

# Energy Resources Quarterly Board Update 2020 Q1

May 11, 2020

# Why We're Here

- Portfolio Overview
- Operations and Planning
  - » Pricing update
  - » Net Wholesale Revenue Forecast update
- Market Update

# Key points

- The District's 2020 Net Wholesale Revenue forecast and other energy-related revenues is \$99.9 million, which is \$2.4 million below budget.

# Energy Resource Team is monitoring major changes in the western power market

- **Resource Adequacy**

Northwest Power Pool effort to design resource adequacy program is underway

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

Many utilities have joined CAISO Energy Imbalance Market (EIM) for within hour products (about 4% of trades)

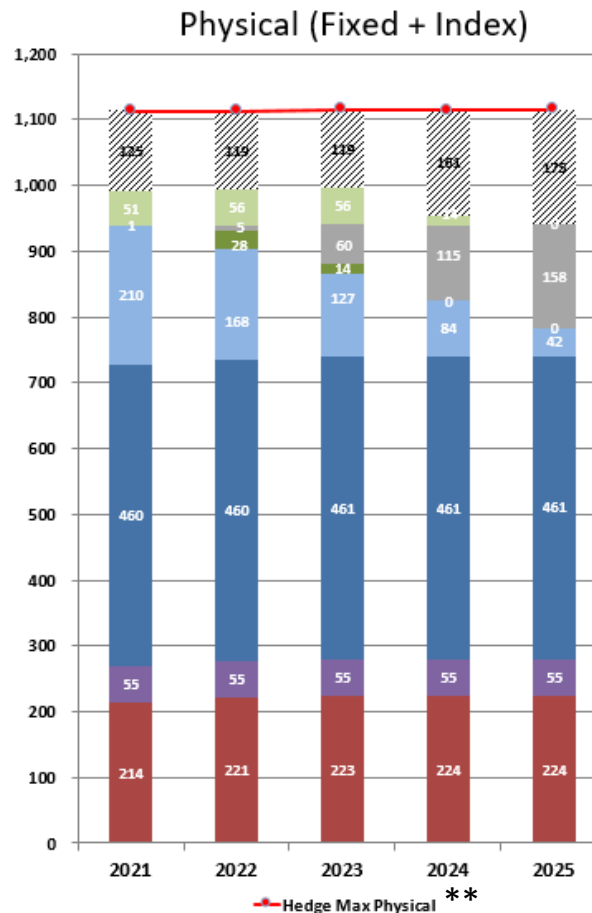
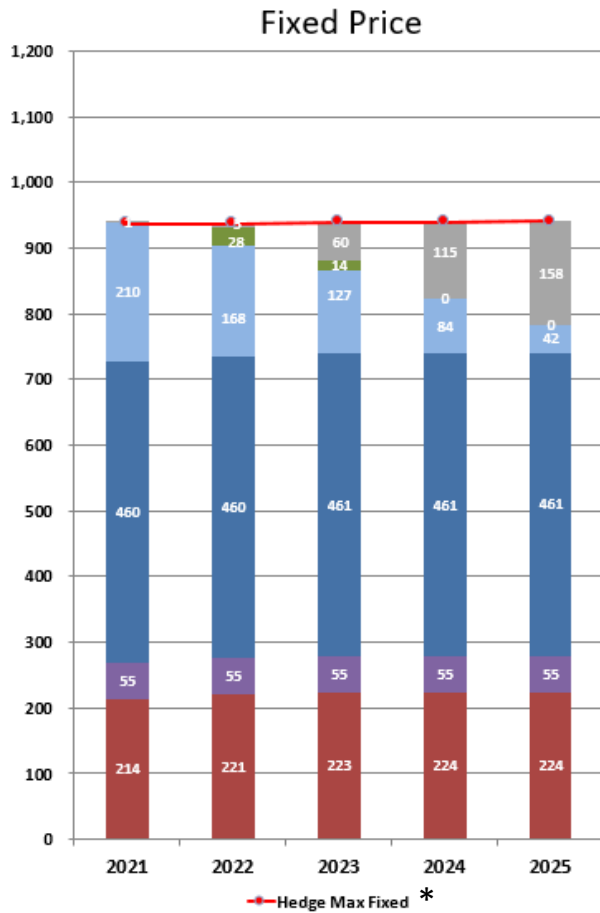
CAISO is proposing to expand EIM to the day-ahead market (Extended Day-ahead Market or EDAM)

- **State carbon policies**

Rulemaking beginning on WA Clean Energy Transformation Act (CETA)

- **New products and services**

# District's energy commitments (average MW)



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

Available to Sell at Fixed Price  
 Fixed Price Block Contracts  
 Market Based Slice  
 Long-term Cost Plus Slice  
 Canadian Entitlement  
 Local Load

