

Grid Expansion and Reinforcement Portfolio (GERP) 1.0 Project Summaries

GERP 1.0 projects consist of 10 proposed projects at a preliminary projected cost of \$2 billion to support regional load growth, reliability needs and commercial transmission service requests.

Note: These projects were previously referred to as Evolving Grid projects. They have been rebranded to reflect the expanded scope and purpose of the work.

Big Eddy-Chemawa 230/500 kV Line Upgrade

This project is a rebuild of portions of the existing Big Eddy-Chemawa #1 230 kV line to 500 kV. BPA proposes to rebuild and re-terminate 91 miles of line between BPA's Big Eddy Substation (The Dalles, OR), Ostrander Substation (Oregon City, OR) and Pearl Substation (Wilsonville, OR).

This project will create additional capacity to support regional load growth, reliability needs and commercial requests for long-term transmission at a preliminary estimated direct cost of \$670 million.

Estimated completion: 2032

Bonanza 230/500 kV Substation

This facility would be a new hub substation in Central Oregon near Prineville, OR. The new 115/230/500 kV Bonanza Substation would be built near BPA's existing Ponderosa Substation.

This project will create additional capacity to support new resource development and access to non-federal resources at a preliminary estimated direct cost of \$300 million.

Estimated completion: 2029 (updated)

Buckley 500 kV Substation Rebuild

This project is a proposed rebuild of BPA's Buckley Substation in Sherman County, OR. It would be a new air-insulated 500-kV substation built near the existing gas-insulated substation, which will be retired.

This project will create additional capacity to support regional load growth, reliability needs and commercial requests for long-term transmission at a preliminary estimated direct cost of \$150 million.

Estimated completion: 2028 (updated)

Chehalis-Covington 230 kV Line Upgrade

This project is a proposed upgrade of a portion of the existing Chehalis-Covington #1 230-kV line. The work would consist of replacing conductor on 35 miles of line between BPA's Chehalis Substation (Chehalis, WA) and Cowlitz Tap (Frederickson, WA).

This project will create additional capacity to support regional load growth, reliability needs and commercial requests for long-term transmission at a preliminary estimated direct cost of \$95 million.



Estimated completion: 2028

Cross Cascades North Upgrades

This series of upgrades consists of three projects designed to reinforce the Cross Cascades North path on the FCRTS.

- Schultz-Raver 500 kV Line Upgrade: BPA proposes upgrading the existing Schultz-Raver #3 and Schultz-Raver #4 500-kV lines to a higher rated capacity. BPA would reconductor the 77 miles of line between BPA's Schultz Substation (Ellensburg, WA) and Raver Substation (Ravensdale, WA).
- Paul 500 kV Substation Upgrade: BPA proposes adding a new capacitor at Paul Substation (Centralia, WA).
- Olympia 230 kV Substation Upgrade: BPA proposes adding a new Static VAR Compensator at Olympia Substation (Olympia, WA).

This project will create additional capacity to support regional load growth, reliability needs and commercial requests for long-term transmission at a preliminary estimated direct cost of \$400 million.

Estimated completion: 2031 (updated)

La Pine-Bonanza 230 kV Line

This project is a proposed new 53-mile 230-kV transmission line in Central Oregon between BPA's La Pine Substation (La Pine, OR) and proposed Bonanza Substation (Prineville, OR).

This project will create additional capacity to support regional load growth, reliability needs and commercial requests for long-term transmission at a preliminary estimated direct cost of \$150 million.

Estimated completion: 2030

Portland Area Upgrades

Keeler-Horizon 230 kV Line #2 - Completed (energized 2024)

Terminating PGE's new Keeler-Horizon #2 line at BPA's Keeler Substation (Hillsboro, OR) and a new 500/230-kV transformer would also be added at Keeler Substation.

Pearl-Sherwood-McLoughlin 230 kV Line Upgrade

Reconfiguring and re-terminating the Pearl-Sherwood-McLoughlin line at BPA's Pearl Substation (Wilsonville, OR).

Estimated completion: Summer 2026

Keeler 230/500 kV Transformer Addition

A new 500/230-kV transformer would also be added at Keeler Substation (Hillsboro, OR).

Estimated completion: 2029



In total, these projects will create additional capacity to support regional load growth, reliability needs and commercial requests for long-term transmission at a preliminary estimated direct cost of \$150 million.

Rock Creek-John Day 500 kV Line Upgrade

This project is an upgrade of the existing Rock Creek – John Day #1 500-kV line. BPA would rebuild 14 miles of line between the Rock Creek Substation (Goldendale, WA) and John Day Substation (Rufus, OR), including a Columbia River crossing.

This project will create additional capacity to support regional load growth, reliability needs and commercial requests for long-term transmission at a preliminary estimated direct cost of \$37 million.

Estimated completion: Early 2030 (updated)

Ross-Rivergate 230 kV Line Upgrade

This project is a proposed upgrade of the existing Ross-Rivergate #1 230 kV line. The work would consist of replacing conductor on 7.5 miles of line between BPA's Ross Substation (Vancouver, WA) and PGE's Rivergate Substation (Portland, OR), including a Columbia River crossing.

This project will create additional capacity to support regional load growth, reliability needs and commercial requests for long-term transmission at a preliminary estimated direct cost of \$50 million.

Estimated completion: 2029 (updated)

Six Mile Canyon 230/500 kV Substation

This is a proposed new 230/500-kV hub substation called Six Mile Canyon near Boardman, OR.

This project will create additional capacity to support regional load growth, reliability needs and commercial requests for long-term transmission at a preliminary estimated direct cost of \$250 million.

Estimated completion: Early 2028 (updated)

