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February 28, 2025

Ms. Eepsita Priye, Chair WECC Studies Subcommittee

Mr. Doug Tucker WECC Senior Staff Engineer

Re: PacifiCorp 2025 Annual Progress Report

Dear Ms. Priye and Mr. Tucker,

In accordance with Western Electricity Coordinating Council project coordination process guidelines, PacifiCorp's 2025 Annual Progress Report outlining significant additions and changes to our system is provided below.

Should you have any questions, or require additional information, please contact me at (801) 220-4231.

Sincerely,

### Justin Mank

Justin Monk

Transmission Planner II, PacifiCorp

cc: STS Members (STS@wecc.org)

Rick Vail Todd Jensen Scott Beyer Rikin Shah Brett Allsup Lori Rolow Lisa Harkins

#### <Public>



# **Table of Contents**

<b>A.</b>	Planned Transmission and Generation Projects	3
I.	Energy Gateway Projects	4
<b>A.</b>	Gateway West Transmission Project – Project Update	6
B.	Gateway South Transmission Project – Project Update	8
C.	Gateway Central Transmission Project	9
D.	Longhorn-to-Hemingway (B2H)	10
II.	Blueprint Transmission Project	11
III.	Future Generation Projects	13
В.	Waiver of "Significant Impact" Status	14
<i>C</i> .	Updates to the Annual Progress Report from the Previous Submittal (2024)	15



## PacifiCorp 2025 Annual Progress Report to WECC

This annual progress report submission is divided into three separate sections, including a summary of all bulk electric system (BES) transmission projects<sup>1</sup> and generation in Section A; a request for Waiver of "Significant Impact" status in Section B; and updates to the annual progress report from the previous submittal (2024) in Section C<sup>2</sup>.

### A. Planned Transmission and Generation Projects

This annual progress report is intended to 1) capture all BES transmission and generation projects that may have a significant impact on the reliability of the Western Interconnection; and 2) to inform neighboring systems in a timely manner regarding new facility additions to our system and associated system operation.

Technical studies have demonstrated that all existing facilities and planned facility additions, as well as associated operating procedures, are in conformance with North American Electric Reliability Corporation (NERC) Planning Standards and Western Electricity Coordinating Council (WECC) System Performance Regional Criteria.

The following projects are included in this Annual Progress Report:

- All major new and upgraded BES transmission facilities. Such projects include, but are not limited to, new transmission facilities, transmission redesigns or upgrades, permanent removal of existing transmission facilities, or other changes (e.g., operating procedures) that may significantly alter the operation of the transmission facilities
- Any facilities not covered under the BES transmission definition that may have a significant impact on the reliability of the Western Interconnection
- All generation projects (200 megawatts (MW) or greater) connected to the transmission system through step-up transformers. Such projects include, but are not limited to, new generation plants, generation repower or upgrades that may significantly alter the operation of the generation facilities

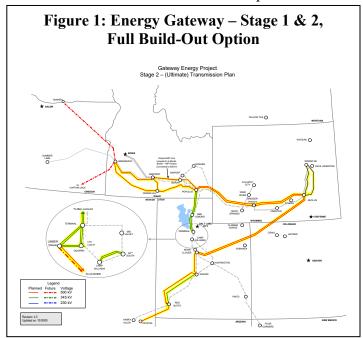
<sup>&</sup>lt;sup>1</sup> BES projects were determined based on the definition that was effective as of July 1, 2014.

<sup>&</sup>lt;sup>2</sup> This last section is intended to be a guide for comparing back-to-back Annual Progress Report submissions.

