

2016 Integrated Resource Plan

Revised Portfolio Analysis

June 6, 2016

Today's purpose

- Discuss DRAFT IRP containing revised portfolio analysis and additional report details
 - **No Board action required today**
 - Request approval of the IRP by resolution at June 20th legal hearing
- Compliance with RCW 19.280: Electric Utility Resource Plans
 - Board adoption of IRP
 - Submittal to Dept. of Commerce by September 1, 2016

Today's presentation

- Summary of Recommendations
- District Load Forecast
- District Net Generation and Load Forecasts
- Short-Term Plan – Conservation
- Short-Term Plan – Energy Resources
- Remaining Board and Public Process Schedule

Summary of Recommendations

- The District retain its current mix of generating resources which will meet load and the renewables requirements of WA Renewable Portfolio Standard (RPS) for the planning period (2016-2026)
- Continue to evaluate and implement conservation programs based on the foundational work performed in the 2015 Conservation Potential Assessment (CPA)
- Carry on evaluating/implementing strategies for additional power sales contracts consistent with financial policies & hedging strategy

UNDER REVIEW

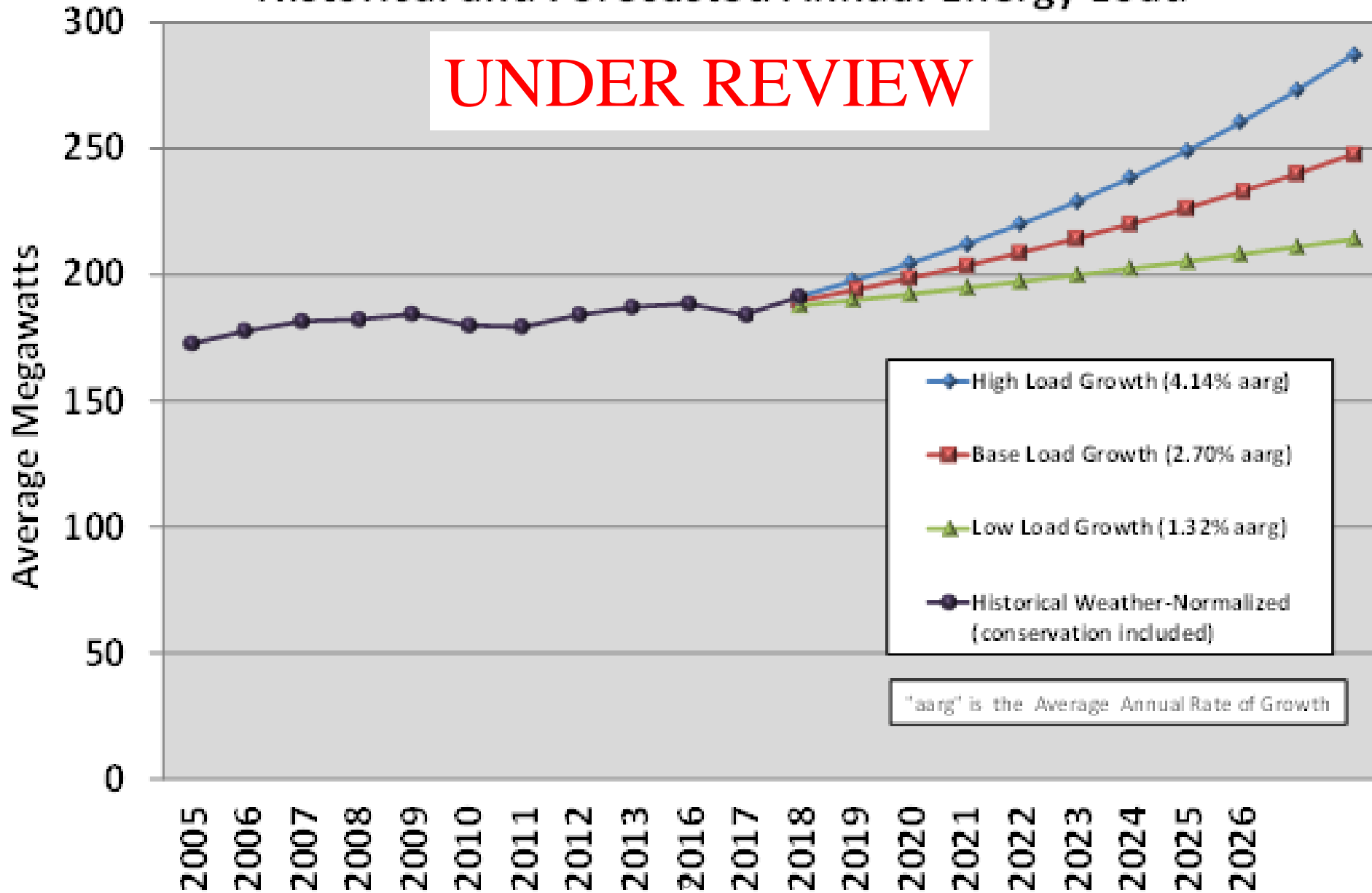
2015 – 2026 Load Growth

	Low %	2015	2026	2015-2026	2015-2026
	Growth	Low aMW	Low aMW	Low aMW growth	aMW from HDL
Residential	0.58%	90	96	6	NA
Commercial	0.54%	56	59	3	NA
Industrial	4.55%	30	50	19	17
Other	0.00%	9	9	0	NA
Total Load	1.32%	185	214	29	17
	Base %	2015	2026	2015-2026	2015-2026
	Growth	Base aMW	Base aMW	Base aMW growth	aMW from HDL
Residential	1.16%	90	102	12	NA
Commercial	1.02%	56	63	7	NA
Industrial	8.38%	30	74	43	40
Other	0.00%	9	9	0	NA
Total Load	2.70%	185	248	62	40
	High %	2015	2026	2015-2026	2015-2026
	Growth	High aMW	High aMW	High aMW growth	aMW from HDL
Residential	1.63%	90	108	18	NA
Commercial	1.41%	56	65	9	NA
Industrial	11.91%	30	105	75	70
Other	0.00%	9	9	0	NA
Total Load	4.14%	185	287	102	70



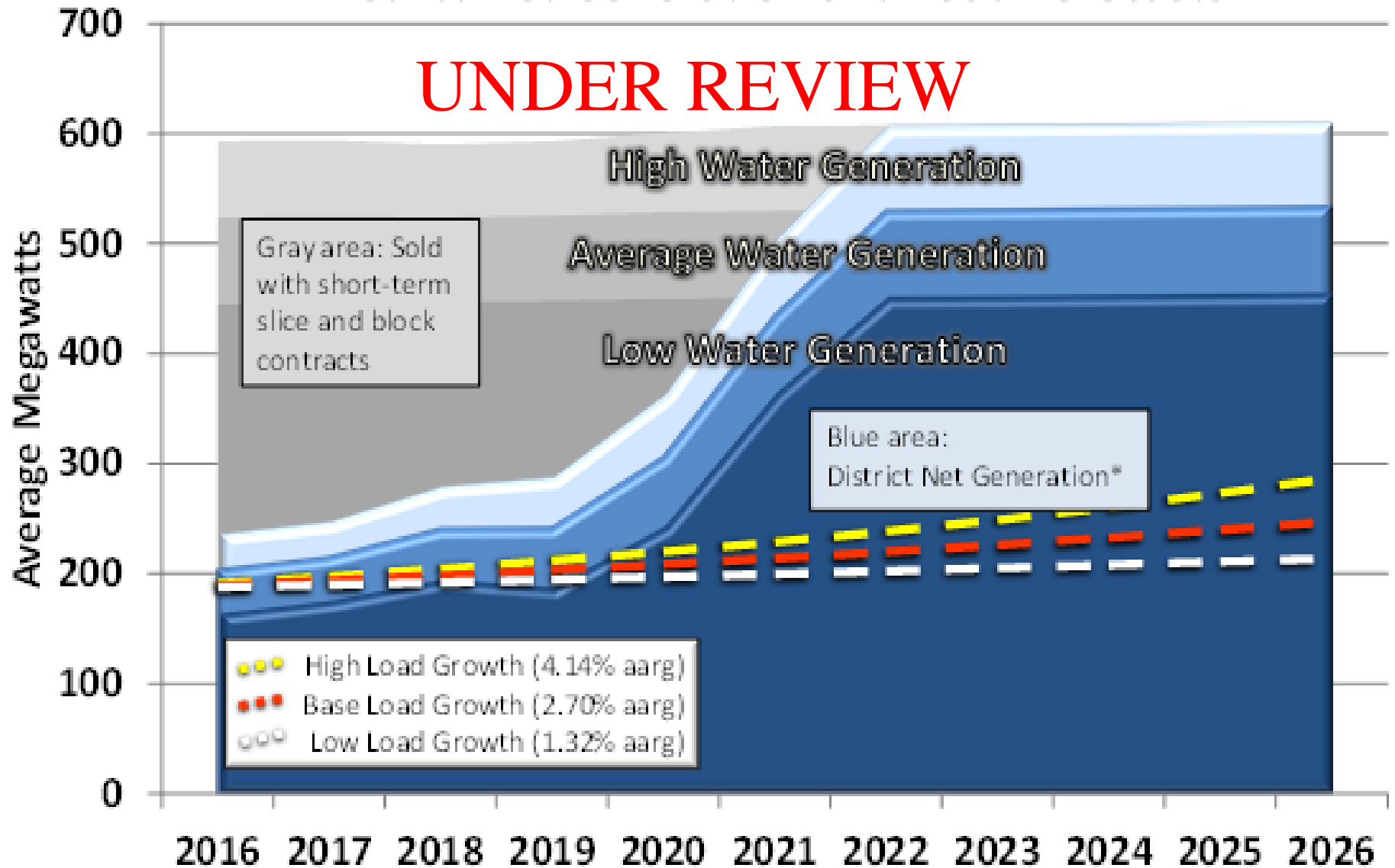
Historical and Forecasted Annual Energy Load