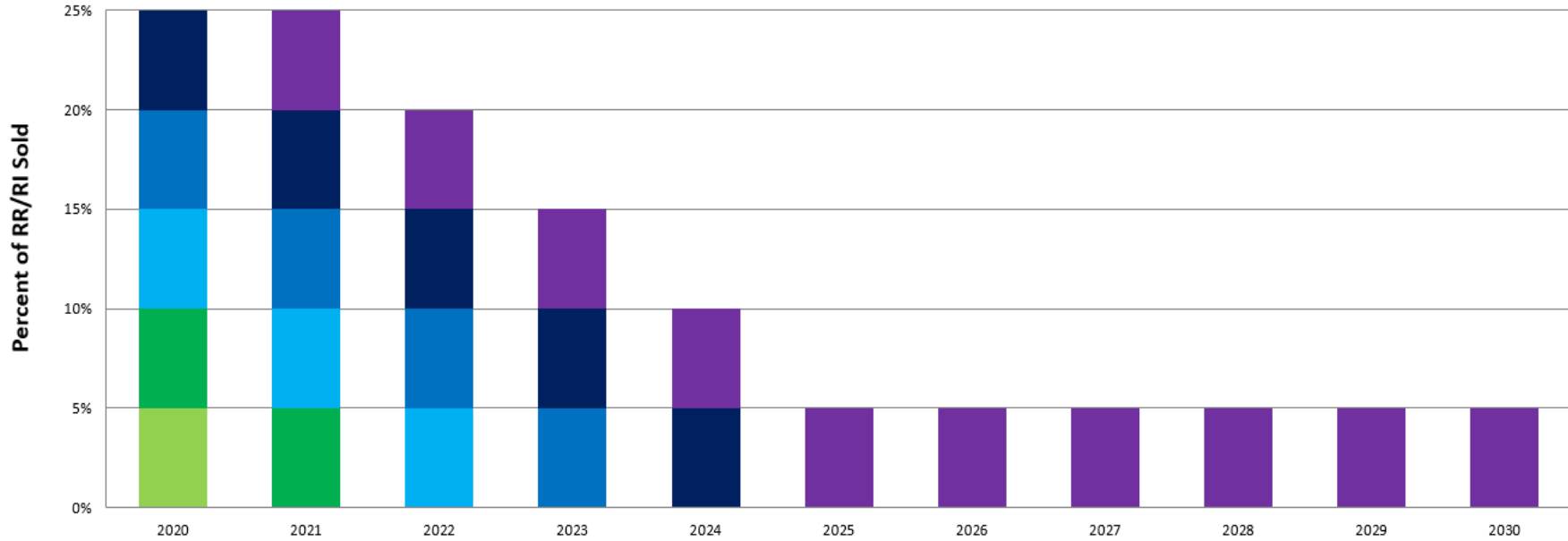
Available to Sell at Index Price  
 Available to Sell at Fixed Price  
 Index Price Block Contracts (Includes Off-System End-Use)  
 Fixed Price Block Contracts  
 Market Based Slice  
 Long-term Cost Plus Slice  
 Canadian Entitlement  
 Local Load

\*Hedge Max Fixed = stress water generation

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

# Market-based slice contracts

Current Market Position - Market Based Slice Products



	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Long Term Slice - Avista		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Slice Product 34 - Powerex	5.0%	5.0%	5.0%	5.0%	5.0%						
Slice Product 30 - Avangrid	5.0%	5.0%	5.0%	5.0%							
Slice Product 29 - Morgan	5.0%	5.0%	5.0%								
Slice Product 26 - Morgan	5.0%	5.0%									
Slice Product 22 - Avista	5.0%										

