

WHO is TransWest Express LLC?

The Anschutz Corporation, a privately held company based in Denver, Colorado, has been a leader in the natural resources industry for more than 75 years.



Founded in 1965, the diversified company today has worldwide investments in energy exploration, production and delivery; real estate, ranching and agriculture; lodging, transportation and telecommunications; newspaper and Internet publishing; and entertainment including sports, film production and movie theaters.

Sustainability practices have been incorporated in company operations around the world. For example, Anschutz Entertainment Group has launched AEG 1EARTH, a program to balance economic performance with environmental health and community well-being and sustain a culture of environmental stewardship. Xanterra Parks & Resorts, which helps provide guest services within state and national parks, tracks its environmental performance through its computerized Ecometrix tracking system and has implemented renewable energy generation projects on property in Death Valley, California.

TransWest Express LLC is a wholly owned affiliate of The Anschutz Corporation, based in Denver, Colorado. The company was formed in 2008 to continue the development of the TransWest Express Transmission Project. The TWE Project previously was under development by three collaborating entities: utilities Arizona Public Service Company and National Grid along with the Wyoming Infrastructure Authority, a quasi-governmental entity created in 2004 to diversify and expand the state's economy through improvements in Wyoming's electric transmission infrastructure.

As an independent transmission developer, TransWest Express LLC is working to help connect Wyoming's world-class renewable wind energy supplies with the market demand for renewable energy in California, Arizona and Nevada. Just like railroads are needed to transport Wyoming's coal to power plants to create electricity for people, transmission lines are needed to transport wind electricity to people. Wyoming has a long history of delivering its energy resources to cities in other states that need bulk supplies of power; according to data from the U.S. Energy Information Administration, more than two-thirds of all electricity generated in Wyoming is exported.



TransWest Express LLC is committed to developing this project in a sensible, balanced and sustainable way. In addition, TransWest will ensure that the TWE Project is built in accordance with standards developed and enforced by the North American Electrical Reliability Corporation and the Western Electricity Coordinating Council, the regional entity responsible for coordinating and promoting bulk electric system reliability in the Western Interconnection. TransWest also will comply with regulations promulgated by the Federal Energy Regulatory Commission, an independent agency that regulates the interstate transmission of electricity, natural gas and oil.



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 land
- Estimated 3-year construction period creating up to 1,000 jobs each year
- Estimated \$3 billion cost
- Selected in 2011 as a federal "Rapid Response Team for Transmission" project



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 have 3,000 megawatts of capacity to take 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 cost-effective 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 more than 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. As outlined in a September 2011 development agreement, Western Area Power Administration, part of the U.S. Department of Energy, is jointly funding the project's development phase. Western also is proposing to jointly own the project – a decision that will be made when the development phase is complete.

