



Annual WPP Member Meeting

January 24th, 2025

Today's Agenda

- » 09:00 AM Welcome & Agenda Overview
- » 09:05 AM Board Introduction and Update
- » 09:20 AM Corporate Year in Review
- » 09:50 AM 10-Minute Break
- » 10:00 AM WPP Programs Intro
- » 10:05 AM Reserve Sharing Group
- Western Frequency Response Sharing Group
- Operating Committee
- Operations Training Subcommittee
- » 10:40 AM Coordinating Group
- » 10:45 AM Western Resource Adequacy Program
- » 11:30 AM Regional Transmission Planning Services
- WestTEC
- » 11:50 AM The Year Ahead
- » 12:00 PM Lunch

Board of Directors

Board of Directors: Intro



Michelle
Bertolino
Treasurer



Doug
Howe



Bill
Drummond
Chair



Susan
Ackerman
Secretary



Andy
Ott
Vice Chair

Board of Directors: Update

Composition: Director Andy Ott's renomination was recommended by the WPP Nominating Committee, a committee comprised of individuals from WPP stakeholder sectors, and he was renominated for a three-year term in December 2024.

Leadership: In 2024, the WPP Board of Directors elected to keep the same officers as the prior year. The next Board officer elections will be held in December 2025.

Board of Directors: 2024 Focus

Finance: The Board oversees all of WPP and in 2024 provided a focus on supporting Sarah Edmonds and the finance team through staffing and organizational changes.

WRAP Oversight: Different from other WPP programs, the Board has ultimate policy oversight of the WRAP program and in 2024 played an active role in its continued development, granting approvals for 20 Planning Reserve Margins, Business Practice Manuals, and Non-Task Force Proposals.

Board of Directors: Wrap Approvals

1. Planning Reserve Margin (PRMs)

» Extra capacity of resources needed to handle high demand and factors like resource outages or less available power.

» Approved: 3 PRMs

2. Business Practice Manuals (BPMs)

» Provide guidance and details to support the execution of the Tariff's rules, requirements, and procedures.

» Approved: 15 BPMs

3. Non-Task Force (NTFPs)

» Suggested change to the Tariff or BPMs that may be implemented without a full Proposal by a PRC sub-committee (a Task Force).

» Approved: 1 NTFPs

4. Expedited Proposals (EP)

» A RAPC determined amendment to the Tariff or BPMs requiring expedited Board review due to Exigent Circumstances.

» Approved: 1 EP

Board WRAP Approvals in 2024

2024 Q1

January 31, 2024

1. PRM Approval:

- Summer 2025

March 7, 2024

2. BPM Approvals:

- 104: Capacity Critical Hours
- 107: FS Deficiency Charge
- 108: FS Submittal Process
- 304: Amendments to Schedule 1 & WRAP Agreement

2024 Q2

June 13, 2024

1. PRM Approval:

- Winter 2025-2026

2. BPM Approvals:

- 203: Program Sharing Calc. Inputs
- 207: Settlement Process
- 401: New Participant Onboarding
- 402: Protection of Commercially Sensitive and Confidential Information

2024 Q3

September 19, 2024

1. EP Approval:

- 2025-EP-1 Revised Transition Plan

2. NTFP Approval:

- 2024-NTFP-1: Tariff Corrections allowing BPM approvals

3. BPM Approvals:

- 102: FS Reliability Metrics
- 103: FS Capacity Requirement
- 106: Qualifying Contracts
- 202: Participant Sharing Calc. Inputs
- 204: Holdback Requirement
- 205: Energy Deployment
- 209: Energy Delivery Failure Charge

2024 Q4

December 12, 2024

1. PRM Approval:

- Summer 2026

9/19/14 Marked Completion of all BPM Approvals

Corporate Year in Review

WPP Leadership Team



Rebecca Sexton
**Director of
Strategic
Engagement**



Ryan Roy
**Chief Operating
Officer**



Sarah Edmonds
**President &
CEO**



Eric Campbell
**Chief Financial
Officer**



Lisa Hardie
**General
Counsel**

Strategic Planning Process



5-Year Goals & Outcomes



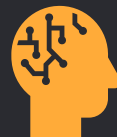
Be a Trusted Partner to Member Utilities



Enhance and Support Regional Reliability and Resource Adequacy



Enable Regional Transmission Planning That Supports Reliability



Be a Trusted Source of Information for Members

Primary Strategic Areas of Focus

- Strengthen our effectiveness as a member-driven organization

Strengthen

- Build organizational scalability to meet members' present and future needs

Build

- Effectively execute programs and services that bring significant value to our members

Execute

Moving forward, there is a significant opportunity for WPP to continue to add value to members and the Western region, setting the stage for a strong, high-value partnership in the next five years.

Questions?

10-Minute Break

WPP Programs Intro

Reserve Sharing Group

Thomas Bagnell, RSGC Chair

January 24, 2025

What is a Reserve Sharing Group

- » A group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each Balancing Authority's use in recovering from contingencies within the group.
- » As permitted by NERC and WECC standards, Participating Balancing Authorities within the region have instituted a Reserve Sharing Program for Contingency Reserve.
- » By sharing Contingency Reserve, participants are entitled to use not only their own "internal" reserve resources, but to call on other participants for assistance if internal reserve does not fully cover a contingency or disturbance.

RSG Support Staff and Leadership

Main RSG Support Staff



CHAREE DIFABIO
*RSGC & WFRSG
Manager*



JUSTIN COCHRAN
Application Engineer



HARLAN TALLMAN
*Associate Operations
Analyst*



RYAN COLYAR
*Power Operations
Analyst I*

Additional RSG Support Staff



KEVIN CONWAY
*Operations
Manager*



JAMES KIRK
Software Developer

RSG Leadership



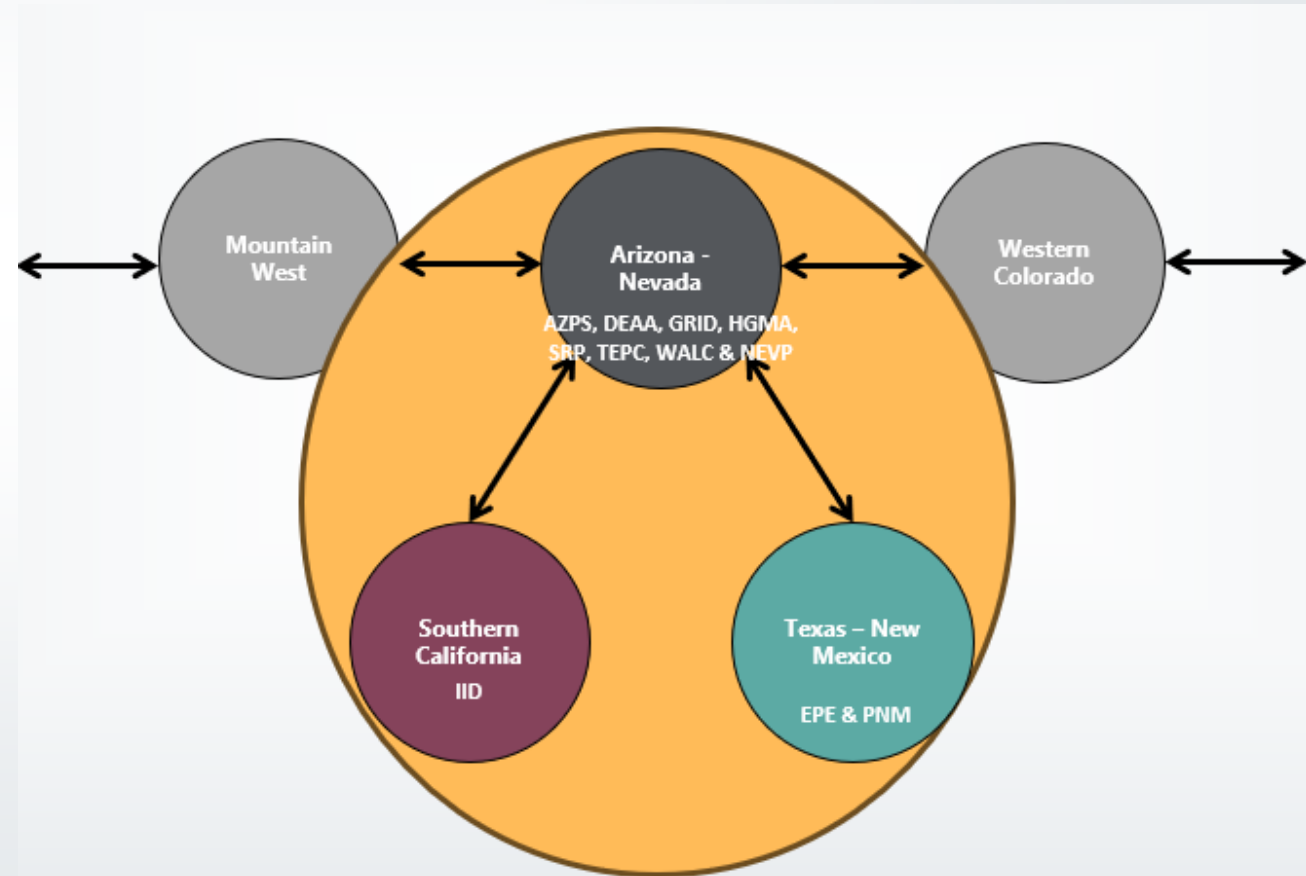
Thomas Bagnell
Operations Engineer
PSE | 425-275-2322
thomas.bagnell@pse.com



Chris McDarment
System Operations Manager
CHPD | 509-661-4682
chris.mcdarment@chelanpu...

Membership - Newest Participants

- » Implementation was smooth with no major issues
- » Operational Learning Curves
 - » Timely requests
 - » Timely reporting
 - » Performance Expectations for ACE Recovery



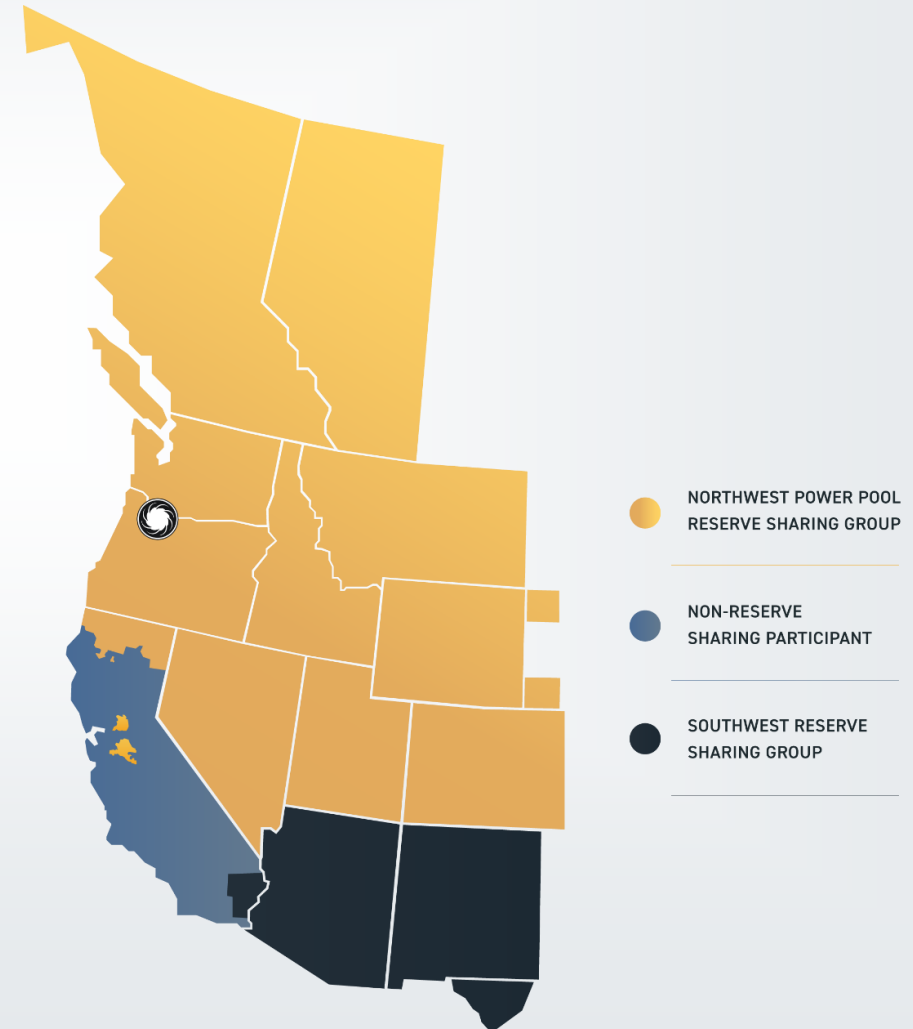
NWPP RSG Footprint

» Non-Reserve Sharing Group Participants:

» CAISO

» LADWP

» CENACE




Consolidation of Balancing Authority Areas



- » **Q2 2025** - GWA footprint expansion with WWA resources, retirement of WWA
- » **Q3/Q4 2025** GWA footprint expansion with addition of MATL
- » **Q4 2025** new Battery Energy Storage System -75MW
- » **Q2 2026** Begin participation in Western EIM



- » WAUW and WACM consolidation into  **SPP** *Southwest Power Pool*
 - » SPP Western Balancing Authority Area
 - » First quarter 2026

Goals

- » Promote reliability within the Western interconnection.
- » Continue strengthening RSG Committee Representative knowledge and engagement.
- » Monitor the activities that impact the NWPP Reserve Sharing Program with regards to compliance and operations.
- » Work on the retirement of BAL-002-WECC-3 and be prepared for the changes.

