

# **Western Resource Adequacy Program (WRAP) Resolution to Fully Participate**

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# Why We Are Here

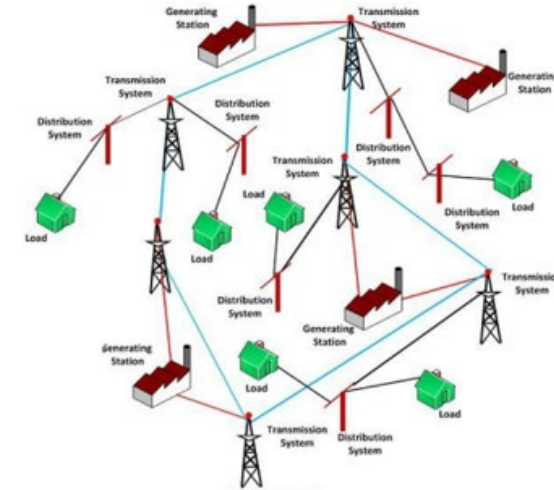
- Review resource adequacy and WRAP
- WRAP pros and cons
- Timeline
- Board to vote on resolution for WRAP full participation

# WRAP Review

- Previous WRAP presentations to Board
  - WRAP Board updates March 2, 2020, April 5, 2021, and Aug. 16, 2021
  - Manager's item Nov. 21, 2022
- Problem statement
  - While the Pacific Northwest (PNW) has enjoyed decades of surplus capacity in the region and little issue with reliability, the future is much less certain. The increase in regulatory requirements and large load customers locating in the PNW has increased the potential for capacity shortfalls according to multiple studies.

# Why Consider a Resource Adequacy Program

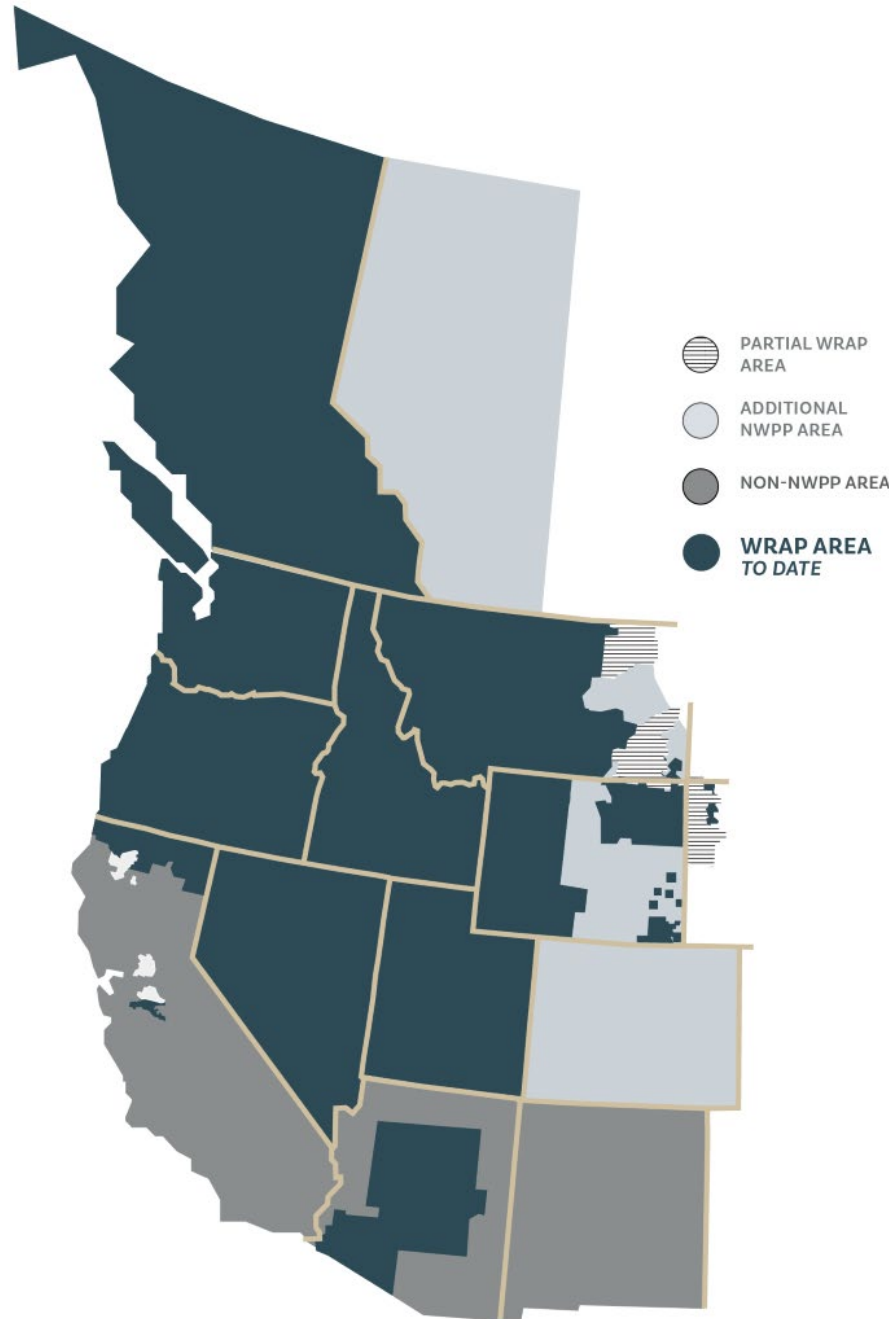
- » We operate as part of connected electric grid
- » A regional resource adequacy program:
  - » Provides a clear, **uniform standard** with **accountability** and **commitment** from each participant to meet it
  - » Establishes how much **capacity each member is responsible for providing**
  - » Creates **transparency** of individual member resource plans
  - » Creates potential for **cost and resource savings** through pooling surplus resources
  - » WRAP provides platform to **call on capacity when deficit** or provide capacity when other members call upon it