# June 2020 Henry Hub natural gas



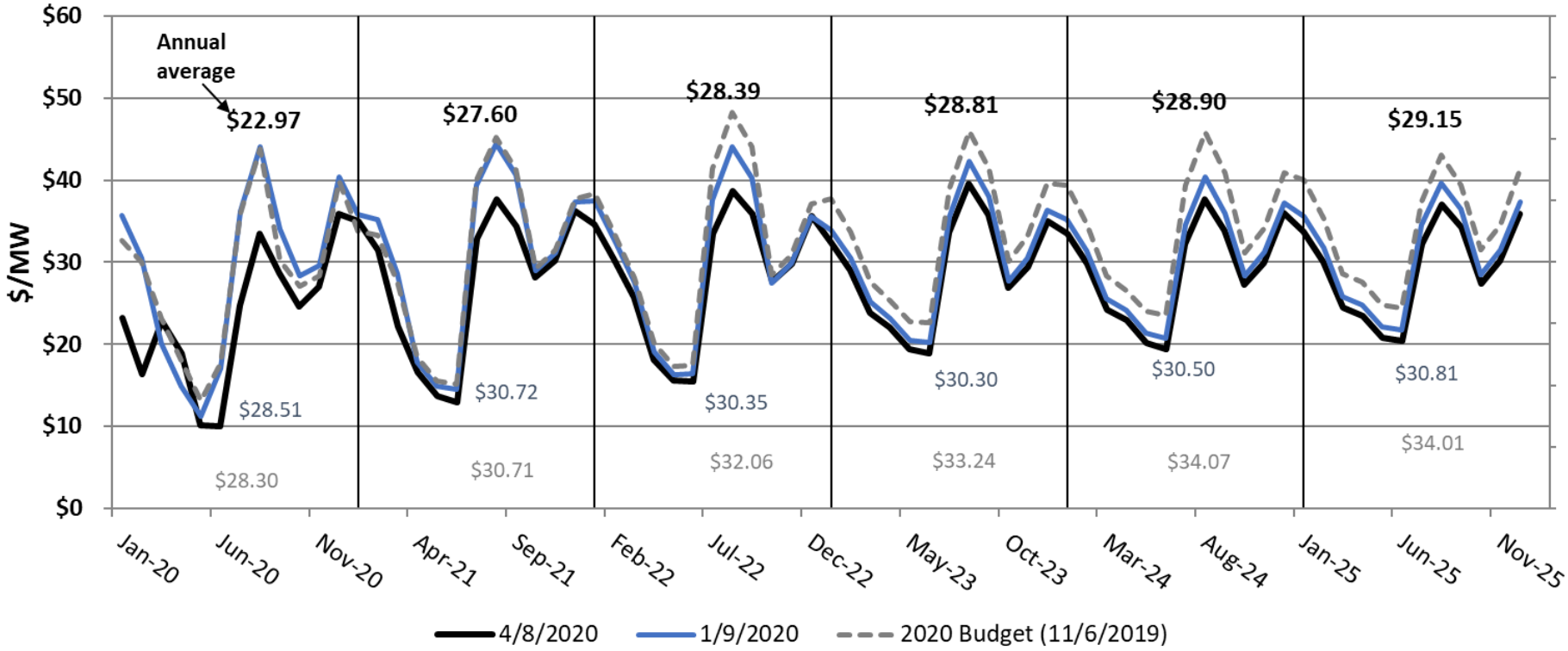
# June 2020 Henry Hub natural gas contract (price history since 2002)





# MIDC forward price curve

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



## 2020 NWR and Other Energy-Related Revenue

(amounts in millions)

	Budget		Forecast [1]		Variance
<b>Net Wholesale Revenue (NWR)</b>					
Energy Sales	\$ 65.1		\$ 64.9		\$ (0.1)
Specified Source Premium	\$ 8.2		\$ 8.2		\$ -
Renewables- Bundled	\$ 0.9		\$ 0.9		\$ (0.0)
NWR Sub-total [2]	\$ 74.1		\$ 74.0		\$ (0.2)
<b>Off-System End-Use Revenue</b>					
Off-System End-Use Sales [3]	\$ 17.6		\$ 15.5		\$ (2.1)
Off-System End-Use Sub-total	\$ 17.6		\$ 15.5		\$ (2.1)
<b>Other Energy-Related Revenue</b>					
LT Power Contract- Retained Surplus	\$ -		\$ -		\$ -
LT Power Contract- Admin Fees	\$ 2.2		\$ 2.2		\$ -
Frequency Response & Load Shedding	\$ 0.9		\$ 0.9		\$ -
Other [4]	\$ 0.3		\$ 0.3		\$ 0.0
Renewables- Unbundled	\$ 0.1		\$ 0.0		\$ (0.0)
Real-Time Revenue	\$ 7.0		\$ 6.9		\$ (0.1)
Other Energy-Related Sub-total	\$ 10.5		\$ 10.4		\$ (0.1)
<b>NWR and Other Energy-Related Revenue</b>	<b>\$ 102.3</b>		<b>\$ 99.9</b>		<b>\$ (2.4)</b>

[1] 2020 forecast based on preliminary Jan-Mar unaudited actuals and Apr-Dec estimates (4/8/20 NWR forecast).

