

Energy Resources Quarterly Board Update 2022 Q4

March 6, 2023

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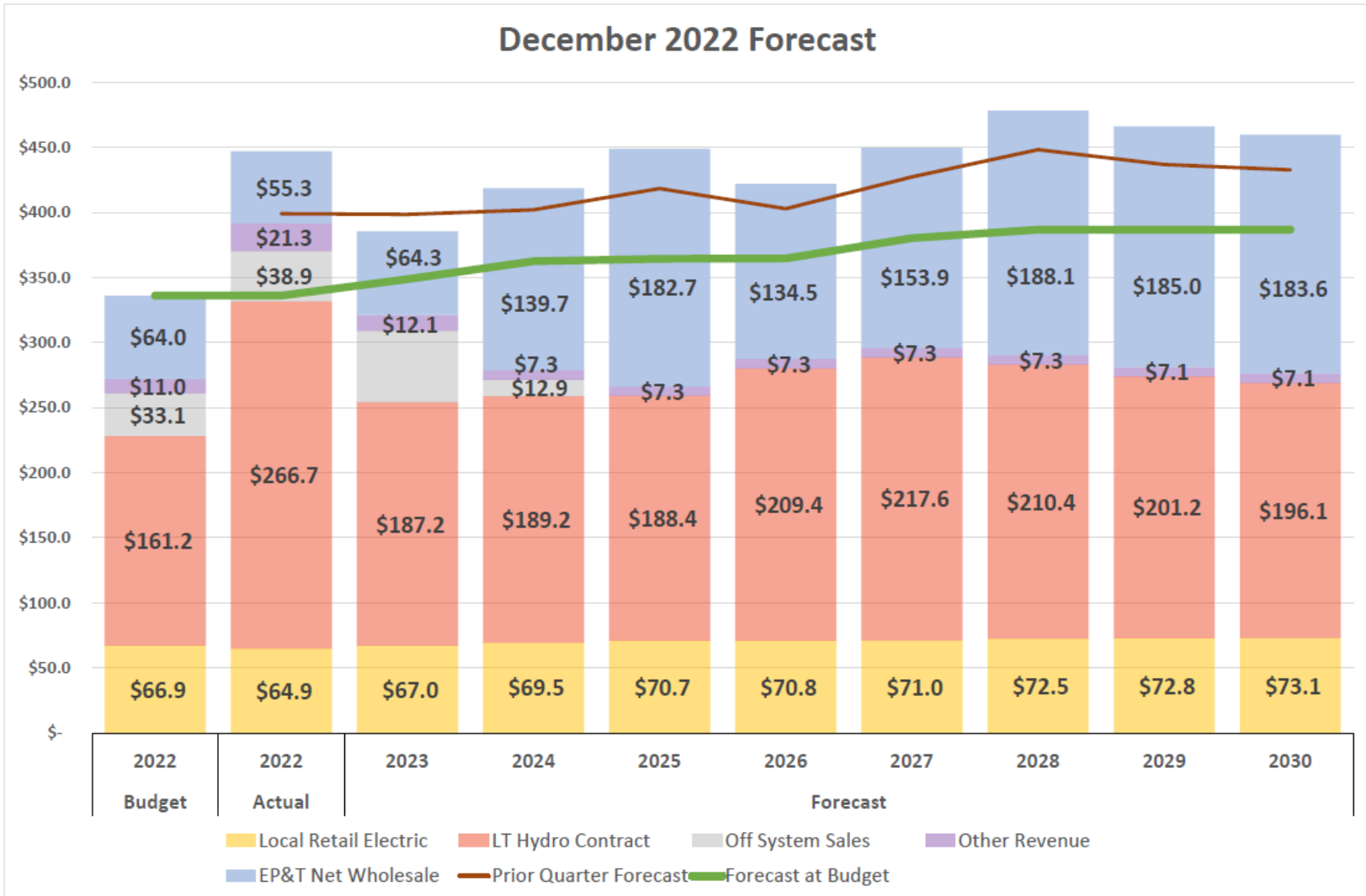
Why We're Here