Questions?

WPP Email:

nwpprsg@westernpowerpool.org

Thomas Bagnell, Chair

Thomas.bagnell@pse.com



Western Frequency Response Sharing Group

Michael Jang, WFRSG Chair

January 2025

TALKING POINTS

**Frequency
Impact**

**WFRSG
Intent**

**WFRSG
Members**

**WFRSG
Support**

**WFRSG
Highlights**

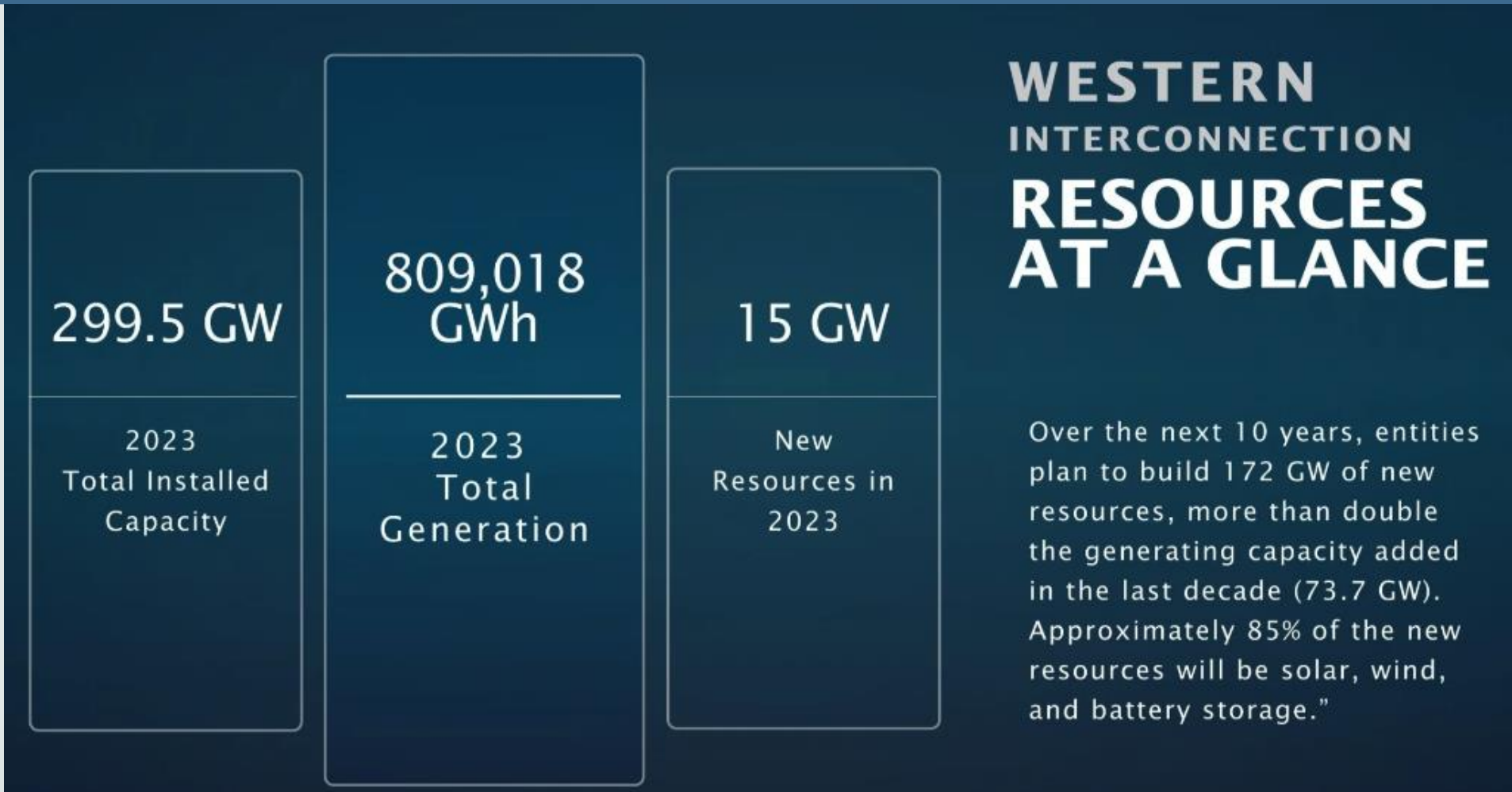
**WFRSG
Future**

**WFRSG
Review 2024**

Frequency Impacts



The Impacts Continue



BAL-003-2 – Frequency Response and Frequency Bias Setting

A. Introduction

1. **Title:** Frequency Response and Frequency Bias Setting
2. **Number:** BAL-003-2
3. **Purpose:** To require sufficient Frequency Response from the Balancing Authority (BA) to maintain Interconnection Frequency within predefined bounds by arresting frequency deviations and supporting frequency until the frequency is restored to its scheduled value. To provide consistent methods for measuring Frequency Response and determining the Frequency Bias Setting.
4. **Applicability:**
 - 4.1. **Functional Entities:**
 - 4.1.1. **Balancing Authority**
 - 4.1.1.1. Balancing Authority is the responsible entity unless the Balancing Authority is a member of a Frequency Response Sharing Group, in which case, the Frequency Response Sharing Group becomes the responsible entity.
 - 4.1.2. **Frequency Response Sharing Group**
5. **Effective Date:** See Implementation Plan for BAL-003-2.

B. Requirements and Measures

- R1. Each Frequency Response Sharing Group (FRSG) or Balancing Authority that is not a member of a FRSG shall achieve an annual Frequency Response Measure (FRM) (as calculated and reported in accordance with Attachment A) that is equal to or more negative than its Frequency Response Obligation (FRO) to ensure that sufficient Frequency Response is provided by each FRSG or BA that is not a member of a FRSG to maintain Interconnection Frequency Response equal to or more negative than the Interconnection Frequency Response Obligation. *[Risk Factor: High][Time Horizon: Real-time Operations]*
- M1. Each Frequency Response Sharing Group or Balancing Authority that is not a member of a Frequency Response Sharing Group shall have evidence such as dated data plus documented formula in either hardcopy or electronic format that it achieved an annual FRM (in accordance with the methods specified by the ERO in Attachment A with data from FRS Form 1 reported to the ERO as specified in Attachment A) that is equal to or more negative than its FRO to demonstrate compliance with Requirement R1.

WFRSG Intent

- » Support Federal Level Compliance - NERC Reliability Standard
- » Applicable - Balancing Authority
- » Requirement – Magnitude of Frequency Response

WFRSG Members



WFRSG Support Staff

WFRSG Leadership



Michael Jang
Chief Dispatcher Generat...
SCL | 206-471-0335
michael.jang@seattle.gov



Wei Shao
BANC | 916-732-6885
wei.shao@smud.org



CHAREE DIFABIO
*RSGC & WFRSG
Manager*

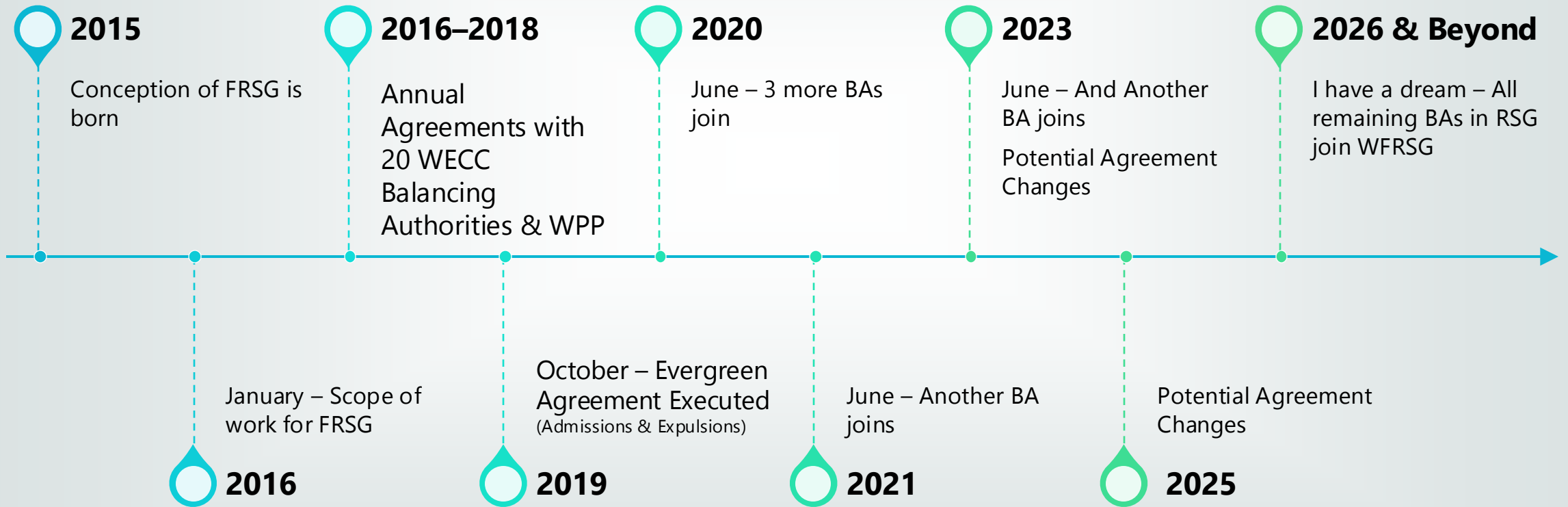


RYAN COLYAR
*Power Operations
Analyst I*



KEVIN CONWAY
*Operations
Manager*

WFRSG Highlights



WFRSG Future – Interested BAs



IID

- Imperial Irrigation District



Capital Power

- Arlington Valley (DEAA)
- New Harquahala Generation Company (HGMA)



PNM

- Public Service of New Mexico



Others

- APS, GRIDS, TEPC, WALC, SPP

WFRSG Review 2024 – Operating Year

- » Year to Date - WFRSG passing all events.**
- » The WFRSG meets next on 3/3/2025 to finalize Operating Year 2024 compliance data.**

MIC DROP!