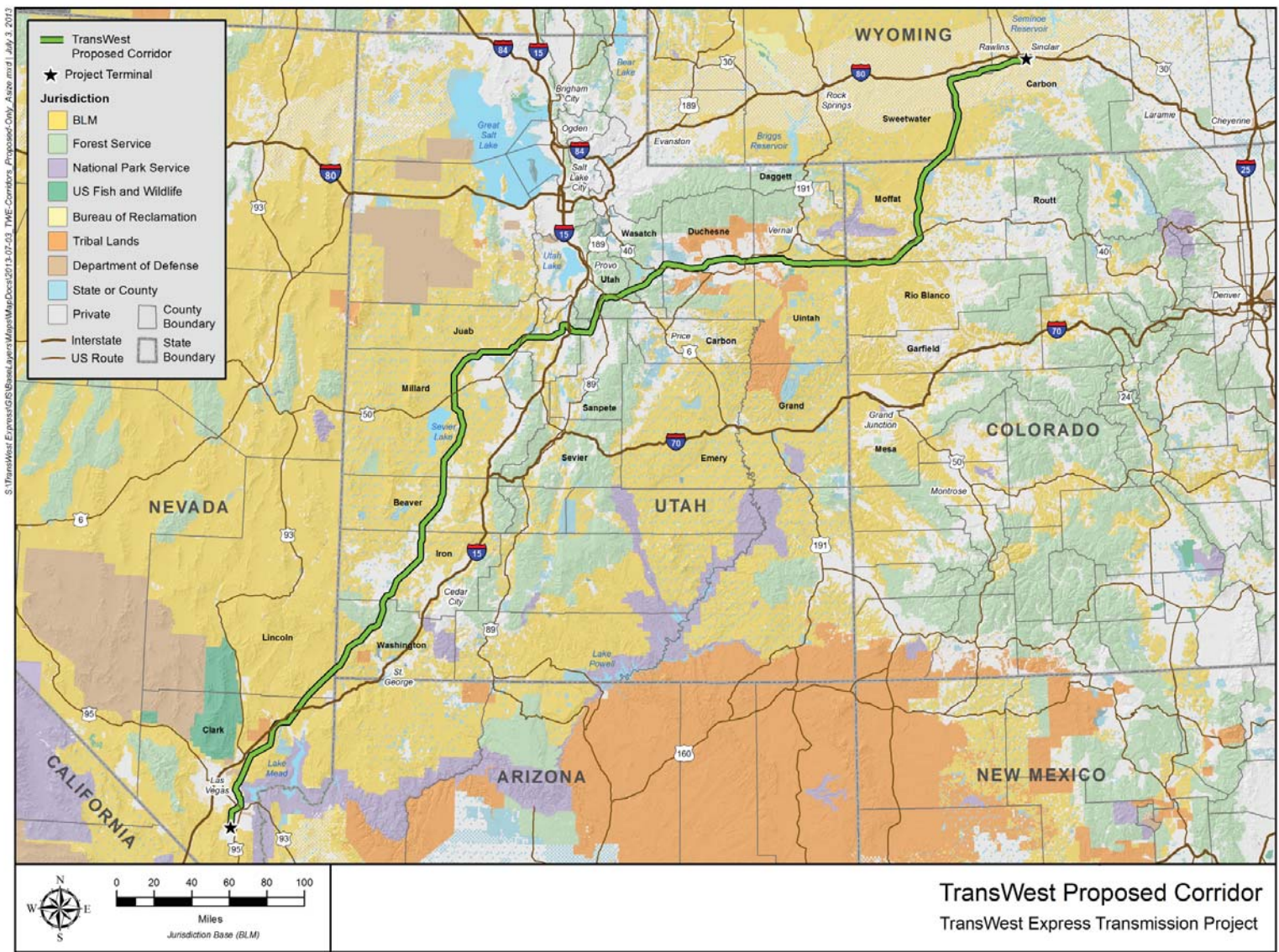
Prudent design, careful permitting

In line with federal energy policies, about two-thirds of the 725-mile proposed route is on federal land mainly administered by the U.S. Bureau of Land Management. Therefore TransWest Express LLC has applied for rights-of-way over these federal lands, and 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. 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.



What is the TWE Project?



WHEN will the TWE Project be built?

Basic steps of construction

Once all permits, easements and permissions have been acquired, these are some of the activities required as part of the construction process.

- Prepare access roads
- Install structure foundations
- Install transmission structures
- String conductor and cabling
- Build terminal stations at either end of the line
- Build ground electrode and related electrical systems
- Restore all disturbed lands

Before construction begins, TransWest also will have completed substantial geotechnical work, soil testing, surveying, and other route planning and engineering work.

Working today to meet tomorrow's renewable energy requirements

The TransWest Express Transmission Project will take two to three years to construct and to place in service. However, many years of planning, engineering and permitting work will have occurred before construction activities may begin.

Most important is the study and route analysis required as part of the process to obtain rights-of-way over federal lands. TransWest Express LLC has applied for rights-of-way because the proposed route and the alternative routes for the transmission line cross hundreds of miles of federal land that is mainly administered by the U.S. Bureau of Land Management. The proposed project is a major federal action requiring the preparation of an Environmental Impact Statement to meet the requirements of the National Environmental Policy Act. BLM and Western Area Power Administration are joint lead agencies preparing the EIS.

