

# WHAT is the TWE Project?

## Fast facts

The TWE Project is a large transmission line that will deliver bulk supplies of electricity.

- 600 kV high-voltage direct current design
- 3,000 MW capacity, or enough to serve more than 1.8 million homes
- 725-mile proposed route primarily on federal lands
- Estimated 3-year construction period creating 1,000+ jobs each year
- Estimated \$3 billion cost



Example structure design under consideration.

## Delivering Wyoming wind energy to the west

The TransWest Express Transmission Project is a proposed 725-mile high-voltage, direct current transmission line. The TWE Project will take up to 3,000 megawatts of renewable wind energy generated in Wyoming – which has the nation's best onshore wind resources – and deliver it to highly populated metropolitan areas in California, Arizona and Nevada.

Numerous studies have documented the increased demand for renewable energy resources in the Desert Southwest region. Yet, the existing transmission capacity between Wyoming, the nation's least populated state, and California, the nation's most populated state, is fully committed.

The TWE Project will address this lack of transmission and deliver clean, sustainable power to about 1.8 million homes. It is a practical, highly efficient way to link Wyoming's tremendous wind energy with the cities in the west where more electricity is needed.

Further, by virtue of its large size and scale, the TWE Project will make important contributions to the overall capacity, reliability and stability of the entire power grid in the Western Interconnection, which ties together all electric utilities from the Great Plains to the West Coast, including western Canada.

## Years of planning

The TWE Project was initiated in 2005 by Arizona Public Service Company, the state's largest electric utility. The project was inspired in part by the Rocky Mountain Area Transmission Study, which identified the potential for communities in the western United States to access the rich renewable energy resources in the Rocky Mountains through the development of major transmission lines. APS also performed several routing and planning studies and held a series of stakeholder meetings.

National Grid, an international energy delivery company, and the Wyoming Infrastructure Authority joined APS in the development of the TWE Project in 2006. TransWest Express LLC acquired the project's development rights in 2008.

## Prudent design, careful permitting

In line with federal energy policies, well over half of the 725-mile proposed route is on federal lands mainly administered by the Bureau of Land Management. Therefore TransWest Express LLC has applied for rights-of-way over these federal lands, and the BLM along with Western Area Power Administration are preparing an Environmental Impact Statement to meet the requirements of the National Environmental Policy Act.

The line will have a typical right-of-way width of 250 feet. Two substation/converter stations, approximately 200 acres in size, will be constructed at the terminating points. (The line will provide for a potential interconnection with the Intermountain Power Project transmission system near Delta, Utah, as well.) Along the route, transmission structures may vary from 100 feet to 180 feet tall depending upon structure type, terrain, span and line crossings, and the span between structures may vary from 900 feet to 1,500 feet.

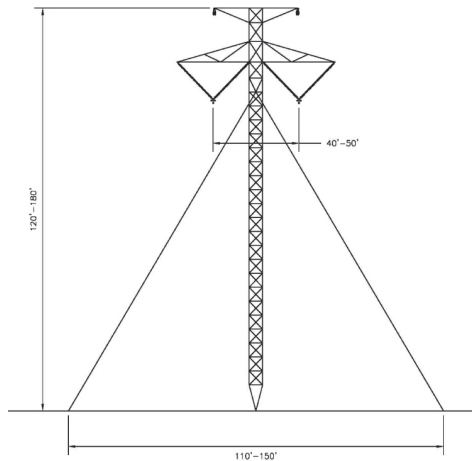


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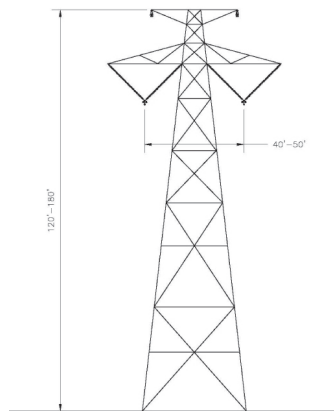
## Basic system design



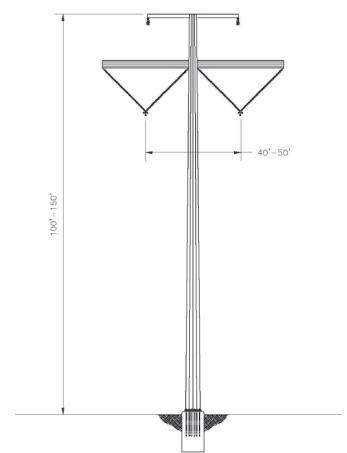
## Structures under consideration



Typical 600 kV DC Guyed Lattice V-String Structure



Typical 600 kV DC Self Supporting Lattice V-String Structure



Typical 600 kV DC Tubular Steel Pole V-String Structure