

Avista Corp.

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April 15, 2021

Public Utility Commission, Oregon 201 High St. SE, Suite 100 Salem, OR 97301

RE: LC 75 - Avista Utilities' 2021 Natural Gas Integrated Resource Plan (IRP) Presentation for April 20, 2021 OPUC Public Meeting

Filing Center:

Attached for filing is Avista Utilities' 2021 Natural Gas IRP presentation for the April 20, 2021 OPUC Public Meeting. Please direct any questions regarding this presentation to Tom Pardee at 509-495-2159 or tom.pardee@avistacorp.com.

Sincerely,

Is/Shawn Bonfield

Shawn Bonfield Sr. Manager of Regulatory Strategy & Policy 509-434-6502 shawn.bonfield@avistacorp.com



2021 Natural Gas Integrated Resource Plan

Tom Pardee, Natural Gas Planning Manager April 20, 2021

Avista Natural Gas Service Areas, Gas Fields, Trading Hubs and Major Pipelines

- Avista Service Territory
- Williams Northwest Pipeline
 - Enbridge Westcoast
 - TC Energy GTN
 - TC Energy Foothills
 - Energy rootniis
 - TC Energy Nova III
 - Kinder Morgan Ruby
- Jackson Prairie Storage Project A
 - Trading Hubs



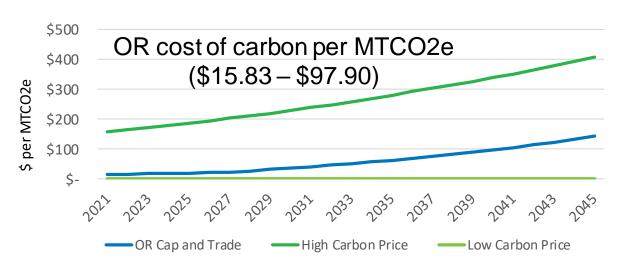
Building the Expected case

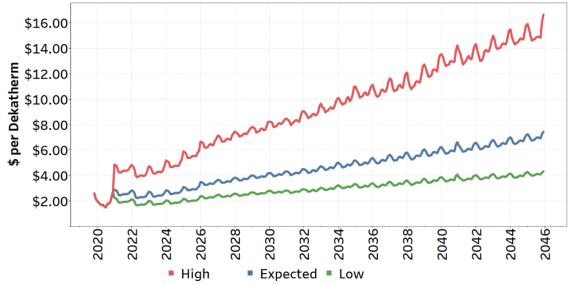
- > Average Weather 20 years daily average by planning area
- Prices blend of 3 consultants, forward price
- ➤ Use 3 year average by planning area
- ➤ DSM Total Resource Cost (TRC) test 14.8 million Therms
- ➤ Price Elasticity 0.81% for every 10% change in price
- > Peak Weather Planning Standard 99% probability of 1 in 30 years
- Carbon Price Oregon Cap-and-Trade/Reduce program (Wood Mackenzie)
- ➤ Expected Customer Growth 1%
- Upstream Emissions
- Policy Carbon Reduction and Electrification



Prices and Carbon Policy

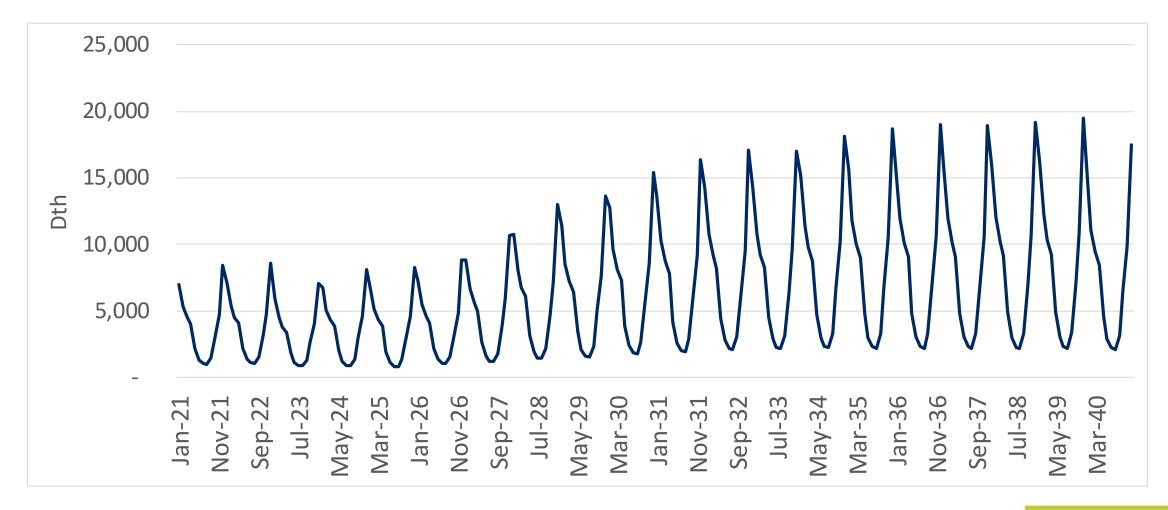
| Years | Price Blend Methodology | |
|-------------|--|--|
| 2021 & 2022 | forward price only | |
| 2023 | forward price / 25% average consultant forecasts | |
| 2024 | 50% forward price / 50% average consultant forecasts | |
| 2025 | 25% forward price / 75% average consultant forecasts | |
| 2026 - 2040 | 100% average consultant forecasts | |







