2023 Integrated Resource Plan Progress Report

Initial Portfolio Analysis Results

October 16, 2023

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Why We Are Here

- RCW 19.280: Electric Utility Resource Plans
- Integrated Resource Planning
- Load forecast
 - I-937 qualifying renewable resources
- District net position and load forecasts
- Portfolio: scenario results



RCW 19.280: Electric Utility Resource Plans

- Analysis describing the mix of generating resources and demand-side resources that will meet current and projected needs at the lowest reasonable cost to the utility and its ratepayers
- The legislation intends for IRPs to assist in identifying and developing:
 - New generating resources
 - Conservation and efficiency resources
 - Means for integrating renewable resources, including addressing overgeneration events
 - Related infrastructure to meet state's electricity needs
- Applies to Washington State utilities with more than 25,000 retail customers
 - Progress Reports every 2 years
 - New IRPs every 4 years



Integrated Resource Planning...

- Helps assess how different portfolio strategies manage risk exposures such as:
 - Load growth
 - Production Costs
 - Resource Mix
- Helps identify robust strategies
 - Avoid strategies that depend upon specific events to be successful
- Document shared consensus on known facts and projections

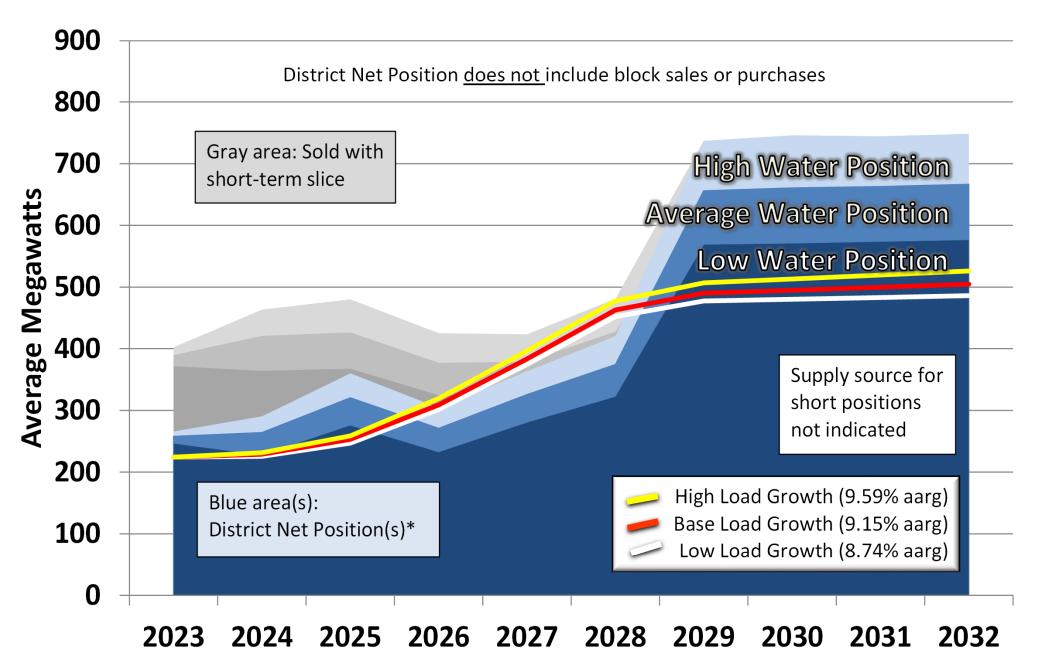


Load Forecast

- Total sector sales residential, commercial, industrial, HDL, crypto, large load, EV & all "other" (plus losses) for 2023-2032 (rates are before the effects of conservation)
 - Low 8.74% average annual rate of growth (1.51% in 2021)
 - Base 9.15% average annual rate of growth (2.15% in 2021)
 - High 9.59% average annual rate of growth (4.86% in 2021)
- District's historical load growth
 - 2013-2022 approx. 1.90%
 - 2013-2022 approx. 1.40% (after the effects of cumulative conservation)
- Based upon current base load forecast (net of conservation), the amount of I-937 qualifying renewable resources required will be approximately:
 - 33-74 aMW (15% of retail load) in 2023-2032



