

# Energy Resources Quarterly Board Update 2020 Q4

February 16, 2021

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# 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 and other energy-related revenues is \$86.4 million, which is \$1.8 million above budget.

# Major changes in the western power market

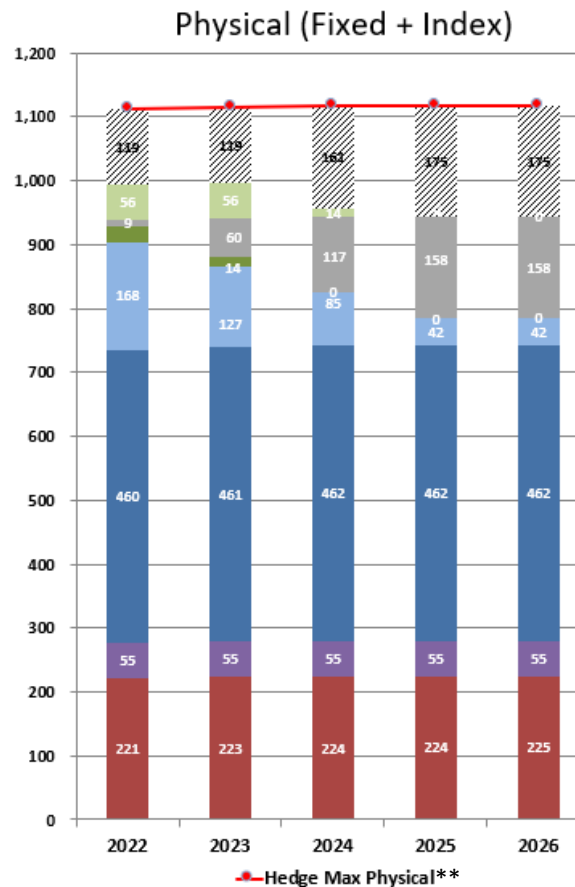
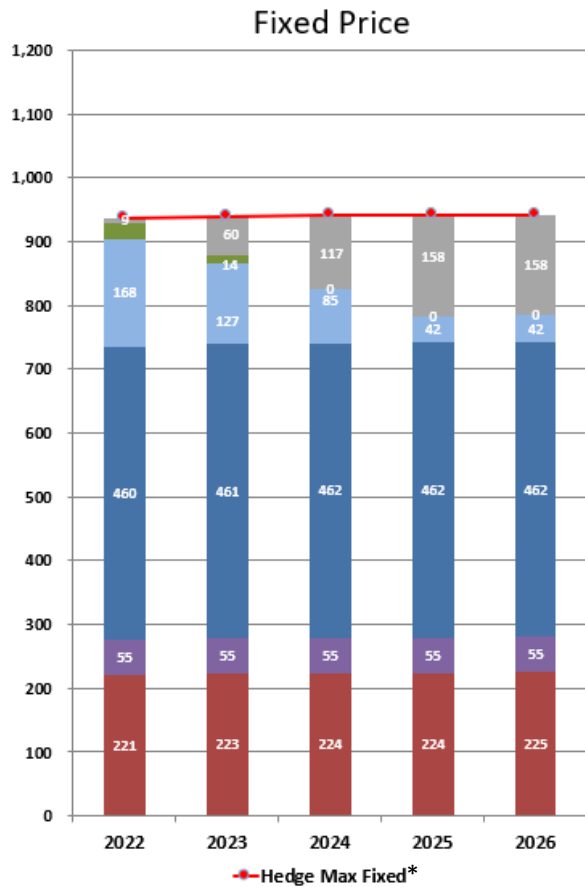
## Resource Adequacy

- Northwest Power Pool design teams are meeting regularly and should have completed the detailed program design in early to mid 2021.
- The Interim Resource Adequacy solution is in place for this winter (similar to past summer) and has not been called upon yet this winter.