### I. Energy Gateway Projects

The Energy Gateway Projects (Gateway West, South and Central) were initially announced by PacifiCorp and Idaho Power in May 2007. The announcement included a description of the full

build-out of the projects, including Stages 1 and 2 (see overview diagram, Figure 1). In its 2011 Annual Progress Report submission to the Western **Electricity Coordinating Council** (WECC), PacifiCorp reported that third party requests and financial commitments that are necessary to support the Energy Gateway – Stage 2 facilities have not materialized. Therefore, PacifiCorp indicated that it would continue to pursue WECC path ratings for Stage 1 of Energy Gateway (see Figure 2) only at that time and will not further pursue ratings for Stage 2 facilities. For clarity,

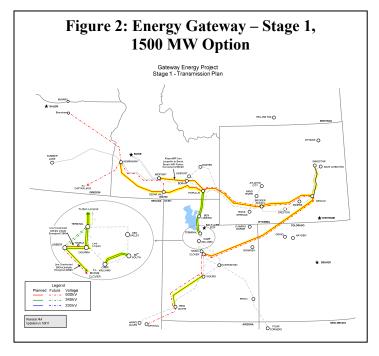


references to the Gateway Project - Stage 1 configuration will be denoted as the Gateway Project throughout the remainder of this report.

Since the initial announcement, the projects have completed the WECC Regional Planning Process (November 2008) as well as Phase 1 (November 2008) and Phase 2 (July 2011) of the WECC Path Rating Process.

Additionally, the Bureau of Land Management (BLM) has issued the Record of Decision (ROD) for all remaining segments of Gateway West (January 2017) and Right-of-Way Grant (August 2018), as well as the ROD for Gateway South (December 2016).

Due to the scope and nature of the Energy Gateway Projects, project

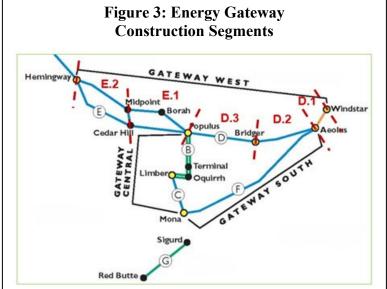


facilities will not be constructed simultaneously, but rather, the projects will be constructed in segments (or sub segments) – driven by need, permitting, and regulatory limitations. Additionally, project implementation has been developed such that facilities will be used, and

useful as specific portions of the projects are placed in-service. The diagram in Figure 3 denotes the various construction segments that have been identified for the Energy Gateway Projects.

Those Energy Gateway Project segments that have previously been completed include:

- Gateway Central:
  - Portions of Segment B: Populus Terminal (November 2010)
  - Portions of Segment
     C: Mona Oquirrh,
     constructed to 500
     kilovolt (kV) and
     energized at 345 kV
     (May 2013)
- Gateway South, Segment
   G: Sigurd Red Butte
   (May 2015)
- Gateway South, Segment
   F: Aeolus Clover
   (December 2024)
- Gateway West, Segment D,



- Sub Segment D.2: Bridger/Anticline Aeolus (December 2020)
- Gateway West, Segment D, Sub Segment D.1: Aeolus Shirley Basin (October 2020)

Gateway West, Segment D, Sub Segment D.1: Windstar – Shirley Basin (December 2024)

Project segments that will be constructed in the future include:

- Gateway West, Segment D: Windstar Populus
  - o Sub segment D.3: Populus Anticline
- Gateway West, Segment E: Populus Hemingway
  - o Sub segment E.1: Populus Midpoint/Cedar Hill
  - o Sub segment E.2: Midpoint/Cedar Hill Hemingway
- Gateway Central, Segment C: Limber Terminal

See Tables 1, 2 and 3 for projected in-service dates of Gateway West construction segments.

### A. Gateway West Transmission Project – Project Update

The following permitting status for the Gateway West project is provided:

The federal National Environmental Policy Act (NEPA) permitting process began in April 2007 when the companies filed the application with the BLM. Public scoping meetings followed in June 2008. The BLM published its draft Environmental Impact Statement (EIS) July 29, 2011, and a year later in August 2012, identified the agency-preferred alternative routes for Gateway West.

