Energy Resources Quarterly Board Update 2023 Q1

May 22, 2023

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Why We're Here

- Wholesale and energy-related revenue update
- Western power markets update
- Operations and planning
 - Portfolio overview
 - Pricing update

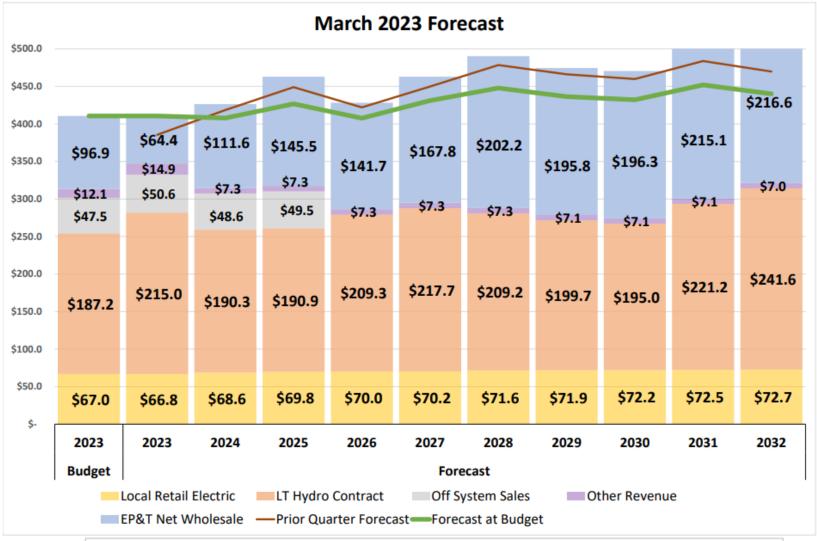


Key points

- Below average water year in 2023
 - NWR and other Energy-Related Revenue projected to be \$161M (\$4M better than budget)
 - Higher wholesale electricity prices, lower generation (below average water), and higher electric loads
- Climate Commitment Act (CCA)
 - First auction held
 - Allowance prices
 - Chelan received "no cost" allowances
- Day-Ahead market Initiatives
 - SPP Markets+ meetings have begun for Phase 1 development (32 participants)
 - Draft CAISO EDAM language released



Electric Revenues Forecast - \$ Millions



Other Revenue includes Real Time, LT Contract admin fees, frequency response and load shedding, renewables, and scheduling. Actual results are prelimniary unaudited figures.



2023 NWR and Other Energy-Related

Revenue

(amounts in millions)						
		Budget	F	orecast [1]		Variance
EP&T Net Wholesale Revenue (NWR)						
Energy Sales/Purchases	\$	83.7	\$	51.1	\$	(32.6)
Specified Source Premium	\$	13.3	\$	11.0	\$	(2.3)
Renewables - Bundled	\$	-	\$	2.3	\$	2.3
NWR Sub-total [2]	\$	96.9	\$	64.4	\$	(32.6)
Off System Sales						
Off System end use sales	\$	47.5	\$	50.6	\$	3.1
Other Energy-Related Revenue						
LT Power Contract- Retained Surplus	\$	-	\$	30.9	\$	30.9
LT Power Contract- Admin Fees	\$	3.4	\$	3.4	\$	-
Frequency Response & Load Shedding	\$	1.2	\$	1.2	\$	-
Other [3]	\$	0.4	\$	0.4	\$	-
Renewables - Unbundled	\$	0.1	\$	0.8	\$	0.7
Real-Time Revenue	\$	7.0	\$	9.1	\$	2.1
Other Energy-Related Sub-total	\$	12.1	\$	45.8	\$	33.7
NWR and Other Energy-Related Revenue	\$	156.5	\$	160.7	\$	4.2

[1] 2023 forecast based Jan - Mar Actual and Apr - Dec estimates (4/6/23 NWR forecast)

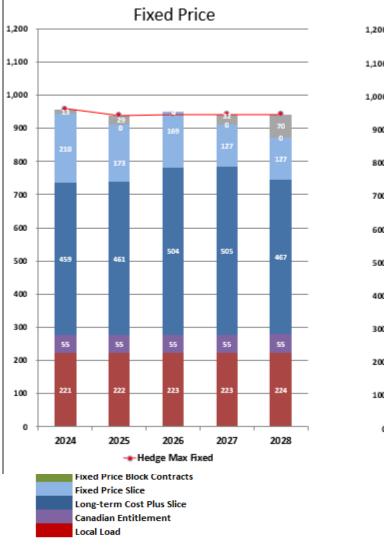
[2] NWR includes PWX specified source sale/full requirements purchase and transmission pass through costs