UNDER REVIEW



District Net Generation and Load Forecasts

UNDER REVIEW



* Hydro generation includes the effects of encroachments, Canadian Entitlement Allocations, other contractual obligations including long-term power purchase contracts, short-term hedging strategy slice contracts and block sales

Short-Term Plan

Conservation

- Implement cost-effective programs that comply with RPS requirements
- In 2016, work to achieve over 2.0 aMW of savings
- In 2016, conduct energy efficiency audits in residential & commercial buildings to improve accuracy of conservation potential and planning
- Conduct strategic energy management surveys at 10+ large commercial customers for operational & management opportunities

Short-Term Plan

Conservation

- In 2016, conduct detailed assessment of publicly-owned street lighting; evaluate LEDs
- Participate in Northwest Energy Efficiency Alliance (NEEA) collaboration to improve efficiency of new consumer products
- Utilize improved conservation financial model; accounting for shape variations/wholesale prices
- In 2016, evaluate new residential programs such as home construction

Short-Term Plan

Energy Resources

- Continue to track state and federal climate change and all environmental legislation
- Monitor western build out of renewable generation and effect on reliability, reserves & market prices; monitor western Energy Imbalance Market (EIM) in conjunction
- Monitor regional dialogue and data regarding impact of climate change on potential effect on District's future loads and hydrology; regional data expected in 2017

Short-Term Plan

Energy Resources

- Continue to monitor growth in electric vehicles (EV) and presence in Chelan County: latest technical updates to modeling of potential EV load; projected potential impacts remain low
- Continue to monitor District high-density load (HDL) rates, policies and load growth to aid in future load forecast

Board and Public Process – 2016

(next step)

May 16

Initial Portfolio Analysis results

June 6

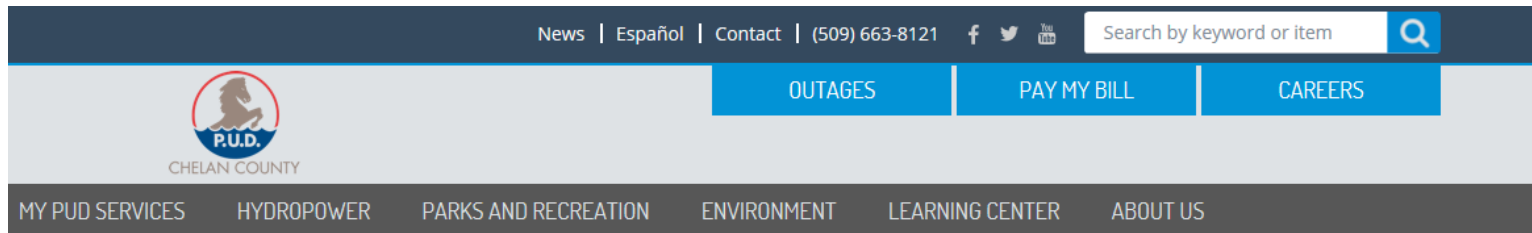
Revised Portfolio Analysis

June 20

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

Chelan PUD IRP website

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



- Operating Responsibly
 - Fish and Wildlife
 - Habitat Conservation Plans
- Web Links
 - Read RCW 19.280
- Related Documents
 - 2014 IRP Progress Report
 - 2012 IRP Document
 - 2010 IRP Progress Report
 - 2008 IRP Document

[Home](#) / [Environment](#) / [Operating Responsibly](#) / [Integrated Resource Plan](#)

Integrated Resource Plan

Chelan County PUD is preparing its 2016 Integrated Resource Plan (IRP) as required by state law, RCW 19.280.

The 2016 IRP outlines the sources of power needed to supply PUD customers through 2026. It describes 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 2016 IRP will be submitted to the Washington State Department of Commerce before the Sept. 1, 2016, deadline.

Public meetings on the IRP are scheduled as shown below (with links to presentations and meeting notices).

[Send comments to contactus@chelanpud.org](mailto:contactus@chelanpud.org)

Public Meetings/Hearing - 2016

June 20, 2016, final hearing 1 p.m.

June 6, 2016 board presentation, 10 a.m.

- [Meeting Notice](#)

May 16, 2016, board presentation, 10 a.m.

- [Meeting Notice](#)