- Wholesale and energy-related revenue update
- Western Power Markets update
- Operations and planning
 - Portfolio overview
 - Pricing update

Key points

- Strong 2022 energy-related revenues
 - \$222M (\$114M better than budget)
 - Higher wholesale electricity prices
 - Retained surplus proceeds from long-term power contracts
- Western Resource Adequacy Program (WRAP)
 - FERC acceptance of tariff
- Day-Ahead market initiatives
 - Southwest Power Pool (SPP) Markets+ funding agreement signed by multiple utilities
 - CAISO board approves Western Day-ahead market (EDAM)

Electric Revenues Forecast - \$ Millions



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

2022 NWR and Other Energy-Related Revenue

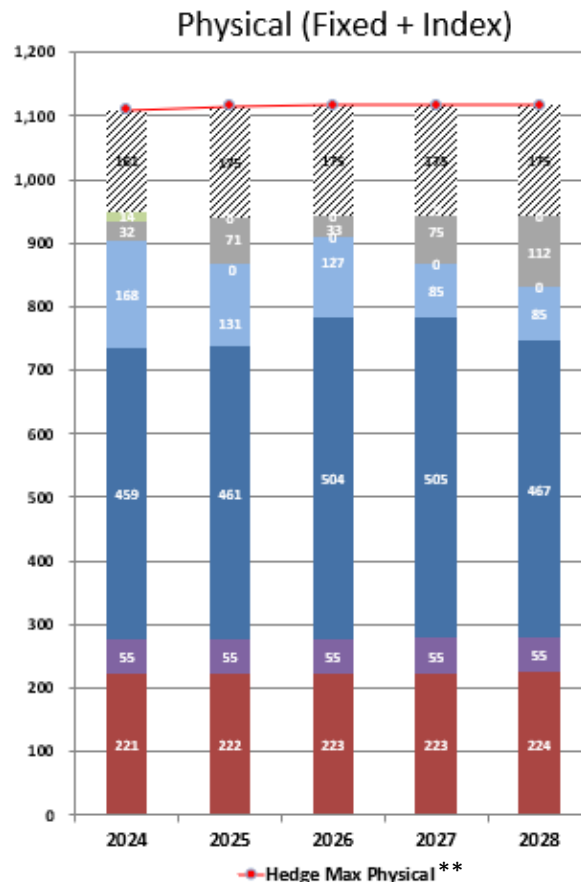
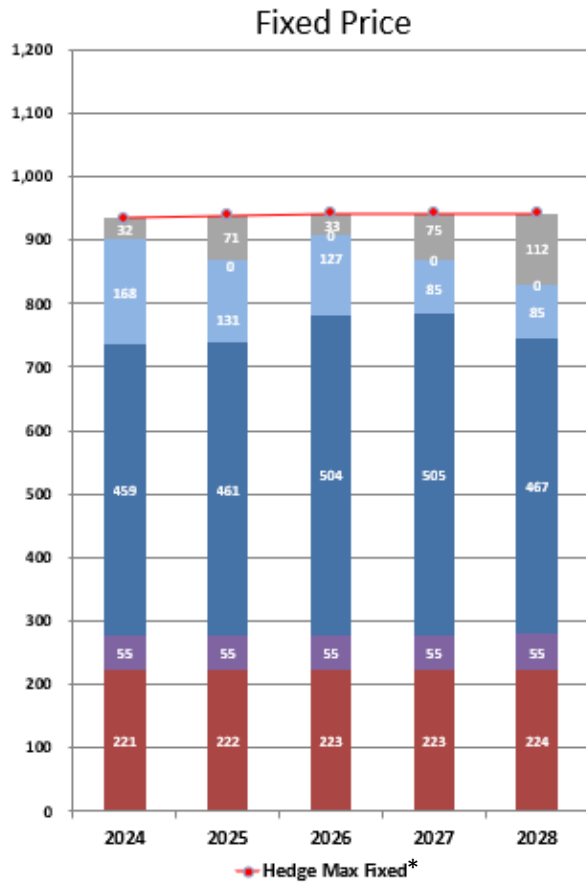
(amounts in millions)				
	Budget		Actual	Variance
EP&T Net Wholesale Revenue (NWR)				
Energy Sales/Purchases	\$ 54.4	\$	\$ 45.5	\$ (9.0)
Specified Source Premium	\$ 9.6	\$	\$ 9.8	\$ 0.2
Renewables - Bundled	\$ -	\$	\$ 0.0	\$ 0.0
NWR Sub-total [2]	\$ 64.0	\$	\$ 55.3	\$ (8.7)
Off System Sales				
Off System end use sales	\$ 33.1	\$	\$ 38.9	\$ 5.8
Other Energy-Related Revenue				
LT Power Contract- Retained Surplus	\$ -	\$	\$ 106.3	\$ 106.3
LT Power Contract- Admin Fees	\$ 2.8	\$	\$ 4.4	\$ 1.6
Frequency Response & Load Shedding	\$ 1.0	\$	\$ 1.0	\$ -
Other [3]	\$ 0.2	\$	\$ 0.6	\$ 0.4
Renewables - Unbundled	\$ 0.1	\$	\$ 0.5	\$ 0.5
Real-Time Revenue	\$ 7.0	\$	\$ 14.8	\$ 7.8
Other Energy-Related Sub-total	\$ 11.1	\$	\$ 127.6	\$ 116.6
NWR and Other Energy-Related Revenue	\$ 108.1	\$	\$ 221.8	\$ 113.6