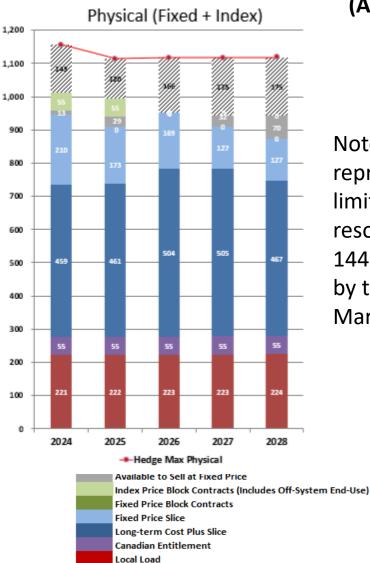
[3] Other includes scheduling & admin fees and the sale of reserves



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District's energy commitments





Note: The graphs represent the limits contained in resolution 20-14439 approved by the Board on March 23, 2020.

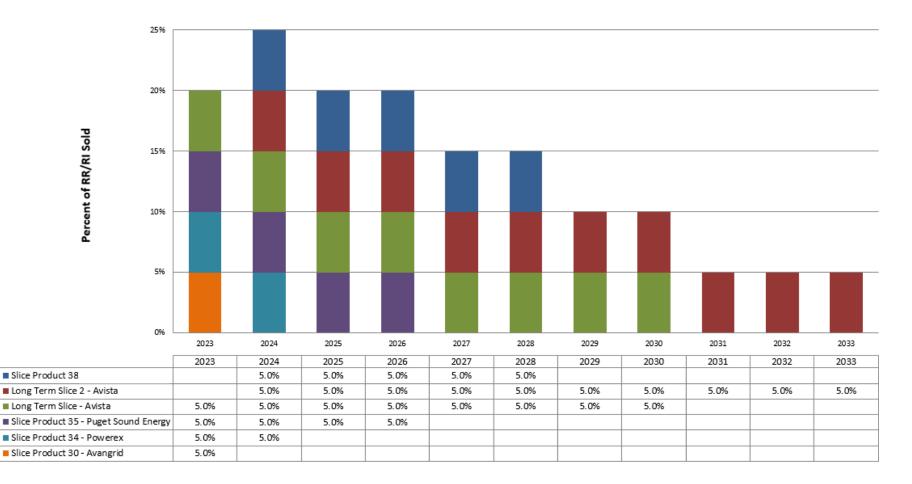
(Average MW)



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**Hedge Max Physical = stress water generation + 175 aMW

Fixed Price Slice Contracts





Changes in the western power market

Western Resource Adequacy Program (WRAP)

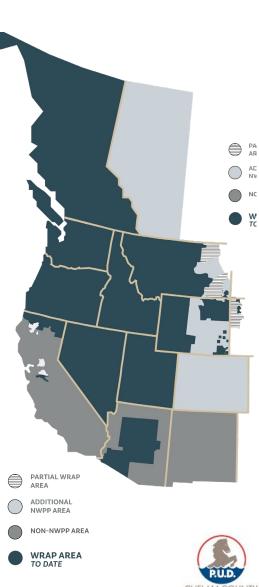
• First binding season may move to summer 2026 due to lack of participant interest in summer 2025, Chelan has already moved to summer 2026

Climate Commitment Act (CCA)

- First auction held on 2/28/2023, all allowances were sold at \$48.50/metric ton of CO2e resulting in ~\$300M in revenue to Department of Ecology
- Next auction scheduled for 5/31/2023
- Allowances currently trading \$60-\$70/metric ton of CO2e in secondary market
- Chelan received 226,451 vintage 2023 "no cost" allowances on 4/25

Short term markets (within hour \rightarrow real-time \rightarrow day ahead)

- SPP Markets+ meetings have begun for Phase 1 development (32 participants)
- Draft CAISO EDAM language released

