

Fact Sheet

Tehachapi Renewable Transmission Project

March 2007

Important community information concerning a proposed Southern California Edison Company project in your area

Southern California Edison Company (SCE) proposes to construct the Tehachapi Renewable Transmission Project (TRTP). The TRTP would include new and upgraded electric transmission lines and substations between eastern Kern County and the city of Ontario in San Bernardino County. The project is needed to interconnect renewable wind power generated in the Tehachapi area to the existing electric transmission system to meet the increasing demand of electricity in Southern California.

PROJECT LOCATION AND DESCRIPTION

The proposed TRTP would extend from eastern Kern County to the city of Ontario in San Bernardino County. In all but a few areas, the project would be constructed in existing utility rights-of-way (ROW), replacing or upgrading existing SCE facilities. In the areas where new ROWs are needed, SCE would need to acquire a ROW ranging between 100 feet and 300 feet wide. One new substation and upgrades at existing substations are also proposed.

The accompanying maps in this master fact sheet and the local inserts provide a visual representation of the project. Also, the section of this fact sheet entitled "Path of Electricity" may help explain some of the terms and ideas discussed here.

The TRTP consists of the following elements, which include Segments 4 through 11 (Segments 1, 2, and 3 were addressed in previous, separate proceedings, as explained below):

The TRTP consists of these elements:

Segment 4 – Construction of the new Whirlwind Substation in Kern County west of Rosamond. This 500/220 kV substation would be connected to the proposed Cottonwind Substation¹ by a new four-mile double-circuit, 220 kilovolt (kV) transmission line and to SCE's existing Antelope Substation in west Lancaster by a new 14-mile 500 kV transmission line. Construction would be in a new ROW, parallel to the existing ROW.

HOW THIS FACT SHEET IS ORGANIZED

The TRTP traverses three counties and numerous municipalities and unincorporated county areas. This master fact sheet is designed to provide a high-level overview of the entire project. For more specific information, SCE has prepared specific inserts that provide greater detail at the local level. All of these materials are available at SCE facilities listed on the last page and are accessible on SCE's Web site: www.sce.com/tehachapi.

WHY IS THE PROJECT NEEDED?

California's demand for electricity continues to grow. So too does its demand for electricity produced by renewable power sources such as wind. The TRTP, which would interconnect renewable wind energy to the existing electric system, would help meet two important state requirements concerning renewable resources. First, state law requires that at least 20 percent of the electricity SCE delivers to custom-

ers be produced by renewable sources by 2010. New and modified transmission facilities are needed to help the state meet that target. Second, the Global Warming Solutions Act of 2006 caps California's greenhouse gas emissions at 1990 levels by 2020. Wind generation does not emit greenhouse gases. By interconnecting renewable wind power, the TRTP can help meet these targets.

Currently, energy developers are planning new "wind farms" in an area of Kern County referred to as the "Tehachapi Wind Resource Area" that would help meet the demand for more renewable power. Although SCE does not have an ownership interest in any of the proposed wind farms, SCE is required to construct extensions of its transmission system to these proposed wind farms so that wind power can be delivered into the state's energy grid.

In order to increase its ability to deliver this renewable wind energy to customers, SCE must upgrade its transmission lines and substations south of the Tehachapi Wind Resource Area by constructing the TRTP. These upgrades are also necessary to serve Southern California's overall growing demand for electricity.