[1] 2022 Actual based Jan - Dec, actual retained surplus and specified source premium through Dec

[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

District's energy commitments



(Average MW)

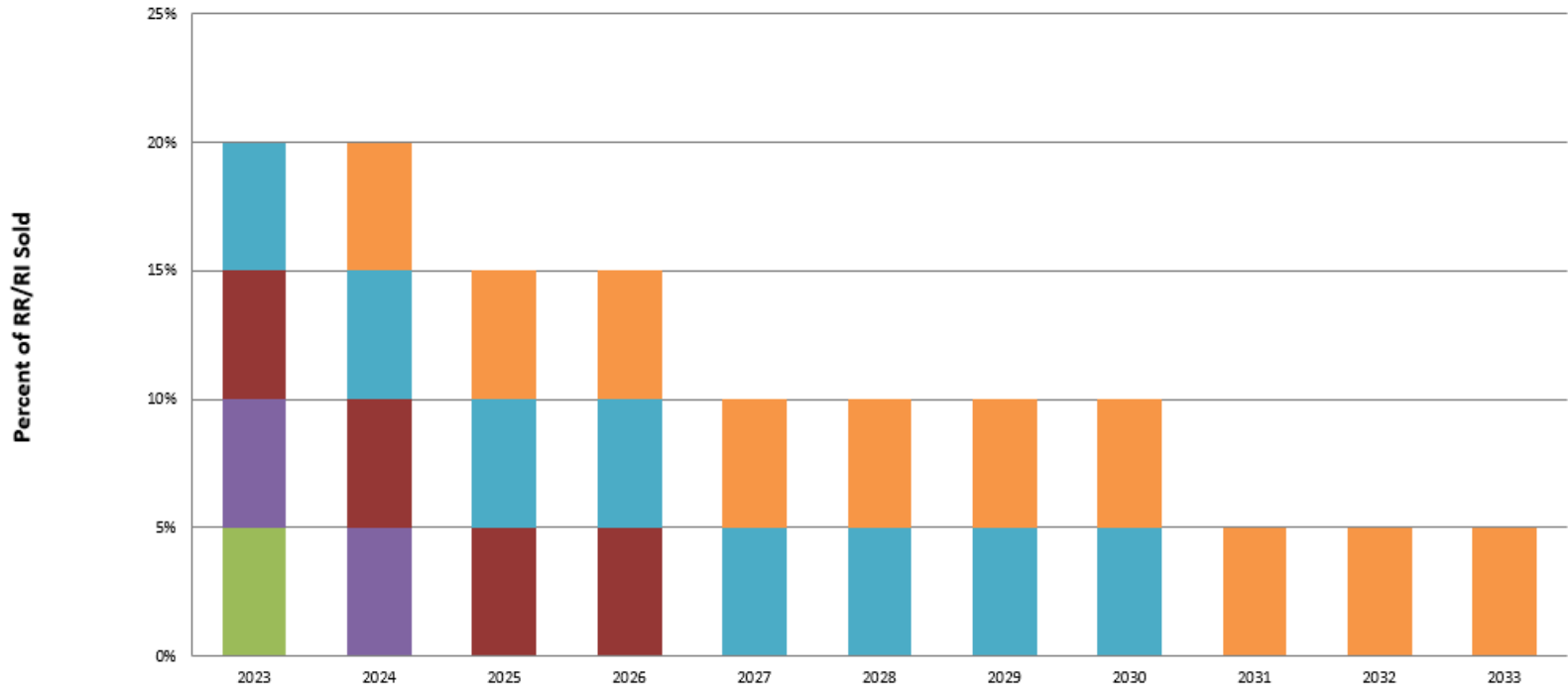
Note: The graphs represent the limits contained in resolution 20-14439 approved by the Board on March 23, 2020.

