2021 Integrated Resource Plan

Initial Portfolio Analysis Results

October 18, 2021

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Why We Are Here

Preliminary

- Load forecast
 - I-937 qualifying renewable resources

District net position and load forecasts

• Portfolio: scenario results



Board and Public Process – 2021

October 18 No board action requested today Initial portfolio analysis results

November 15 (tentative)Finalized portfolio analysis and final draft IRP document

December 6 (tentative) Final draft IRP for board approval (Resolution to be presented)

Prior to September 1, 2022Submit final IRP to Department of Commerce

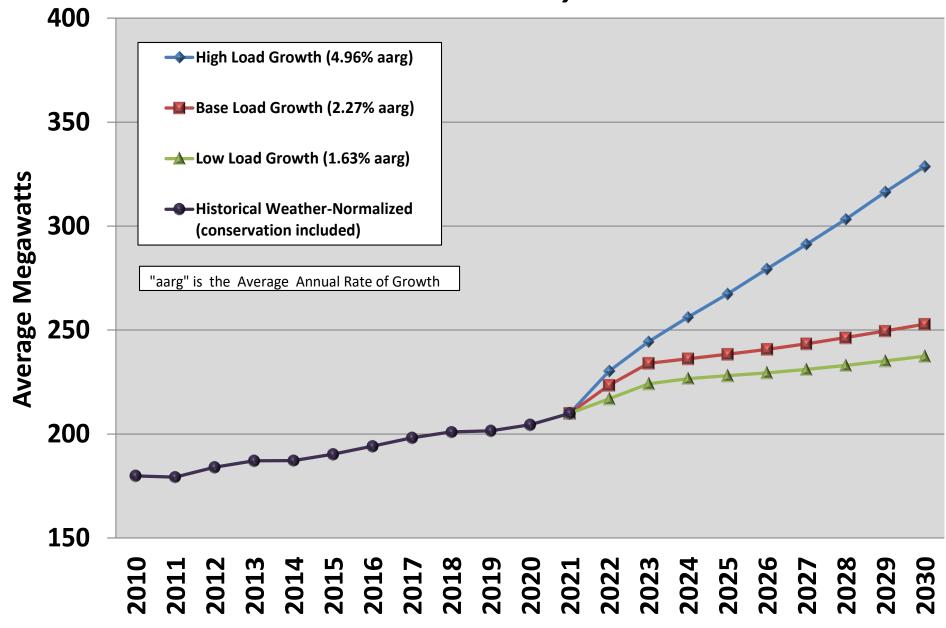


Load Forecast - Preliminary

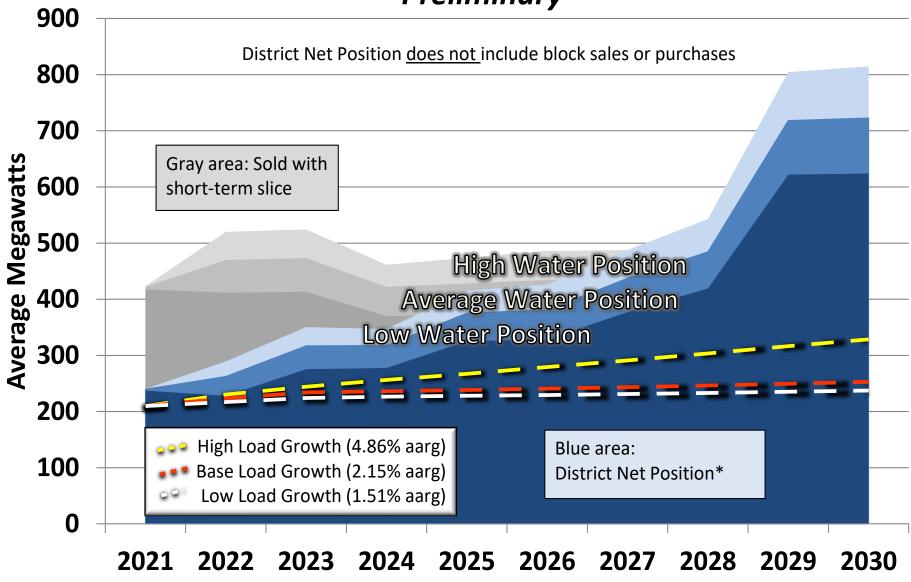
- Total sector sales residential, commercial, industrial, HDL, EV & all "other" (plus losses) for 2021-2030 (rates are before the effects of conservation)
 - Low 1.51% average annual rate of growth (.69% in 2020)
 - Base 2.15% average annual rate of growth (1.75% in 2020)
 - High 4.86% average annual rate of growth (5.08% in 2020)
- District's historical load growth
 - 2010-2020 approx. 1.71%
 - 2010-2020 approx. 1.23% (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:
 - 31-35 aMW (15% of retail load) in 2021-2030



Historical and Forecasted Annual Energy Load *Preliminary*



District Net Position and Load Forecasts *Preliminary**



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

Portfolio: Scenario Results 2021-2030 *Preliminary*

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 without new power supply
- Finalizing conservation targets

Service reliability

- Load/resource balance evaluated and expected to exceed hourly peak load forecast for each month plus operating reserve requirements
- District involved in NWPP capacity resource adequacy effort to manage in a coordinated manner
- Portfolio may change to address reliability standards

Environmental impacts

District's hydro and wind resources <u>do not</u> emit air pollutants



Chelan PUD IRP Website

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



Home / Environment / Operating Responsibly / Integrated Resource Plan

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.

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). During the development of this IRP, the rulemaking for CETA continues to be ongoing. Due to Chelan County PUD's hydropower resources being surplus to its forecasted retail electric load throughout the planning period, the District does not anticipate the CETA requirements will have a significant impact on the District's IRF development.

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.

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

A new IRP is being developed in 2021, to coincide with the development of the District's first Clean Energy Implementation Plan (CEIP). The CEIP is a requirement of CETA. The IRP will outline the sources of power needed to supply PUD customers through 2030. 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 2021 IRP will be submitted to the Washington State Department of Commerce before the September 1, 2022 deadline. Meeting notices and presentations will be linked below as available.

Public Meetings/Hearing - 2021

October 18, 2021, 10 a.m.

November 15, 2021, 10 a.m.

December 6, 2021, final hearing, 1 p.m.



Questions?

