

Richland–Stevens Drive 115-kV line rebuild project

Who will this affect? Tri-Cities and the surrounding area by ensuring a more reliable supply of electricity and reducing the likelihood of power outages. However, this proposed transmission line rebuild may have a greater impact on landowners along the existing right-of-way.

What's happening?

The Bonneville Power Administration is proposing to rebuild the 115-kilovolt power line between Richland Substation and Stevens Drive Substation in the Tri-Cities, Washington.

Rebuilding the line will allow BPA to add another circuit to the line, in essence, creating two lines where now there is only one.

BPA expects to introduce the rebuild project to the public in spring 2023. BPA has already notified landowners along the path of the line about preliminary work we are doing that will aid in the development of the preliminary design.

BPA has acquired the services of Burns & McDonnell, which will design and complete the transmission line rebuild and substation work until it is energized, which is estimated to be in late 2025 or 2026.

Why is BPA proposing the rebuild?

The rebuild would reduce the likelihood of unplanned outages in the Tri-Cities area. Over the past five years, the BPA transmission system has experienced 15 unplanned outages on the Richland–Stevens Drive 115-kV line. Six of these outages were resolved by dispatchers who were able to remotely reclose breakers to restore service without investigation or repairs. Five of these outages occurred during peak loading periods in the spring and summer. If BPA takes no action, these outages could increase in frequency and result in longer, more widespread power interruptions to customers in the area.

This is one of four transmission line projects BPA is proposing in the area, that combined with other fiber and substation work, are collectively referred to as the Tri-Cities Reinforcement program. The program will increase BPA's transmission capacity in the area by 66% to 1,750 MW. This work will also update BPA's current Tri-Cities infrastructure by reinforcing substations and transmission lines.

The existing transmission lines that bring power into the Tri-Cities are at risk of becoming overloaded during periods of high electricity use, which could lead to blackouts.



Overloading could occur during summer irrigation season, during summer when air conditioning use spikes, and in winter when heating is peaking.

In addition, 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 these planned outages, the other feeds into the area are at increased risk of becoming overloaded, which could also lead to blackouts. Unplanned outages can also be caused by 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.

Project benefits

Reliability Rebuilding the Richland–Stevens 115-kV transmission line would increase the capacity of the power grid, which reduces the risk of power outages and blackouts. This is particularly important during times of high demand or when extreme weather events occur.

Economic growth The Tri-Cities area in Washington is experiencing rapid growth, and as a result, upgrades to the power system are proposed to meet the growing demand for electricity.

Efficiency The proposed line rebuild provides an additional pathway to transfer electricity. This can reduce overloads on existing transmission lines, which can improve reliability and reduce the likelihood of power outages.

Security Rebuilding the existing transmission line would increase the capacity and could help ensure that the electricity supply is reliable and resilient, which is essential for energy security.

Project details

BPA is proposing to rebuild an approximately 3-mile-long segment of the White Bluffs to Richland No.1 115-kilovolt (kV) transmission line from Stevens Drive Substation south to the Richland Substation within the City of Richland, Wash.

The existing transmission line between Stevens Drive and Richland is a single circuit line consisting of wood H-frame and monopole structures. The existing line would be rebuilt as a 115-kV double-circuit transmission line (two transmission lines on the same structure) on steel monopole structures. Along the existing transmission line corridor, the work would include replacing the existing conductors, H-frame wood pole structures, wood monopoles, selected steel structures and all hardware. Rebuilding the transmission line would also require equipment upgrades at BPA's Richland Substation and the City of Richland's Thayer Drive, Stevens Drive, First Street and White Bluffs substations.

Initial cost estimates for the project are between \$15 million and \$21 million.

PROPOSED	EXISTING	EXISTING
DOUBLE CIRCUIT STEEL POLE HEIGHT: 80'–115'	H-FRAME WOOD POLE (ALONG WELLSIAN WAY) HEIGHT: 55'–95'	SINGLE WOOD POLE (ALONG THAYER DRIVE) HEIGHT: 55'–95'

The most visible proposed changes to the line are:

1. Pole height would increase. The existing structures are between 55 and 91 feet high. The replacement poles will be 97 to 119 feet high.
2. Poles would change from a wood pole to a steel monopole.
3. Pole diameter would increase.
4. Pole relocations. Many of the existing poles would be removed entirely or moved to appropriately sag and operate the line.

What are next steps?

Comment scoping period	March 24 – April 26, 2023
Public scoping meeting	April 12, 2023
EA determination (if warranted)	Summer 2023
Draft EA available for public comment (if warranted)	Summer 2023
Final EA (if warranted)	Winter/Spring 2024
Finding of No Significant Impact (if warranted)	Winter/Spring 2024
If decision to build, construction start	Summer/Fall 2024

How can I provide input?

BPA is holding its first public meeting on the project April 12. A public comment period will be held before BPA decides whether to rebuild the line. www.bpa.gov/comment