV T/L traveling approximately 17 miles over new ROW between the Windhub Substation and the proposed new Whirlwind Substation (Segment 10).
- Rebuilding approximately 19 miles of existing 220-kV T/L to 500-kV standards between the existing Vincent and Gould Substations. Also adding a new 220-kV circuit on the vacant side of the existing double-circuit structures of the Eagle Rock-Mesa 220-kV T/L, between the existing Gould Substation and the existing Mesa Substation (Segment 11).
- Installation of associated telecommunications infrastructure.



(Future Simulation) Looking southeast along Tehachapi-Willow Springs Road, Kern County. (Segment 10)

Alternatives to the Proposed Project. The following alternatives developed by SCE in their Proponent's Environmental Assessment (PEA), as well as additional feasible alternatives to be developed by the CPUC and the USDA Forest Service will be considered, including the No Action alternative. SCE's proposed alternatives as presented in the PEA include the following:

- Alternative Routing between Windhub and Whirlwind Substations (Segment 10)
- Alternative Routing through Chino Hills (Segment 8)
- Alternative Routing through Angeles National Forest (Segments 6 and 11)
- Whirlwind Substation Alternative Locations (Segment 9).



(Future Simulation) Looking east from Linard/Kayann intersection, South El Monte. (Segment 7)

Additional Project Information. For additional information on the TRTP, please check the CPUC website:

ftp://ftp.cpuc.ca.gov/gopher-data/enviro/tehachapi_renewables/TRTP.htm

To request additional information or to be added to the mailing list, please contact the EIR/EIS environmental review team by e-mail, fax, or phone:

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