In following the NEPA process, the BLM has completed the EIS for the Gateway West project. The BLM released its final EIS April 26, 2013, followed by the ROD November 14, 2013, providing a right-of-way grant for most of the project. The agency chose to defer its decision on the western-most portion of the project located in Idaho to perform additional review of the Morley Nelson Snake River Birds of Prey Conservation Area. In September 2014, the BLM announced their intent to conduct a supplemental EIS for the final two segments. A draft supplemental EIS was published in March 2016 and a final ROD was issued January 19, 2017. On April 17, 2017, the Interior Board of Land Appeals remands January 2017 ROD back to BLM for reconsideration. In response to a request from Idaho Governor Otter to the Secretary of the Interior, the January 2017 ROD for the Gateway West project was officially rescinded and remanded back to the BLM Idaho State Office for further consideration. President Trump signed the Fiscal Year 2017 Consolidated Appropriations Act into law in May 2017, which included an agreement to route segments 8 and 9 of the Gateway West Transmission Line Project through the Morley Nelson Snake River Birds of Prey National Conservation Area (NCA). House Resolution 2104 directs the Secretary of Interior to grant right-of-way for the Companies' preferred route (Alternative 1) through the NCA. The BLM published the final supplemental environmental assessment (EA) for segments 8 and 9 on January 5, 2018, and Right-of-Way Grant was issued August 8, 2018.

#### Gateway West - Plan of Service and Planned Operating Date

An overview of the Gateway West transmission system facility modification and in-service dates are summarized in Table 1.

**Table 1: Gateway West Facilities and In-Service Dates** 

Gateway West Transmission Project Facilities	Date	
Construction of one new 230 kilovolt (kV) circuit from Windstar to Shirley Basin (57 miles) with 2-1272 ACSR Bittern/phase [PAC owned facility].	In service 2024	
Construction of one new 3.5-mile 230 kV Aeolus - Freezeout line with 2X1158.4 Hudson conductor. [PAC owned facility]	In service 2024	

In service 2024
In service 2024
In service 2024
2031 (earliest)
In service 2024
In-Service: October 2020
In-service: April 2022
2033 (earliest)
In service Dec 2024
In-Service: October 2020
Q4 2034 (earliest)
Q4 2034 (earliest)
Q4 2034 (earliest)
In service 2024
2036 (earliest)

of the existing Kinport/Borah to Midpoint 345 kV line section to 500 kV [IPC owned facility], and the addition of a new 500 kV circuit between Populus and Borah [PAC owned facility]. A 500/345 kV (1500 MVA) autotransformer (3 x 1Φ) will be installed at Borah.		
Construction of one new 500 kV circuit from Populus to Cedar Hill with approximately 45% series compensation. (118 miles) [PAC owned facility]	Q4 2036 (earliest)	
Construction of one new 500 kV circuit from Cedar Hill to Hemingway with approximately 45% series compensation. (161 miles) [PAC/IPC jointly owned facility]	2036 (earliest)	
Construction of one new 500 kV circuit from Cedar Hill to Midpoint.  This line will connect the Idaho southern route to Midpoint for improved reliability. (34 miles) [PAC/IPC jointly owned facility]  This facility has been advanced from Gateway West – Stage 2	2036 (earliest)	
Midpoint West		
Midpoint – Hemingway Section		
This section of the project will include two-500 kV circuits:  • The first 500 kV circuit from Midpoint to Hemingway has been developed by interconnecting the existing Midpoint – Summer Lake 500 kV line into the Hemingway Station. [PAC owned facility]	In-Service: July 2010	
Construction of the second 500 kV circuit from Midpoint to Hemingway with approximately 50% series compensation. (126 miles) [PAC/IPC jointly owned facility]  This facility has been advanced from Gateway West – Stage 2	2036	

## B. Gateway South Transmission Project - Project Update

The following updates to the previous WECC Annual Progress Report for Gateway South are provided:

The 2023 PacifiCorp Integrated Resource Plan (IRP) preferred portfolio includes the Aeolus-to-Mona (Clover substation) transmission segment (Energy Gateway South or Segment F). This segment is included in the preferred portfolio as a component of the least-cost, least-risk plan.

The 500 kV transmission segment extends 416 miles between the new (as part of Gateway West sub-segment D.2) Aeolus substation near Medicine Bow, Wyoming, and the existing Clover substation located near Mona, Utah. PacifiCorp, with stakeholder involvement, has pursued permitting of the Energy Gateway South transmission project since 2008. In May 2016 the BLM released its final EIS and issued their ROD in December of the same year. In May 2018 the

United States Forest Service issued its ROD, completing the permitting on federal lands and providing a right-of-way grant for federal properties.

