

## Glossary

**AC (Alternating Current)** – An electric current that reverses its direction of flow periodically, as contrasted to direct current.

**Access Road** – A road used for vehicle travel, usually from a public road to a transmission line corridor or other associated facility. If no suitable road exists, new roads are constructed.

**Appraisal** – A process used by the professional appraiser to interpret facts and judgments into an estimate or opinion of value. These facts include: the interests being acquired, such as an easement or a fee; the effect on the remaining property; and data obtained from the market, such as comparable sales, costs and income.

**Centerline** – A ground plan or straight line between points of intersection used for transmission tower alignment.

**Conductor** – The wire cable suspended between transmission towers through which electric current flows.

**Corridor** – A linear strip of land of variable width, generally two to five miles wide, which accommodates utility facilities such as transmission lines.

**Easement** – A specific strip of land within which a utility has certain rights, as authorized by a written agreement with the property owner or a judgment in condemnation.

**Eminent Domain** – The legal right of a government agency or utility to take private property for public use, with just compensation to the property owner, as determined by a court.

**Environmental Impact Statement/ Environmental Impact Report** – A document which serves as the Federal environment impact statement required by the National Environmental Policy Act.

**Land Services Agent** – A Western employee or contractor who is in direct contact with the affected landowner. The land services agent represents Western in negotiating: (1) permission to enter for conducting pre-construction activities, and (2) contracts for easement or other property rights. The land services agent also provides the landowner with information about the type and location of the proposed line, the width of the needed easement, the conditions of the easement and the basis for full payment.

**National Electrical Safety Code** – An American National Standard imposed to safeguard people during the installation, operation or maintenance of electric supply and communications lines and their associated equipment.

**National Environmental Policy Act** – An act passed by Congress in 1969 requiring Federal agencies to consider possible environmental impacts of most large projects. NEPA requires preparation of an environmental impact statement on actions that may significantly affect the quality of the environment.

**Right-of-way** – The strip of land where a transmission line or its access roads are located. A right-of-way can be held by a utility as an easement or in fee simple ownership.

## Living and Working Around Electrical Facilities

Electric utilities design, construct, operate and maintain transmission lines and substation facilities to meet or exceed the requirements of the *National Electrical Safety Code*. These standards provide for the safety and protection of landowners and their property, the general public and utility employees.

Many activities are compatible with transmission line rights-of-way. For example, certain ranching and farming activities, gardening, various recreational activities and many other uses are permitted as long as care is taken to prevent damage and maintain access to transmission line structures.

No buildings or structures may be erected within the easement because they could impede the safe operation of the line or interfere with access needed for line maintenance. For safety reasons, pumps, wells, swimming pools and flammables must not be placed in the easement area. Properly grounded sprinkler systems are acceptable.

Western also has other requirements for transmission rights-of-way to maintain system reliability. For example, Western has regulations on vegetation management because trees may grow too close to the transmission line and cause the line to short out. ▼

## WORKING WITH LANDOWNERS



# Los Banos-Gates Transmission Upgrade

## Introduction

Electricity plays a vital role in our lives. As electric power requirements increase, utilities must periodically construct new transmission lines and substations or upgrade existing lines. To build and maintain these facilities, utilities acquire certain rights to private and public property.

The Los Banos-Gates Transmission Upgrade, also known as the Path 15 Project, is such a project. It is an 84-mile, 500-kilovolt AC electric transmission line extending between Pacific Gas & Electric Company's Los Banos and Gates substations along with related substation improvements.

The line route parallels Interstate 5 from west of Los Banos south to east of Coalinga. The project will add a third line to two existing lines, to increase transmission capacity between Northern and Southern California by 1,500 megawatts. The new line will be located west of the two existing lines and west of Interstate 5.

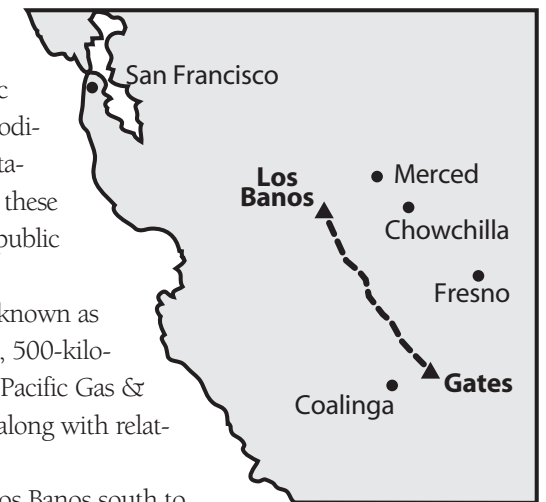
Under the current schedule, construction will start in spring 2003 to allow the line to be energized in fall 2004. Surveys to look for biological or cultural resources and other field work, including easement acquisition, will precede construction.

The project will enable both regions to diversify power resources and provide more reliable and economical service to their electric utility customers. A shortage of transmission between Northern and Southern California was one of the reasons behind blackouts in Northern California in early 2001.

This booklet describes many of the activities that will be involved in building and maintaining the transmission line. It explains how easements or other property rights will be acquired and describes activities during the construction and operation that may affect you as a landowner. Western Area Power Administration will be acquiring the property rights required for the Path 15 Project under Federal property acquisition guidelines (the Uniform Relocation Assistance and Real Property acquisition Policies Act of 1970). Italicized words are defined in the Glossary.

For more information on any of the topics discussed in this brochure, call or write:

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## How the Route Was Selected

A number of factors influenced the transmission line route selection. These include environmental, engineering, land use patterns, economics, electrical requirements and reliability and existing electric transmission facilities.