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

- Participation in CAISO's Energy Imbalance Market (EIM) continues to grow: footprint expected to include ~77% of Western Interconnection load by 2022
- CAISO is proposing to offer organized day-ahead market trading to the EIM footprint by 2023. We are closely watching governance proposals.
- Southwest Power Pool plans to also offer energy imbalance market services to a few Western Interconnection utilities in 2021
- **State carbon policies**
  - CETA rulemaking efforts are ongoing—some draft rules were finalized at year end, but some of the rules on key issues have been deferred to 2021.
- **New products and services**

# District's energy commitments (average MW)



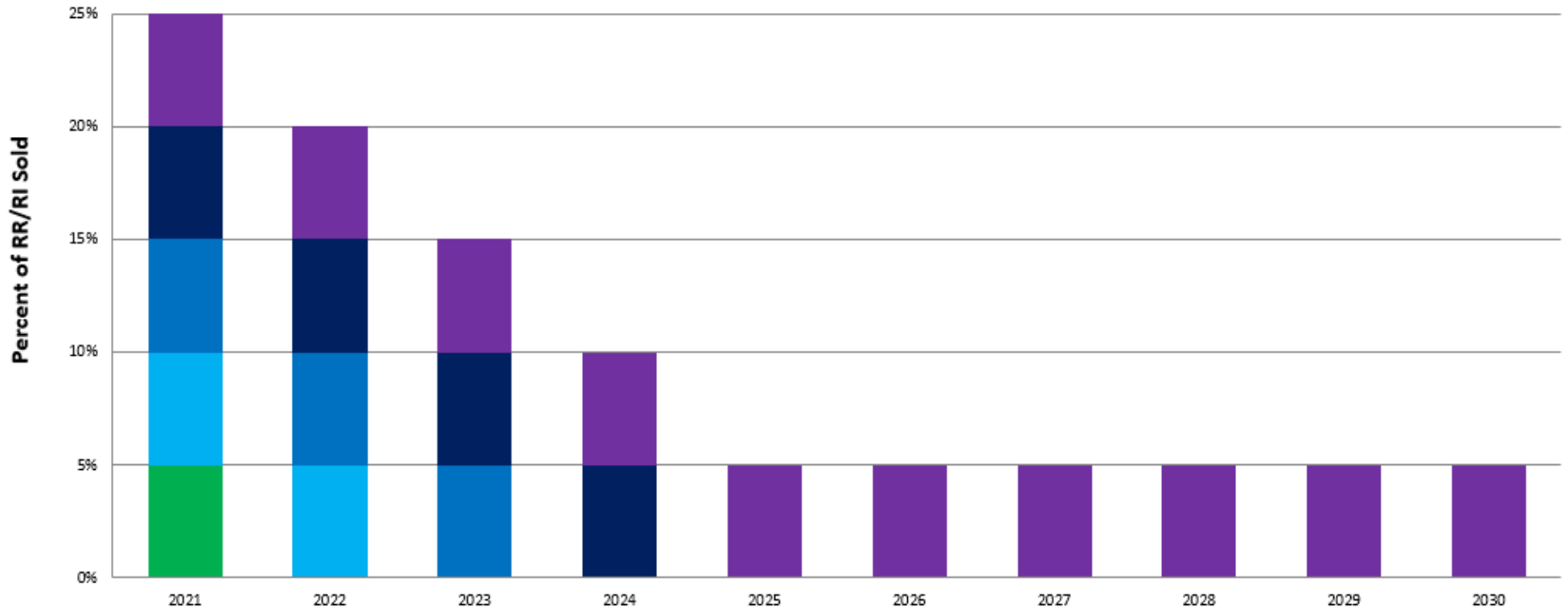
Note: The graphs represent the limits contained in resolution 20-14439 approved by the Board on March 23, 2020.

\*Hedge Max Fixed = stress water generation

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

# Market-based slice contracts

Current Market Position - Market Based Slice Products



	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%						
Slice Product 30 - Avangrid	5.0%	5.0%	5.0%							
Slice Product 29 - Morgan	5.0%	5.0%								
Slice Product 26 - Morgan	5.0%									

