

BPA Attachment K Planning Process

Planning Meeting II

November 7, 2024



Agenda

- Introductions
- Attachment K Planning Cycle – 2024
- Attachment K Website
- Economic Study Requests
- Project Updates and Significant Planned Projects
- Next Steps

Attachment K Planning Cycle - 2024

- **Customer Meeting I** **May 3, 2024**
 - 2023 BPA Transmission Plan
 - 2024 Planning Assumptions, Criteria, Methodology
 - Economic Study Requests
- **Posting I** **September 2024**
 - Summary of 2024 System Assessment Results and Conceptual Solutions
- **Customer Meeting II** **November 7, 2024**
 - Project updates
- **Posting II** **End of Year 2024**
 - 2024 BPA Transmission Plan

BPA's Attachment K Planning Process Website

<https://www.bpa.gov/energy-and-services/transmission/attachment-k>



Energy & services

Environment & land

Learn & participate

About & careers



Power Services ▾

Transmission Services ▾

Energy Efficiency ▾

Rate & tariff proceedings ▾

Customer & contractor services ▾

Doing Business

Becoming a Transmission Customer

Acquiring Transmission ▾

Business Practices ▾

Notices

Open Access Transmission Tariff

Attachment K Planning

Transmission Business Model

Coordinated Transmission Agreement

Customer Training

Standards of Conduct

Commercial Business Process Improvement

Attachment K Planning

Transmission Services conducts system planning meetings in accordance with its Open Access Transmission Tariff Attachment K. These meetings provide customers and interested parties the opportunity to discuss and provide input to the studies and development of the plans of service. This page provides information about the Transmission Services Attachment K process including notifications of meetings, results of planning studies, plans of service and other reference information.

Email Information

To request participation in the Planning Process, send questions, comments, or request copies of reports, complete the [Planning Process Participation Request](#).

To request an Economic Study, fill out the [Economic Study Request Form](#).

Planning Cycles

2024 Planning Cycle	+
2023 Planning Cycle	+
2022 Planning Cycle	+



BPA's Attachment K Planning Process Website

Planning Cycles

2024 Planning Cycle

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This page provides information about the Transmission Services Attachment K process including notifications of meetings, results of planning studies, plans of service and other reference information. To request participation in the Planning Process, complete and email the Participation Request form.

Meetings

November 7, 2024

[Agenda](#)

May 3, 2024

[Agenda](#)

[Planning Meeting I 2024](#)

Reference Information

[2024 System Assessment Assumptions and Methodology](#)

[2024 System Assessment Summary \(October 2024\)](#)

[Expand Planning Cycle for details](#)

BPA's Attachment K Planning Process Website

- **E-mail Information**
 - PlanningParticipationRequest@bpa.gov
 - PlanningEconomicStudyRequest@bpa.gov
- **Meetings**
 - Meeting announcements, agendas, etc.
- **Economic Studies**
 - Requesting and Tracking Economic Studies
- **Reference Information**
 - Materials associated with the Planning Process, participation forms, etc.
- **Links**
 - Links to information related to the Planning Process

Economic Study Requests

- What is an Economic Study?
 - Studies may be requested to address congestion issues or the integration of new resources and loads.
- How are Requests for Economic Studies submitted?
 - Use the Economic Study Request Form on the Attachment K website
 - Submit to PlanningEconomicStudyRequest@bpa.gov
- Requests may be submitted any time...

Requests submitted after October 31 will be considered in the next prioritization process.
- BPA will complete up to two Economic Studies per year at its own expense.
- There were no Economic Study Requests received during the study cycle which closed on October 31, 2024.

CFR Customers

BPA provides contracted Transmission Planning services for the following NT customers who have Coordinated Functional Registrations (CFR) with NERC.



Klickitat County PUD



Lewis County PUD



Northern Wasco County PUD



Pend Oreille PUD



Umatilla Electric Cooperative



Whatcom PUD



Lower Valley Energy

Draft Plans of Service (2024 Planning Cycle)

- Most of the draft plans of service on the following slides, have been developed to maintain compliance with the applicable planning reliability standards and criteria
- The following standards and criteria were applied in development of the proposed corrective action plans:
 - **NERC Reliability Standard TPL-001-5.1**
(North American Electric Reliability Corporation)
 - **WECC Reliability Criteria TPL-001-WECC-CRT-4**
(Western Electricity Coordinating Council)
- The remaining plans of service provide needed equipment upgrades or improve Operational or Maintenance Flexibility

Draft Plans of Service (2024 Planning Cycle)

- BPA's 2024 System Assessment for the load areas was based primarily on current and some qualified past studies as allowed by the NERC TPL Reliability Standard
- The transmission system was divided into 27 load service areas and 16 paths/interties
- There were no new corrective action plans (plans of service) identified from the 2024 System Assessment
- Several of the projects identified from previous System Assessments have updated schedules as shown on the following slides

