



## T r a n s m i s s i o n   P l a n n i n g

# 2024 WECC Progress Report

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# Table of Contents

<b>1</b>	<b>Introduction.....</b>	<b>3</b>
<b>2</b>	<b>Planned Transmission Projects.....</b>	<b>4</b>
2.1	Schultz-Wautoma 500 kV Series Capacitor Addition .....	4
2.2	Cross Cascades North Upgrade .....	4
2.3	Keeler 500 kV Expansion and Transformer Addition .....	4
2.4	Pearl-Sherwood-McLoughlin Upgrade.....	5
2.5	Boardman Area Reinforcement Longhorn Substation.....	5
<b>3</b>	<b>Planned Generation Interconnection Projects.....</b>	<b>6</b>
3.1	G0238 & G0239 Montague Projects, 202 MW .....	6
3.2	G0362 Wheatridge Wind Jordan Butte 1 & 2 Wind Project, 204 MW .....	6
3.3	G0539 Ponderosa Project, 600 MW total.....	6
3.4	G0559 Four Mile Project, 250 MW total.....	7
3.5	G0367 & G0368 Avangrid’s Brickoven Project, 202 MW total .....	7
<b>4</b>	<b>Request For Waiver of “Significant Transmission Projects” .....</b>	<b>8</b>
4.1	Boardman Area Reinforcement Longhorn Substation.....	8
4.2	Cross Cascades North Upgrade .....	8
<b>5</b>	<b>Prior Submissions Granted Waiver of “Significant Transmission Projects” ....</b>	<b>9</b>
5.1	Pearl-Sherwood-McLoughlin Upgrade (2023 Waiver).....	9
5.2	Northern Mid-Columbia Area Project (2022 Waiver).....	9
5.3	South Tri-Cities Reinforcement (2022 Waiver).....	9
5.4	Raver 500/230 kV Transformer Addition (2013 Waiver) .....	9
<b>6</b>	<b>Point of Contact .....</b>	<b>11</b>



# 1 Introduction

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This Progress Report is prepared in satisfaction of the Western Electricity Coordinating Council's (WECC) Progress Report Policies and Guidelines. This Progress Report (also known as the Supplemental Progress Report) includes projects from the 2023 Progress Report where there has been no significant change in plans of service, capacity, or in-service. This report also identifies any projects completed since the 2023 Progress Report and any new projects identified since the 2023 Progress Report. Finally, BPA requests waiver of “Significant Impact” status for transmission projects that have insignificant impacts on the Western Interconnection System.

## **This Progress Report includes the following funded generation projects and transmission system facilities:**

- New generation projects over 200 megawatts (MW) connected to the transmission system.
- New and upgraded transmission system facilities over 200 kilovolt (kV) that may significantly alter the operation of the transmission system. Projects typically included are transformer additions, reinforcements, substations, and series capacitors.
- Any facilities below 200 kV that may have a significant impact on the reliability of the Western Interconnection.

## **Each project reported includes:**

- A brief physical description of the project
- The planned project in-service date
- The project status (the planning, design, or construction status)

## **This Progress Report does not include:**

Projects such as bus tie breakers, bus sectionalizing breakers, shunt reactive additions, reterminations, reactors, circuit breaker additions, line upgrades, line disconnect switches, transfer trips and shunt capacitors are not included in this report. Projects that are not funded by BPA are typically not included as well.



## 2 Planned Transmission Projects

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### 2.1 Schultz-Wautoma 500 kV Series Capacitor Addition

#### 2.1.1 Project Description

This project is necessary to increase South of Allston (SOA) available transfer capability and improve operations and maintenance flexibility for SOA. The project will add 1152 Mvar, 24 OHM series capacitor (rated 4000A at 500 kV) on the Schultz-Wautoma line at the Wautoma substation.

#### 2.1.2 Project Planned Operating Date

This project is expected to be completed in 2024.

#### 2.1.3 Project Status

This project is in the construction phase.

### 2.2 Cross Cascades North Upgrade

(Formerly Schultz-Raver 500 kV Series Capacitors)

#### 2.2.1 Project Description

This project enables additional transmission capacity on West of Cascades North. Both Schultz-Raver #3 and #4 500 kV lines will be re-conducted; the 500 kV series capacitor on the Schultz-Raver #4 500 kV line will be upgraded to its ultimate rating to match the 500 kV series capacitor on the Schultz-Raver #3 500 kV line; a new +350/-300 Mvar STATCOM will be installed at Olympia 230 kV; a new 221 Mvar shunt capacitor bank will be installed at Paul 500 kV.

