



# Southern Colorado Transmission Improvements

## San Luis Valley – Calumet – Comanche Transmission Project

### Working with Landowners



Tri-State Generation and Transmission Association (Tri-State) and Public Service Company of Colorado (PSCo), an Xcel Energy company, are jointly proposing to construct the San Luis Valley–Calumet–Comanche Transmission Project, which would be owned and operated by the two companies.

The proposed project would be constructed by the utilities and include the following components:

- Approximately 95 miles of new double-circuit 230-kilovolt (kV) transmission line from the existing San Luis Valley Substation, north of Alamosa, to a new Calumet Substation near Walsenburg
- A new 230/345-kV Calumet Substation at a location six miles north of Walsenburg on property owned by Tri-State and expansion of three existing substations
- Approximately 45 miles of new double-circuit 345-kV transmission line between the proposed Calumet Substation and the existing Comanche Substation near Pueblo
- Approximately six miles of new 230-kV transmission line between the proposed Calumet Substation and the existing Walsenburg Substation
- Proposed communication facilities to support operation and maintenance of the transmission lines

#### Project Right-of-Way

A right-of-way (ROW) is the land area that would be acquired by a utility for the transmission line. The ROW for this project would vary, and is developed based upon several factors including the voltage of the transmission line, structure spacing, conductor tension, operational safety, and maintenance. Safety requirements are determined by the National Electric Safety Code. For this project, the ROW generally required for the 230-kV segments would be 150 feet and 200 feet for the 345-kV segments.

Other project characteristics are described below:

- Both transmission line ROWs and access easements would be required for this project.
- The transmission structures located within the ROW would be between 100 and 150 feet tall.
- The lowest conductors would be about 28 feet above the ground when the lines reach maximum operational temperatures. Additional clearance may be required in areas with high snow accumulation or to accommodate agricultural operations.
- A combination of steel lattice structures and steel mono-poles would be used on the 230-kV segment of the project. The choice of structure type would be based upon the appropriateness of a structure at a given location and the location's design conditions. Only steel mono-poles would be used on the 345-kV segment of the project.
- The structures would be placed about 800 to 1,200 feet apart, maximizing span length where possible to fully use the ROW width.
- If structures are not as tall, more structures are used due to the required shorter spans.
- Specific details would be provided to landowners once the design details are finalized.

## Easement Acquisition and Survey Permission

An easement is a permanent right authorizing a utility to use the ROW to build and maintain a transmission line. Access easements would be needed for construction and long-term maintenance of the transmission line. The easement agreements would identify both Tri-State and PSCo as the grantees.

To assist with transmission line engineering and design, the companies and/or consultants would acquire temporary access or survey permission from landowners. Engineering, environmental, cultural, and land survey studies would be conducted to develop the transmission line route.

Tri-State and PSCo would use market data from recent sales of similar properties to determine fair and appropriate compensation. Every effort to reach a fair and reasonable settlement will be made. When negotiations are unsuccessful, which is rare, the companies may have to exercise their eminent domain authority.



## Working in the Right-of-Way

Normally, access by the landowner within the transmission line easement is not restricted, and agricultural activities can still occur. Activities not permitted within the easement are those that jeopardize the integrity of the structures or reduce the ground-to-line clearance, such as construction of buildings. Landowners need to exercise caution when operating tall equipment, moving irrigation pipes, fueling vehicles, or conducting other activities within the easement to prevent electrical shock or contact with the line.

## Easements and Agriculture

### Center Pivots

Irrigation equipment would be avoided to the extent possible. Site specific circumstances would be addressed with applicable landowners.



### Planting and Harvesting

ROW agents would work with individual landowners to determine when to avoid construction during the planting and harvesting seasons. If damage to crops cannot be avoided, compensation for crop loss would be offered.



### Livestock

In coordination with the landowner, segments of fences may be removed or access gates may be installed during line construction. Crews would construct temporary fences and work with landowners to minimize impacts to and protect livestock.