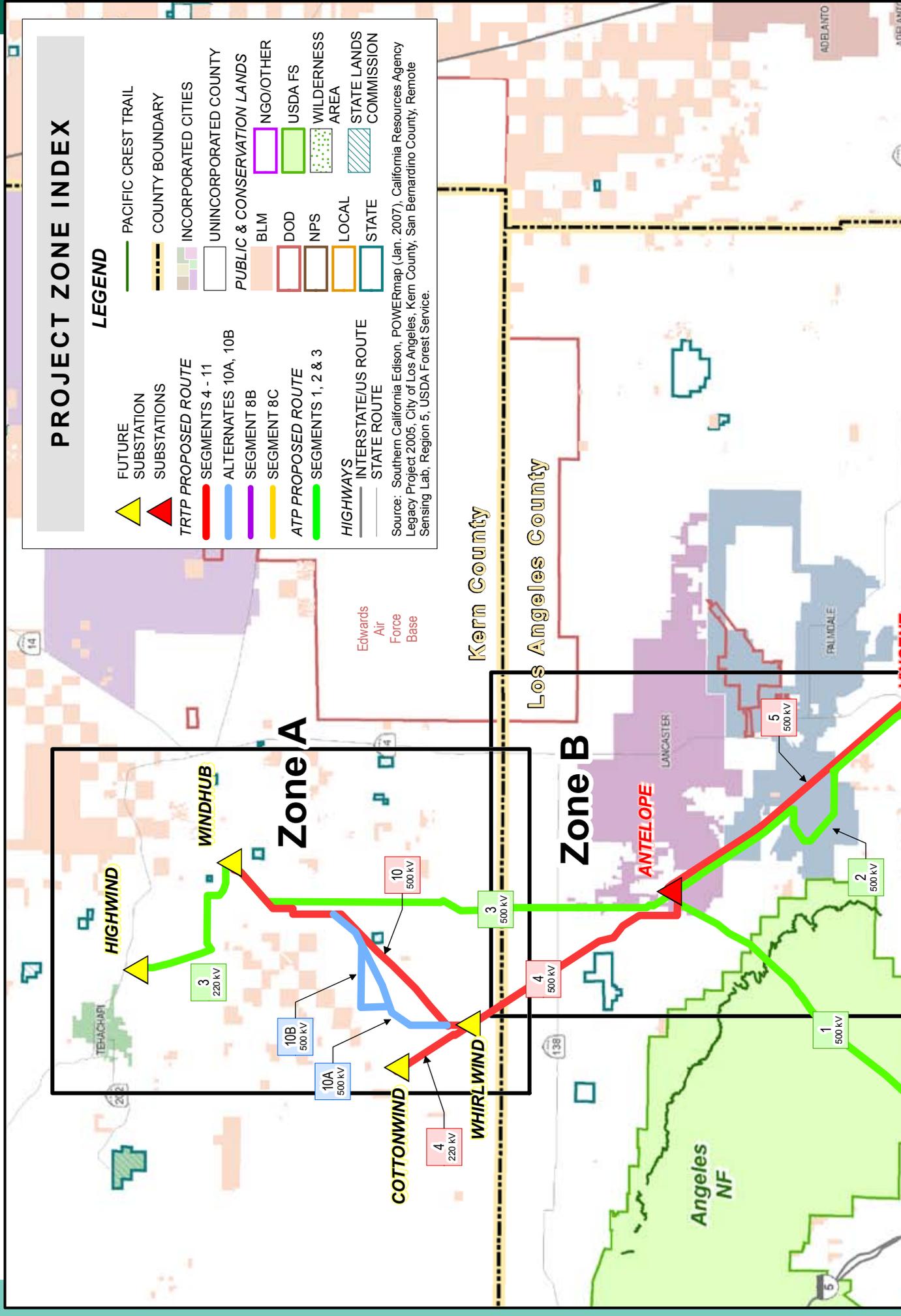
¹ Cottonwind Substation is currently undergoing environmental review by the County of Kern in conjunction with a proposed wind farm development under an existing application.

PROJECT ZONE INDEX

LEGEND

- | | | | |
|---|---------------------|--|---|
|  | FUTURE SUBSTATION |  | PACIFIC CREST TRAIL |
|  | TRTP PROPOSED ROUTE |  | COUNTY BOUNDARY |
|  | SEGMENTS 4 - 11 |  | INCORPORATED CITIES |
|  | ALTERNATES 10A, 10B |  | UNINCORPORATED COUNTY PUBLIC & CONSERVATION LANDS |
|  | SEGMENT 8B |  | BLM |
|  | SEGMENT 8C |  | DOD |
|  | ATP PROPOSED ROUTE |  | NPS |
|  | SEGMENTS 1, 2 & 3 |  | LOCAL |
|  | HIGHWAYS |  | STATE |
|  | INTERSTATE/US ROUTE |  | STATE LANDS COMMISSION |
|  | STATE ROUTE |  | USDA FS |
| | |  | WILDERNESS AREA |
| | |  | STATE LANDS COMMISSION |

Source: Southern California Edison, POWERmap (Jan. 2007), California Resources Agency Legacy Project 2005, City of Los Angeles, Kern County, San Bernardino County, Remote Sensing Lab, Region 5, USDA Forest Service.



Segment 5 – Construction of a new 18-mile-long 500 kV transmission line that would connect SCE’s existing Antelope Substation with SCE’s existing Vincent Substation near Acton. This new line would be built next to an identical existing 500 kV line and would replace two 220 kV lines that would be removed. An existing ROW would be utilized. This new line would be initially energized at 220 kV.

Segment 6 – Replacement of approximately 27 miles of an existing 220 kV transmission line that runs from SCE’s existing Vincent Substation to the southern edge of the Angeles National Forest (ANF) near the city of Duarte with a new 500 kV transmission line that would initially be energized at 220 kV. An existing ROW would be utilized. Replacement of approximately five miles of an existing SCE 220 kV transmission line between Vincent Substation and the northern border of the ANF with a new 500 kV transmission line.

