2020 Integrated Resource Plan

Initial Portfolio Analysis Results

May 11, 2020



Why we're here

- Load Forecast
 - Renewable Resources Required
- Conservation
- District Net Position and Load Forecasts
- Portfolio: Scenario Results



Board and Public Process – 2020

May 11 - No Board Action Requested Today

Initial Portfolio Analysis results

June 15 (tentative)

Finalized Portfolio Analysis and Final Draft IRP document

July 6 (tentative)

Final Draft IRP for Board Approval (Resolution to be presented)

Prior to September 1

Submit Final IRP to Department of Commerce

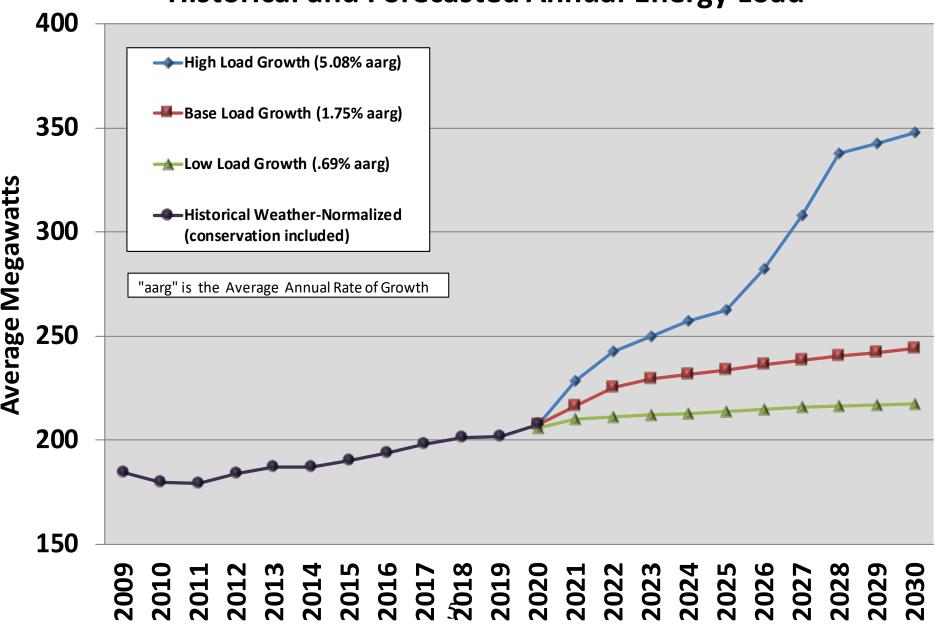


Load Forecast

- Total Sector Sales Residential, Commercial, Industrial, HDL, EV & all "Other" (plus losses) for 2020-2030 (rates are before the effects of conservation)
 - − Low − 0.69% average annual rate of growth (.87% in 2018)
 - Base 1.75% average annual rate of growth (3.45% in 2018)
 - High 5.08% average annual rate of growth (7.87% in 2018)
- District's Historical Load Growth
 - 2009-2019 approx. 1.47%
 - 2009-2019 approx. 0.89% (after the effects of cumulative conservation)
- Based upon current base load forecast (net of conservation), the amount of renewable resources required will be approximately:
 - 31-34 aMW (15% of retail load) in 2020-2030