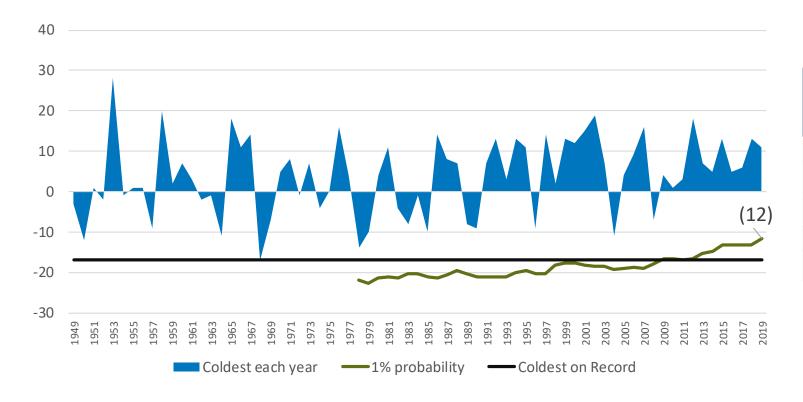
Demand Side Management



Savings of 1.48 M Dth Over 20 years or 86,000 MTCO2e!



Peak Weather Planning Standard

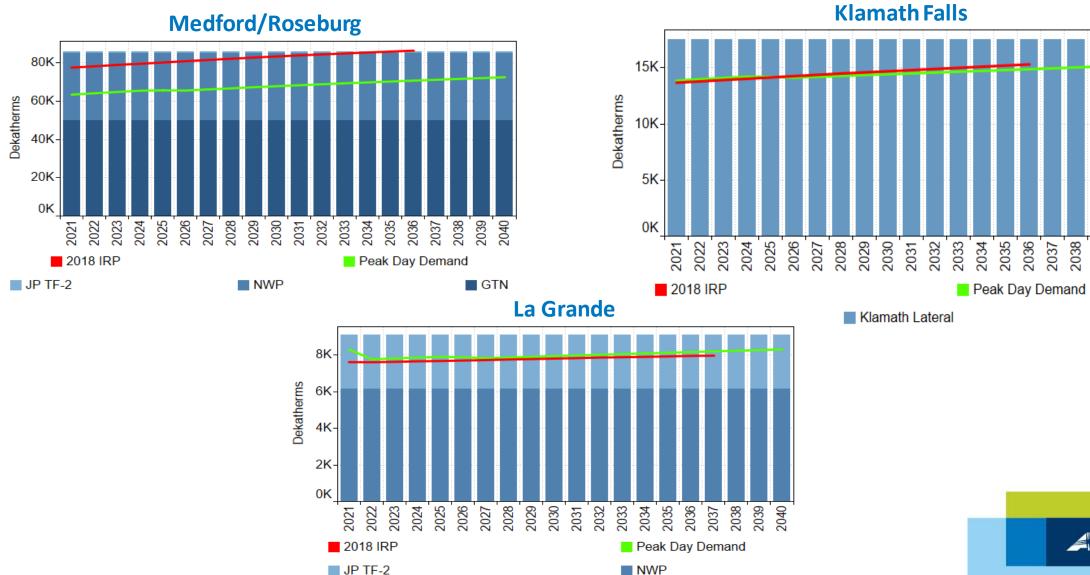


| Planning Area | Coldest on Record (Prior IRP's) | New - 99% Probability Avg. Temp |
|---------------|---------------------------------------|---------------------------------------|
| La Grande | -10 | -11 |
| Klamath Falls | -7 | -9 |
| Medford | 4 | 11 |
| Roseburg | 10 | 14 |
| Spokane | -17 | -12 |

- Peak Weather 99% probability of 1 in 30 years
 - > will capture climate change vs. coldest on record
 - Will account for coldest average day for each year

