BONNEVILLE POWER ADMINISTRATION



BPA proposes South of Tri-Cities Reinforcement project

Overview

The Bonneville Power Administration is proposing to build a new substation and 115-kilovolt transmission line in the Tri-Cities area of Washington. The 18.5-mile-long line would connect the proposed new Webber Canyon Substation near County Well Road to BPA's existing Badger Canyon Substation off Leslie Road.

Background

The Tri-Cities area is growing, and the increasing demand for power is adding to the area's existing transmission system constraints. The primary goals of this project are to improve long-term electric reliability, improve short-term flexibility and address system maintenance needs. Additionally, this project could help BPA to incorporate future generation and line/load interconnection projects in the region. This is one of four projects BPA is proposing in the area, collectively referred to as the Tri-Cities Reinforcement program. The program would increase BPA's transmission capacity in the area. This work would also update BPA's current Tri-Cities infrastructure by reinforcing substations and transmission lines.

The transmission lines that bring power into the Tri-Cities are at risk of becoming overloaded during periods of high electricity use, which potentially could lead to unplanned power interruptions in the absence of other measures. Overloading could occur during the summer irrigation season, when air conditioning use spikes in the summer and when heating peaks in the winter.

The possibility of an unplanned power interruption increases when BPA takes one of the lines currently serving the Tri-Cities area out of service for regular maintenance. During a planned outage, the other lines serving the area are at increased risk of becoming overloaded. Unplanned outages can also be caused by such things as equipment failure, a public safety power shutoff that may be necessary to ensure safety and reliability during wildfire season, lightning, or a transmission pole struck by a vehicle.



This new transmission line and substation would help relieve stress on the system and substantially reduce the potential for unplanned outages because it would provide an alternate path for electricity to flow if another line in the region becomes overloaded or is out of service.

BPA hosted a public meeting in December 2022 and a NEPA scoping meeting in October 2023 to collect information from the public regarding this proposed project.

Project details

To understand the potential environmental impacts of this proposal, BPA has prepared an environmental assessment (EA) following the procedures of the National Environmental Policy Act (NEPA). The EA analyzes the substation and transmission line build, including the two proposed route options, as well as a no-action alternative in which no construction actions would be taken. The EA also describes anticipated impacts to natural and human resources and identifies mitigation measures to help avoid or minimize impacts.

Routing Options

BPA is evaluating two routing options for the proposed 18.5-mile-long Webber Canyon to Badger Canyon line: the Railroad and Canal Option. Currently, BPA's preferred routing option is the Railroad Option.

As part of the Proposed Action, both the Railroad Option and Canal Option can provide safe and reliable transmission that meets North American Electric Reliability Corporation (NERC) standards and BPA customer obligations. The two route options differ in their cost effectiveness and effects on the natural and human environment.

Considerations in the identification of a preferred route option include the environmental effects identified in the EA, length of the routes, existing road infrastructure, river and highway crossings, geographic features, non-standard design applications, proximity to existing homes and planned development, number of road and ROW easements, public input, and constructability.

Proposed project schedule and process

Summer 2025: Release Draft EA, accept public comments.

Fall 2025: Release Final EA.

February 2026: Substation construction begins if project proceeds.

Winter 2027: Energization.

What type of structures would the new line use?

BPA is proposing a mix of double-circuit steel pole and H-frame wood pole structures for this project.

How tall would the new structures be?

Generally, BPA expects structures to be anywhere from 60 feet to 120 feet tall, depending on structure type, terrain and other factors.

What type of road work would occur?

BPA typically acquires or builds access roads to enable long-term maintenance of its facilities. Use of public roads, acquisition of rights to use private roads, and construction of new roads would all be considered. Where access roads need to be built, BPA uses gravel surfacing in most cases.

What is the fiber optic cable for?

The proposed fiber optic cable would be used for the BPA transmission system. It would allow BPA to monitor and control its transmission facilities. BPA currently has no requests for commercial use of its fiber.

Is there a website where I can learn more?

Yes, you can find more information at this website: www.bpa.gov/nepa/south-of-tri-cities.



Tri-Cities Area Reinforcement



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