Bold text indicates a schedule or status change as of 11/8/2024 compared with last year's update. ISDs are subject to change

Project Updates

Seattle/Tacoma Area

Project

Monroe-Novelty 230 kV Line Upgrade

Schedule

2026

Centralia/Chehalis

Project

Silver Creek 230 kV Bus Sectionalizing Breaker Addition

Schedule

2027

SW Washington Coast Area

Project

Cosmopolis-Satsop Park 115 kV No.1 Upgrade

- Upgrade the line to 100 deg C MOT

Schedule

2027

Satsop Park-South Elma 115 kV No.1 Upgrade

- Upgrade the line to 100 deg C MOT

2027

Project Updates

Portland Area

<u>Project</u>	<u>Schedule</u>
Troutdale 230 kV Series Bus Sectionalizing Breaker Addition	2026
Keeler 230 kV Bus Sectionalizing Breaker Addition	2028
Keeler 500 kV Bus Reconfiguration and 500/230 kV TX-2	2029
Pearl-Sherwood 230 kV Line Reconfiguration and Pearl 230 kV Bus Sectionalizing Breaker Addition	2027
Carlton 230 kV and 115 kV Breaker Additions (O&M Flexibility)	2025
Forest Grove-McMinnville 115kV Line Upgrade (O&M Flexibility)	2024
St Johns 230/115 kV Transformer Tie Line Upgrade	2026

Project Updates

Eugene Area

Project

Alvey-Dillard Tap 115 kV Line Rebuild (O&M Flexibility)

Schedule

2028

Olympic Peninsula Area

Project

Kitsap 115 kV Shunt Capacitor Relocation

Shelton-Fairmount 115 kV No.1 Line Upgrade

Schedule

2026

2026

Project Updates

Mid-Columbia Area

Project

Columbia-Rapids 230 kV Line Construction

Columbia 230 kV Bus Tie and Bus Section Breaker Addition
(O&M Flexibility)

Schedule

In-service

In-service

Walla Walla Area

Project

Tucannon River 115 kV Shunt Reactor (15 Mvar) Addition

Schedule

In-Service

Project Updates

Umatilla Area

Project

Morrow Flat 230 kV Shunt Reactor (40 Mvar) Addition

Schedule

2025

Southeast Idaho/Northwest Wyoming Area

Project

Spar Canyon 230 kV Reactor (25 Mvar)
Addition (O&M Flexibility)

Schedule

In-Service

Project Updates

North Idaho Area

Project

Troy 115 kV Shunt Capacitor (12.6 Mvar) Addition

Schedule

2032

South Oregon Coast Area

Project

Toledo 230 kV and 69 kV Bus Tie Additions (O&M Flexibility)

Wendson 115 kV Bus Tie Breaker Addition (O&M Flexibility)

Schedule

2024

2024

Okanogan

Project

Grand Coulee-Foster Creek 115 kV Line Upgrade

Schedule

Completed

Project Updates

Spokane/Colville/Boundary Area

Project

Bell-Boundary (Sacheen) 230 kV No.1 Upgrade

Schedule

2027

West of Cascades North (WOCN) Path

Project

Schultz-Raver 500 kV No. 3 and No. 4 Series Capacitors

Schedule

2026

Significant Planned Projects

Schultz-Wautoma Series Capacitors

Description

This project was necessary to increase South of Allston (SOA) available transfer capability and improve operations and maintenance flexibility for SOA and I-5 corridor paths. The project added a series capacitor on the Schultz-Wautoma 500 kV line at Wautoma Substation.