Email:

Michael Jang, WFRSG Chair Michael.Jang@seattle.gov

Wei Shao, WFRSG Vice Chair Wei.Shao@smud.org

Charee DiFabio, WPP charee.difabio@westernpowerpool.org

OPERATING COMMITTEE

January 24, 2025

**Adam Labuga, Turlock Irrigation District (TID)
Operating Committee Chair**

OC has accomplishments for 2024

- » Additional members
 - » Expanding the WPP footprint across the Western Interconnection
- » Retirement of the Energy Emergency Plan
 - » Streamline and focalize efforts of WPP Staff
- » Adoption of Goals
 - » Aligns with Membership Agreement
 - » Each goal is tied to an objective to ensure measurability.
- » Improved meeting efficacy
 - » More than just informational
 - » Improved Agendas to foster engagement
- » Reinforce encouragement for Source.Training
 - » Significant benefit
- » Approval of new WPP Operating Committee Logo

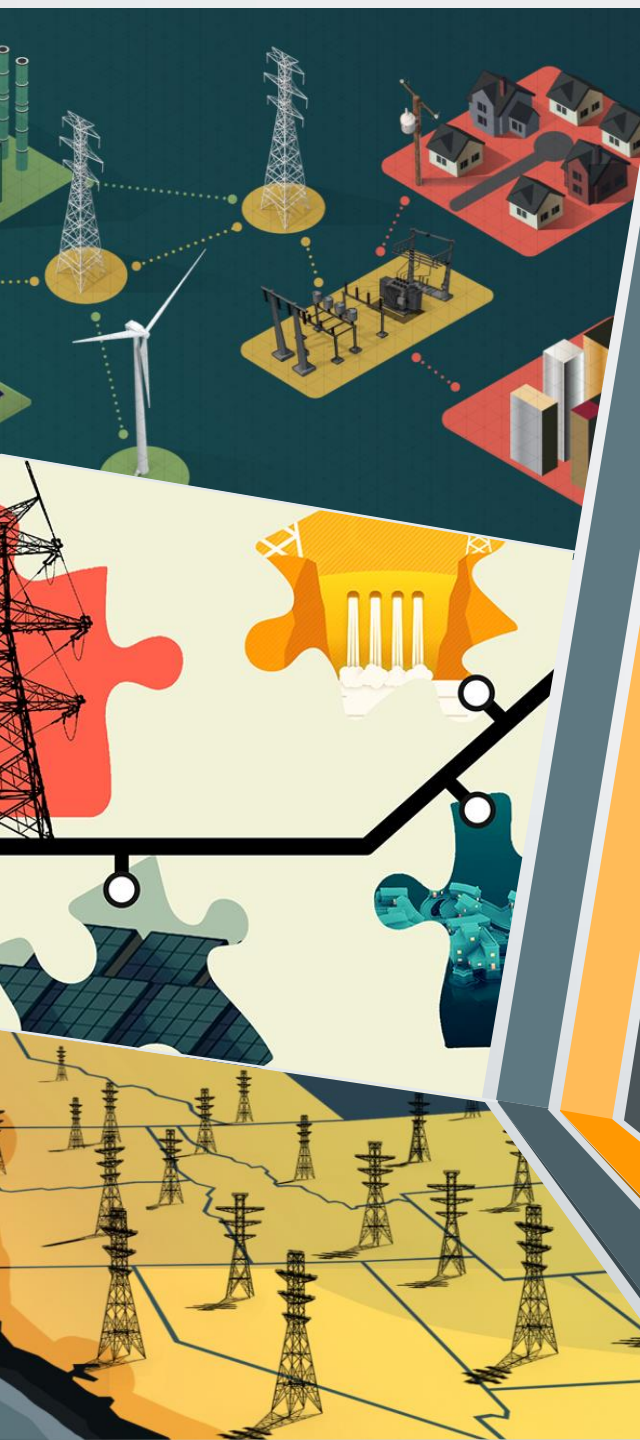
OC hopes to accomplish in 2025

- » Adoption of Charter
 - » Ensures committee members understand mission, goals, and responsibilities.
- » Minimize “information only” agendas
 - » Identify opportunities for member engagement
 - » Utilize industry expertise and knowledge.
- » Improve efficiency and abridge redundancy
 - » Agenda items and overlap across OC/OTS/RSGC
- » Continued efforts on the NERC Reliability Standards front
 - » BAL-002-WECC-3 Contingency Reserves
- » Follow-through with goals and objectives
 - » Ensures committee focus and scope is in line with the purpose of the OC.

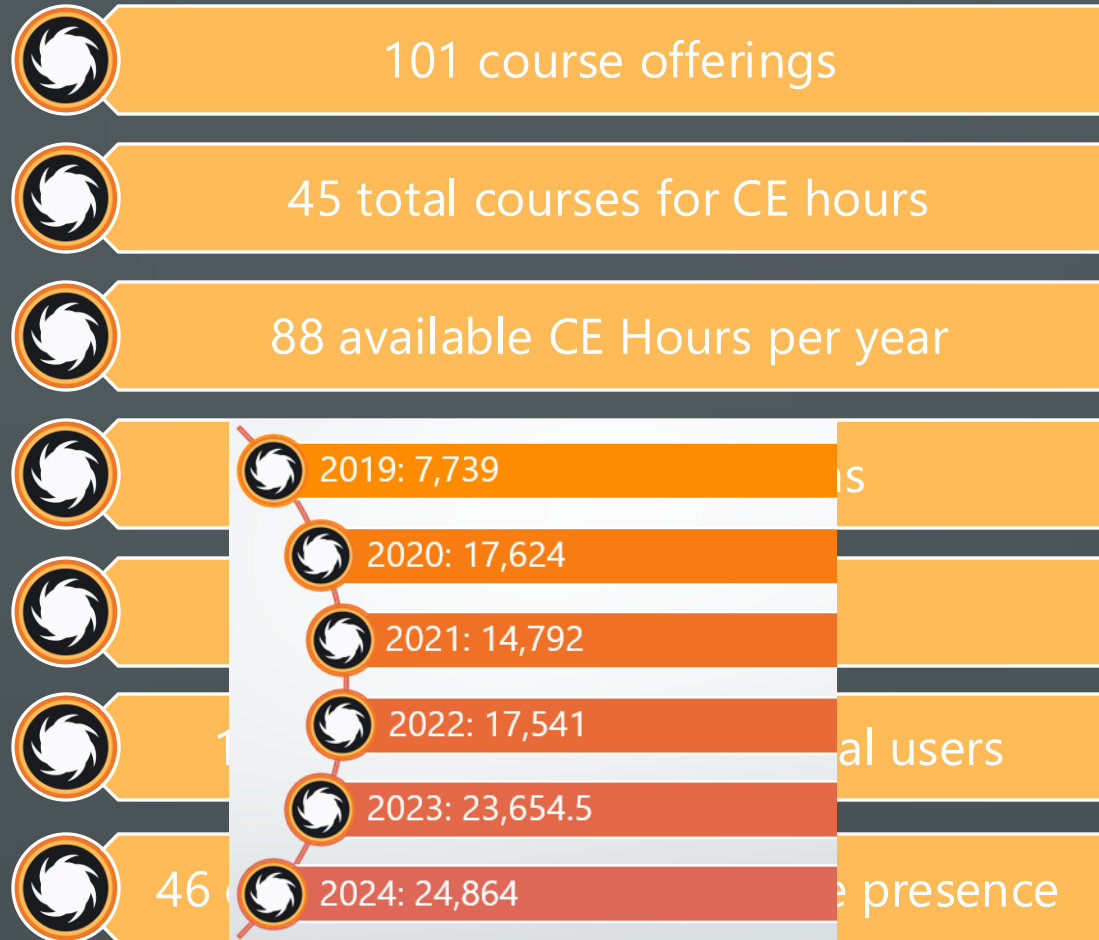


Training Update

December 2024



Source.Training Overview



Training Team



LINDSEY STREITZ

*Graphic
Designer*



CHRIS SAKR

*Senior Creative
Supervisor*



JESSICA ZAMONIS

*Principle Technical
Trainer*



BRIAN COMPTON

*Motion Graphics
Designer*



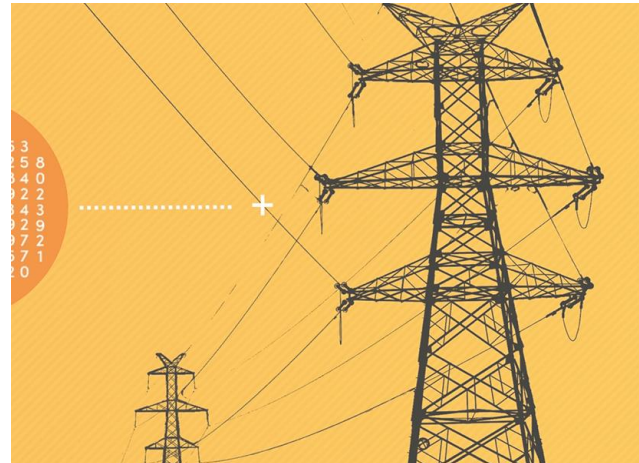
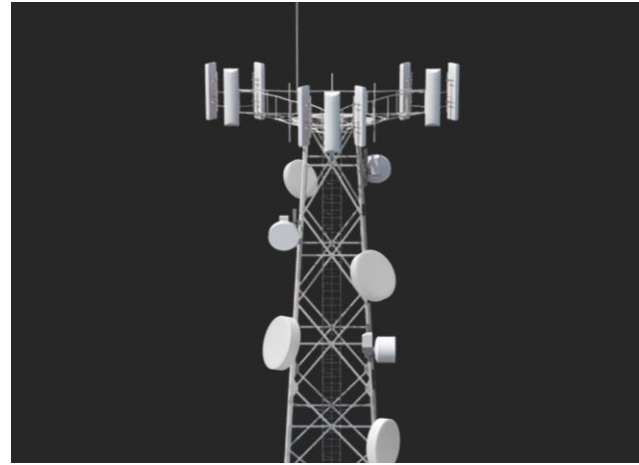
AARON HAMMACK

Technical Trainer



Subscription Updates

- » Added L&T Limited, Pend Orielle, and United Power
- » On-going talks with Colorado Springs, PG&E, SCE, first steps in reaching out to WECC, SDGE and LADWP
- » Presented at the Alberta Real Time Operating Committee(ROC) meeting in December
- » \$46,000 in program upgrades and capital investments paid for with subscriptions.
- » Source.Training platform updates and new features being explored
- » NERC Test Prep Endeavor currently being funded by Subscriptions



NERC TEST PREP



PARTNERED WITH MIKE
TERBRUGGEN



SIGNIFICANT TIME AND
RESOURCE ARE SPENT BY
OUR MEMBERS TO GET
SYSTEM OPERATORS
CERTIFIED AND ABLE TO
WORK THE DESK



TO DATE HAS BEEN FULLY
FUNDED BY THE
SUBSCRIPTION PROGRAM

2024 Content

Reserve Sharing Essentials (2024)

Disturbance Reporting

Reserve Sharing Qualifying Events (2024)

RTA Compliance

RSG General Overview

Reserve Sharing Operations

Reserve Sharing After the Fact

Real-Time Assessments

Operation Limits and Congestion Management

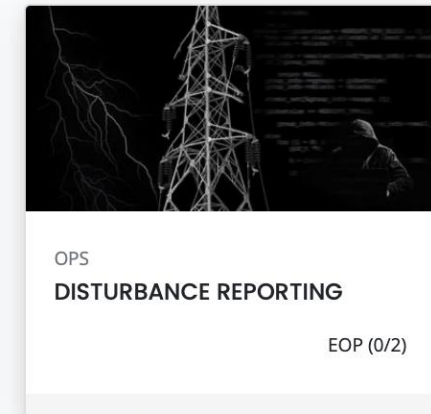
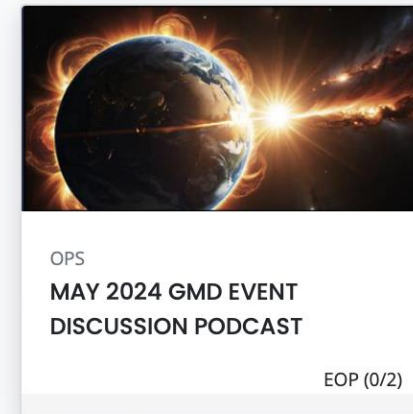
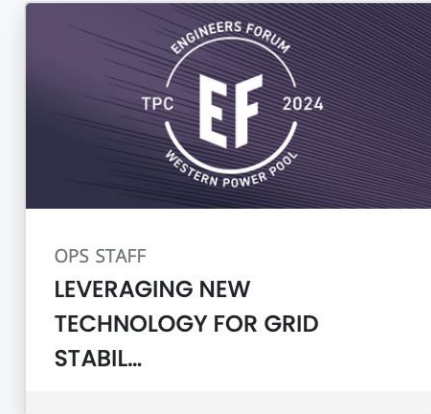
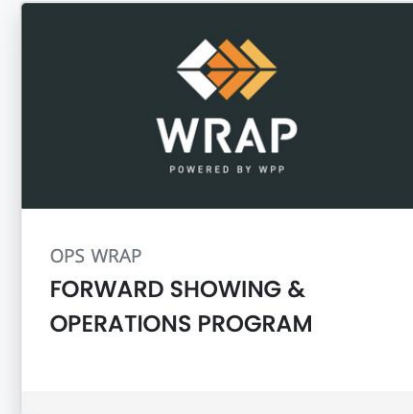
May 2024 GMD Event