Segment 7 – Replacement of 15 miles of the existing 220 kV line from the ANF border near the city of Duarte south to SCE’s existing Rio Hondo Substation in the city of Irwindale and then continuing southwest across various San Gabriel Valley cities toward SCE’s existing Mesa Substation in the Monterey Park/Montebello area with a double-circuit, 500 kV transmission line. Existing ROWs would be utilized and various lower-voltage subtransmission lines between the Rio Hondo and Mesa Substations would require relocation within existing ROW or public ROW.

Segment 8 – Replacement of existing single-circuit, 220 kV line that runs from the existing Mesa Substation area to the Chino Substation area and existing double-circuit, 220 kV line from Chino Substation to the existing Mira Loma Substation with a 32-mile double-circuit, 500 kV line. Replacement of approximately seven miles of existing 220 kV line that run from SCE’s Chino Substation to its Mira Loma Substation located in the city of Ontario with a double-circuit, 220 kV line. Existing ROWs would be utilized except for where approx-

imately three miles of new ROW would be required in limited areas. Various lower-voltage sub-transmission lines in the Chino area would require relocation within existing ROW or public ROW.

Segment 9 – Installation of equipment and upgrades at Antelope, Vincent, Windhub and Whirlwind Substations to connect new 220 kV and 500 kV transmission lines and to help maintain proper voltage levels.

Segment 10 – Construction of a new 12-mile, single-circuit, 500kV line to connect the proposed Whirlwind Substation (Segment 4) with the Windhub² collector substation. New ROW would be required.

Segment 11 – Replacement of approximately 20 miles of 220 kV transmission line between the existing Vincent Substation and Gould Substation near La Cañada Flintridge with a new, 20-mile, single-circuit, 500 kV transmission line. Installation of a second 220 kV transmission line on the currently empty side of the transmission towers that already extend from the area of Gould Substation across various San Gabriel Valley cities to the area of Mesa Substation in Monterey Park. An existing ROW would be utilized.

PROJECT APPROVAL PROCESS

To construct the TRTP, SCE must submit applications for approval to the California Public Utilities Commission (CPUC) and to the U.S. Forest Service (USFS). The CPUC is the state regulatory agency that sets electric rates and issues permits for the construction of certain electric facilities

such as those comprising the TRTP. Portions of the project fall within public lands administered by the USFS which will review and approve the project for compliance with federal environmental laws. SCE’s applications will include both environmental and technical data for the TRTP. The CPUC and USFS will review the applications in accordance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) and will seek public comment on the TRTP. The CPUC and USFS will then approve the TRTP as filed, approve the project with modifications, or deny the project.

PUBLIC OUTREACH AND COMMUNICATIONS

SCE wants the public – including local residents, community organizations, government officials and others to know the “why,” “where” and “how” as well as the “why here” of any project that may impact a community. Public outreach and communication is an essential part of this project. As SCE explains why the TRTP is necessary, and why SCE proposes to build it where it has, so too does SCE want to receive input, comments and questions about the project, and to address those questions and concerns as it proceeds through the various stages of its approval. In researching and collecting information on possible routes, SCE has already held preliminary discussions regarding the project with local government officials. SCE will continue to meet with local property owners, local government officials, and

PROJECTED TIMELINE FOR THE TRTP

Spring, 2007	Project Open Houses
Summer, 2007	SCE submits applications to the CPUC and the USFS for authorization to construct the project
Summer, 2009	Proposed start of construction upon receipt of all required approvals
Winter, 2013	Project completed

² Substation One (Windhub) was included in SCE’s proposed Antelope Transmission Project Segment 2-3 application (A.04-12-008) submitted to the California Public Utilities Commission for approval in December 2004 and amended September 30, 2005.

other interested parties throughout all phases of this project.

In addition to conducting outreach activities with individual residents and organizations, SCE will schedule a series of public open houses at various locations along the project route during the second quarter of 2007. The open houses are designed to provide detailed information on the project, answer specific questions that the public may have about all aspects of the project, and allow the public to meet the project team. The open houses will be advertised in local newspapers and on SCE's website www.sce.com/tehachapi. SCE will mail open house invitations to property owners within 300 feet of the project route and to anyone else who has asked to be on the project mailing list. To learn how to add your name to that mailing list, please see the "Additional Information" section below.

SCE will produce other project updates or other communications as needed, and will mail them to the TRTP list as well.

OTHER SCE LOCAL PROJECTS

In order to connect new wind farms already planned for Kern County to the regional electric grid, SCE filed applications (A.04-12-007 and A.04-12-008) with the CPUC in December 2004 and amended A.04-12-008 in September 2005 to construct the Antelope Transmission Project (ATP). The ATP project includes upgrades to an existing substation in Lancaster, two new substations in the Tehachapi Wind Resource Area to collect wind energy, and transmission lines to the Lancaster, Acton, and Santa Clarita areas to allow that wind power to be added to the electric grid. In the overall service plan to interconnect wind development, ATP comprises Segments 1, 2, and 3 and the TRTP comprises Segments 4 through 11 of a comprehensive plan developed in conjunction with the California Independent System Operator and the Tehachapi Collaborative Study Group, as ordered by the CPUC. As these projects progress, SCE will provide specific information to the affected communities.

