

Resource Adequacy

Western Resource Adequacy Program

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Resource Adequacy



“Resource adequacy planning looks forward to match electricity needs with electricity resources to determine whether the system can meet electricity needs in **every hour of every season** – even during **extreme conditions** such as extended heat wave or drought.”

— Oregon Public Utility Commission

We Are Reliable



WE KEEP THE LIGHTS ON

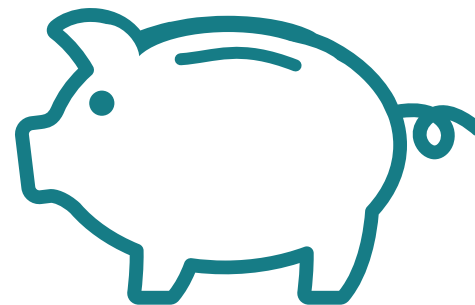
99.9%

OF THE TIME

We Are Affordable



OUR PRICES ARE MORE THAN
20% BELOW
THE NATIONAL AVERAGE

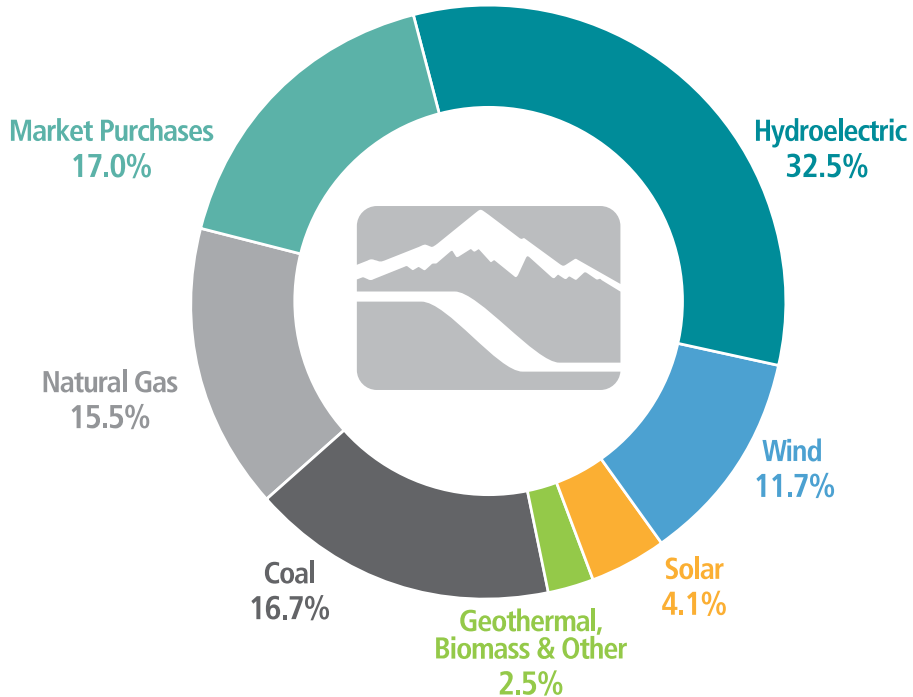


We are Clean today, Cleaner tomorrow.®



Clean Energy

2021 Energy Mix

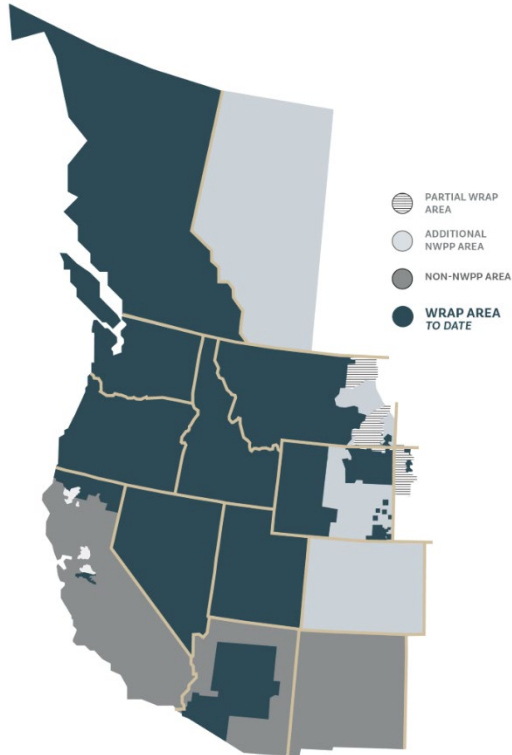


This shows the energy we generate from company-owned resources and energy we buy through long-term contracts with wind, solar, biomass, geothermal, and small-scale hydro generators.

The mix does not represent the energy delivered to customers for two reasons.

- We participate in the wholesale energy market and sell energy both to other utilities and to retail customers.
- Some of our purchased power from renewable sources comes with a Renewable Energy Credit, or REC, which we sell to keep customer prices low.

Western Resource Adequacy Program (WRAP)



- Industry Driven
- Reliability Focused
- Economically Beneficial — Reduced Planning Reserve Margin (PRM)
- Works with Existing Market Structures
- Voluntary
- Geographical Diversity
 - Load
 - Generation



Current Phase Activities



PO collected data from participants

Design refinement and public webinars



PO running LOLE/ELCC models—*draft results to participants*

Showing for Winter 2022–2023 Non-Binding season

Showing for Summer 2023 Non-Binding season

Asking for sign ups in late 2022 for transition to Binding program

Oct 2021

Dec 2022

1/23 Requested effective date for WRAP implementation

Design refinements led into tariff drafting

Participant review of tariff in Spring

Draft tariff out for public review and webinar

Aiming to file with FERC in late August

Sign-ups for next phase/ Binding Participation



Activities for early 2023:

- Install new, independent, board of directors at Western Power Pool (WPP); update WPP bylaws to incorporate independent board, open meetings, etc.