The Aeolus-to-Mona transmission segment was placed in service in December 2024. Based on the 2023 IRP, development of the Aeolus-to-Clover transmission segment will align with additional renewable generation projects that will further decarbonize PacifiCorp's portfolio.

#### Plan of Service and Planned Operating Date

An overview of the Gateway South transmission system modifications and in-service dates are summarized in Table 2.

**Table 2: Gateway South Facilities and In-Service Dates** 

Gateway South Transmission Project Facilities	Dates	
Aeolus South		
Construction of one new 500 kV circuit from Aeolus to Clover with 50% series compensation (416 miles) and add two - 500/345 kV (1600 MVA) autotransformer (6 x 1Φ) at Clover [PAC owned facility]	In Service Dec 2024	
Loop-in the 345 kV circuit between Huntington and Mona into Clover and rebuild the existing Clover – Mona 345 kV #1 and #2 lines. [PAC owned facility]	In Service Dec 2024	
Re-terminate Mona – Camp Williams #3 345 kV line into Clover making it Clover – Camp Williams # 3 345 kV line.	In Service Dec 2024	

### C. Gateway Central Transmission Project

The following updates to the previous WECC Annual Progress Report for Gateway Central are provided:

#### **Oquirrh to Terminal**

This section of new transmission will link together other recently constructed transmission sections, specifically Clover (Mona)-to-Oquirrh and Populus-to-Terminal, to complete the Gateway Central portion of the Energy Gateway Project. All rights-of-way have been procured.

#### Plan of Service and Planned Operating Dates

An overview of the Gateway Central transmission system modification is summarized below.

**Table 3: Gateway Central Facilities and In-Service Dates** 

Gateway Central - Transmission Facilities	Dates
Populus-to-Terminal double circuit 345 kV (135 miles)	In-Service: November 2010
Addition of the 500 kV single circuit between Clover (Mona) and Limber, energized at 345 kV (65 miles)	In-Service: May 2013
Addition of the 345 kV double circuit between Limber and Oquirrh (32 miles). The Limber-to-Oquirrh #1 circuit will be initially energized at 138 kV for service to the Tooele Valley.	In-Service: May 2013
Addition of the 345 kV double circuit between Oquirrh and Terminal (14 miles)	In Service December 2024
<ul> <li>Construct Limber 500/345/138 kV substation</li> <li>Terminate Clover – Oquirrh 345 kV line into Limber</li> <li>Energize the Clover – Limber section of the Clover –line to 500 kV</li> <li>Install one (1) 1600 MVA 525/345 kV auto transformer at Limber</li> <li>Install two (2) 700 MVA 345/138 kV auto transformer at Limber</li> <li>Convert the existing Oquirrh - Tooele 138 kV line to 345 kV which is already constructed to 345 kV and create the second Limber – Oquirrh 345 kV line</li> <li>Construct a new approximately 12 mile 138 kV line from Limber - Tooele</li> </ul>	Q4 2030

## D. Longhorn-to-Hemingway (B2H)

PacifiCorp is jointly participating with Idaho Power in the construction of the Longhorn to Hemingway (B2H) 500 kV transmission line. This new line, previously referred to as the Boardman to Hemingway line, will be approximately 290 miles between the planned Longhorn substation near Boardman, Oregon and the Hemingway substation near Melba, Idaho. The project has a planned in-service date of Q4 2027. Series compensation stations will be constructed at Maverick and Midline substations. The transmission line will facilitate continued and long-term growth of new renewable resources, provide load service to Oregon customers and provide additional transfer capacity between PacifiCorp East (PACE) and PacifiCorp West (PACW).