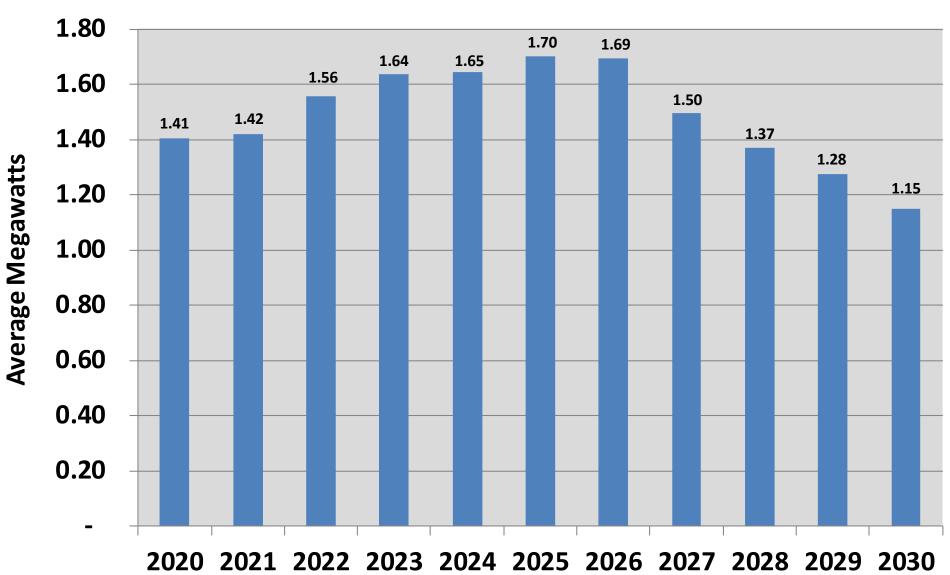


Historical and Forecasted Annual Energy Load



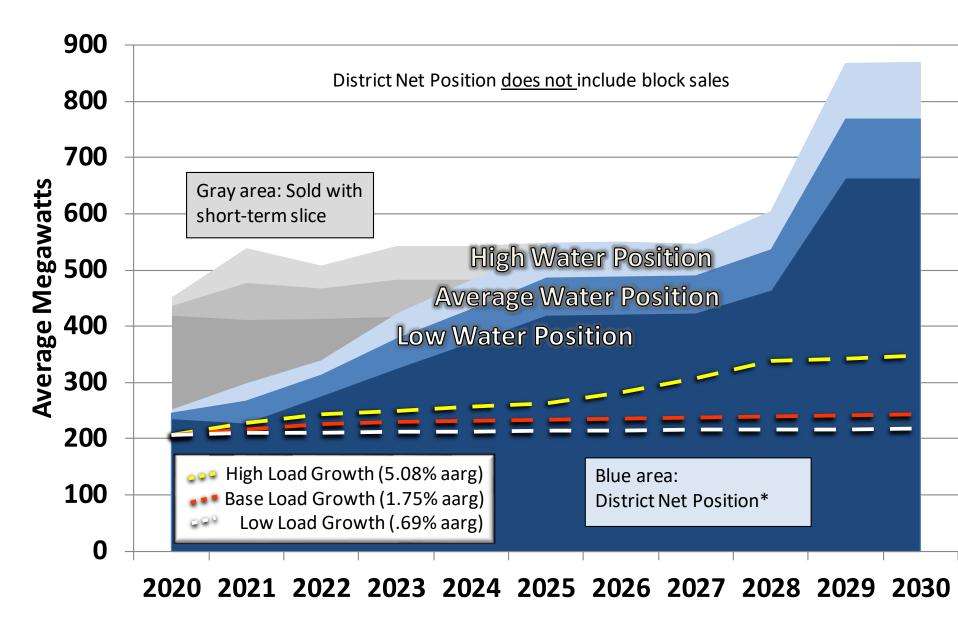
10-Year Conservation Targets

Source: 2019 District Conservation Potential Assessment



2 Year Target

District Net Position and Load Forecasts



^{*}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 2020-2030

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
- Conservation resources increased since 2018 to 1.49 aMW (2020-2030)

Service Reliability

- Meets Council's voluntary loss of load probability standard
- District involved in NWPP capacity resource adequacy effort to manage in a coordinated manner
- Portfolio may change to address reliability standards

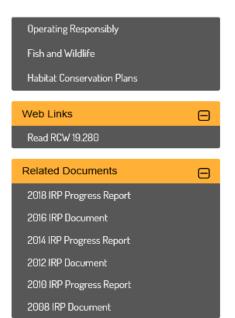
Environmental Impacts

- District's hydro and wind resources <u>do not</u> emit air pollutants
- District is purchaser of "unspecified" resources during certain hours



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. During the development of this IRP, the rulemaking for CETA is 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 IRP 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.

Chelan County PUD has begun its 2020 IRP. The 2020 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 that will meet current and projected needs at the lowest reasonable cost and risk to the utility and its customer-owners.

The 2020 IRP will be submitted to the Washington State Department of Commerce before the Sept. 1, 2020, deadline. Meeting notices and presentations will be linked below as the process evolves.

Send comments to contactus@chelanpud.org

Public Meetings/Hearing - 2020 (tentative)



Questions?