**Resource adequacy** is the ability of an electric power system to serve load across a broad range of weather and system operating conditions, subject to a long-run standard on the maximum frequency of reliability events where generation is insufficient to serve all load

## Phase 3A Participants

Arizona Public Service  
Avangrid  
Avista  
Black Hills  
Basin Electric  
Bonneville Power  
Administration  
Calpine  
Chelan PUD  
Clatskanie PUD  
Douglas PUD  
Eugene Water & Electric Board  
Grant PUD  
Idaho Power  
NorthWestern Energy  
NV Energy  
PacifiCorp  
Portland General Electric  
Powerex  
Puget Sound Energy  
Salt River Project  
Seattle City Light  
Shell  
Snohomish PUD  
Tacoma Power  
The Energy Authority  
Turlock Irrigation District



- > **Industry-driven initiative** for regional approach to help ensure resource adequacy in light of changing resource composition and increased resource uncertainty
  - > Estimated peak winter load of 65,122 MW and summer load of 66,768 MW
- > **Participation is voluntary**, with mandatory requirements once joined
- > Implemented through **bilateral transactions under existing frameworks**

# Solving a Problem

- What WRAP does:
  - » Implements a **binding forward showing (7 months prior to the upcoming season)** framework that requires members to demonstrate they have secured enough capacity to meet their own load plus a planning reserve margin
  - » Implements a **binding operational program** that obligates members with calculated surplus to assist participants with a calculated deficit on the hours of highest need
  - » Leverages the binding nature of the operational program, together with modeled supply and load diversity, to **safely lower the planning reserve margins** in the forward showing and help **inform resource selection** for the region, **driving investment savings** for members and their end use customers

# District's Pros and Cons

## Local Pros:

- Increases value of capacity in the region which passes through to COP++ and market-based slices.
- Moving forward with a voluntary WRAP makes it less likely policymakers will be incentivized to establish resource adequacy mandates.
- Joining would be less planning reserve margin under WRAP than standalone so more slice sales.

## Regional Pros:

- Regional diversity of reliability which enhances the stability of the District's balancing authority and the grid as increased intermittent renewables will come online over the next decade and thermal resources are retired.
- Supporting the WRAP may increase the chance of success of future organized markets, which has had over 20 participants from the PNW to the Desert Southwest (DSW). A resource adequacy program is a standard feature of an organized market. If Chelan joins a future organized market, there will most likely have similar rules to WRAP.

## Cons:

- More work from data exchange and submittals with the WRAP program than a standalone program.
- Less influence on program rules than compared to a standalone program.

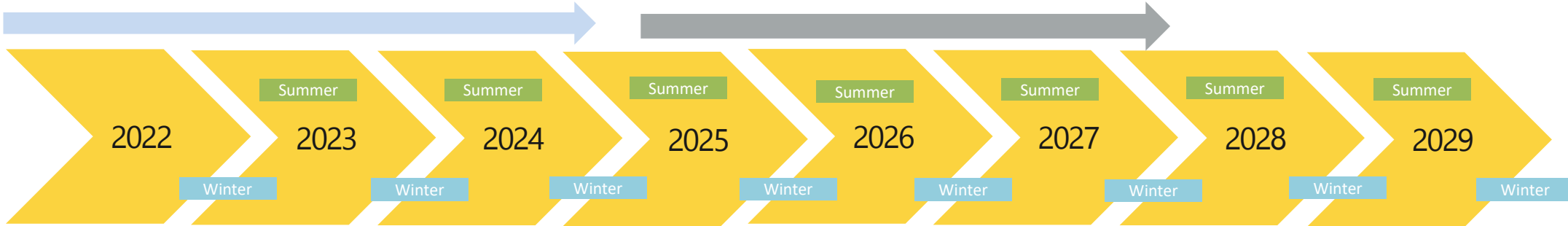
# Transition Timeline

## Non-Binding Forward Showing

Winter 22-23, Summer 23, Winter 23-24, Summer 24, Winter 24-25

## Transition Seasons (Ops and FS)

Summer 25, Winter 25-26, Summer 26, Winter 26-27, Summer 27, Winter 27-28



## Non-Binding Operations Program

Summer 23 (trial – will include testing scenarios), Winter 23-24, Summer 24, Winter 24-25

## Binding Program Without Transition Provisions

Summer 28 and all seasons following



# Next Steps

- Answer questions
- Requesting Board approval
  - Able to exit program with two-year notice at any time
- Notify Western Power Pool of resolution vote