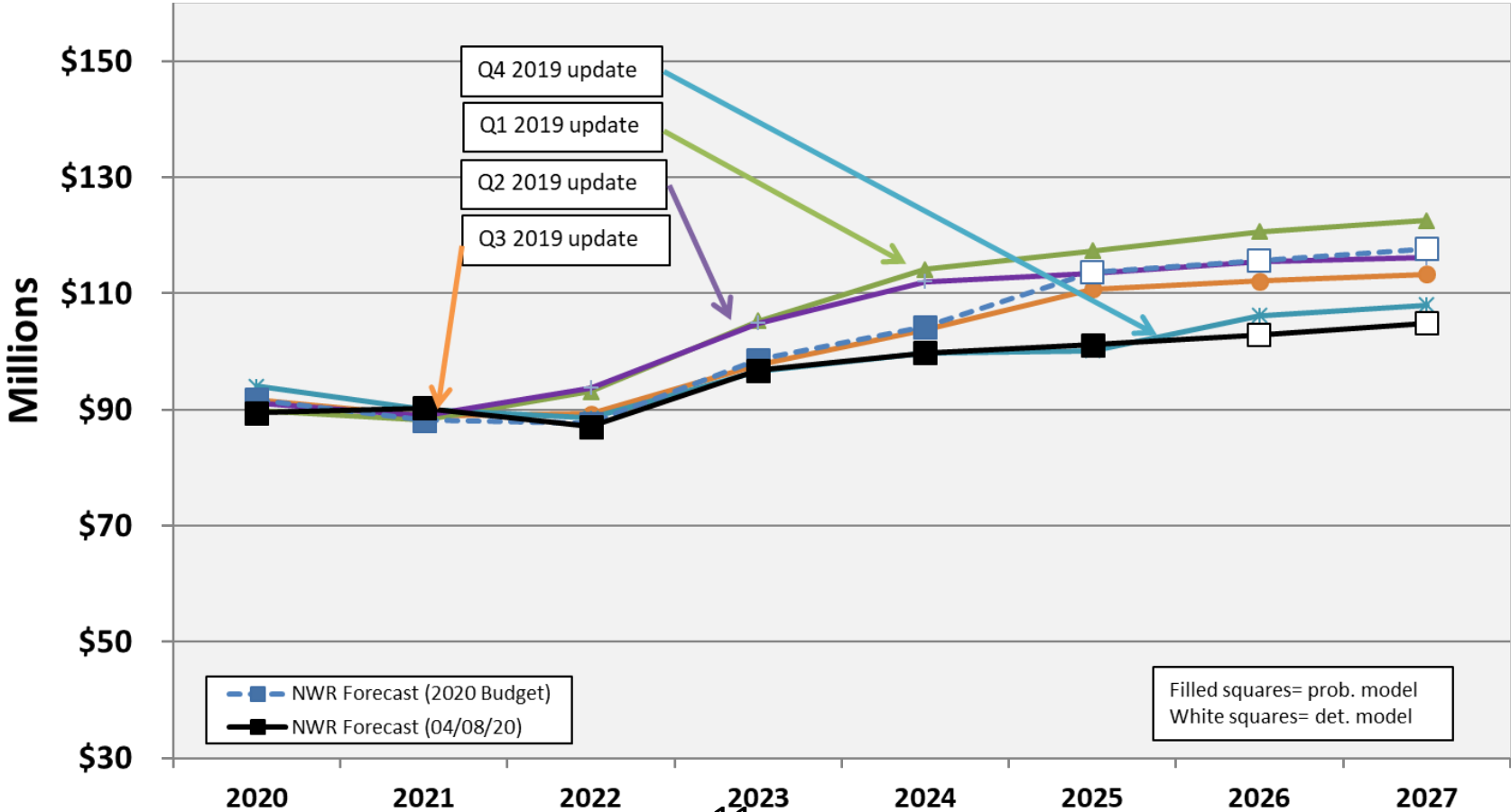
[2] NWR includes PWX specified source sale/full requirements purchase and transmission pass through costs.

[3] Off-system end-use sale includes transmission pass through costs, but not the transaction specific costs.

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

# Net Wholesale Revenue + Off-System End-Use sales forecast

## Net Wholesale Revenue + Off System End-Use Sales Forecast



# Market info

## California snowpack well below average:

- 42% of normal
- Increased risk of fires this summer

April 29, 2020

Provided by the California Cooperative Snow Surveys

Report generated: April 29, 2020 09:17

		Today
NORTH	Number of Stations Reporting	29
	Average snow water equivalent	6.8"
	Percent of April 1 Reporting	23%
	Percent of Normal for this date	31%
CENTRAL	Number of Stations Reporting	44
	Average snow water equivalent	11.7"
	Percent of April 1 Reporting	39%
	Percent of Normal for this date	47%
SOUTH	Number of Stations Reporting	28
	Average snow water equivalent	9.5"
	Percent of April 1 Reporting	37%
	Percent of Normal for this date	46%
Statewide Average SWEQ		9.7"
Statewide Percent of April 1		34%
Statewide Percent of Normal		42%

## North Las Vegas agrees to remain NV Energy customer for \$250,000/year

- NV Energy will pay City of North Las Vegas \$250k per year through 2024 to keep the municipality from turning to independent power marketer
- Strategy to prevent departure of largest customers for alternative energy suppliers
- NV Energy has agreed to pay a total of about \$4.5 million to state and local government agencies

# Summary

- The District's 2020 Net Wholesale Revenue forecast and other energy-related revenues is \$99.9 million, which is \$2.4 million below budget.

Questions?