## **WHY** is the TWE Project needed?

## Power to the people

Many social, electrical and policy issues are driving the need for more transmission lines such as the TWE Project, including:

- Federal objectives to connect remotely located renewable energy resources to densely populated areas.
- Renewable Portfolio Standards that require utilities to provide a certain portion of renewable energy by certain dates. For example, California requires 33% of all electricity to come from renewable sources by 2020, Nevada 25% by 2025, and Arizona 15% by 2025.
- Greenhouse-gas emissions reductions mandates.
- More people using and requiring more electricity to power more electrical devices.
- Inadequate and aging transmission infrastructure strained to meet demand.
- National goals to further develop and diversify U.S. energy sources and supplies.

The TransWest Express Transmission Project will provide the transmission infrastructure and capacity necessary to reliably and cost-effectively deliver approximately 3,000 megawatts of clean and sustainable electric power generated in Wyoming to the Desert Southwest region of Arizona, Nevada and southern California – where the demand for renewable energy is greatest. At 3,000 MW, the TWE Project will be one of the largest transmission systems in the western United States.

National, regional and state environmental policies have significantly increased the need for renewable resources in this area. At the same time, Wyoming has an abundance of high-quality, low-cost renewable resources in the form of wind energy. In fact, the vast majority of the best winds in the continental United States are available in Wyoming. Given Wyoming's rich resources and the current advantages of wind-generated renewable power, Wyoming wind is a logical, cost-effective choice to satisfy a portion of the demand for renewable energy in the west, but Wyoming's existing export transmission capacity is fully utilized.

The TWE Project objectives are to:

- Broaden consumers' access to domestic, clean, renewable energy sources.
- Contribute to meeting national, regional and state energy and environmental policies, including state-mandated renewable portfolio standards and greenhouse-gas reduction targets.
- Meet increasing customer demand with improved electrical system reliability.
- Provide system flexibility and increased access to the grid for third-party transmission users.
- Expand regional economic development through increased employment and enlargement of the property tax base. (TransWest will pay property taxes in every county the transmission line crosses.)
- Maintain the standard of living associated with highly reliable electricity service.





## Why is the TWE Project needed?



Encouraging the production, development, and delivery of renewable energy is one of the Department's highest priorities.

> U.S. Department of Interior Order No. 3285, March 2009

Meeting our nation's energy goals will require developing extra-high-voltage transmission infrastructure that is needed to bring clean, renewable energy from areas where it is produced most efficiently to areas where most of our nation's power is consumed.

- John Wellinghoff, FERC Chairman, 2009

It is imperative that we continue to utilize all abundant natural resources located within the United States, including wind.

> Congressional Western Caucus Chairman Rob Bishop, April 2010

When I was the governor of Texas, I signed an electric deregulation bill that encouraged and mandated the use of renewable energy. Today, Texas produces more wind energy than any other state. If an oil state can produce wind energy, other states in America can produce wind energy.

- President George W. Bush, 2008

The need for the TWE Project is supported by numerous studies that have documented the increase in demand for renewable energy resources within the Desert Southwest.

In order to meet these broad objectives, the TWE Project has the following project-specific purposes and needs.

- Provide for the efficient, cost-effective and economically feasible transmission of approximately 20,000 gigawatt hours per year of clean and sustainable electric energy from Wyoming to markets in the Desert Southwest region.
- Meet North American Electric Reliability Corporation Reliability Standards and Western Electricity Coordinating Council planning criteria and line separation requirements.
- Maximize the use of existing and designated utility corridors and access roads in order to minimize environmental and social effects of the TWE Project to the extent practical.
- Provide these benefits to the Desert Southwest region and the broader western United States in a timely manner to meet the region's pressing environmental and energy needs. TransWest has identified a need for the TWE Project by 2015 or as soon as the regulatory reviews can be completed.
- Provide for flexibility and maximize the use of transmission capacity that may become available by configuring the TWE Project to allow for future interconnection with the Intermountain Power Project transmission system near Delta, Utah.

Further, multiple strong economic and environmental cases have been made for remote renewable resources delivered by new transmission lines to densely-populated markets, as recognized by the Department of the Interior, Department of Energy and others. The higher quality and higher volumes of renewable energy available in some remote areas greatly offsets the capital required to build the transmission capacity.

For example, the DOE-sponsored 10-Year Regional Transmission Plan, produced by the Western Electricity Coordinating Council in 2011, found that cost-effective remote resources could provide hundreds of millions of dollars of savings for ratepayers per year, as compared to local renewable resources. Specifically, the economic analysis noted that the TWE Project could help California ratepayers save on the order of \$600 million every year, which translates to billions of dollars in savings for customers over time.

The 2009 "Green Power Superhighways" report, jointly prepared by the American Wind Energy Association and Solar Energy Industries Association, also recognized the consumer benefits of improved transmission. The paper notes:

"A robust transmission grid provides consumers with access to lower-cost electricity. On a severely constrained transmission grid, as now exists in many parts of the United States, consumers are forced to rely on local power plants even though plants in other regions can produce power more efficiently and at lower cost.

The effect of higher electricity prices goes beyond financial hardship for residential consumers. Businesses pass higher electricity costs on to their customers, and electricity-intensive industries have a strong incentive to relocate to regions with lower electricity costs, taking jobs with them."