### II. Blueprint Transmission Project

The Blueprint transmission project will connect major resource and load areas in central and eastern Oregon through construction of approximately 320 miles of new 500 kV transmission line and associated 500 kV and 230 kV system upgrades. The project was initiated in PacifiCorp' 2022-2023 local planning process and is included in the 2022-2023 biennial Local Transmission System Plan and 2024-2025 NorthernGrid Regional Planning process. The project components are grouped into three primary segments:

- Blueprint South: Snow Goose-Full Circle 500 kV
- Blueprint North: Full Circle-Apex 500 kV
- Blueprint East: Apex-Maverick-Feedville 500 kV

Within each of the primary segments, new substations, series compensation stations and modifications to existing substations are identified to facilitate integration with the existing transmission system.

PacifiCorp plans to initiate the Initial Progress Report in 2025 and does not intend to seek a waiver of significant impact. The Blueprint project will largely parallel the existing Northwest AC Intertie (NWACI) 500 kV system, interconnecting with that existing system at various points. As a result, significant coordination with NWACI owners and other affected systems is anticipated to be required and will likely affect the final plans and design for facilities.



#### Blueprint South: Snow Goose-Full Circle 500 kV

Construct a new, approximately 166-mile 500 kV line with two 500 kV mid-line series capacitor stations providing 40% series compensation each, for 80% series compensation in total. The transmission line will include shunt compensation for voltage control and will be designed to support single-pole switching.

In support of this transmission line addition, the following transmission facility additions and modifications will be required:

- Snow Goose Substation Expand to accommodate new 500 kV line termination
- Twin River Substation (Future) Future 500/230 kV Chiloquin area source substation
- Chemult Substation New 500 kV series compensation station
- Paulina Substation New 500 kV series compensation station
- Full Circle Substation New 500/230 kV substation, connecting to existing 230 kV system in Deschutes or Crook County, Oregon

The Blueprint South segment has a targeted in-service date of Q4 2032.

#### **Blueprint North: Full Circle-Apex 500 kV**

Construct new, approximately 144-mile 500 kV line with one 500 kV mid-line series capacitor station providing 50% series compensation. The transmission line will include shunt compensation for voltage control and will be designed to support single-pole switching.

In support of this transmission line addition, the following transmission facility additions and modifications will be required:

- Full Circle Substation New 500/230 kV substation, connecting to existing 230 kV system in Deschutes or Crook County, Oregon
- Snowball Substation New 500 kV series compensation station
- *Dual Mesa Substation (Future)* Future 500/230 kV substation to accommodate potential load interconnection requests currently under study
- Apex Substation Being constructed in 2026 for customer load interconnection requests, expand to accommodate new 500 kV line termination

The Blueprint North segment has a targeted in-service date of Q4 2032

#### Blueprint East: Apex-Maverick-Feedville 500 kV

Facilities to be constructed under individual service agreements for load interconnection requests, to include 500 kV between Apex and Maverick substations and a future 500 kV connection to the planned Feedville substation.

In support of this transmission line addition, the following transmission facility additions and modifications will be required:

- Apex Substation Being constructed in Q4 2025 for customer load interconnection requests, expand to accommodate new 500 kV line termination
- Maverick Substation Series compensation station on the Hemingway to Longhorn (B2H) line, approximately 15 miles south of Longhorn. Convert to 500 kV substation with connection to Apex-Maverick 500 kV line.
- Feedville Substation (Future) New 500/230 kV transformation connecting to Feedville 230 kV substation being constructed for customer load interconnection requests

The Blueprint East segments will be constructed per the load interconnection service agreements, with planned in-service dates of Q4 2025 through Q3 2030.

### **III.** Future Generation Projects

This section includes all significant generation projects (200 MW or greater) connected to or removed from the transmission system through step-up transformers or generation projects that may have a significant impact on the reliability of the Western Interconnection.