Expected Energization

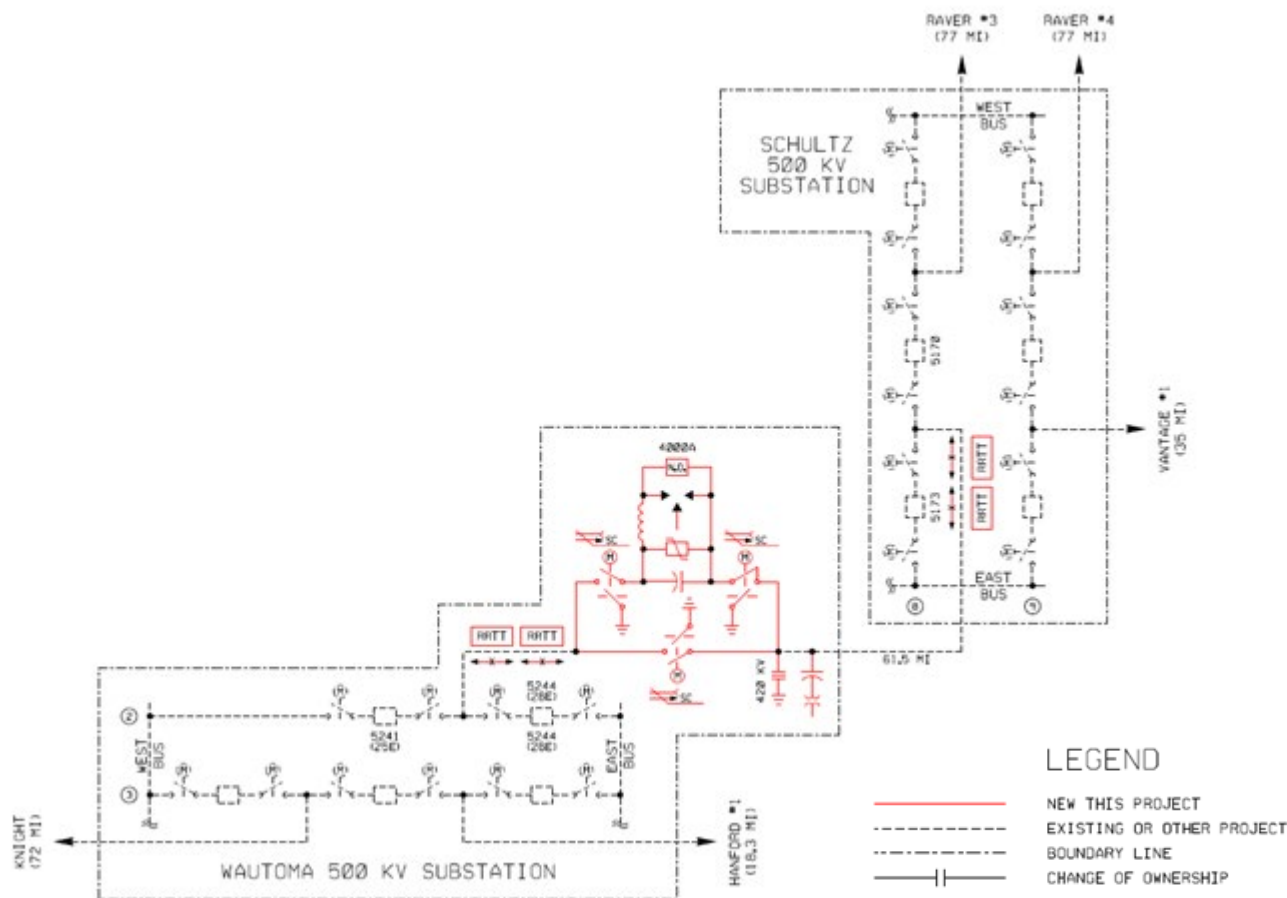
In-service

Estimated Cost

\$49,000,000

Significant Planned Projects

Schultz-Wautoma Series Capacitors



Significant Planned Projects

Buckley Air Insulated Substation

Description

Buckley 500 kV conventional Air Insulated Substation(AIS) is a permanent replacement of a Buckley Gas Insulated Substation(GIS). Currently, the GIS is bypassed by a temporary three terminal emergency bypass until a new AIS is built. Buckley AIS will be configured in a double bus, double breaker layout using a breaker and half scheme that will provide opportunities for future system expansion.