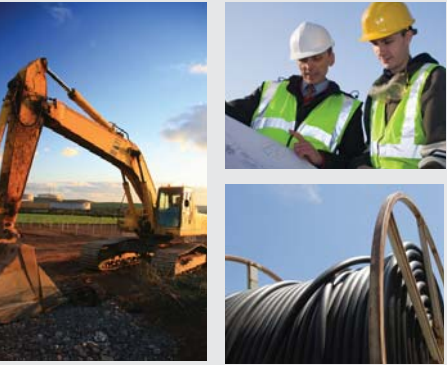
A preliminary right-of-way application was filed with BLM in 2007, which was amended and re-filed by TransWest Express LLC in 2008 after it acquired the development rights to the project and updated again in 2010. In 2009 and 2010, TransWest submitted to BLM the initial and updated versions of its Preliminary Plan of Development, guided by TransWest's ongoing planning, engineering and design work.

Public scoping was completed January-April 2011. The Draft EIS was announced in July 2013. A Record of Decision on the EIS is expected from BLM and Western by 2014. TransWest anticipates completing construction of the TWE Project by 2016-2017.

Basic stages of the EIS process

An Environmental Impact Statement must be completed on many projects involving federal action, as part of the National Environmental Policy Act. This multi-step, multi-year process involves extensive study, analysis and opportunities for the public to provide feedback for federal agencies to consider when making their decisions. As joint lead agencies for the TWE Project EIS, BLM and Western set the schedule for this process. Here is a basic overview of what an EIS entails.

1. **Publish Notice of Intent** in the Federal Register to prepare an EIS.
2. **Hold public scoping period** to gather stakeholder comments related to the EIS via public meetings and other methods such as mail and fax.
3. **Conduct analysis and publish a Draft EIS** that includes the BLM and Western's analysis of multiple social and environmental factors and identifies alternatives based on the analysis.
4. Provide the public an opportunity to **review and comment on the Draft EIS**, announced in the Federal Register through a Notice of Availability.
5. Provide the public an opportunity to **review and comment on the Final EIS**, which addresses comments received on the Draft EIS and is announced in the Federal Register through a Notice of Availability.
6. **Announce the availability of the Record of Decision** in the Federal Register, describing the BLM/Western decision regarding the proposed action. The public has 30 days for protest/appeal.



For more information on the EIS process and NEPA, visit www.blm.gov and click on the "Get Involved" link.

Where will the TWE Project be located?



Routing and siting a power line such as the TWE Project takes many years of careful analysis and study. First conceptualized in 2005, the TWE Project likely will not have a final corridor identified until 2014. It is important that critical infrastructure systems like the TWE Project are built wisely from day one, given people's future dependence on the line's electricity for their daily lives, the decades-long lifespan of a transmission line, the significant construction costs of roughly \$2 million per mile and other factors.

Many constraints and sensitivities are considered during the routing and siting process, including:

- Topography and geology
- Residential areas
- Socioeconomics
- Cultural and historic resources
- Wildlife and environmental resources
- Agricultural development
- Visual and cultural impacts
- Existing infrastructure
- Land use
- Special designations
- Water, minerals and mining
- Air quality
- National security

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:

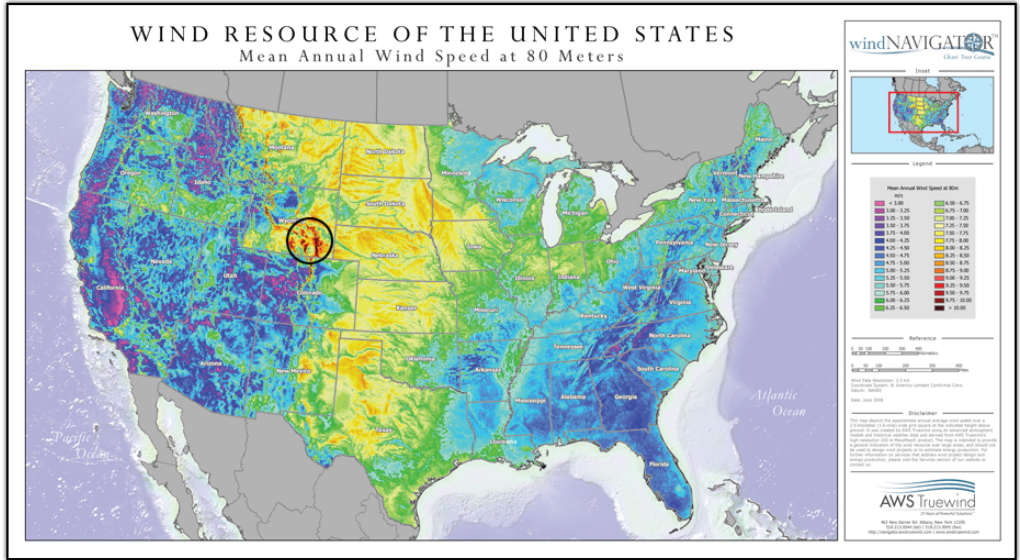
- Federal objectives to connect remotely located renewable energy resources to densely populated areas.
- Renewable Portfolio Standards that require utilities to provide a certain portion of renewable energy by certain dates. For example, California requires 33% of all electricity to come from renewable 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."

WHERE will the TWE Project be located?

Thoughtful route planning

TransWest's proposed route for the TWE Project was designed to accomplish many objectives, including:

- Staying within the established energy corridors that the U.S. government has designated across the west, as much as practical.
- Staying on federally owned land, as much as practical.
- Finding the shortest route between Wyoming and the Desert Southwest, therefore reducing the line's economic and environmental costs.
- Finding a route where construction can physically and wisely occur given existing geologic, environmental and human factors such as mountains, rivers and gorges; roads, railroads, housing and cultural sites; and wildlife breeding and habitat areas.

By virtue of its large size and high-capacity, the TWE Project can deliver electricity more efficiently and with less environmental impact than the construction of, say, 5 to 7 smaller lines that would be needed to transmit the same amount of electricity. Think of it like an oceanliner shipping hundreds of containers at once, effectively replacing the numerous smaller boats it would take to send the same amount of cargo.

The 725-mile TransWest Express Transmission Project is proposed to begin in south-central Wyoming, extend through northwestern Colorado and central Utah, turn southwest into southern Nevada, and end near Las Vegas, where the power can then be transmitted to nearby cities via networks of existing and potentially upgraded power lines. With this general start and end point in mind, TransWest has conducted a corridor feasibility study to identify the proposed transmission line route and alternative routes, many of which are located within or adjacent to federally designated or proposed utility corridors, or parallel existing transmission lines or pipelines. The line will provide for a potential interconnection with the Intermountain Power Project transmission system near Delta, Utah, as well.

TransWest Express LLC has applied for rights-of-way over federal lands because the proposed route and the alternative routes for the transmission line cross hundreds of miles of federal land that is mainly administered by the U.S. Bureau of Land Management. The proposed project is a major federal action requiring the preparation of an Environmental Impact Statement to meet the requirements of the National Environmental Policy Act. BLM and Western Area Power Administration are joint lead agencies responsible for preparing the EIS, and are coordinating with other federal, state and local government agencies.

Through their analysis, the BLM and Western will determine the final route corridor through many stages of study, scrutiny and refinement. Those stages include seeking comments and feedback from other BLM field offices, other federal land management agencies, state and local government entities, formal Cooperating Agencies, and the general public. Once a final route corridor has been identified by BLM and Western, the TransWest surveying, design and engineering teams will continue working within the corridor area and with federal and private landowners to micro-site each tower in the best possible location and in consideration of identified sensitivities and constraints.