#### 2.2.2 Project Planned Operating Date

The project is expected to be completed by 2030.

#### 2.2.3 Project Status

This project is in the draft phase.

### 2.3 Keeler 500 kV Expansion and Transformer Addition

#### 2.3.1 Project Description

This project will add 500 kV breakers at Keeler substation to reconfigure the Keeler 500 kV bus layout into a double-breaker-double-bus arrangement. This project also adds a second 500/230 kV transformer bank at Keeler substation.

#### 2.3.2 Project Planned Operating Date

This project is expected to be completed sometime by 2029.

#### 2.3.3 Project Status

This project is in the scoping phase and is subject to final funding approval.



## 2.4 Pearl-Sherwood-McLoughlin Upgrade

(Formerly Pearl-Sherwood 230 kV Corridor Reconfiguration)

### 2.4.1 Project Description

This project will split two sets of 230 kV circuits jumpered together and add 230 kV switch gear at BPA Pearl and PGE Sherwood substations, to be operated as four standalone 230 kV circuits (Pearl-Sherwood #1, #2 and #3 230; and Pearl-Sherwood-McLoughlin #1 230). The project will also reconductor several segments of the new circuits. This is a joint project with PGE and no other affected Transmission Owners. BPA and PGE have already coordinated on all potential impacts internal to their respective systems through multiple study forums.

### 2.4.2 Project Planned Operating Date

This project is expected to be completed in 2027.

### 2.4.3 Project Status

This project is in the scoping phase.

## 2.5 Boardman Area Reinforcement Longhorn Substation

### 2.5.1 Project Description

This project adds a new source to the Boardman area by looping the McNary – Coyote Springs 500 kV line into 500 kV breaker-and-a-half yard, adds two 1200 MVA 500-230 kV transformers, and adds a 230 kV breaker-and-a-half yard to serve growing data center load in the area.

### 2.5.2 Project Planned Operating Date

This project is expected to be completed in 2025.

### 2.5.3 Project Status

This project is in the construction phase.





## 3 Planned Generation Interconnection Projects

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The following planned generation interconnection projects are in the design, construction, commercialize, or close out phase. It does not include projects that are in the Initiation and Planning or Project Authorization Phases.

### 3.1 G0238 & G0239 Montague Projects, 202 MW

#### 3.1.1 Project Description

The Montague I (wind) and Montague II (solar) projects are 202 MW each. The hybrid wind & solar generation is located near Slatt Substation in Gilliam County, Oregon with a point of interconnection requested at BPA Slatt 500 kV Substation.

#### 3.1.2 Project Planned Operation Date<sup>3</sup>.

G0238 and G0239 are complete.

#### 3.1.3 Project Status

G0238 and G0239 are energized.

### 3.2 G0362 Wheatridge Wind Jordan Butte 1 & 2 Wind Project, 204 MW

#### 3.2.1 Project Description

The Wheatridge Wind Jordan Butte project is 204 MW. The wind generation project is located near Morrow Flat Substation in Morrow County, Oregon with a point of interconnection requested at BPA Morrow Flat Substation.

#### 3.2.2 Project Planned Operation Date

G0362 requested in-service date is 2025.

#### 3.2.3 Project Status

G0362 is in the scoping phase.

### 3.3 G0539 Ponderosa Project, 600 MW total

#### 3.3.1 Project Description

A 600 MW solar project interconnecting at BPA's Ponderosa substation in Central Oregon.

#### 3.3.2 Project Planned Operation Date

G0539 requested in-service date is 2025.

#### 3.3.3 Project Status

G0539 is in the design phase.



### 3.4 G0559 Four Mile Project, 250 MW total

#### 3.4.1 Project Description

A 250 MW wind project interconnecting on BPA's McNary-Franklin No. 2 230 kV line in Eastern Washington.

#### 3.4.2 Project Planned Operation Date

G0559 requested in-service date is 2026.

#### 3.4.3 Project Status

G0559 is in the design phase.

### 3.5 G0367 & G0368 Avangrid's Brickoven Project, 202 MW total

#### 3.5.1 Project Description

A 202 MW wind and solar project interconnecting at BPA's Maupin substation in Wasco County, Oregon.

#### 3.5.2 Project Planned Operation Date

G0367 requested in-service date is 2024.

#### 3.5.3 Project Status

G0367 is in the construction phase.



## 4 Request For Waiver of “Significant Transmission Projects”

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This section lists projects that are not expected to have significant impacts on the operation of the Western Interconnect System. Thus, BPA requests waiver of “Significant Transmission Project” status for the purpose of the Project Coordination Review Process.