Expected Energization

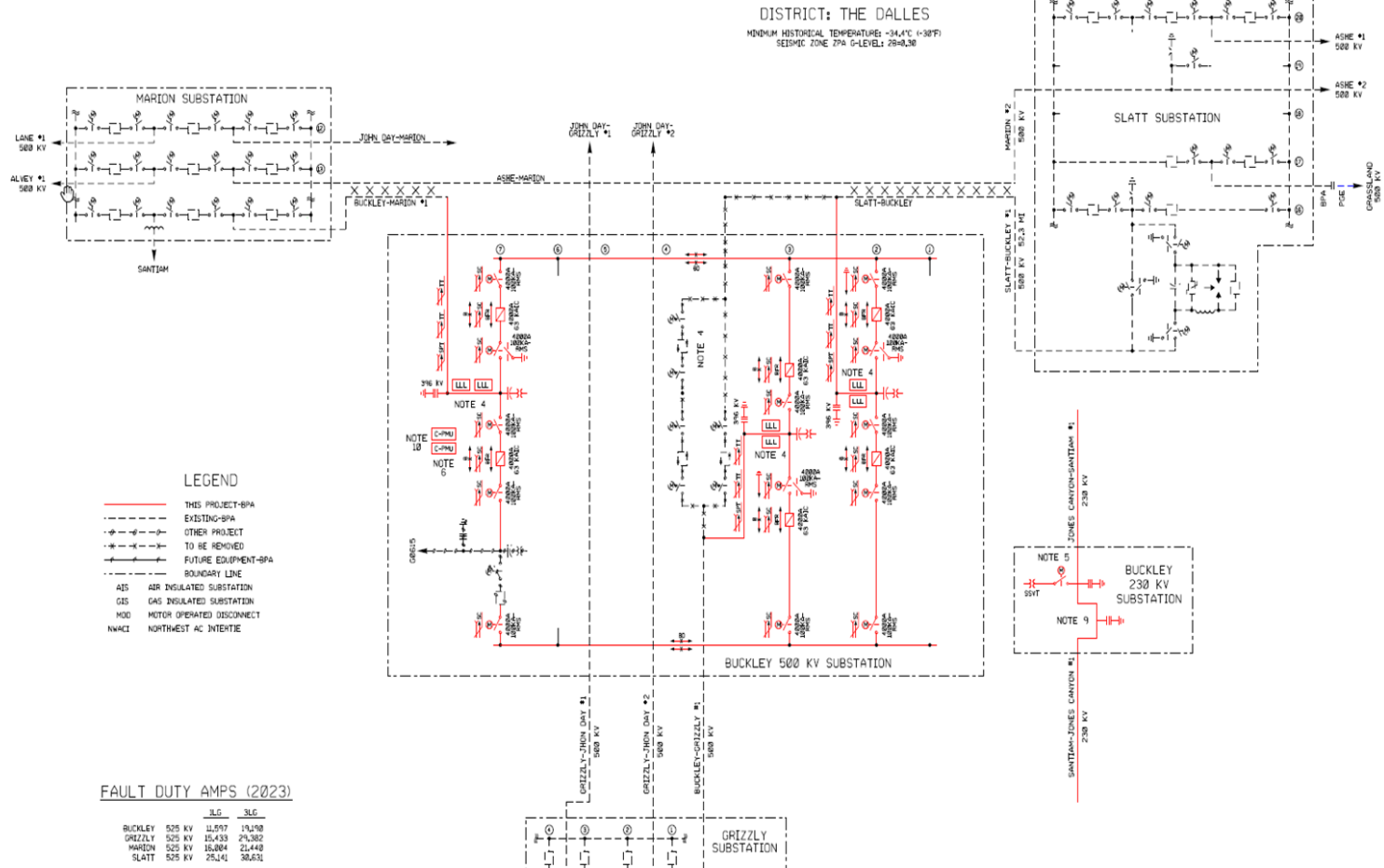
2027

Estimated Cost

\$132,100,000

Significant Planned Projects

Buckley Air Insulated Substation



Significant Planned Projects

Longhorn Substation

Description

The Longhorn 500 kV substation is a new 500/230 kV substation about 3 miles east of the Coyote Springs generating plant with McNary – Coyote 500 kV line looped in and out. Proposed to interconnect generation and load in the Boardman and Umatilla area. Will also be a west terminus for B2H 500 kV Line project. In construction phase.