Table 4: Significant Generation Additions- PacifiCorp East/ West

Project Queue or Name	Location (County, State)	Participants	One- Line Diagram	Status	Generation Capacity (MW)	Туре	Trans- mission Facil- ities (kV)	Studies
409	Albany, WY	PacifiCorp	On File	In Service	320	Wind	230	Complete
687	Klamath, OR	PacifiCorp	On File	Suspended	415.8	Pumped Storage	500	Complete
713	Converse, WY	PacifiCorp	On File	Executed IA	350	Wind	230	Complete
719	Albany, WY	PacifiCorp	On File	Suspended	280	Wind	230	Complete
778	Emery, UT	PacifiCorp	On File	Construction	200	Solar	345	Complete
787	Emery, UT	PacifiCorp	On File	Executed IA	200	Solar	345	Complete
836	Carbon, WY	PacifiCorp	On File	Executed IA	400	Wind	230	Complete
838	Utah, UT	PacifiCorp	On File	Executed IA	525	Solar	345	Complete
TCS- 48	Salt Lake, Ut	PacifiCorp	On File	Executed IA	200	Batter y	345	Complete
C1-23	Klamath, OR	PacifiCorp	On File	Executed IA	300	Solar & Battery	230	Complete
C1-34	Utah, UT	PacifiCorp	On File	Executed IA	200	Solar & Battery	345	Complete
C1-35	Carbon, UT	PacifiCorp	On File	Executed IA	500	Wind	230	Complete
C1-39	Washingt on, UT	PacifiCorp	On File	Construction	300	Solar & Battery	345	Complete

Project Queue or Name	Location (County, State)	Participants	One- Line Diagram	Status	Generation Capacity (MW)	Туре	Trans- mission Facil- ities (kV)	Studies
C1-43	Clark, ID	PacifiCorp	On File	Executed IA	200	Solar & Battery	230	Complete
C1-44	Lake, OR	PacifiCorp	On File	Suspended	400	Solar & Battery	500	Complete
C1-50	Utah, UT	PacifiCorp	On File	Suspended	400	Solar & Battery	345	Complete
C1-51	Juab, UT	PacifiCorp	On File	Suspended	300	Solar & Battery	345	Complete
C2-10	Salt Lake, UT	PacifiCorp	On File	Executed IA	500	Pimp Storag e	345	Complete
C2-82	Bannock, ID	PacifiCorp	On File	Executed IA	300	Solar & Battery	345	Complete

# B. Waiver of "Significant Impact" Status

Table 5 summarizes planned transmission projects within the PacifiCorp system for which waivers of "Significant Impact" Status for the purpose of Project Coordination Review Process are being requested. The purposes of these projects are for serving local load, to enhance or maintain local reliability, and/or to reduce local capacity requirements. These projects are not expected to have significant impacts on the operation of the Western Interconnection. PacifiCorp does not have any planned transmission projects seeking waiver of Significant Impact Status in 2025.

**Table 5: Planned Transmission Projects (Waiver)** 

Project Name	Project Description	In Service Date
None	NA	NA

### C. Updates to the Annual Progress Report from the Previous Submittal (2024)

The following updates to the PacifiCorp 2024 Annual Progress Report were made in developing this document:

- 1. The summary for the Energy Gateway Projects has been updated to reflect current planned in-service dates. Please note several projects were put in-service in 2024.
- 2. Table 4 Significant Generation Additions PacifiCorp East/West This table has been updated from the 2024 submission to reflect current generation interconnection queue status.
- 3. Table 5 Planned Transmission Projects (Waiver) has been updated to reflect current planned project waiver requests.
  - Aeolus Freezout #2 230 kV This project was completed and energized in 2024.
  - Apex Substation Project This project was granted a Waiver of "Significant Impact" Status in 2024 based on no comments received from WECC Members and was removed from Table 5.
  - Feedville Substation Project This project was granted a Waiver of "Significant Impact" Status in 2024 based on no comments received from WECC Members and was removed from Table 5.
  - Southern Oregon 230 kV Line Upgrades This project was granted a Waiver of "Significant Impact" Status in 2024 based on no comments received from WECC Members and was removed from Table 5.
  - Alvey-Malin 500 kV Series Compensation Upgrades This project was granted a
    Waiver of "Significant Impact" Status in 2024 based on no comments received
    from WECC Members and was removed from Table 5.
  - Limber Terminal 345 kV lines This project was granted a Waiver of "Significant Impact" Status in 2024 based on no comments received from WECC Members and was removed from Table 5.