### 4.1 Boardman Area Reinforcement Longhorn Substation

This project adds a new source to the Boardman area by looping the McNary – Coyote Springs 500 kV line into 500 kV breaker-and-a-half yard, adds two 1200 MVA 500-230 kV transformers, and adds a 230 kV breaker-and-a-half yard to serve growing data center load in the area. BPA is the only affected NERC Transmission Planner or Transmission Owner for this project. Impacts to local BPA customers have already been coordinated via applicable Interconnection Study Requests and annual NERC TPL-001 System Assessments. No wider impacts to the Western Interconnection are expected from this project.

### 4.2 Cross Cascades North Upgrade

This project enables additional transmission capacity on West of Cascades North (WOCN). Both Schultz-Raver #3 and #4 500 kV lines will be re-conducted; the 500 kV series capacitor on the Schultz-Raver #4 500 kV line will be upgraded to its ultimate rating to match the 500 kV series capacitor on the Schultz-Raver #3 500 kV line; a new +350/-300 Mvar STATCOM will be installed at Olympia 230 kV; a new 221 Mvar shunt capacitor bank will be installed at Paul 500 kV.

BPA is not seeking a new Accepted Rating for WOCN with this project, and any potential impacts on adjacent transmission systems have been coordinated through distribution of BPA’s Annual NERC TPL-001 System Assessment and BPA’s commercial Transmission Service Request and Expansion Process (TSEP) Cluster Studies. Puget Sound Energy (PSE) owns portion of the WOCN path definition, but the nature of the Project prevents any impacts to PSE’s circuits (series capacitors will offload PSE’s parallel transmission circuits).





## 5 Prior Submissions Granted Waiver of “Significant Transmission Projects”

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### 5.1 Pearl-Sherwood-McLoughlin Upgrade (2023 Waiver)

(Formerly Pearl-Sherwood 230 kV Corridor Reconfiguration)

This project will split two sets of 230 kV circuits jumpered together and add 230 kV switch gear at BPA Pearl and PGE Sherwood substations, to be operated as four standalone 230 kV circuits (Pearl-Sherwood #1, #2 and #3 230; and Pearl-Sherwood-McLoughlin #1 230). The project will also reconductor several segments of the new circuits. This is a joint project with PGE and no other affected Transmission Owners. BPA and PGE have already coordinated on all potential impacts internal to their respective systems through multiple study forums.

### 5.2 Northern Mid-Columbia Area Project (2022 Waiver)

This project proposes to add new BPA Columbia-DPUD Rapids 230 kV transmission line. DPUD will own and operate the majority of the circuit, and BPA will operate new terminal equipment at Columbia substation. Impacts to adjacent Transmission Systems have already been coordinated in regional Transmission Studies conducted by BPA, DPUD, Chelan PUD, Grant PUD and Avista (Columbia Grid Mid-C Area Study team, circa 2010-2017). No wider impacts to the Western Interconnection are expected from this project.

The project is in the construction phase and is nearing completion.

### 5.3 South Tri-Cities Reinforcement (2022 Waiver)

This project proposes to add a Webber Canyon 500/115 kV transformer and new Webber Canyon-Badger Canyon 115kV line in the Tri-Cities area. This project will maintain reliable local load service to the Tri-Cities area. BPA is the only affected NERC Transmission Planner or Transmission Owner for this project. Impacts to local BPA customers have already been coordinated via applicable Interconnection Study Requests and annual NERC TPL-001 System Assessments. No wider impacts to the Western Interconnection are expected from this project.

The project is in the design phase and is expected to be completed in 2025.

### 5.4 Raver 500/230 kV Transformer Addition (2013 Waiver)

This project will install a 1300 MVA transformer at Raver substation. A new 230 kV substation will be developed adjacent to the existing 500 kV substation. The high side of the new transformer will terminate at Raver 500 kV. The project will also reconfigure the Tacoma-Raver 500 kV lines by removing jumpers and re-terminating the Tacoma-Raver #2 circuit into Covington 230 kV and Raver 230 kV Substations. The Tacoma-Raver #2 line will be renamed and operated as the Raver-Covington #3 230 kV line. The plan of service also requires reconfiguring the Covington 230 kV bus, adding a new sectionalizing breaker and two bus tie breakers.



This project is primarily for load service to Tacoma and Covington Substations and has no significant impact to the WECC transmission system. It has been studied as part of a sub-regional Puget Sound Area Study team through Columbia Grid. No wider impacts to the Western Interconnection are expected from this project.

The transformer was energized in 2021 and the rest of the project is expected to be completed in 2024.



## 6 Point of Contact

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### 6.1.1 WECC StS Rep and Point of Contact

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