The public's ideas and concerns played an integral and important role in the planning process. Before any decision was made, public meetings were held to give citizens and local governments an opportunity to express their views and influence the decision. The public was also encouraged to send written comments. In addition, newsletters were published periodically to keep the public up to date on the status of the project studies.

Through detailed analyses and public review, potential locations for the line were gradually narrowed from a large regional *study area*, to alternative *corridors*, to alternative routes. The

alternative routes determined to be the most suitable were originally analyzed and compared in a 1988 joint *Environmental Impact Statement/Environmental Impact Report* to meet the requirements of the *National Environmental Policy Act*. The EIS/EIR provided the basis for deciding whether to approve the project, and, if so, which route to select for the transmission line.

Due to the amount of time that had passed since the environmental documents were prepared, Western held public meetings in 2001 and updated the 1988 document with a Supplement Analysis. Western concluded, as a result of this analysis, that there are not substantial changes to the environmental impacts identified in the 1988 EIS/EIR. ▼

## How Easements Are Obtained

### Survey Work

Once the preferred transmission line route (approximately 1,500 feet wide) is identified, a specific *centerline* is located. A combination of aerial surveys, environmental and engineering field studies and geologic investigations are needed to select tower sites and to design the tower foundations. Towers are located at specific sites to satisfy structural design criteria, maintain adequate line-to-ground clearance and minimize impacts to the property being crossed.

### Land Services Agent

If you own land needed for the project or land which should be surveyed or tested, a *land services agent* representing Western will contact you to explain the steps involved in route and tower site selection, land acquisition and construction. If any proposed construction activities interfere with your land use, the land services agent will discuss your needs and try to accommodate your requests.

The land services agent will also request permission to enter your property to conduct surveys and studies. The surveys and studies will be performed by people who are under contract to Western. The work will be done in a way that minimizes any foreseeable disturbances to you and your property. However, should any damage to crops, fences or other property occur as a result of these surveys and

studies, you will be compensated or the damage will be repaired.

### Acquisition of Easements and other Property Rights

New property rights about 200-foot wide will be acquired within the selected route. These property rights, called *easements* or *rights-of-way*, are needed to construct, operate and maintain the transmission line. They will be purchased through negotiations with landowners at fair market value, based on an independent *appraisal*. The landowner normally retains title to the land and may continue to use the property in ways that are compatible with the transmission line. In rare instances, the right-of-way needed for the project may be acquired in fee rather than as an easement. (See "Living and Working Around Electrical Facilities" on page 4.)

The process to compensate landowners for easements acquired for the project starts with appraisals. Appraisals are made to determine the fair market value of the required easements. Appraisals are prepared by a qualified real estate appraiser. An appraiser determines the value of the easement by customary appraisal methods, including careful analysis of any available market data and comparable sales, and by taking into consideration the rights being acquired from the landowner.

The appraiser will contact the landowners and

invite them to accompany the appraiser during property inspection. Landowners can then identify any property features and uses believed to be of importance in determining the value of the easement.

Landowners are presented with a written offer, based on the appraised value, and contract to purchase required easements. Western's land services agent explains the contract and discusses the basis for payment. Western makes every effort to obtain an agreement that is fair and reasonable to both parties.

Once the conditions of the agreement are met, the transactions are processed as efficiently as possible. Western will make full payment for easements to landowners and pay all fees for recording the easement and any title insurance.

### Eminent Domain

Western makes every effort to acquire the necessary easements through successful negotiations with landowners. If negotiations should fail, easements can be acquired through *eminent domain* (condemnation) proceedings. Federal and state laws enable public agencies to acquire, through the courts if necessary, property rights for facilities to be built in the public interest.

Eminent domain proceedings are only used if an agreement cannot be reached or if there are title matters that do not allow for a clean transfer of the necessary land rights. Through the eminent domain process, a court determines the just compensation to be paid to the property owner. ▼

## How The Project Is Built And Operated

### During Construction

Transmission lines are built in four stages:

1) preparing the right-of-way, 2) installing the tower foundations, 3) assembling and erecting the towers, and 4) stringing the *conductors*. Work is performed by construction contractors on Western's behalf. Contractors are restricted to the area within the acquired easements, *access roads* and *staging areas*.

Western's land services agent will advise landowners of the construction schedule. Reasonable attempts will be made to take into account the use and condition of the land, such as any planting, irrigation and harvest schedules, to minimize any inconvenience.

Preparing the right-of-way for construction may require gates and culverts be installed, vegetation cleared, trees trimmed or removed and structures removed that reduce adequate ground clearance for the conductors or access to the right-of-way. It may also be necessary to build access roads in hilly or mountainous terrain.

Tower footing foundations are constructed by digging or drilling holes, which are filled with steel-reinforced concrete. Steel tower components are then transferred to the site and assembled. Completed towers are raised by a crane or helicopter and attached to their foundations.

Finally, transmission conductors are installed. Trailers containing reels of conductor cable are

placed along the route. The conductor cables are pulled from the reels through pulleys on the towers. After the conductor cables are positioned, they are suspended from the towers on insulators.

### After Construction

Construction crews will minimize potential damage and clean up the right-of-way after work is completed. Before the last crew leaves, all work areas and access roads not required for line maintenance will be restored, as nearly as practical, to their previous condition. Construction refuse and scrap material will also be removed.

Landowners will be compensated for crop and for property damage that occurs as a result of construction or maintenance of the transmission line. If landowner believes that damage has occurred and has not been recognized, he or she should contact Western's land services agent.

### Maintenance

After the line is energized, Western staff will periodically inspect, repair and maintain its components. Transmission lines are inspected from the air and on the ground. Aerial inspections from helicopters and small aircraft are routinely performed, particularly after wind, ice or lightning storms. Ground inspections are usually performed annually to detect items needing repair or replacement that are not found by aerial inspections. ▼