*Hedge Max Fixed = stress water generation

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

Fixed Price Slice Contracts

Fixed Price Slice Products



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Long Term Slice 2 - Avista		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Long Term Slice - Avista	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%			
Slice Product 35 - Puget Sound Energy	5.0%	5.0%	5.0%	5.0%							
Slice Product 34 - Powerex	5.0%	5.0%									
Slice Product 30 - Avangrid	5.0%										

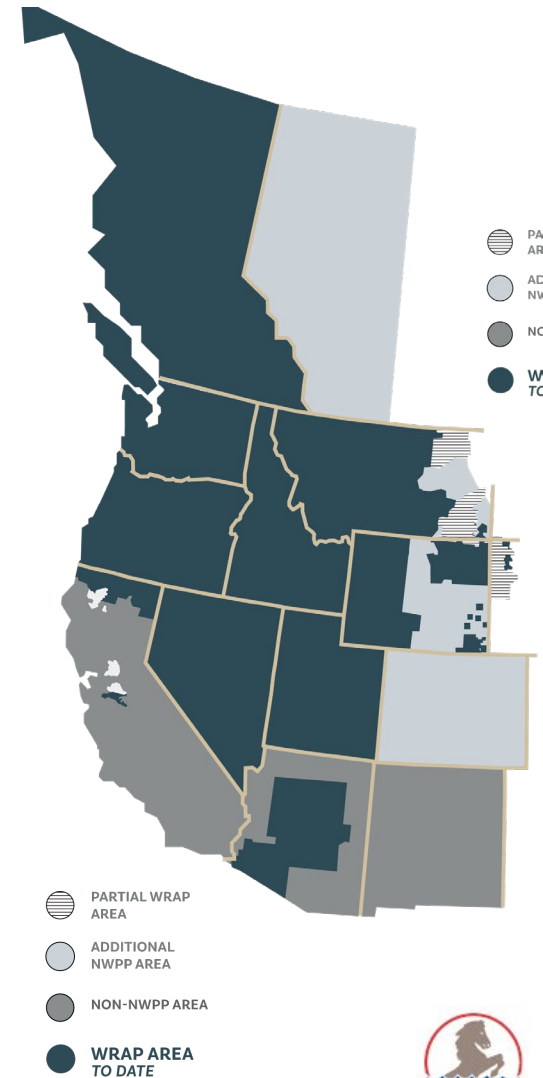
Changes in the western power market

Western Resource Adequacy Program (WRAP)

- FERC approved WRAP tariff on 2/10/23
- Participants to decide by May when to join binding program (summer 2025 through winter 2028)