District Net Position and Load Forecasts



*District net position includes the effects of encroachments, forecasted Canadian Entitlement Allocations, other contractual obligations including long-term power sales contracts and short-term hedging strategy slice contracts

Portfolio: Scenario Results 2023-2032

- Load/resource balance
 - Low, base and high levels of hydro generation stressed with various stream flows
 - Low, base and high load growth forecasts
 - Expected to be able to serve retail load (evaluating how to serve a new large load)
 - Conservation targets have increased since 2021
- Service reliability
 - Load/resource balance evaluated and expected to exceed hourly peak load forecast for each month plus operating reserve requirements (evaluating how to serve a new large load)
 - District involved in Western Resource Adequacy Program (WRAP) capacity resource adequacy effort to manage in a coordinated manner
 - Portfolio may change to address reliability standards & new large loads
- Environmental impacts
 - District's hydro and wind resources <u>do not</u> emit air pollutants
 - Any changes in portfolio will comply with environmental regulatory requirements



Board and Public Process – 2023

October 16 No board action requested today

Initial portfolio analysis results

November 20 Finalized portfolio analysis and final draft IRP document

December 4 Final draft IRP for board approval (Resolution to be presented)

Prior to September 1, 2024 Submit final IRP to Department of Commerce



Chelan PUD IRP Website

http://www.chelanpud.org/environment/operating-responsibly/integrated-resourceplan

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Integrated Resource Plan

In 2006, RCW 19.280 was adopted by the Washington State legislature. The statute requires investor-owned and consumer-owned electric utilities with more than 25,000 customers to develop Integrated Resource Plans (IRP) and progress reports. Among other things, IRPs must include a range of load forecasts, assessments of commercially-available, utility-scale renewable and nonrenewable generating technologies, a comparative evaluation of renewable and nonrenewable generating resources and conservation and efficiency resources and an assessment of methods for integrating renewable resources and addressing overgeneration events, if applicable.

Public Participation

Your comments in the development of this IRP Progress Report are welcome. <u>Click here to submit your</u> <u>comments.</u>

In 2019, the passage of RCW 19.405: the Washington Clean Energy Transformation Act (CETA) added significant requirements to RCW 19.280. These include an assessment and forecast of the availability of regional generation and transmission capacity on which the utility may rely to deliver electricity to its customers, a determination of a resource adequacy metric, a forecast of distributed energy resources installed by customers, and assessments of energy and nonenergy benefits and reduction of burdens to vulnerable populations and highly impacted communities, long-term and short-term public health and environmental benefits, costs and risk and energy security and risk and a 10-year Clean Energy Action Plan (CEAP).

Utilities must produce progress reports reflecting changing conditions related to and the progress towards the IRP every two years and an updated IRP must be developed at least every four years.

dditionally, governing boards of consumer-owned utilities shall encourage participation of its consumers in development of the plans. nd progress reports and approve the plans and progress reports after it has provided public notice and hearing.

A new IRP progress report is being developed in 2023. The progress report will outline the sources of power needed to supply PUD customers through 2032. It will describe the mix of resources from generation, conservation and efficiency and demand response that will meet current and projected needs at the lowest reasonable cost and risk to the utility and its customer-owners. The 2023 progress report will be submitted to the Washington State Department of Commerce by the September 1, 2024 deadline. Meeting notices and presentations will be linked below as available.

Public Meetings Schedule - Tentative

- October 16 Present results of draft 2023 IRP Progress Report load and resource forecasts
- November 20 Present summary of final draft IRP Progress Report & provide to the Board and public
- December 4 Final draft 2023 IRP Progress Report for Board approval by resolution

Questions?

