



TRANSMISSION INFRASTRUCTURE PROGRAM

WESTERN AREA POWER ADMINISTRATION

Advancing a New Era of Energy Delivery in the West

Western Area Power Administration’s (Western’s) Transmission Infrastructure Program (TIP) leverages Western’s depth of transmission project development experience and expertise, along with its statutory borrowing authority, to advance projects aimed at expanding and modernizing the electric grid.

Western was authorized by Congress in 2009 to borrow up to \$3.25 billion from the U.S. Department of the Treasury to support the development of projects that facilitate and optimize the delivery of reliable, affordable power generated by renewable energy resources. TIP was established to carry out and manage that authority.

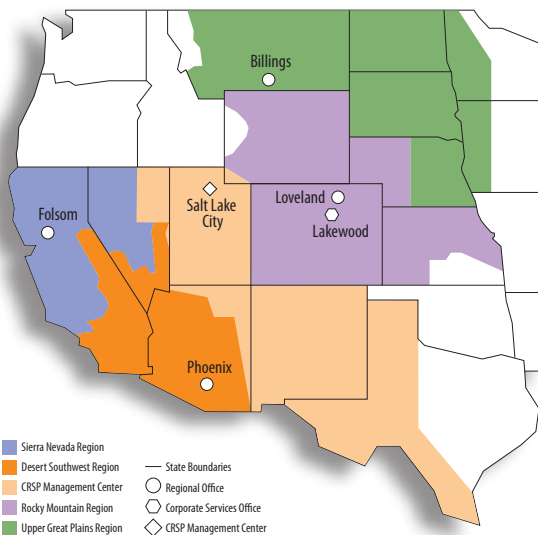
The Changing Energy Landscape

Launched when the country was in the throes of a major recession, TIP was designed to address market constraints that were hindering energy investment and provide the capital needed to drive clean energy infrastructure development. Fast-forward five years to 2014, and a very different picture is emerging.

The West, in particular, is undergoing a major energy transformation. Tapping into their abundant clean energy resources, western states have been proactive in deploying renewable electricity. Of the 11 western states that have established a renewable portfolio standard or renewable goal, most are on track to meet those targets. At the end of 2012, installed renewable electricity capacity in the western states approached 80 gigawatts, or about half of the nation’s total installed renewable electricity capacity. And the technical potential exists to support continued growth.

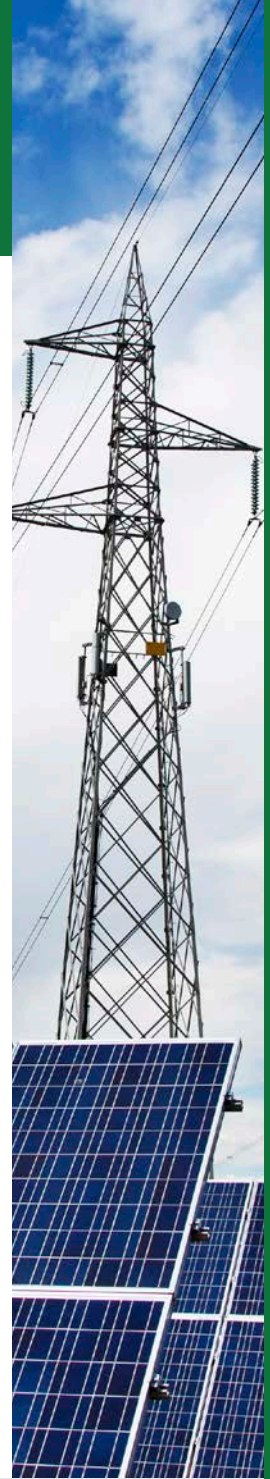
These changes in the energy landscape underscore the ongoing need and role for public-private partnerships focused on addressing current market gaps to help accelerate energy infrastructure development and investment in the West.

WESTERN AREA POWER ADMINISTRATION Customer Service Territories



“The Transmission Infrastructure Program was created to support the next generation of electric transmission development, which can enhance electricity reliability, support the integration of clean energy, and strengthen our nation’s critical infrastructure.”

— Tracey A. LeBeau | Senior Vice President & Manager
Western Area Power Administration
Transmission Infrastructure Program



Cultivating Economic Opportunities in the West

New investments in transmission infrastructure and storage solutions provide opportunities for economic development in the region—and TIP is uniquely positioned to cultivate those opportunities.

TIP provides project development technical assistance to help developers and other interested parties install new or upgrade existing electric power transmission lines and related facilities.

Streamlining Development to Help Qualify Projects for Financing

TIP partners with successful applicants to overcome a wide variety of project development hurdles and streamline steps in the development process ranging from siting and permitting to engineering and design—all of which are essential to securing both equity and debt financing of these often complex projects. Once project partners have successfully completed the development phase, they submit their loan applications to the DOE Loan Programs Office, which carries out underwriting and loan servicing functions for Western's TIP.

For details about this process, from development assistance to loan application, please contact TIP@wapa.gov.

Harnessing Innovation to Modernize the Grid

Leveraging Western's deep transmission development expertise and access to federal financing at competitive rates, TIP represents an unprecedented opportunity to harness energy innovation and build a modern transmission system. By partnering with qualified developers to move viable projects forward, TIP is advancing a new era of energy delivery in the West.



Construction crews secure the next section of the Saguaro line structure that is part of the ED5 substation upgrade. *Photo from Ralph McCracken, Western Area Power Administration*

Current TIP Projects

- **Centennial West Clean Line**—Designed to deliver 3,500 megawatts (MW) of renewable power from northeastern New Mexico to communities in California via a 900-mile overhead high-voltage direct current transmission line, this proposed project will include an intermediate converter station in Mohave County, Arizona, to access the state's abundant solar resource.
- **Electrical District No. 5 - Palo Verde Hub (ED5-PVH)**—An approximately 109-mile transmission project in Arizona, ED5-PVH will add up to 410 MW of bidirectional capacity (primarily renewable energy) to the grid, including 254 MW connecting to the vital Palo Verde market hub that serves consumers in Arizona, Southern California, and Nevada.
- **Southline**—Designed to collect and transmit electricity across southern New Mexico and southern Arizona, this proposed project would build a new 240-mile, 345-kilovolt (kV) double-circuit transmission line between the existing substations in New Mexico and Arizona, and upgrade about 120 miles of Western's existing transmission lines from 115 kV to 230 kV, adding about 1,000 MW of capacity.
- **TransWest Express (TWE)**—Consisting of an overhead transmission line extending approximately 725 miles from south-central Wyoming crossing Colorado and Utah, this proposed project would transmit about 3,000 MW of electricity annually, generated primarily from renewable resources at planned facilities in Wyoming.

TIP Eligibility Criteria

To qualify for assistance from TIP, a project must:

- Facilitate delivery to market of power generated by renewable energy projects that are constructed or likely to be constructed
- Have at least one line that terminates within Western's 15-state service territory
- Be able to demonstrate and establish a reasonable expectation of its ability to generate enough transmission service revenue to cover all of its operating costs (including overhead) and repay the loan principal and interest by the end of its service life
- Not adversely impact Western's system operations or service reliability
- Be in the public interest.

Contact Us

To learn more about TIP, visit: ww2.wapa.gov/sites/Western/transmission/tip/Pages/default.aspx.

For questions about the application process, contact us:

Phone: 720-962-7710

Email: TIP@wapa.gov



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Western Area Power Administration
P.O. Box 281213
Lakewood, CO 80228-8213
www.wapa.gov

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