Expected Energization

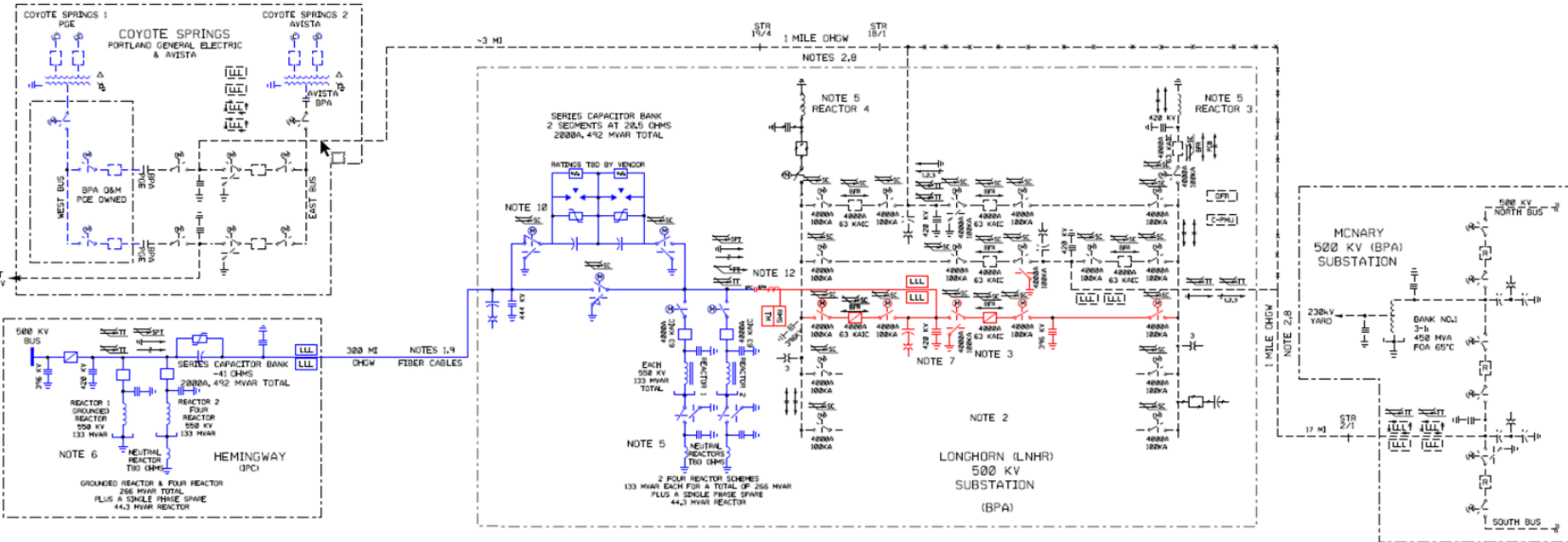
End of 2025

Estimated Cost

\$200,000,000

Significant Planned Projects

Longhorn Substation



LEGEND

- NEW THIS PROJECT
- - - - - EXISTING OR OTHER PROJECT
- — — — — BOUNDARY LINE
- || — CHANGE OF OWNERSHIP

Significant Planned Projects

Six Miles Canyon Substation

Description

Six Miles Canyon 500 kV substation is a new 500/230 kV substation on mile 56 of the Ashe – Slatt 500 kV line, with the line looped in and out of the substation. Proposed to interconnect UEC load in the West of Boardman area. In scoping phase.

Expected Energization

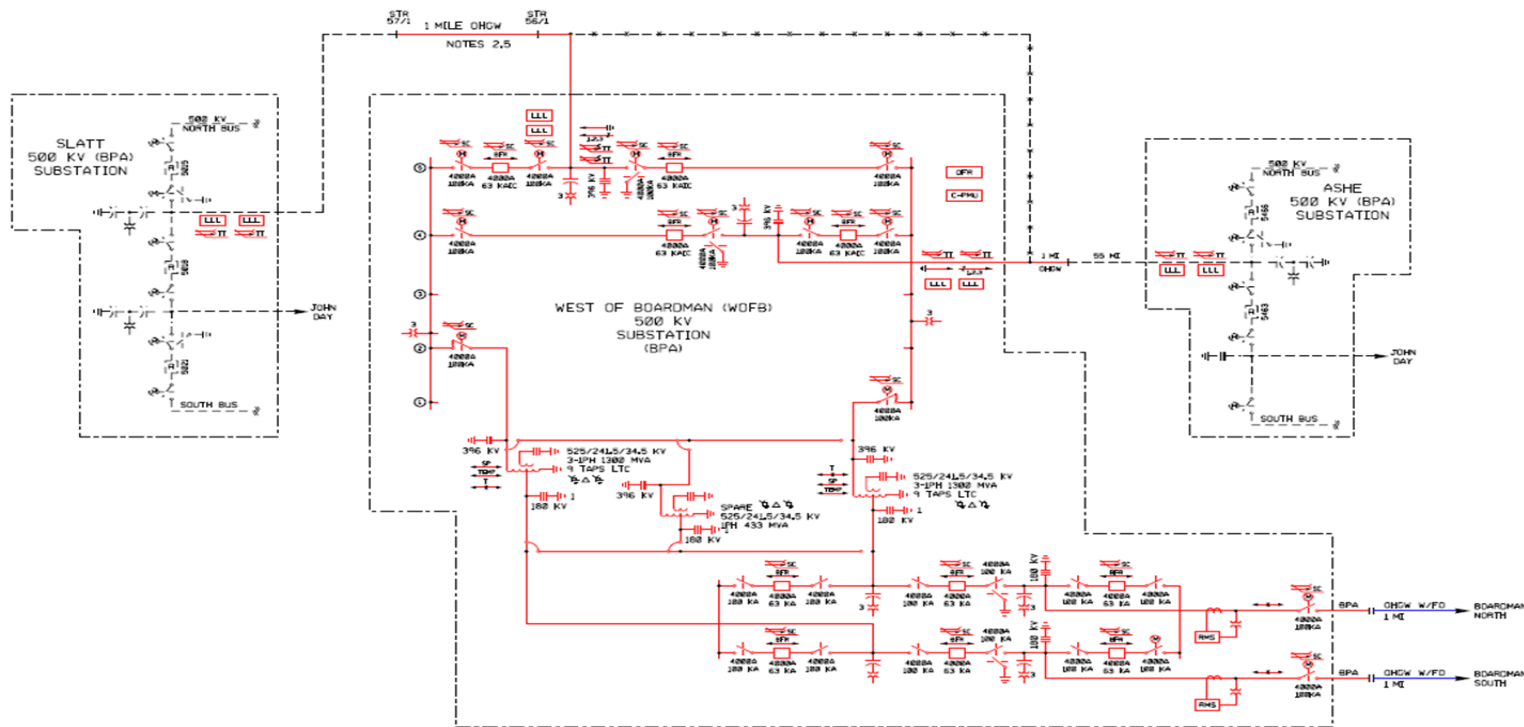
End of 2027

Estimated Cost

\$284,000,000

Significant Planned Projects

Six Miles Canyon Substation



- LEGEND**
- NEW THIS PROJECT
 - - - - - EXISTING OR OTHER PROJECT
 - - - - - BOUNDARY LINE
 - ||— CHANGE OF OWNERSHIP

Significant Planned Projects

Tri-Cities Load Area Projects

Description

The following projects are planned for the Tri-Cities Load Area:

- McNary-Paterson Tap 115 kV Line
- Red Mountain–Horn Rapids 115 kV Line Reconductor
- Richland-Stevens Drive 115 kV Line
- South Tri-Cities Reinforcement

McNary-Paterson Tap – This project adds a new 115 kV bay at McNary and a parallel 115 kV line from McNary to Paterson Tap (2 miles).

Red Mountain-Horn Rapids 115 kV Line Reconductor: This project will reconductor the Red Mountain–Horn Rapids 115 kV section of BPA’s Red Mountain–White Bluffs 115 kV transmission line (4 miles).

Richland-Stevens Drive – This project constructs a new 115 kV line to create a double-circuit from Richland to Stevens Drive switching station (3 miles).

South Tri-Cities Reinforcement - This project constructs a 500 kV substation on the Ashe-Marion #2 500 kV line with a 500/115 kV transformer, and a 115 kV line to Badger Canyon (17 miles).

Significant Planned Projects

Tri-Cities Load Area Projects – continued

McNary-Paterson Tap is presently in the construction phase.

Estimated Schedule: Spring 2025

Estimated Cost: \$15,000,000

Red Mountain-Horn Rapids 115 kV Line Reconductor is an approved project in design. The estimated project cost and schedule will be refined as the project progresses through design.

Estimated Schedule: Summer 2025

Estimated Cost: \$3,600,000

Richland-Stevens Drive 115 kV Line is an approved project in design. The estimated project cost and schedule will be refined as the project progresses through design.

Estimated Schedule: Spring 2027

Estimated Cost: \$12,500,000

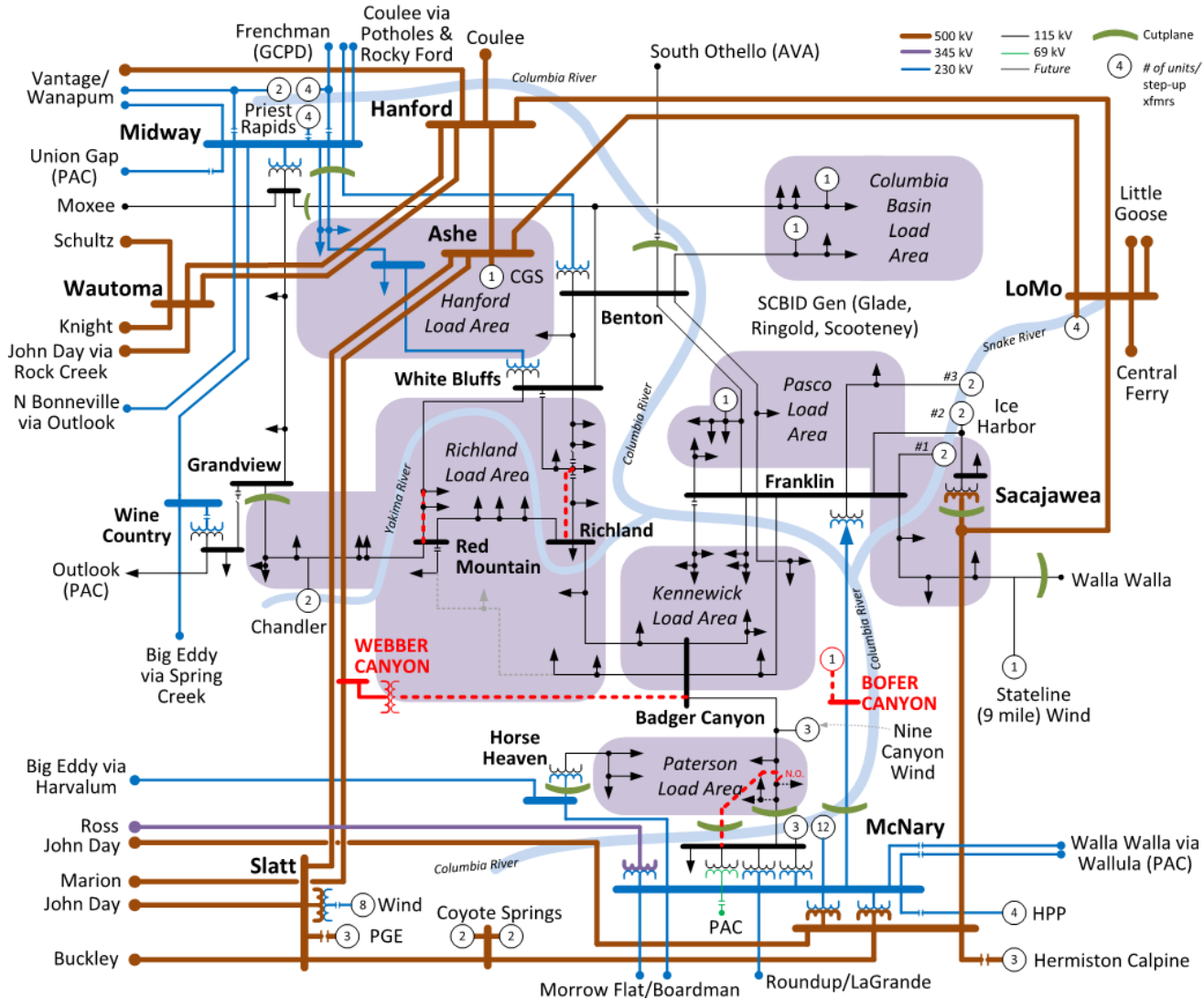
South Tri-Cities Reinforcement is an approved project in design. The estimated project cost and schedule will be refined as the project progresses through design.