# Mar 2021 Henry Hub natural gas



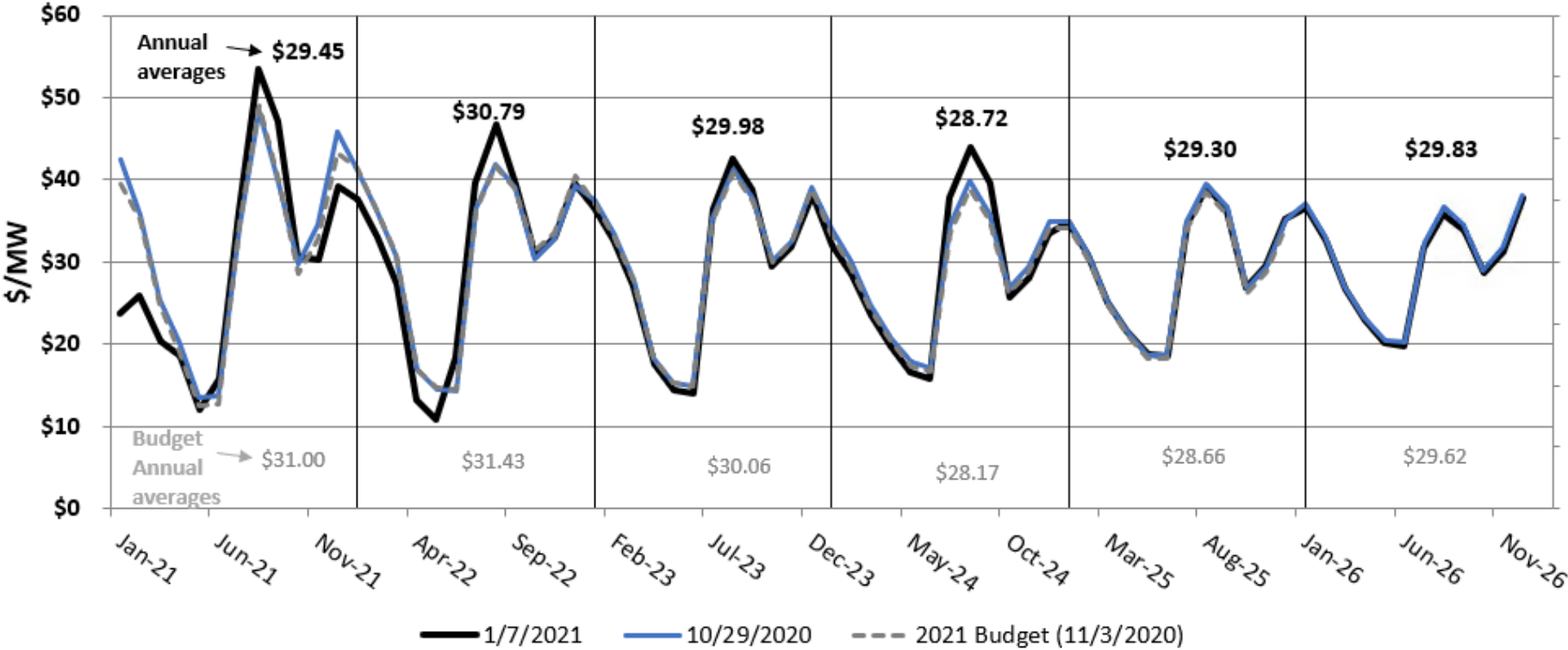
# Mar 2020 Henry Hub natural gas contract (price history since 2002)