NERC Test Prep Exam

Multimedia Support for Key Events and Committees

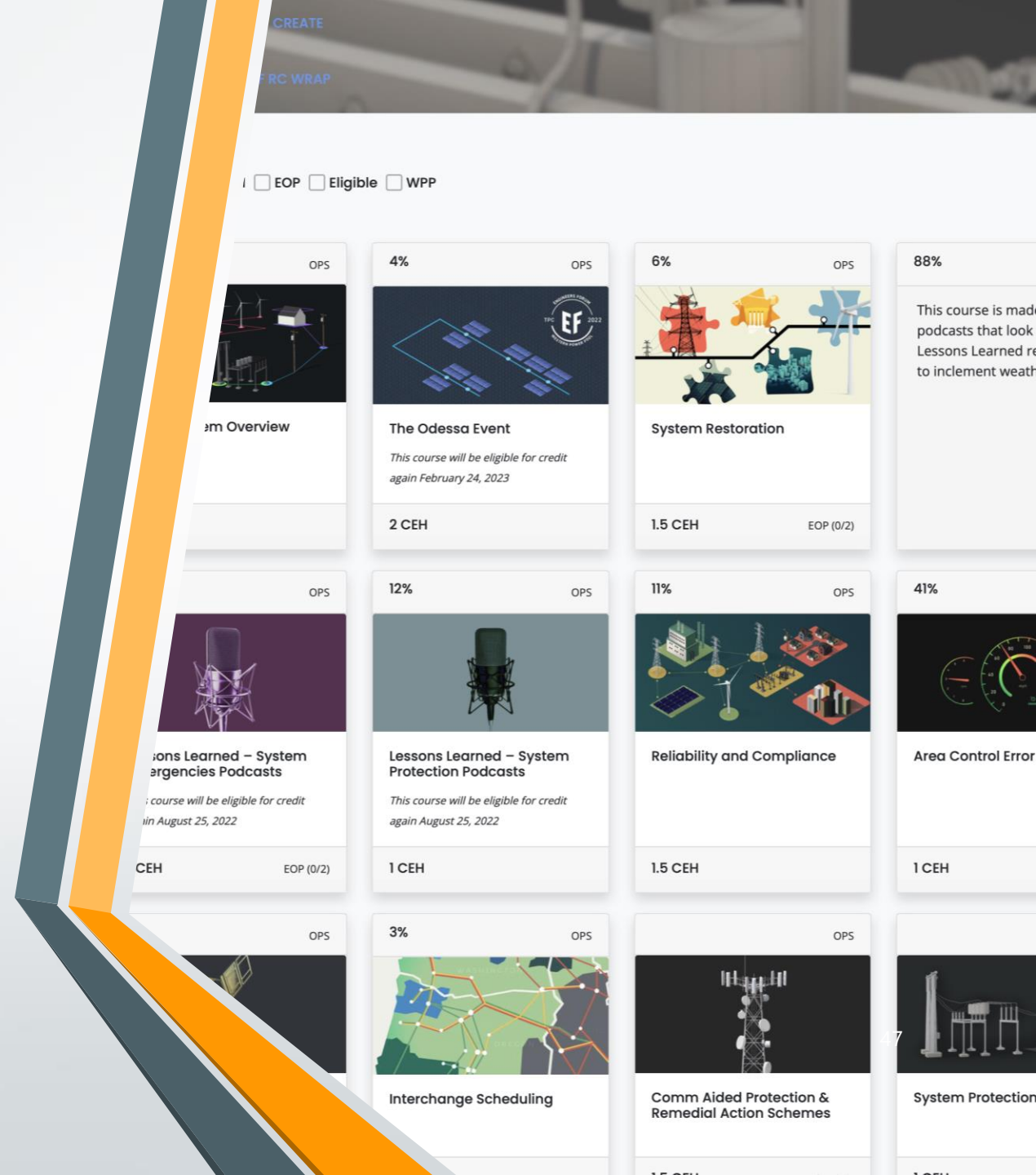
- » **TPC Engineers Forum:** Traveled to Seattle to film Engineers Forum capturing 4 presentations that were produced for source.training.
- » **WRAP:** Produced the Forward Showing informational video series.
- » **WESTEC** Produced a promotional video and currently working on a FAQ video series for WestTec, the first 3 videos in this series were just released.

☐ Eligible ☐ WPP



User Comments

- » **FERC_SOC:** I loved the sarcasm. I smiled several times when the instructors were delivering jokes with straight faces. I love your training material. I can honestly say, WPP online training is the best I have ever seen.
- » **PSO:** As someone who is completely new to the power industry, I felt the instructors did a great job explaining the basics in a way that taught me the things I needed to know without being condescending or talking down to me. Great job! Much better than any training videos in my past career in aviation.
- » **ACE:** Great analogy to driving, well done with the information covered to simplify a complicated subject. Excellent job as always! You guys do the best training courses around!
- » **Blue Cut Fire Podcast:** Great analysis, these guys went into very deep detail about what is really happening with the threat of deep renewable penetration.
- » **Space Weather:** My only recommendation is that you make this available to entities outside of the NWPP. I recently started with a member of the NWPP and this is by far the best course I have had in regards to Space Weather, GMDs, and GIC. Again thanks for what you all do and this was a great course.
- » **Synchronization:** I have been in system operations for almost 40 years, this is some of the best material I have seen in my career.
- » **System Restoration:** This is some of the best online training I have ever done. I was in nuclear training with my company before I transitioned to be an operator, so I have a great respect for high quality training. Your training is top notch. Great Job!



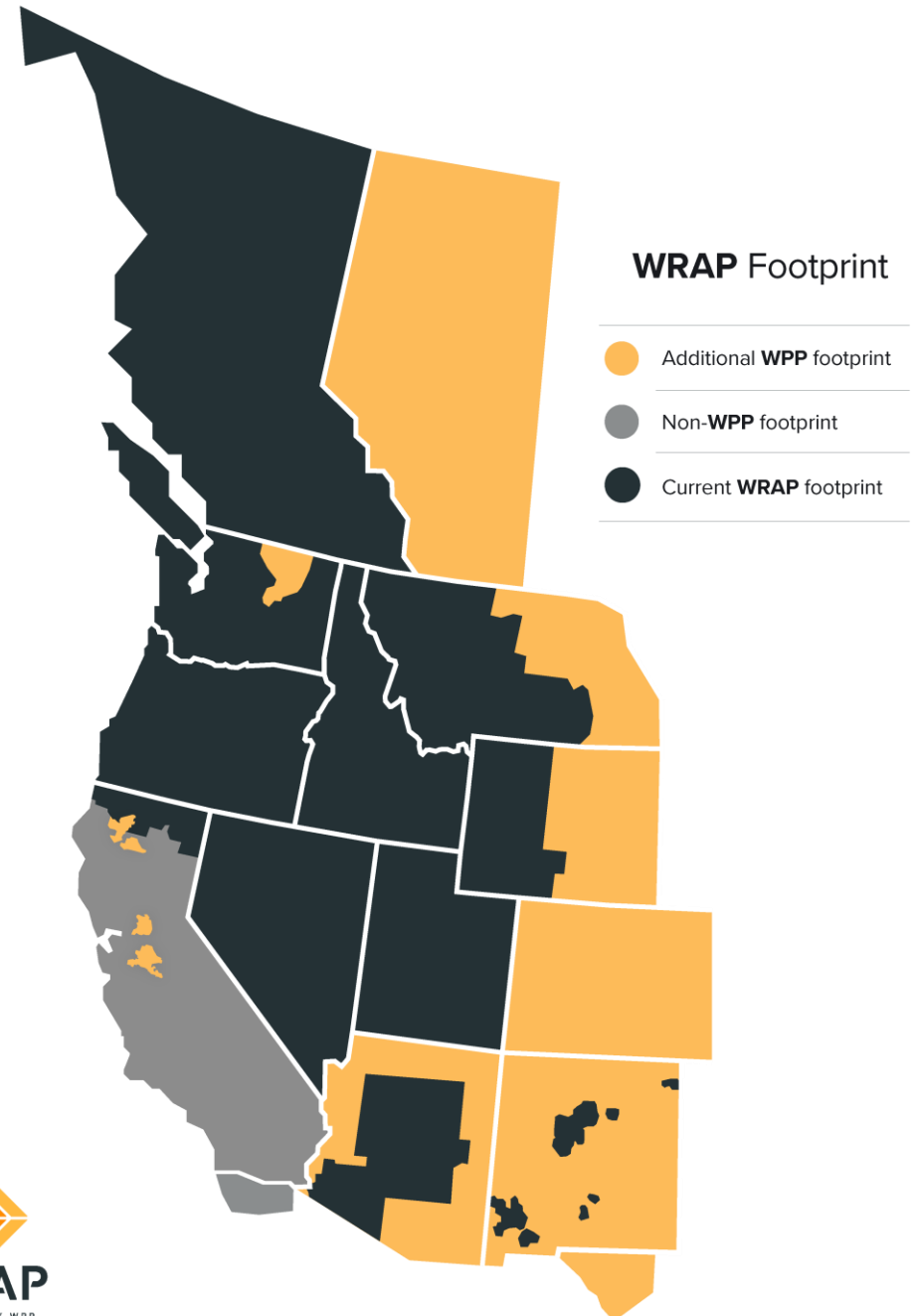
WESTERN RESOURCE ADEQUACY PROGRAM

January 24, 2025

**RA Participant Committee (RAPC) Update
WPP Member Meeting**

CURRENT WRAP PARTICIPANTS

Arizona Public Service
Avista
Bonneville Power Administration
Calpine
Chelan County PUD
Clatskanie PUD
Eugene Water & Electric Board
Grant PUD
Idaho Power
Northwestern Energy
NV Energy
PacifiCorp
Portland General Electric
Powerex
Public Service Company of New Mexico
Puget Sound Energy
Salt River Project
Seattle City Light
Shell Energy
Snohomish PUD
Tacoma Power
The Energy Authority



WRAP VALUE PROPOSITION

- » **Binding forward showing** requires Participants to show they have secured their share of the regional capacity need for the upcoming season using common planning and capacity accreditation metrics
- » **Binding operational program** obligates Participants with surplus to assist Participants with a deficit in the hours of highest need using bilateral trading mechanisms

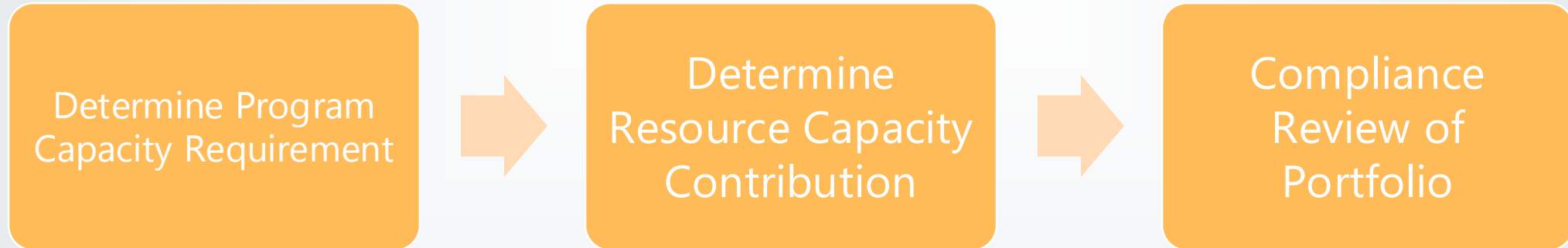
- ⇒ Set of common analytically derived reliability metrics
- ⇒ Leveraging load and resource diversity for reliability