Estimated Schedule: 2027

Estimated Cost: \$107,000,000

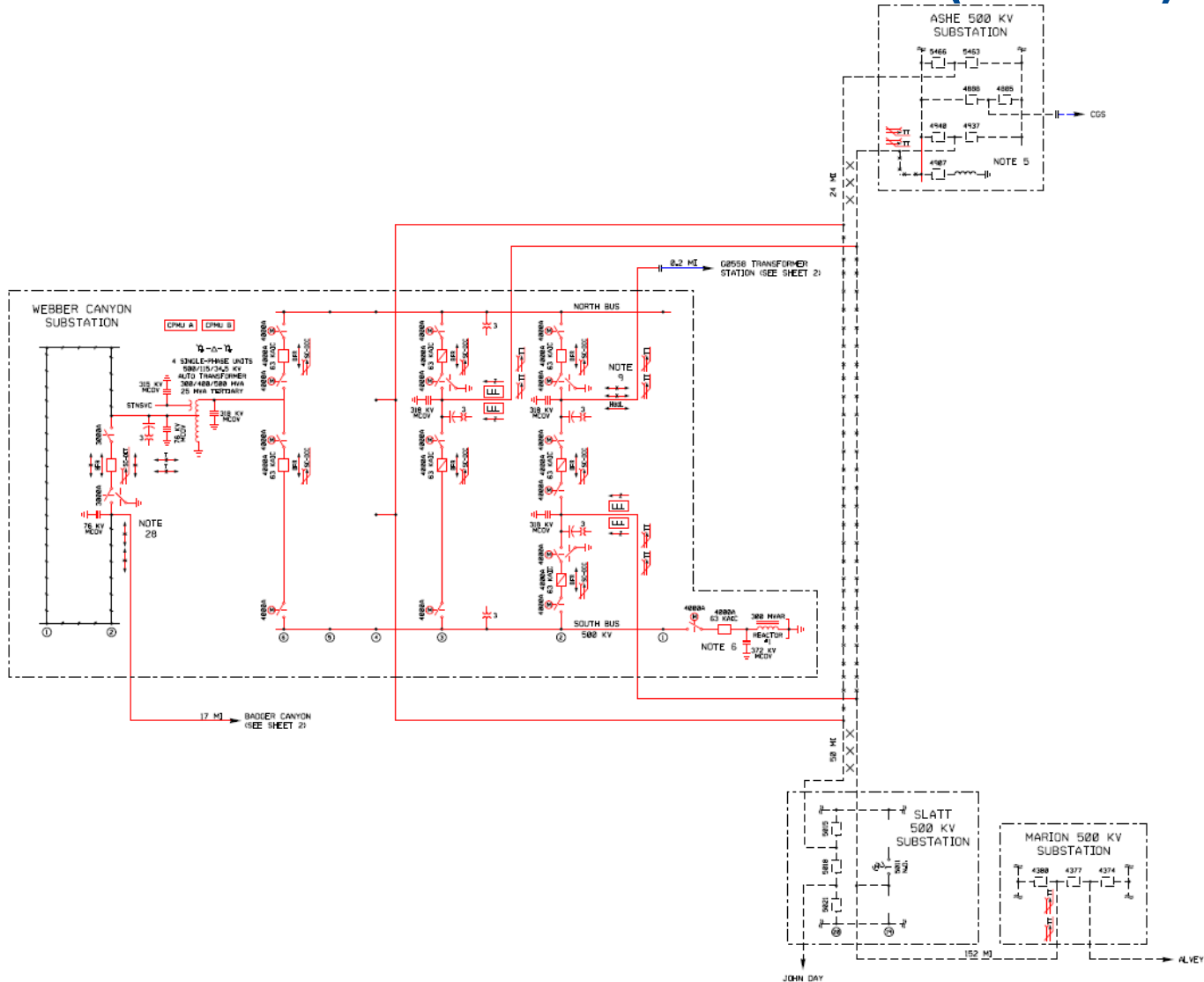
Significant Planned Projects

South Tri-Cities Reinforcement



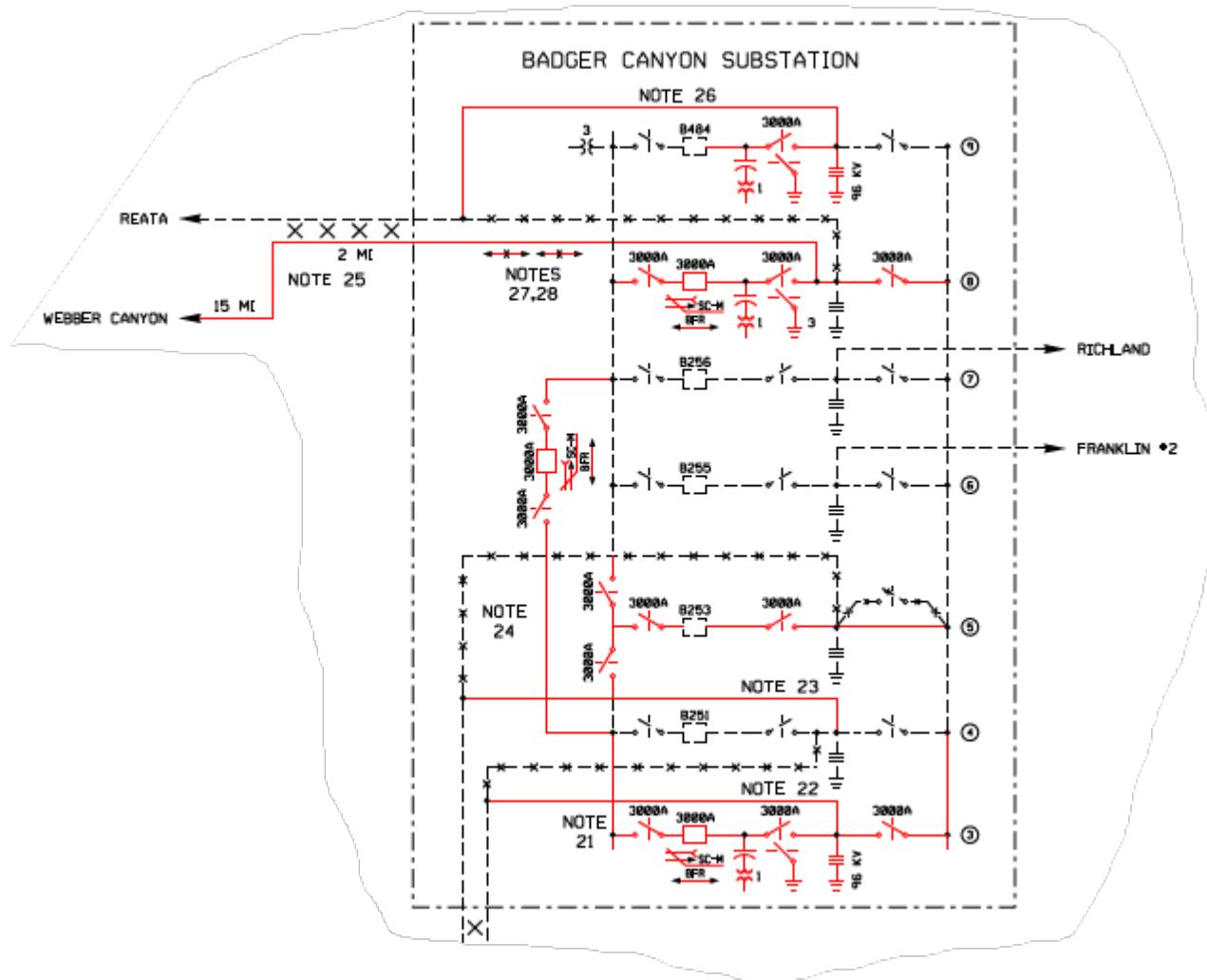
Significant Planned Projects

South Tri-Cities Reinforcement (sheet 1)



Significant Planned Projects

South Tri-Cities Reinforcement (sheet 2)



Next Steps

- **Update the BPA Transmission Plan** based on the 2024 planning cycle and post by the end of December 2024.
- **Jan.1, 2025 – Begin 2025 Attachment K Planning Cycle**

Sign up to participate in future meetings or receive additional information by:

Filling out the Participation Request form on BPA's Planning Process website and sending it via e-mail to:

PlanningParticipationRequest@bpa.gov