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

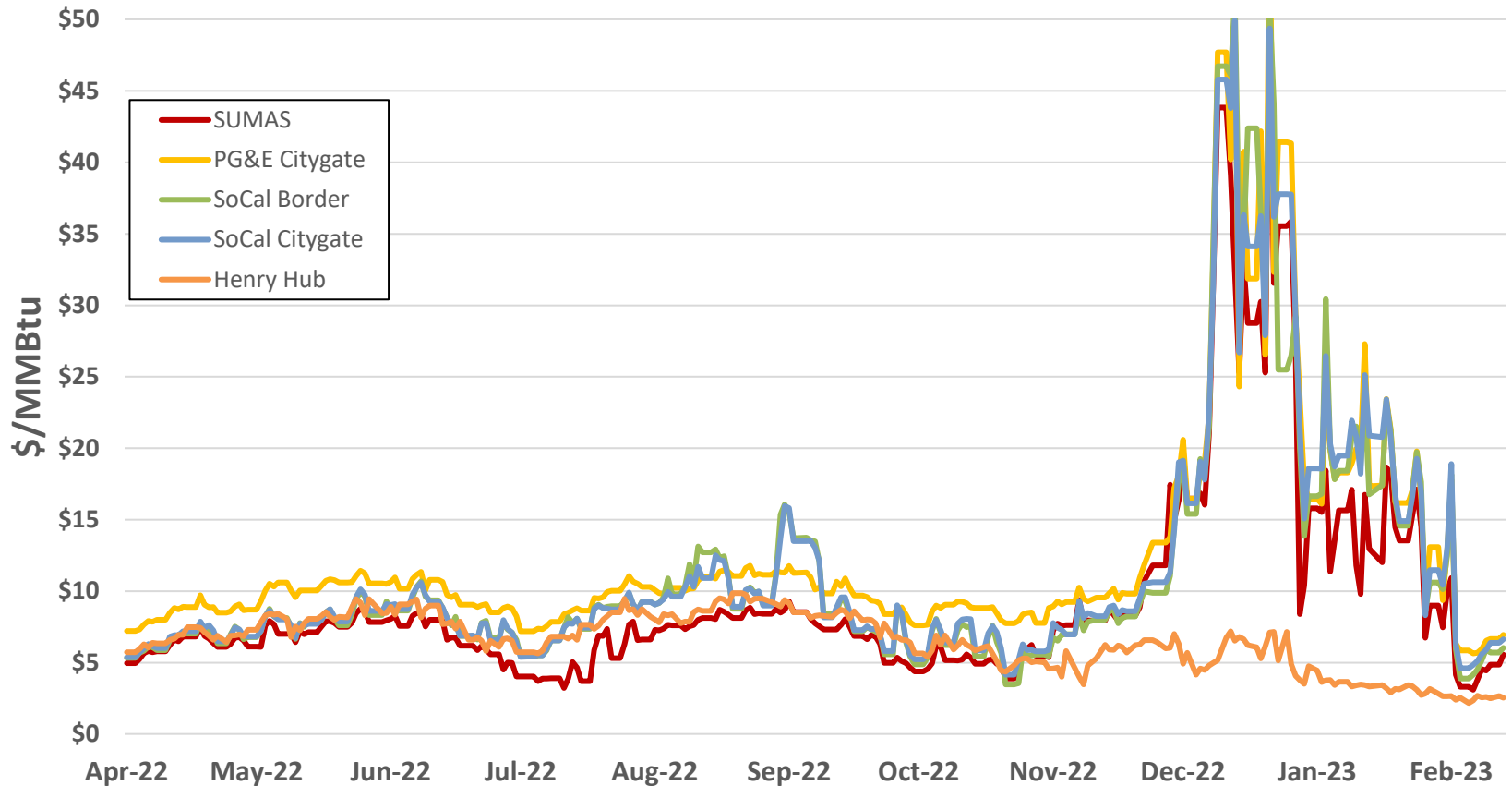
- Multiple utilities (including the District) expected to fund development of SPP Markets+
- CAISO Extended Day Ahead Market headed to FERC for approval
- California state legislature considering regionalization legislation