GOVERNANCE

- » The **Resource Adequacy Participant Committee (RAPC)** is the main venue for Participants to engage in program governance, decision-making, implementation, and compliance
- » The sector-based **Program Review Committee (PRC)** is responsible for receiving, considering, and proposing changes to WRAP program design
- » The **Committee of State Representatives (COSR)** facilitates participation in the WRAP decision-making process by state regulators and energy offices
- » The **Board** (selected by a sector-based **Nominating Committee**) has ultimate authority over all aspects of the WRAP

PROGRAM DESIGN OVERVIEW

FORWARD SHOWING

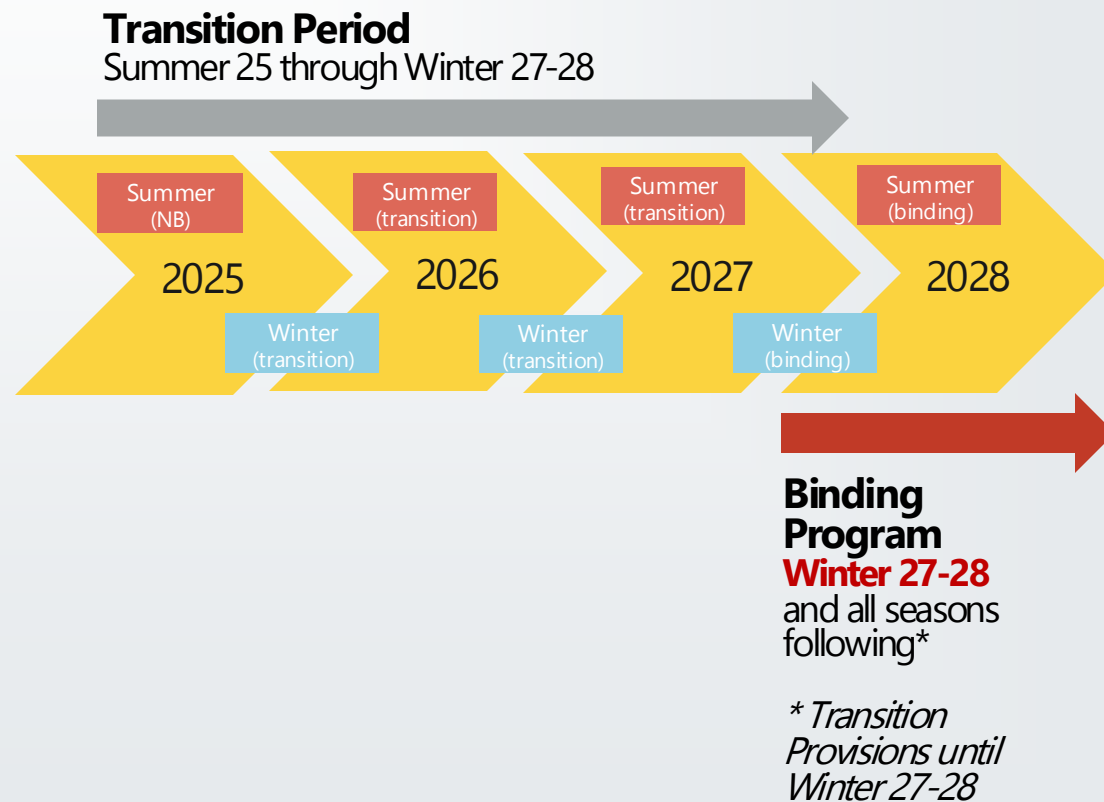


OPERATIONS PROGRAM



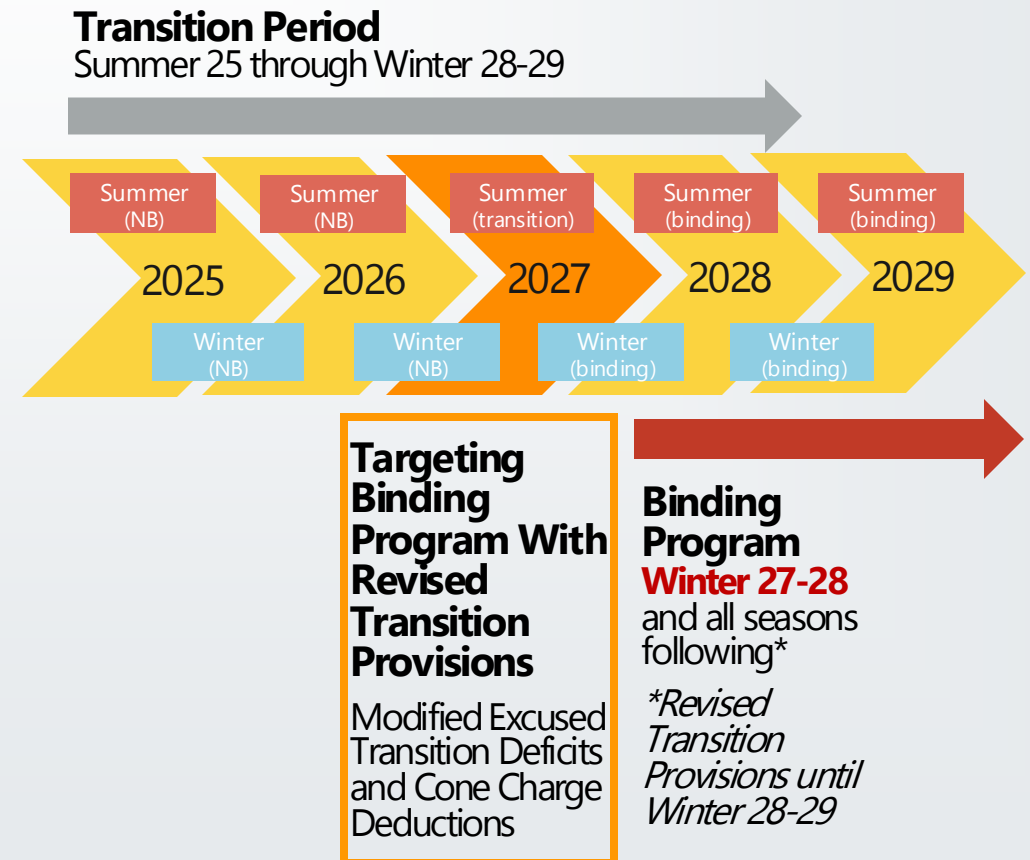
REVISED TRANSITION PLAN

- » On **April 22**, the RAPC [published a letter to the region](#) reaffirming commitment to the program and highlighting **significant developments since WRAP development began**:
 - » Participants have been pursuing new resources and increasing efforts on transmission development
 - » Supply chain issues and other challenges have slowed the ability to deliver and interconnect new resources, with peak loads growing faster than ever, exacerbated by extreme weather events
- » Given the potential magnitude of deficiency charges, concern about binding in Summer 2026 – instead, **taking advantage of the flexibility allowed by the Tariff (\$15)**, Participants are going to focus on **pulling together a critical mass for 2027**



REVISED TRANSITION PLAN

- » Participants developed a proposal for a revised transition plan approved by the Board on September 19th
- » The Board approved plan includes changes & additions pertaining to:
 - Summer 27 Binding Season
 - Critical Mass
 - Discounted Deficiency Charges
 - Assumptions of diversity sharing
 - Operations Program data sharing



REVISED TRANSITION PLAN

Concept	Change/Addition
Transition Period	Extended from June 1, 2025 through March 15, 2029
Binding Season	Deadline to select Summer 2027 as first binding season moved to January 15, 2026 <ul style="list-style-type: none">Summer 2027 LOLE modelling will include all Participants regardless of binding seasonExit window date for Winter 27/28 remains the same (October 31, 2025)
Critical Mass	If less than “Critical Mass” in subregion, Participants in that subregion <u>may</u> elect to be non-binding <ul style="list-style-type: none">Thresholds to be defined in a future BPM or BPM updatePersists beyond transition period
ETDs	“Discounted Deficiency Charge” + ETDs in Summer 27, Winter 27/28 limited to 200% FSPRM MWs <ul style="list-style-type: none">Drops to 100% FSPRM in Summer 28 and Winter 28/29
Diversity Sharing	PRM calculation includes 500 MW of diversity sharing between subregions <ul style="list-style-type: none">Benefitting NW in Winter, SW in SummerLimited to WRAP Regional LOLE Study Result PRMApplies for transition period, reevaluation no later than 2030
Operations Program Data	Participants to provide disaggregated data to Operations program <ul style="list-style-type: none">Aiming for plan and timeline by end of 2024

WRAP GOVERNANCE UPDATE

Two updates to the WRAP Tariff via the defined change control process

- » 2024-EP-1 aka Revised Transition Plan (comments August-September 2024)
 - Seeking a **critical mass** of binding participation **by extending Transition Period** provisions while making Winter 27/28 the first binding season for all (with option of going binding earlier: Summer 27)
 - Filed with FERC: effective date of March 16th 2025, if approved on January 27th

- » 2024-NTFP-1 (comments received June-July 2024)
 - Provided **corrections to the Tariff to align with intended policy**
 - Some BPMs written assuming approval of NTFP-1 and will be effective after FERC approval
 - Filed with FERC: effective date of March 16th 2025, if approved on January 27th

FORWARD SHOWING IN 2024

- » Performed the Winter 2024-2025 Forward Showing in March 2024 in excel workbooks
- » In September 2024, transitioned to new online data submission tool (called EDST) for Summer 2025 Forward Showing
 - › **Training:** 16 hours delivered to all Participants prior to launch
 - › **Support:** 25 sessions provided for additional technical support within 5 weeks
- Custom design based on FS Workbook design while leveraging existing RA tool used by SPP
- Key Features:
 - › Automated Validations
 - › Document Mapping
 - › Advance Assessment Results
 - › Shared Records (Contracts)
 - › Historical data available
 - › Document Upload

OPERATIONS PROGRAM IN 2024

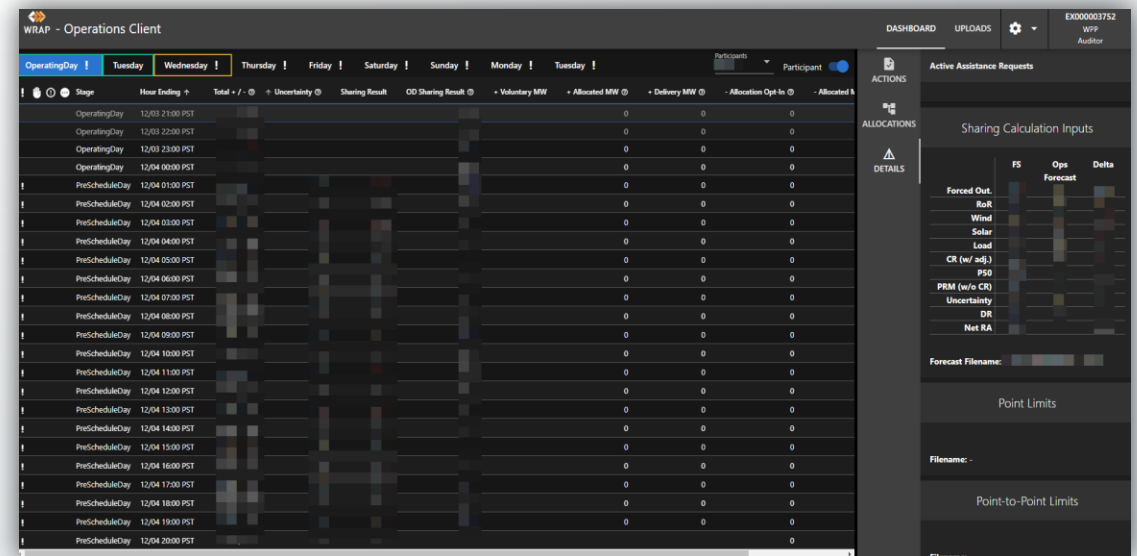
» We are in the third Non-Binding Season

- › Winter 2023-2024
- › Summer 2024
- › Winter 2024-2025 (underway)

» Improvements in 2024

- › Data platform upgrades (Ops Client)
- › Participation and data quality
- › Data performance and accuracy
- › Features: Raised Hand, Details Pane

» WPP performed first retrospective look at a cold weather event



OPERATIONS PROGRAM PARTICIPATION

<i>Winter 2023-2024</i>	Nov	Dec	Jan	Feb	Mar
Number of Participants submitting at least 1 file in the month	81%	86%	86%	81%	81%
Number of Participants submitting all file types for all Preschedule days in the month*	4%	4%	23%	32%	36%
<i>Summer 2024</i>	Jun	Jul	Aug	Sep	
Number of Participants submitting at least 1 file in the month	86%	91%	91%	91%	
Number of Participants submitting all file types for all Preschedule days in the month*	59%	36%	45%	77%	

