

TransWest Express Transmission Project and NEVADA

The TransWest Express Transmission Project is a 600 kV high-voltage, direct current (HVDC) transmission system designed to transport high-capacity Wyoming wind energy to markets in Nevada, California and Arizona that have growing demands for cost-effective renewable power. With 3,000 MW of capacity and an approximately 730-mile route, the TWE Project will strengthen the entire western U.S. power grid. It will be one of the 10 largest HVDC transmission lines in the world.

The estimated \$3 billion TWE Project is being jointly developed by TransWest Express LLC, an affiliate of The Anschutz Corporation, and by Western Area Power Administration, part of the U.S. Department of Energy. WAPA is proposing to be a joint owner in the Project, consistent with its expanded mission “to construct transmission lines to help deliver renewable resources to market.”

In 2011, the federal “Rapid Response Team for Transmission” selected the TWE Project for its program to “accelerate responsible and informed deployment of several key transmission facilities.”



Bringing significant renewable energy investments

Total estimated investment in Nevada: **\$814 million to \$1 billion**

- About 157 miles of HVDC structures and line in Lincoln County and Clark County, with 100% of the route on federal land or co-located with existing transmission lines.
- A 200-acre AC/DC converter station site (southern terminal) in Boulder City to connect into the existing substations that provide electricity across the Desert Southwest, including Western's transmission system delivering hydropower from Hoover Dam.
- Ancillary equipment and communication systems.

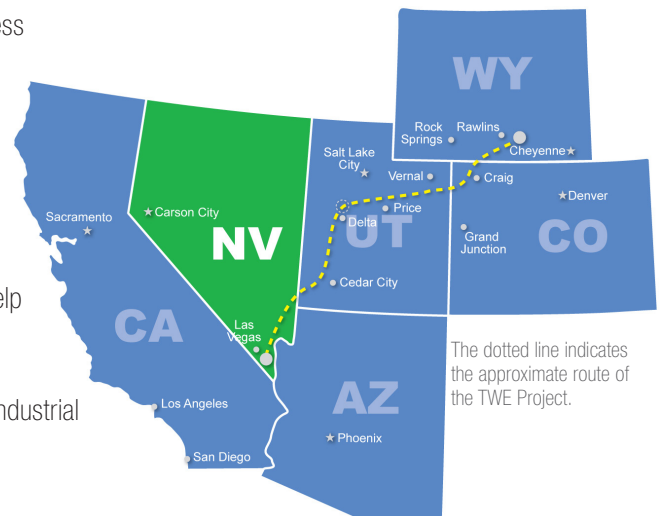
Creating jobs and economic development opportunity

- The TWE Project's construction will create thousands of direct and indirect jobs across the west.
- Jobs specifically for building the converter station in Boulder City:
 - Direct construction jobs per year at peak: 180-250
 - Indirect jobs in the project area: 300
 - Long-term operations/maintenance jobs: 12-25



Typical AC/DC Converter Station

- The United Brotherhood of Carpenters, International Brotherhood of Electrical Workers and the International Union of Operating Engineers strongly support the development and construction of the TWE Project.
- TransWest will pay an estimated \$4.4 million to \$5.4 million in property taxes in Nevada in the first tax year, augmenting state and local government budgets. The purchase and delivery of construction materials, substation equipment and transmission towers also are anticipated to generate an estimated minimum of \$24 million in Nevada sales/use tax revenue, depending on the final ownership structure and the application of state tax laws.
- This massive infrastructure investment and construction activity will provide business and job opportunities for existing companies and for development of new businesses.
- Availability of low-cost, high-capacity clean and sustainable energy can help Nevada keep its overall electricity rates as low as possible, contributing to industrial retention and recruitment.



The dotted line indicates the approximate route of the TWE Project.

Advancing federal land use, energy and environmental goals

- The TWE Project will deliver enough clean, sustainable energy for nearly 2 million U.S. homes.
- The wind power delivered on the TWE Project will reduce CO2 emissions by an estimated 8.2 million metric tons per year, equivalent to taking 1.5 million cars off the road or shutting down a 1,000+ MW coal facility.
- Will use the latest HVDC technology available to efficiently transmit large amounts of renewable energy over long distances with a relatively small environmental footprint.
- Will serve as an example of responsible transmission line development, including maximizing the use of designated energy corridors and following other linear features. About two-thirds of the 730-mile route crosses federal land.
- Will provide the shortest, most economic route between Wyoming – home of the nation's best, 40%+ capacity wind resources – and the Desert Southwest market, home of 46 million people and state Renewable Portfolio Standards.
- Will provide important new connectivity between Western Area Power Administration's Rocky Mountain and Desert Southwest regions, along with expanding access to the grid.

Progressing forward

The TWE Project's route intersects federal land primarily administered by the U.S. Bureau of Land Management and the U.S. Forest Service. In 2008, TransWest applied for rights-of-way over these lands, and an Environmental Impact Statement was prepared by BLM and WAPA as joint lead agencies, with USFS and dozens of other federal, state and local cooperating agencies.

A Notice of Intent to prepare the EIS was published in January 2011; public scoping was completed January-April 2011; and a Draft EIS was announced July 3, 2013. After addressing comments, the agencies issued their Final EIS on April 30, 2015, identifying their preferred route. The BLM Record of Decision was issued in December 2016, with the WAPA Record of Decision issued in January 2017. Once all permits and rights-of-way are obtained, construction can begin. Construction of the project is estimated to take two to three years.