Daily Natural Gas Prices

Apr 2022 – Feb 2023

Select Western Natural Gas Hubs
Spot Prices



Mar 2023 Henry Hub natural gas

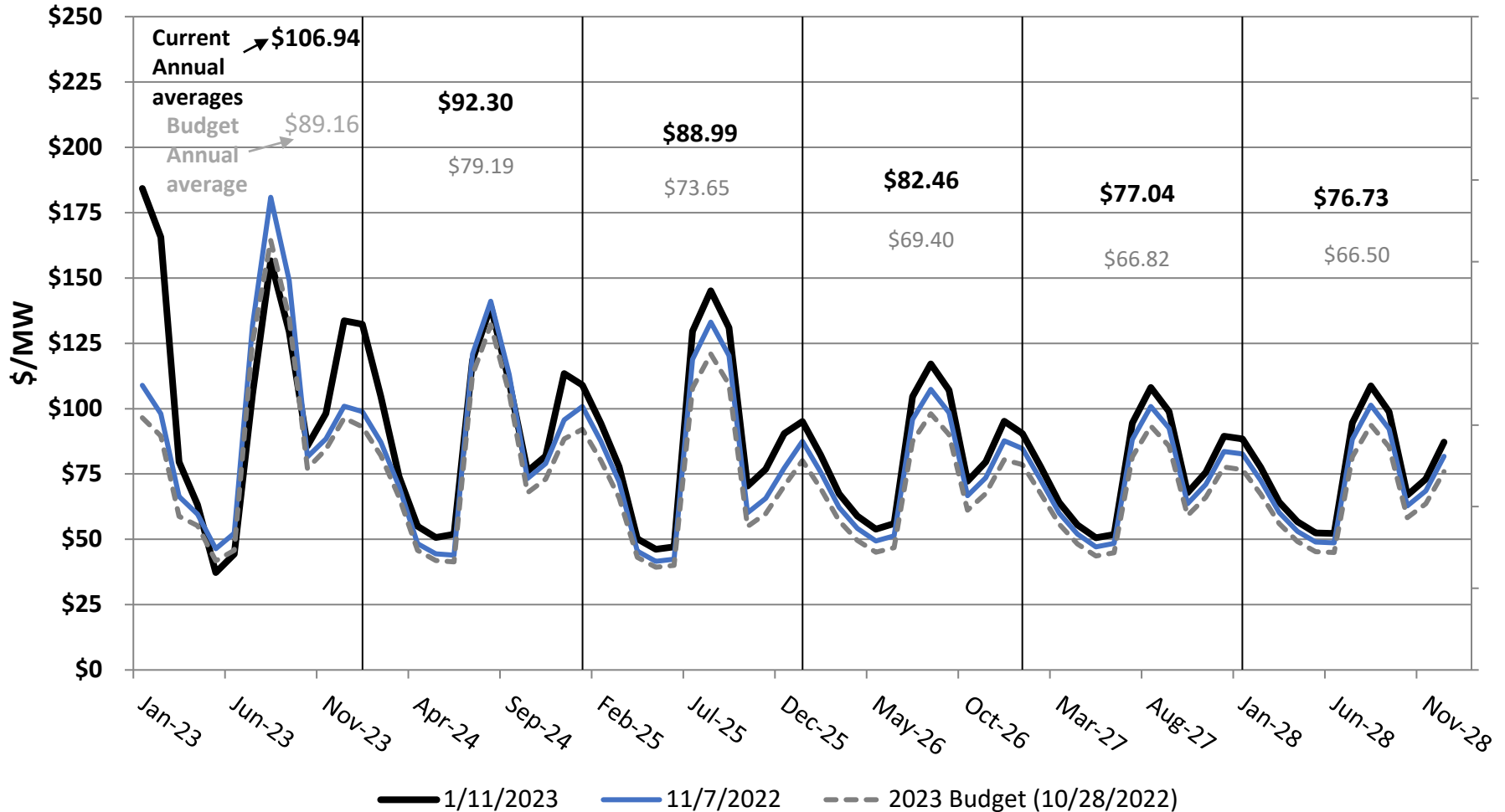


Mar 2023 Henry Hub natural gas (price history since 2002)