** There are 6 input file types required with different submission times. The metrics reflect Participants who were able to successfully submit all 6 types of files on all Preschedule days, as required.*

LOOKING AHEAD INTO 2025

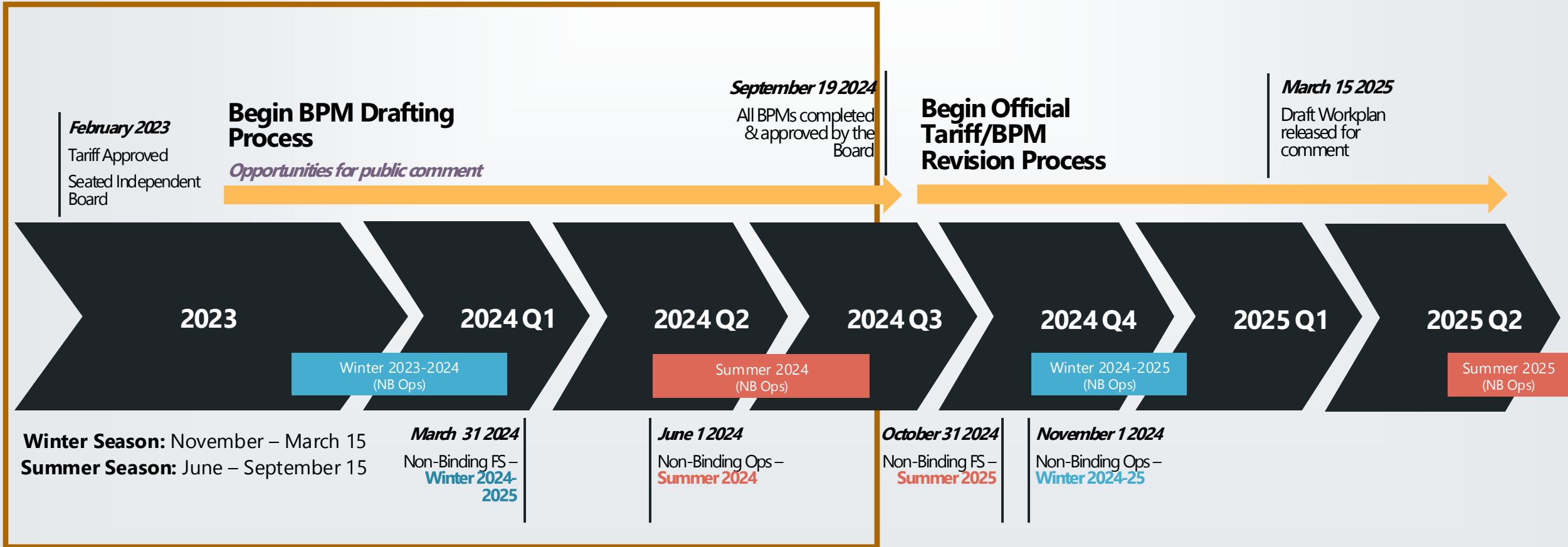
- » Performing Winter 2025-2026 and Summer 2026 Forward Showings
- » SPP will perform Advance Assessment for Winter 2026-2027 and Summer 2027
 - Board to approve PRMs for Winter 2026-2027 at June Board meeting and Summer 2027 at December Board meeting
- » Summer 2025 and Winter 2025-2026 Operations Program
- » Kicking off project to automate the WRAP Settlements process
- » As part of the Revised Transition Proposal, Participants committed to providing the WRAP Operations Program with increased data granularity
 - In parallel with data already being provided to the Ops Program
 - Critical to WPP and the Board's ability to confidently stand behind the functioning of the Ops Program
- » Expecting first new Participants joining the WRAP in fall 2025

WESTERN RESOURCE ADEQUACY PROGRAM

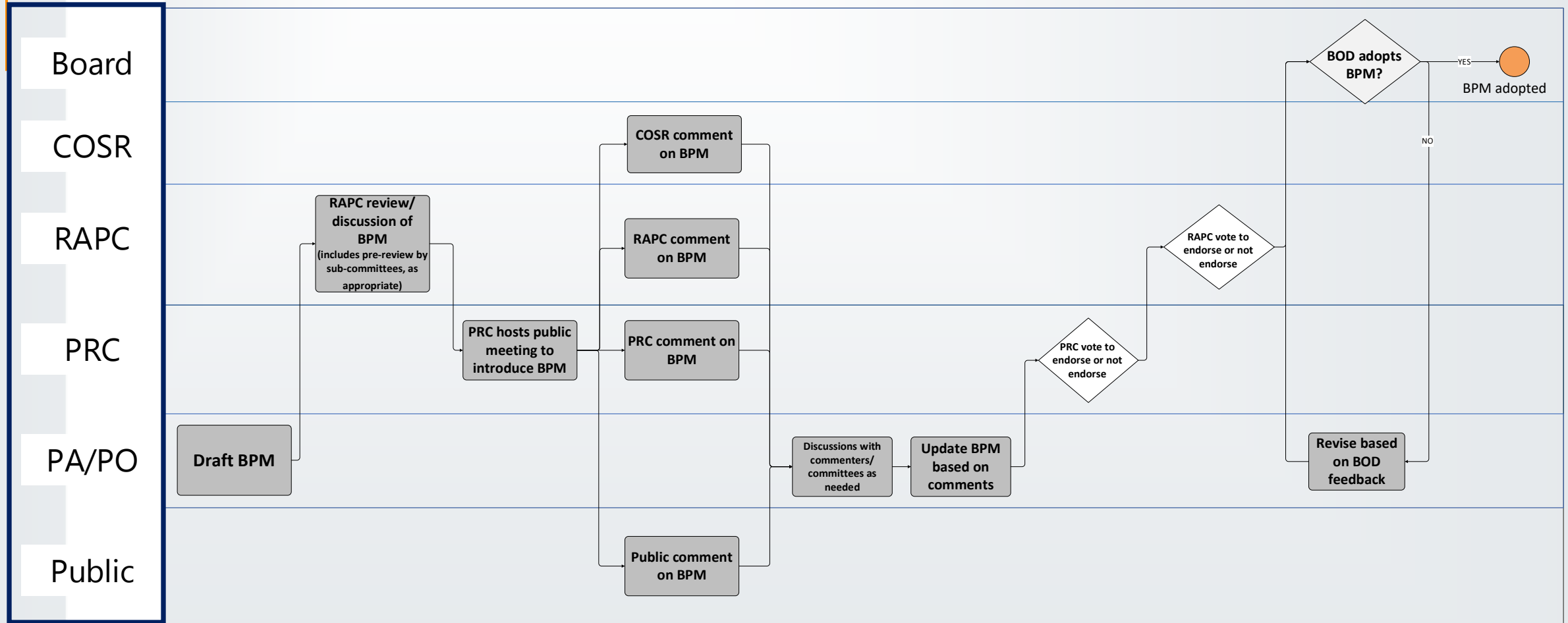
January 24, 2025

**Program Review Committee Update
WPP Member Meeting**

WHERE WE CAME FROM



BPM PROCESS FLOWCHART



BUSINESS PRACTICE MANUALS

BPM	Topic
101	Advance Assessment
102	Reliability Metrics
103	Forward Showing Capacity Requirement
104	Capacity Critical Hours
105	Qualifying Resource
106	Qualifying Contracts
107	Forward Showing Deficiency Charge
108	Forward Showing Submission Process
109	FS Transition Period
201	Operations Timeline
202	Sharing Calculations
203	Sharing Calculations Inputs
204	Holdback Requirement
205	Energy Deployment
206	Settlement Pricing
207	Settlement Process
209	Energy Delivery Failure Charge
210	Operations Transition Period
301	PRC Workplan Development
302	PRC Proposal Development
303	Expedited Review Process
304	WRAPA & Schedule 1 Changes
401	New Participants
402	Data Release