ADDITIONAL INFORMATION

If you have any questions or comments about the project, or would like to be added to the project mailing list, please contact any of these SCE representatives. Areas of responsibility are noted by their names.

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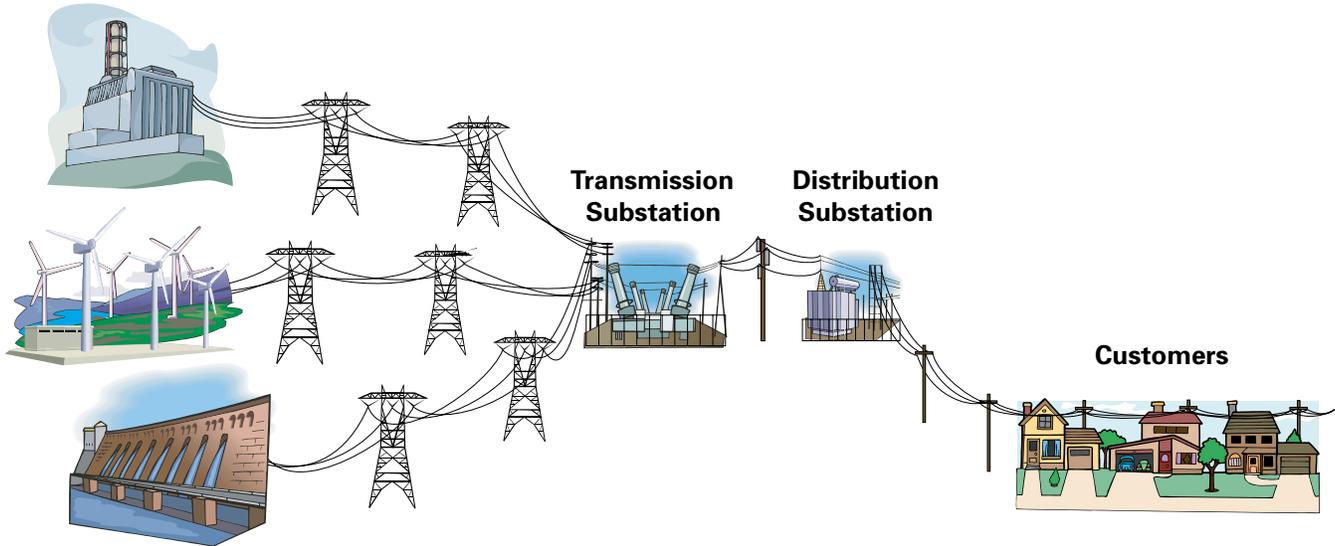
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PATH OF ELECTRICITY

Generating Stations



The information presented in this section provides general information about how electricity is delivered to homes and businesses. It helps illustrate how the proposed TRTP fits into the bigger picture of how SCE delivers electricity to you. The specific SCE project elements referred to in this fact sheet are detailed in the sections above entitled: "WHY IS THE PROJECT NEEDED" and "PROJECT LOCATION AND DESCRIPTION."

Electricity is produced at power plants and at facilities such as wind farms often located many miles away from where that electricity is used. Transmission lines are the "freeways" of the electrical system, moving large amounts of electricity over long distances from these power plants to customers. To do this most efficiently and with the least amount of energy loss along the way, the electricity must be transported at high voltages, normally 220,000 volts (220 kilovolts or 220 kV) to 500,000 volts (500 kilovolts or 500 kV). The electricity transmitted over almost all of these high-voltage lines, including those for the TRTP, is alternating current (A/C), the same kind of power you plug into at home. One A/C circuit consists of three separate conductors (wires), each of which is called a "phase." When you see three wires

attached to a transmission tower, arranged either vertically or horizontally, those three wires comprise a single electric circuit. If the tower has only three wires attached to it, it's called a "single-circuit" line. If it has two sets of three wires attached to it, in two vertical sets, it's called a "double-circuit" line.

In order for this electricity to be used by businesses or homes, however, the voltages must be reduced through the use of transformers. These transformers are located at facilities known as substations. The voltage reduction is usually done in stages – first from 500 kV to 220 kV, and then from 220 kV to 66 kV or 12 kV. Lower-voltage distribution lines deliver power from these smaller substations to neighborhoods where it can be used by homes and businesses.

SCE transmission lines are typically named for the substations they connect. If two transmission lines operating at the same voltage connect the same two substations, they are also numbered. For example, the 500 kV line that connects SCE's Antelope Substation with its Vincent Substation is called "Antelope-Vincent No. 1." The proposed new line would be named "Antelope-Vincent No. 2."



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