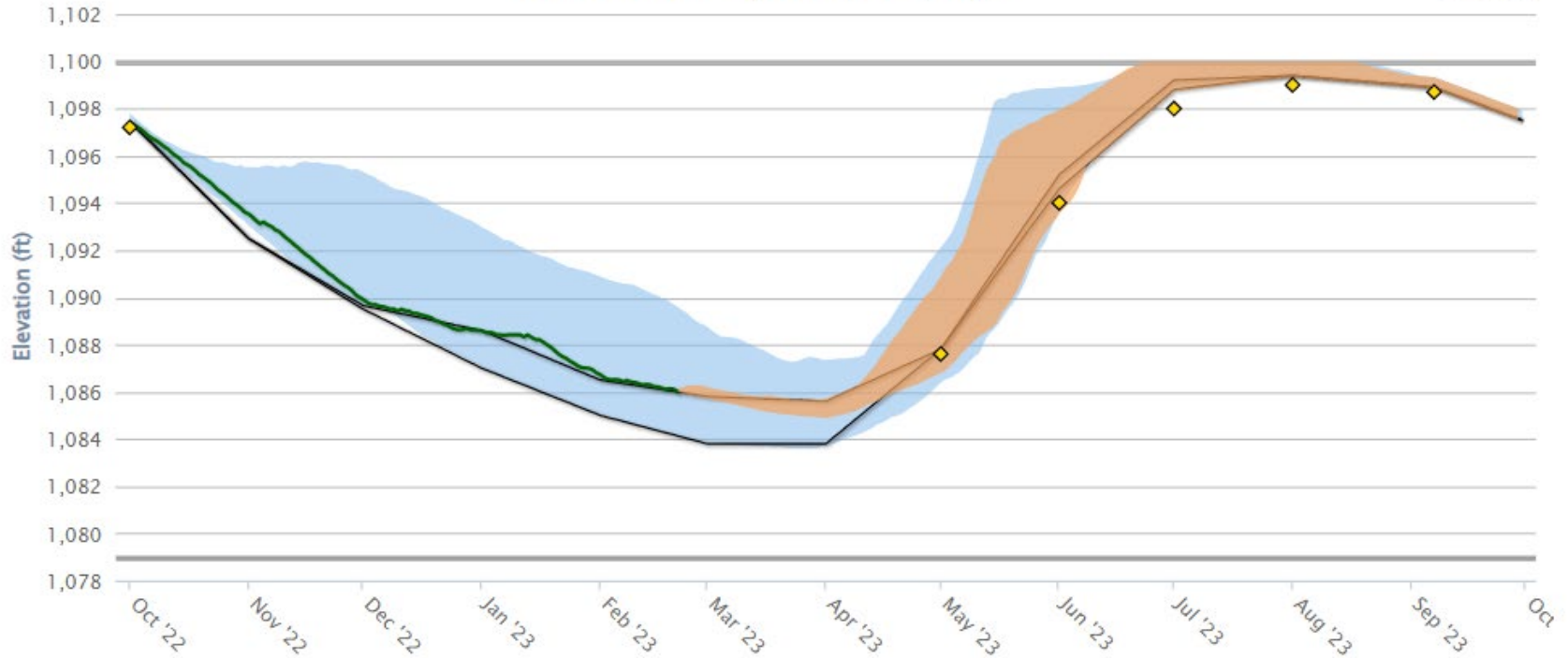
Mid-C forward price curve

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



Lake Chelan level webpage

Chelan Lake Levels: Expected Operating Ranges



- Current Year Actual Elevation (ft)
- Previous Year Actual Elevation (ft)
- Current Forecasted Operating Range (ft)
- Current Forecasted Average Elevation (ft) (50% chance of occurring)
- October 1 Forecasted Operating Range (ft)
- October 1 Forecasted Average Elevation (ft)
- Target Curve During Dry and Average Water Years (ft)
- Target Curve During Wet Water Years (ft)
- ◆ Minimum Target Elevation

Summary

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Questions?

U. S. Seasonal Outlooks

February - April 2023

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