- Review and adoption of business practice manuals
- Begin planned WRAP governance and review (e.g., Committee of State Representatives (COSR), Program Review Committee (PRC), stakeholder processes)
- Set up data exchange between participants/small-power producers (SPP) for Operations Program trial and non-binding seasons

PO = Program Operator
LOLE = Loss of Load Expectation
ELCC = Expected Load Carrying Capacity

Program Design Overview

Forward Showing Program

- Establishes a **regional reliability metric** (1 event-day in 10 years LOLE)
- Utilizes thoughtful modeling and analytics to:
 - Determine historical summer and winter **capacity critical hours** (CCHs) data sets for the region
 - Determine each resource type's **qualifying capacity contribution** (QCC) to the regional capacity needs
 - Determine a planning reserve margin (PRM) which is applied to peak load forecast based on P50 metric
- Showing requirement includes **deliverability** component
 - Firm or conditional firm transmission to meet 75% of P50 + PRM (paired with robust exception framework)
- Participant compliance obligation (7 months in advance of binding season) = **physically firm resources to meet P50 + PRM**



Determine
Program
Capacity
Requirement

Determine
Resource
Capacity
Contribution

Compliance
Review of
Portfolio

Program Design Overview

Operations Program



- » Evaluates participants' operational situation relative to Forward Showing assumptions (for load, outages, variable energy resources [VER] performance)
- » Obligates participants with calculated surplus to assist participants with a calculated deficit on the hours of highest need
- » Deficiency forecast on the day before the Operating Day (Preschedule Day) establishes Holdback Requirement for surplus participants
- » Surplus Participant that fails to provide assigned Energy Deployment must pay Energy Delivery Failure Charge

Commitment



- Normal Withdrawal — 24-month notice requirement
 - Prior to selected binding season
- Expedited Withdrawal — Negotiated with WPP
 - Potential exit fee
- Idaho Power is meeting WRAP Forward Showing requirements for 2023
- Phase 3B includes the **non-binding** implementation phase