9 x Forward Showing

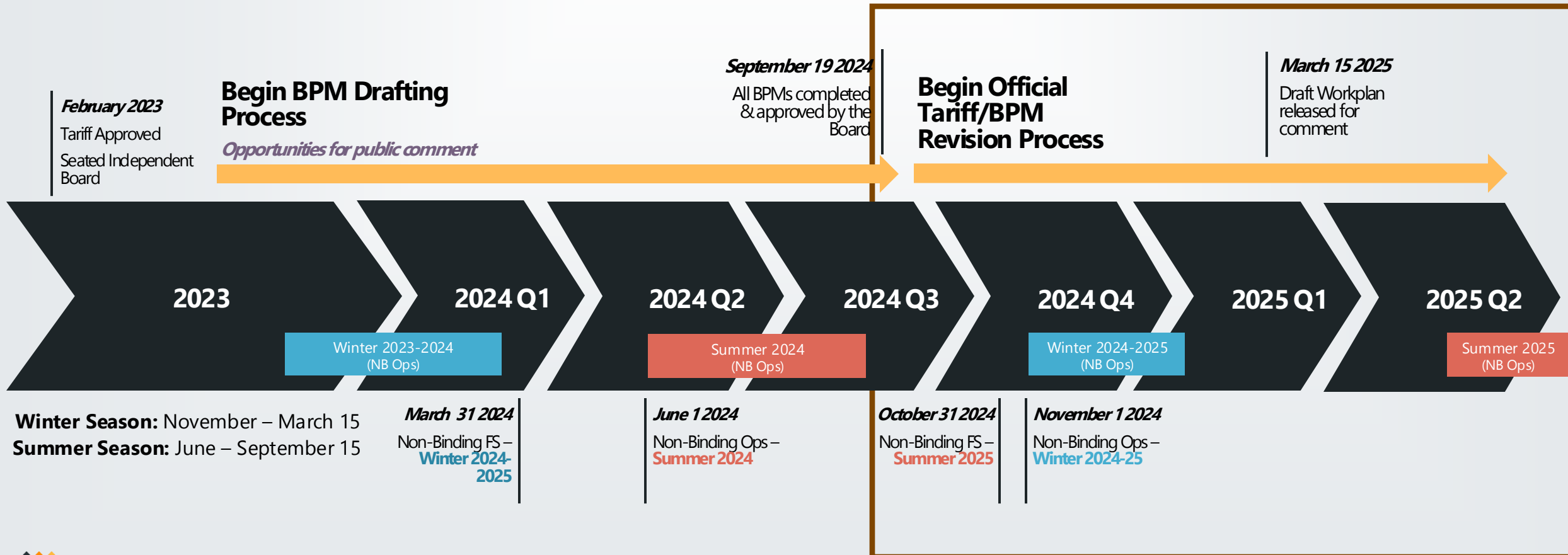
9 x Operations Program

4 x Change Control

2 x Miscellaneous



WHERE WE ARE

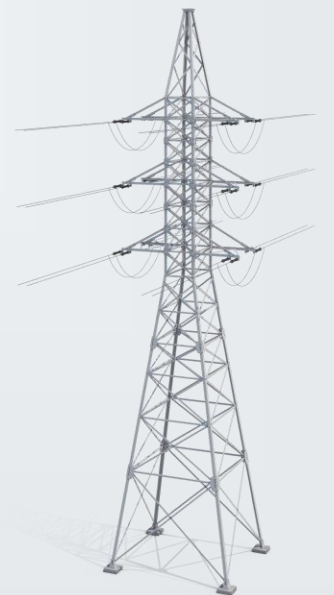
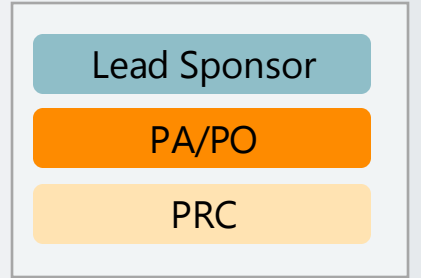
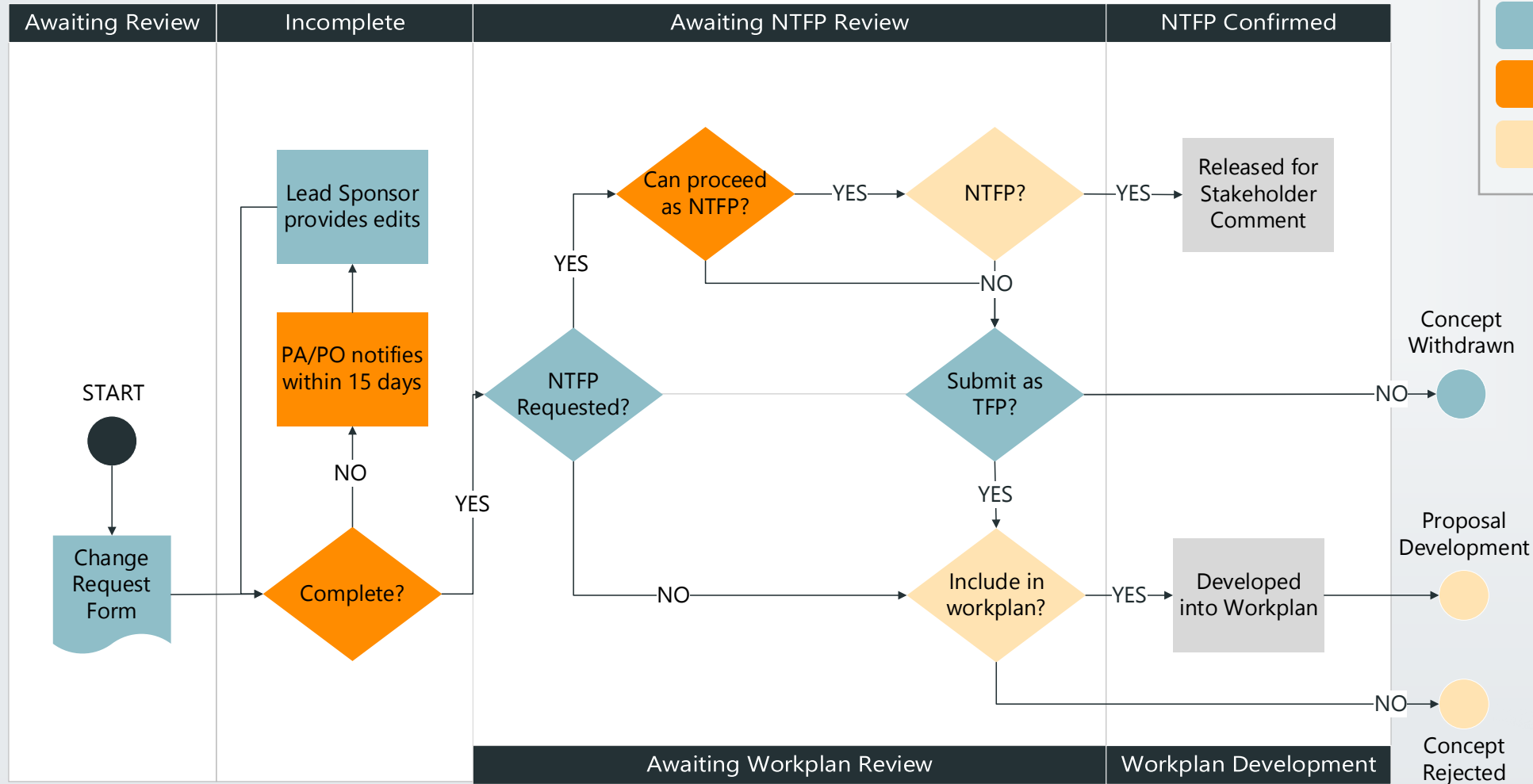


CHANGE CONTROL

- » The WRAP **Change Request Portal** was opened to the public on October 3rd, 2024.
 - December 31st deadline for **Concepts** to be considered for the 2025 Workplan
- » Participants can submit a **Change Request Form** (CRF) to propose a **Concept** or **Non-Task Force Proposal** (NTFP)
 - **Concepts** are incomplete Proposals that require further development by stakeholder Task Forces before they go for comment (may become part of Workplan if prioritized)
 - **NTFPs** are complete Proposals that do not require further development before comment and approval process



WHERE WE'RE GOING - FROM CONCEPTS TO CHANGES



CURRENT STATUS

- **Received 35 Change Request Forms in 2024**

- Consolidated to 22 Concepts for the PRC to prioritize (took place yesterday, January 23rd)
- Four Non-Task Force Proposals requested (plus 2024-NTFP-2 filed in 2025)

- **NTFPs** (*indicates a legacy change that was identified before the change management process began)

- *2024-NTFP-2 (changes to BPMs due to the Revised Transition Plan): public comment
- *2024-NTFP-3 (Operations Program engagement for Participants in two Subregions): Sponsors discussions
- *2024-NTFP-4 (Load change methodology fix): COSR comment
- 2024-NTFP-5 (Energy Delivery Failure Charge definitions): Post public comment Lead Sponsor discussions
- 2024-CRF-22 (Demand Response as Contingency Reserve): Working with Lead Sponsor on Proposal
- 2023-CRF-23 (Variable Energy Resource Operational Testing Requirement): Working with Lead Sponsor

- **PRC Prioritization Exercise**

- Took place yesterday, January 23rd, 2025

- **Next Steps**

- Workplan Development: determining how many and which Concepts
- will be developed by Task Forces into Proposals ready for comment