# 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)

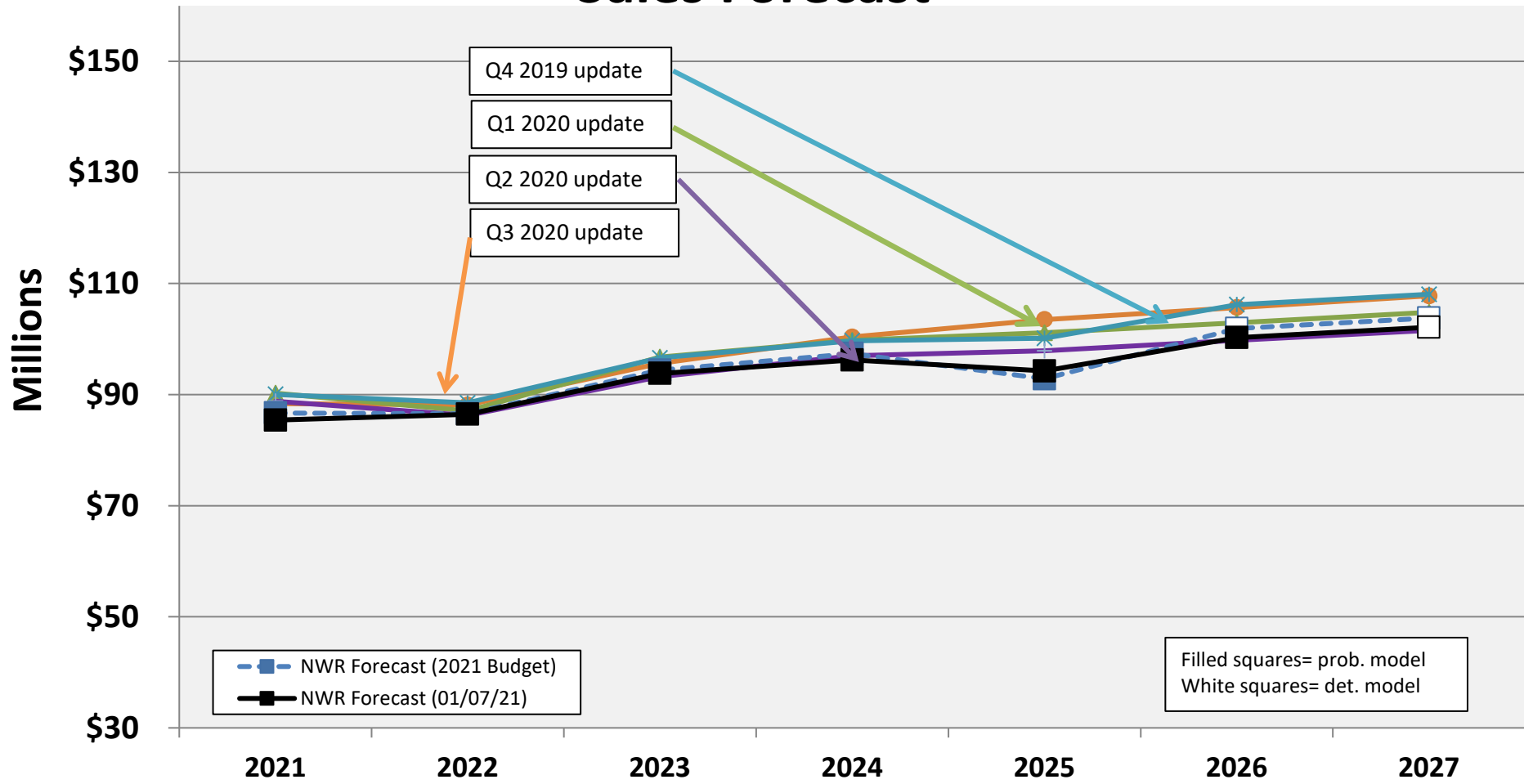
	Budget		Forecast [1]		Variance
<b>Net Wholesale Revenue (NWR)</b>					
Energy Sales/Purchases	\$	65.1	\$	65.7	\$ 0.6
Specified Source Premium	\$	8.2	\$	8.2	\$ 0.1
Renewables- Bundled	\$	0.9	\$	0.9	\$ (0.0)
NWR Sub-total [2]	\$	74.1	\$	74.8	\$ 0.6
<b>Other Energy-Related Revenue</b>					
LT Power Contract- Retained Surplus	\$	-	\$	-	\$ -
LT Power Contract- Admin Fees	\$	2.2	\$	2.3	\$ 0.1
Frequency Response & Load Shedding	\$	0.9	\$	0.9	\$ 0.0
Other [3]	\$	0.3	\$	0.1	\$ (0.2)
Renewables- Unbundled	\$	0.1	\$	0.0	\$ (0.0)
Real-Time Revenue	\$	7.0	\$	8.3	\$ 1.3
Other Energy-Related Sub-total	\$	10.5	\$	11.7	\$ 1.2
<b>NWR and Other Energy-Related Revenue</b>	<b>\$</b>	<b>84.7</b>	<b>\$</b>	<b>86.4</b>	<b>\$ 1.8</b>

[1] 2020 forecast based on unaudited actuals. Numbers may vary slightly due to rounding differences.

[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.

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



# Market info

## PGE Targets Net-Zero Emissions by 2040, Clean Energy for Capacity Gaps

- Aiming for net-zero greenhouse gas by 2040, while also reducing greenhouse GHG emissions from its portfolio by 80% below 2010 levels by 2030
- Goal is companywide and touches power supply, vehicles and buildings
- PGE faces 697 MW capacity deficit starting in 2025 and 1,000 MW by 2030
- To achieve goal, company acknowledged it would may have to eliminate its contract with Colstrip earlier than 2030
- PGE plans to release an RFP for up to 150 aMW of renewable energy, along with an RFP for new non-emitting capacity resources to address needs 2025 and beyond

## TransAlta's Centralia plant in Washington will be its last coal-fired plant running

- Plans to covert all coal-fired plants in Canada to gas by end of 2021, four years ahead of schedule
- Plan is to retire Centralia (1,340 MW) by end of 2025
- Plans to invest in hydrogen and possibly blend hydrogen into their facilities

# Summary

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Questions?