Transition Timeline

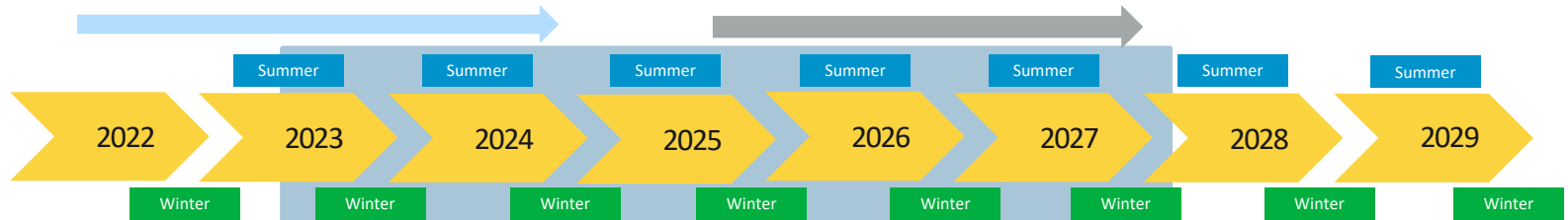


Non-Binding Forward Showing

Winter 22–23, Summer 23, Winter 23–24,
Summer 24, Winter 24–25

Transition Seasons (Operations and Forward Showing)

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

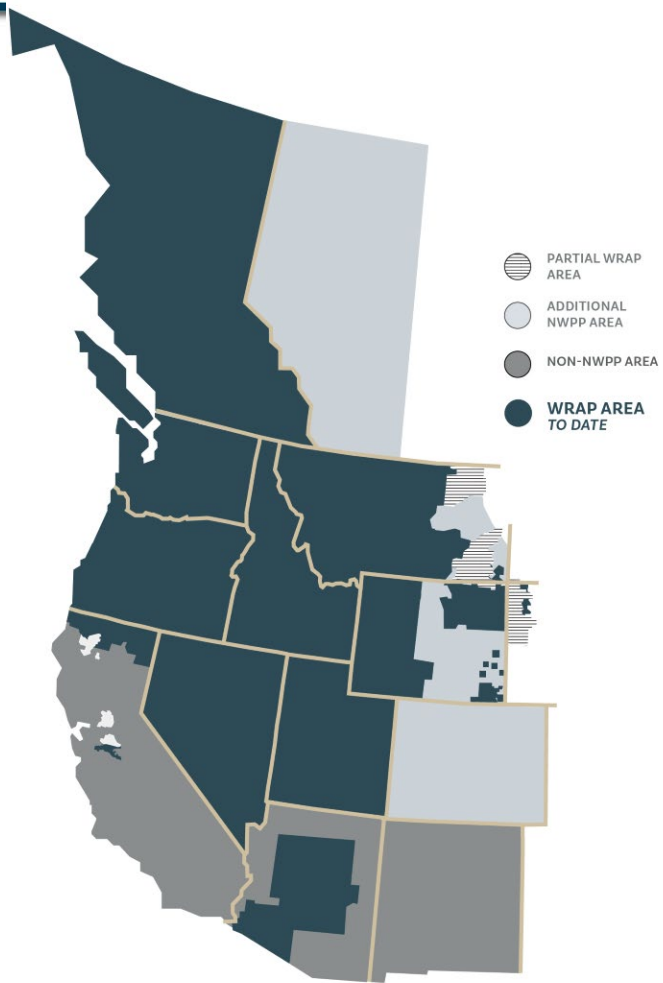
Binding Program Without Transition Provisions

Summer 28 and all seasons following

Summary of Benefits and Next Steps



- Over \$4M in annual savings
- Immediate Reliability Benefits
- Commit to Participate in Phase 3B – non-binding operation (12/16/22)
- Select an initial Binding Season of Summer 2027
- Evaluate feasibility of earlier Binding Season
 - Earlier binding season provides Idaho Power and the program an assured Resource Adequacy outcome sooner, allowing full realization of reliability and economic benefit
 - Could be as early as 2025
- File an Application with the Idaho Public Utilities Commission for Review of Costs & Benefits of WRAP



Transmission



Diversity

Questions