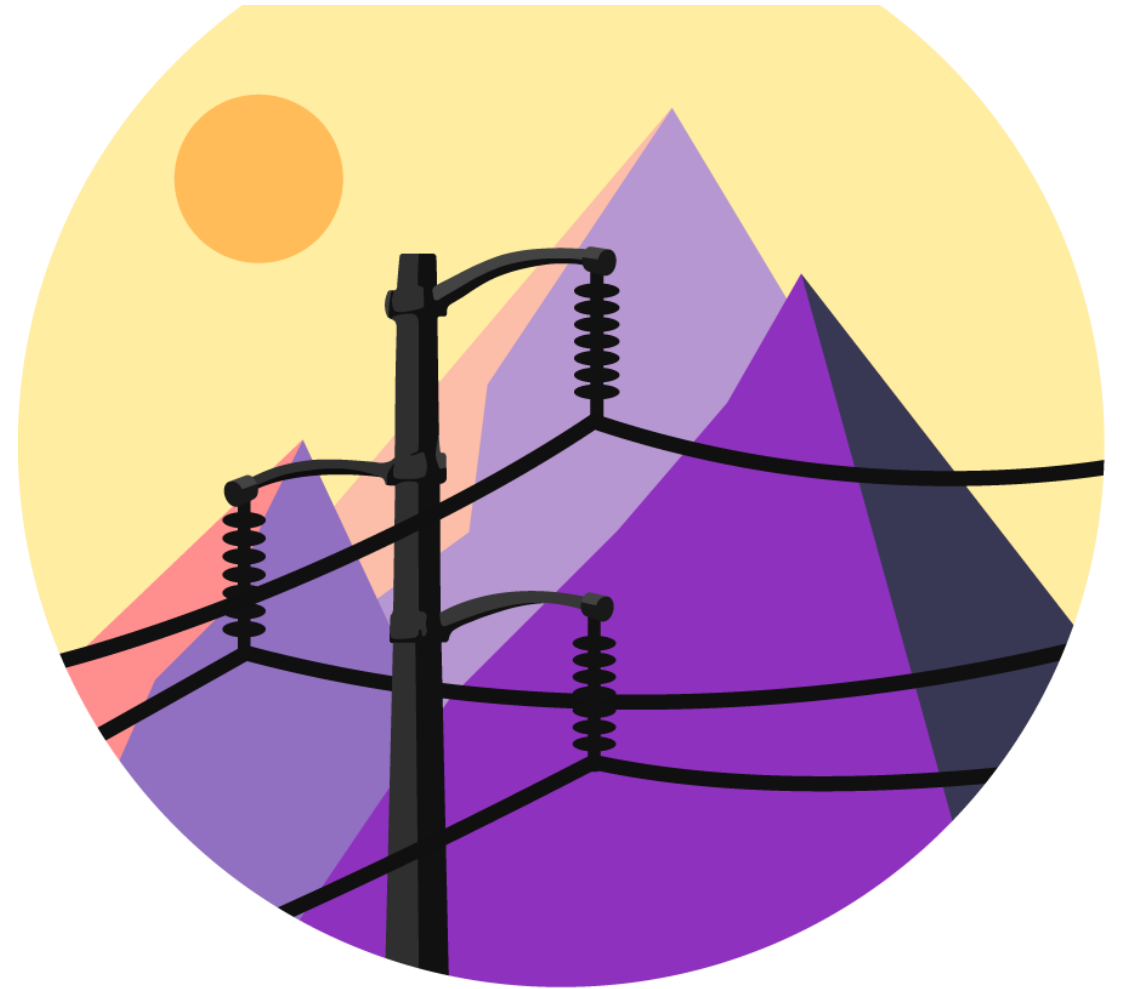


WPP Annual Members
Meeting
Jan 24, 2025

Regional Transmission Planning Services

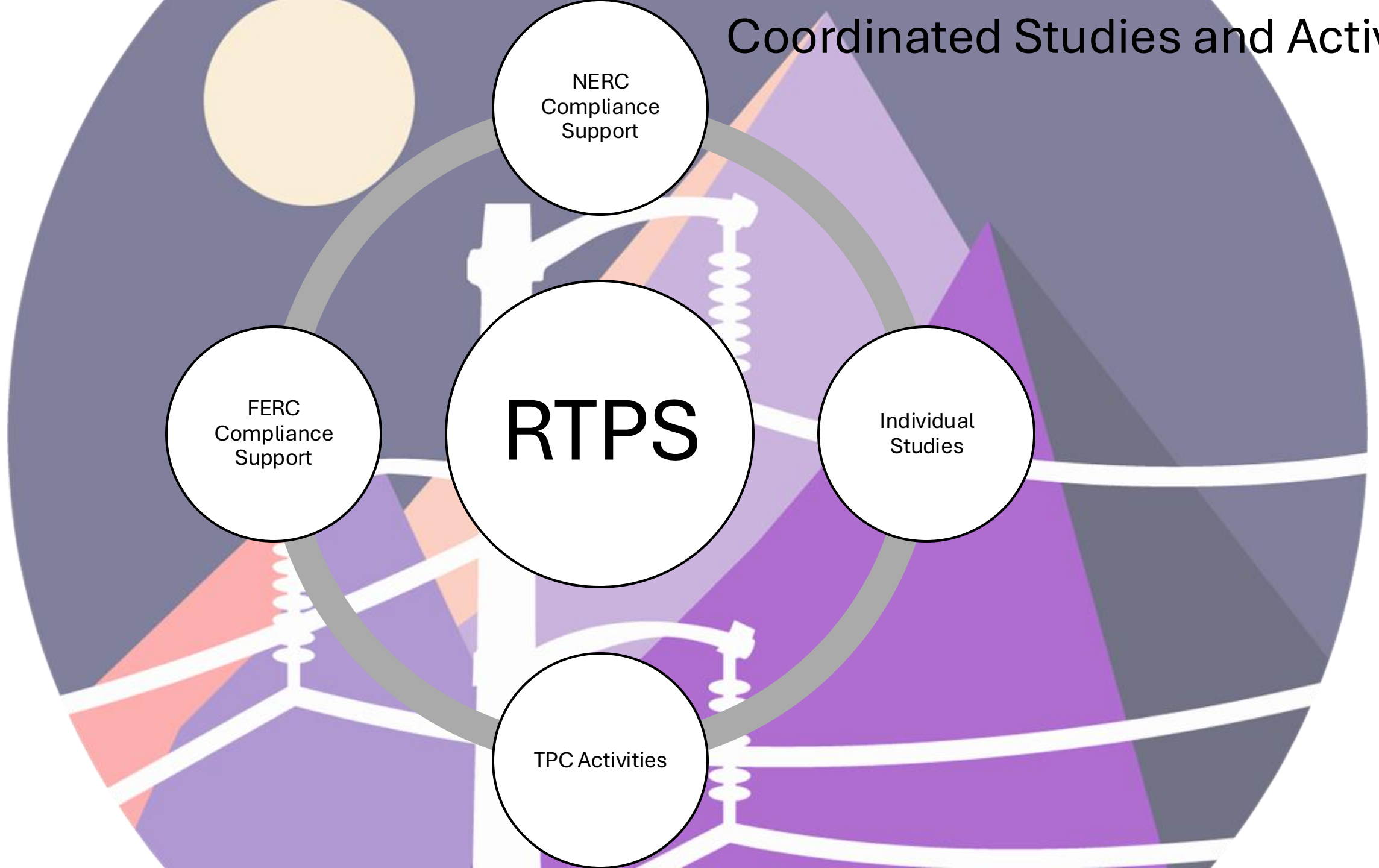


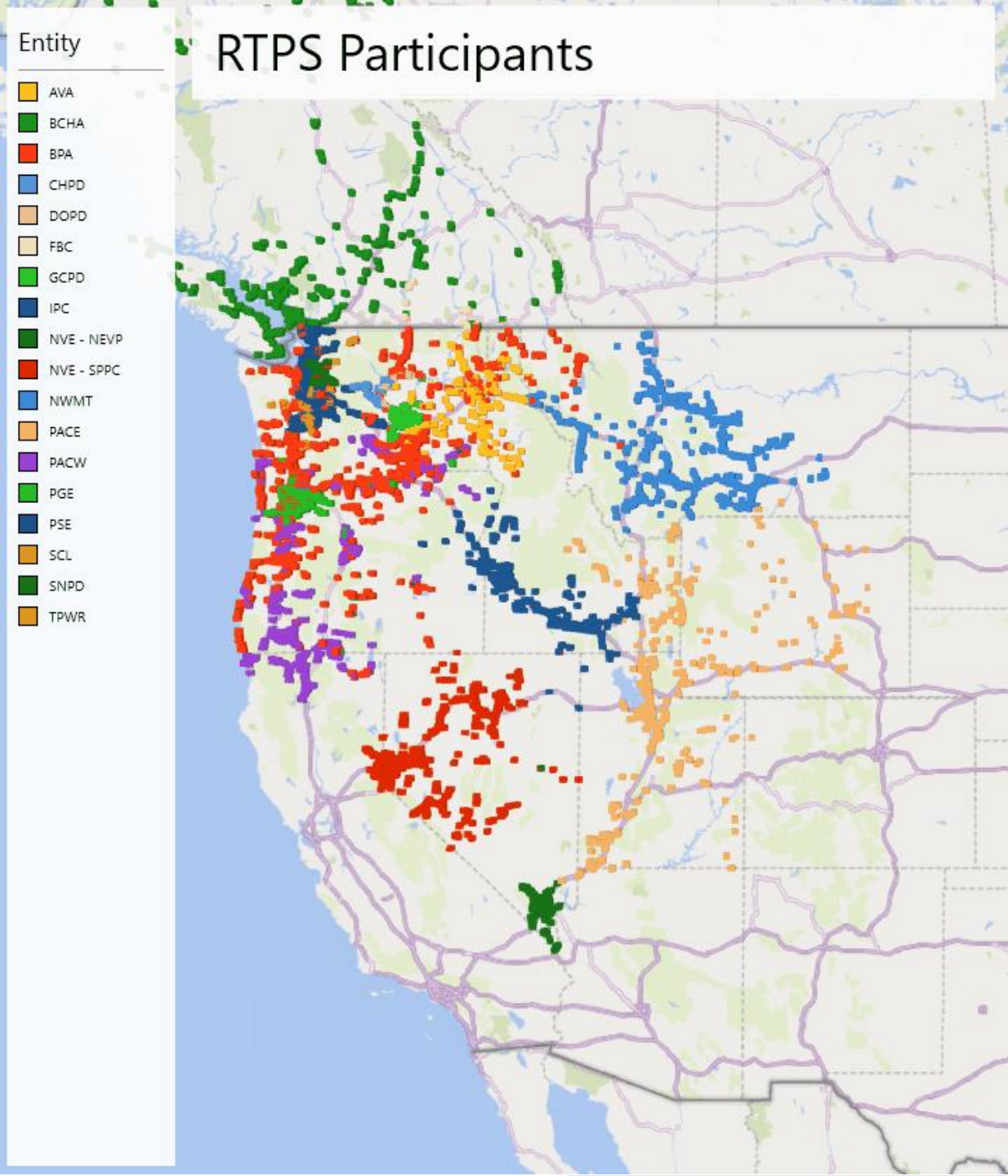
WESTERN
POWERPOOL



RTPS | POWERED
BY **WPP**

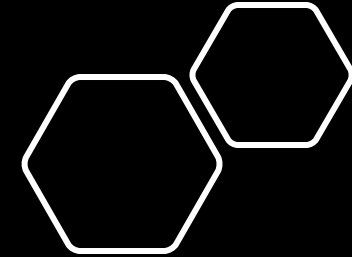
Coordinated Studies and Activities



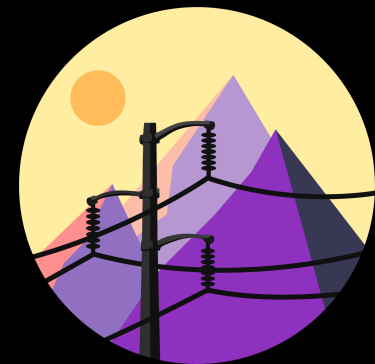


RTPS Interfaces with:
19 Member Companies
113 Member Employees

*Numbers Exclude NOPSG



Effort	NERC Compliance	FERC Compliance	TPC Activities	Individual Studies
RTPS Participants	X	X	X	X
TPC Members			X	
TPL-007 GMD Study & Data	X			
MOD-033 Model Validation Study	X			
NorthernGrid Regional Plan		X		
PRC-006 UFLS Data Collection	X			
FERC 2023 Interconnection Maps		X		
CIP-014 Critical Infrastructure	X			
Area 40 Base Case Coordination	X			
South of Allston TTC Study				X
BPA PCM Analysis				X





RTPS | POWERED BY WPP



WESTERN
POWERPOOL

2024 ENGINEERS FORUM SEPTEMBER 25-26

Hosted by
PUGET SOUND ENERGY

FOR MORE DETAILS
please visit our **website**.



355 110th Ave NE
Bellevue, WA 98004

Snoqualmie Falls Tour



2024 Engineers Forum Day 1 Agenda

Inverters

- Need
- Modeling
- Development

FERC 881

Grid Enhancing Technologies

Jeopardy: TPC Knowledge

Upcoming in 2025

2025 Engineers Forum
September, 2025
Spokane, WA



RTPS Activities



Ongoing

- WECC base case support
- NERC TPL-001 Base Case Support
- NERC TPL-007 Data Support
- NERC Mod-033
- NorthernGrid Facilitation

2024

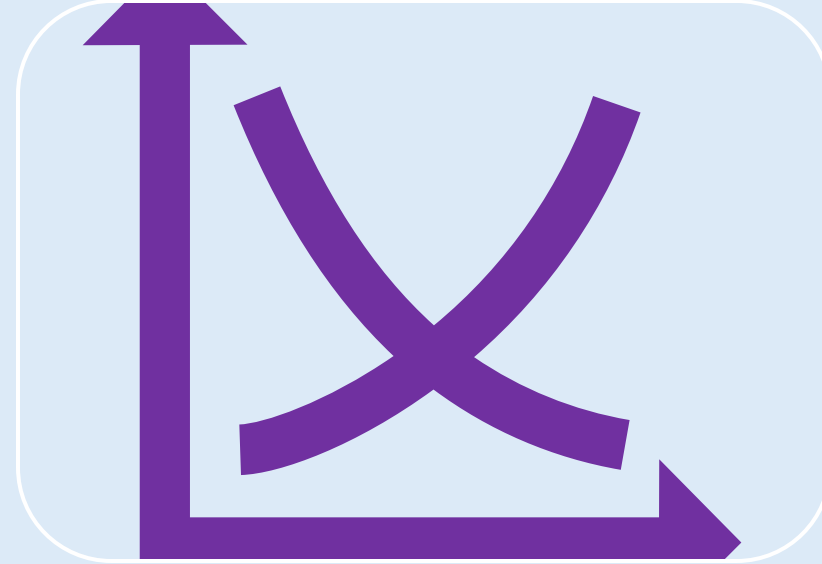
- 20-year base case development
- FERC 881 Discussions
- NERC TPL-008 Discussions
- FERC 2023 Discussions

2025

- 20-year Report
- FERC 2023 Support
- NERC CIP-014 Support
- NERC TPL-008 Support



NorthernGrid



Coordinated
Studies





WECC
participation

FERC 1920



Proxy
Representation



Protect
Regional
Interest



Value

FERC 1920 Requirements

20-year, Scenario-based
Planning

3 plausible and diverse
scenarios

- With Extreme Sensitivities

7 Factor Categories for
Scenario Development

7 Benefits for Evaluation

Extensive transparency
and regional engagement

Development of Ex Ante
Cost Allocation Method

Incorporation of Grid-
enhancing technologies,
generation interconnection
with FERC 1000, and
improved interregional
coordination

Regional Filing due June
2025, Interregional Filing
due August 2025

FERC 1920-A

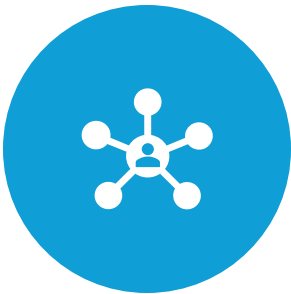
FERC 1920 NorthernGrid Activities



Hired Slalom as
Facilitator



Held 3 State
Engagement meetings
thus far



Coordinating with WIEB
and CREPC-TC



Bi-weekly meetings with
WestConnect and
CAISO

WPP Member Meeting - Western Transmission Expansion Coalition "WestTEC"

January 24, 2025

What is the Western Transmission Expansion Coalition?

- » *“WestTEC”*
- » *Not a FERC process*
- » *West-wide 20-year transmission study (10-year look)*
- » *Industry-led with unprecedented regional partner inclusion*
- » *Goal is to produce an actionable transmission study*



WestTEC Project Timeline

NEAR-TERM PLANNING HORIZON EFFORTS

LONG-TERM PLANNING EFFORTS

PROJECT DISTRIBUTION
& REGIONAL PARTNER
ENGAGEMENT

QUARTERLY PUBLIC ENGAGEMENT

2024
Q3

2024
Q4

2025
Q1

2025
Q2

2025
Q3

2025
Q4

2026
Q1

2026
Q2

2026
Q3

2026
Q4

2027
Q1

Oct 21:
CREPC-TC
Meeting

Nov 19:
All-
Committee
Meeting

Nov 22:
Public
Workshop

Feb:
Public
Workshop

Feb:
CREPC-TC
Meeting

Mar 2025:
Steering
Approves
Scenarios

Aug 2025:
Initial 10-year
Horizon Report
Complete

July 2026:
Planning
Scenarios
Complete

Sept 2026:
Completion of 20-
year Horizon Report
and Final 10-year
Horizon Report

Sept
2024:
Final
Study
Plan

Technical Status Update

1. Significant progress has been made developing the **10-year Reference Case**, which is a trendline view of 2035 that will be used to assess nearer-term interregional transmission needs and will service as the starting point for 20-year assessments
 - » This consists of forecasts for **load, generation, and transmission** for the 2035 study horizon
2. Energy Strategies and the technical taskforce have been **finalizing study methodologies** for the System Reliability Assessment
 - » The team will begin work refining other methods (e.g., Interarea Deliverability Assessment) soon
3. Energy Strategies and E3 have been coordinating baseline assumptions and data handoffs to support execution of 20-year assessment in 2025

Study Execution: Next Steps

1. Complete further data collection and model calibration/testing required for 2035 assessment *[November/-January]*
 - » Methods will be refined January 2025
2. Complete Powerflow Assessment and refinement of hypothesis map *[March, 2025]*
3. Complete Congestion Assessment and refinement of hypothesis map *[April 2025]*



RTPS | POWERED
BY **WPP**

**THANK
YOU!**

Emily Moore, Puget Sound Energy

John Martinsen, Snohomish County PUD

Ravi Aggarwal, Bonneville Power Administration

Jennifer Galaway, Portland General Electric

Chelsea Loomis, Western Power Pool

Ben Hutchins, Western Power Pool

The Year Ahead

Adjourn & Lunch