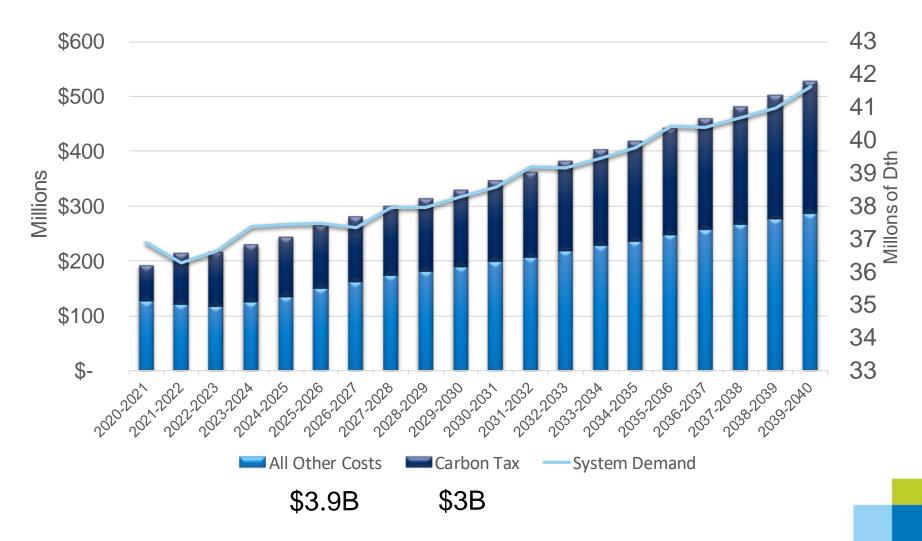


Expected Case Results



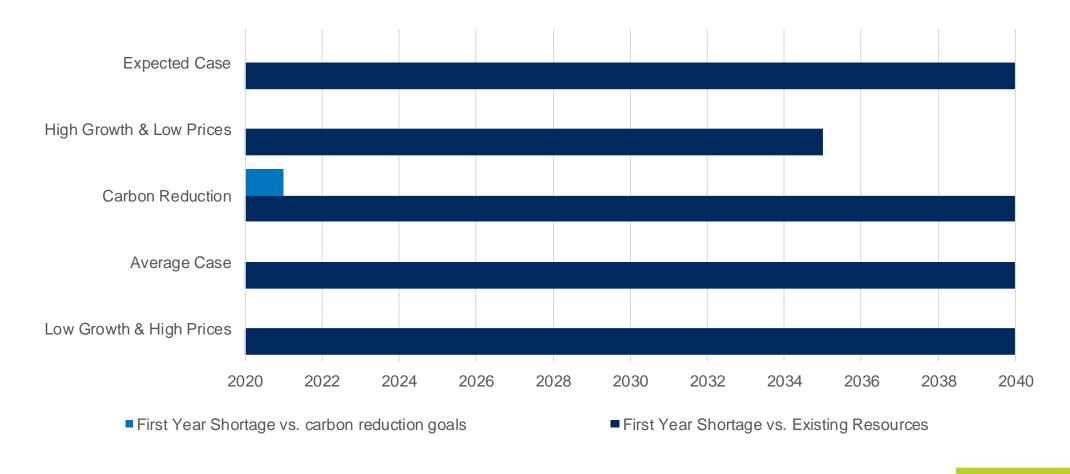
2040

Expected Case Costs (20 year – system)





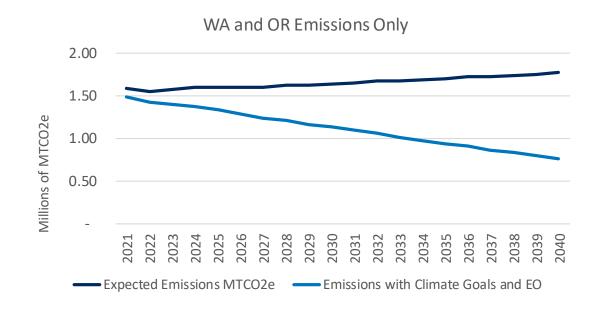
Scenario Comparisons





Policy and Future IRP's

- Carbon Reduction policy is continuing to be discussed in our Oregon and Washington territories
- Reducing emissions below 1990 levels was signed into law in Oregon via Executive Order 20-04 in 2020
 - Once rules and regulations implementing Executive Order 20-04 are determined, future IRPs will likely require carbon reducing resources like RNG & H2 as a piece of future preferred resource strategy





Highlighted Action Items

- Further model carbon reduction
- Investigate new resource plan modeling software and integrate Avista's system into software to run in parallel with Sendout
- Model all requirements as directed in Executive Order 20-04
- Explore the feasibility of using projected future weather conditions in its design day methodology, rather than relying exclusively on historic data.