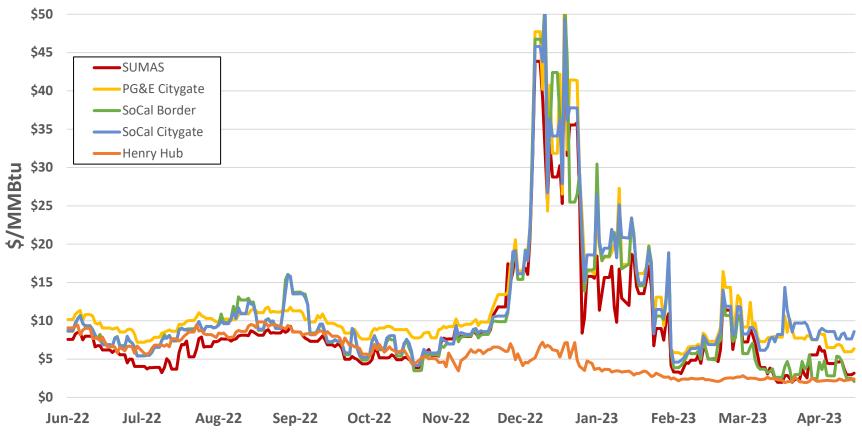


Daily Natural Gas Prices

Jun 2022 – Apr 2023

Select Western Natural Gas Hubs

Spot Prices



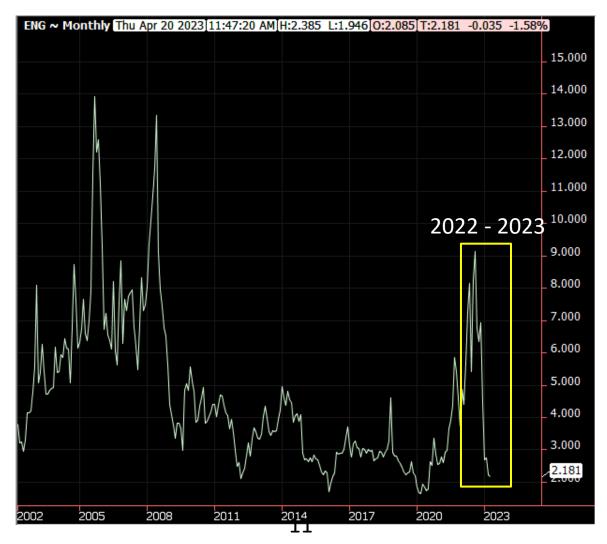


May 2023 Henry Hub natural gas





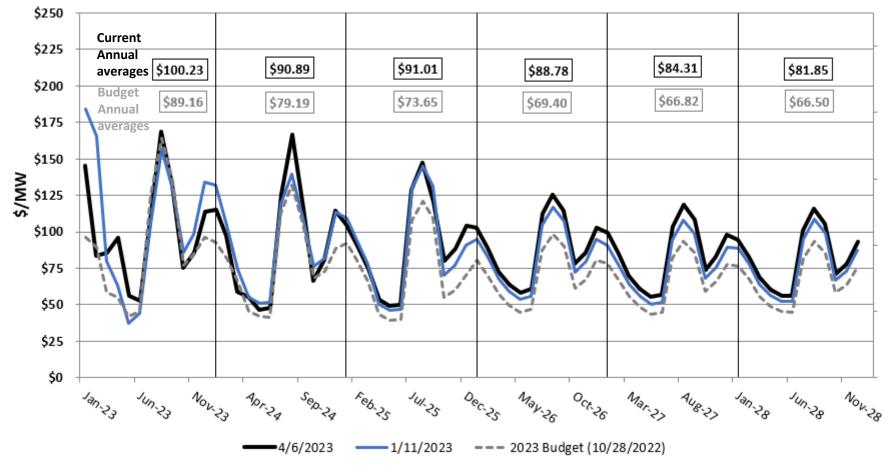
Mar 2023 Henry Hub natural gas (price history since 2002)





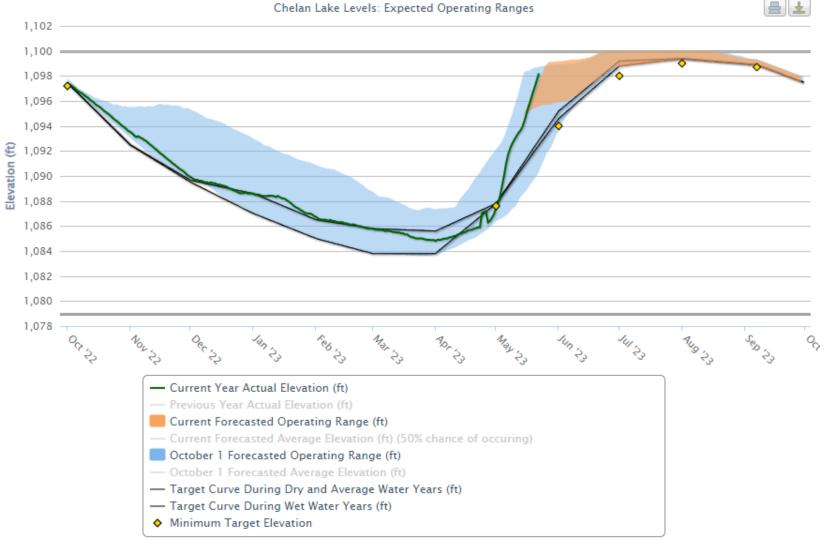
Mid-C forward price curve

MIDC Flat Forward Price Curve (ICE DA index prices for previous months)





Lake Chelan level webpage





Summary

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Questions?



U. S. Seasonal Outlooks April - June 2023

The seasonal outlooks combine the effects of long-term trends, soil moisture, and, when appropriate, ENSO.

