



Received  
Records Management  
02/17/21 11:50  
State Of WASH.  
UTIL. AND TRANSP.  
COMMISSION

# Washington Utilities and Transportation Commission

## Tom Pardee, Manager of Natural Gas Planning

February 23, 2021

Avista 2021 Integrated Resource Plans

# 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 ■
- TC Energy – Nova ■
- Kinder Morgan – Ruby ■
- Jackson Prairie Storage Project ▲
- Trading Hubs

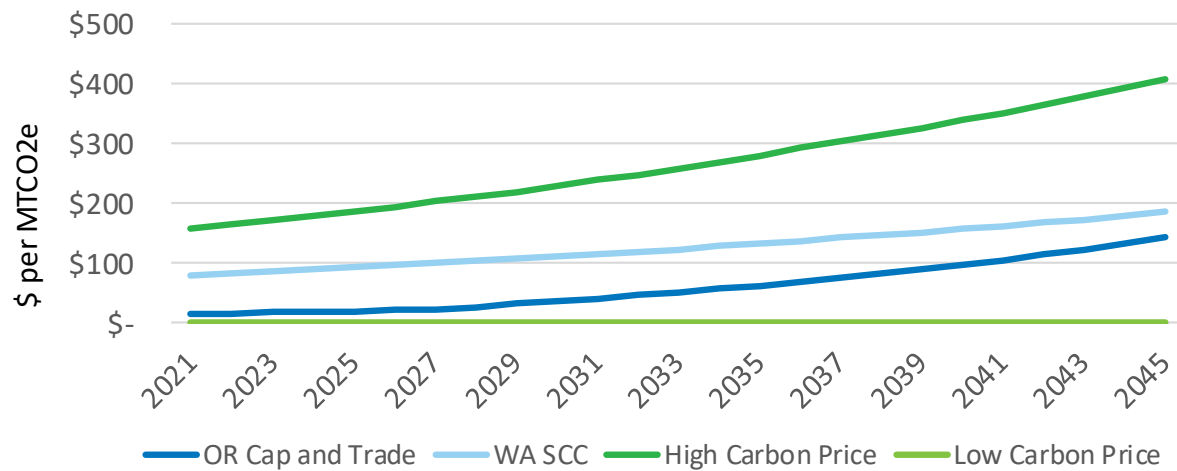
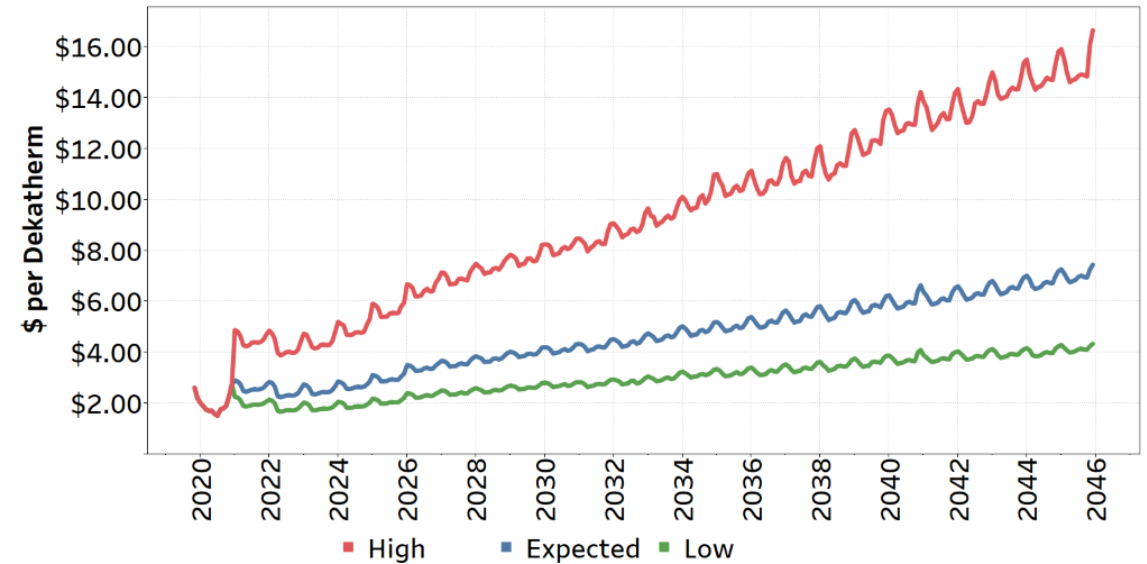


# Building the Expected case

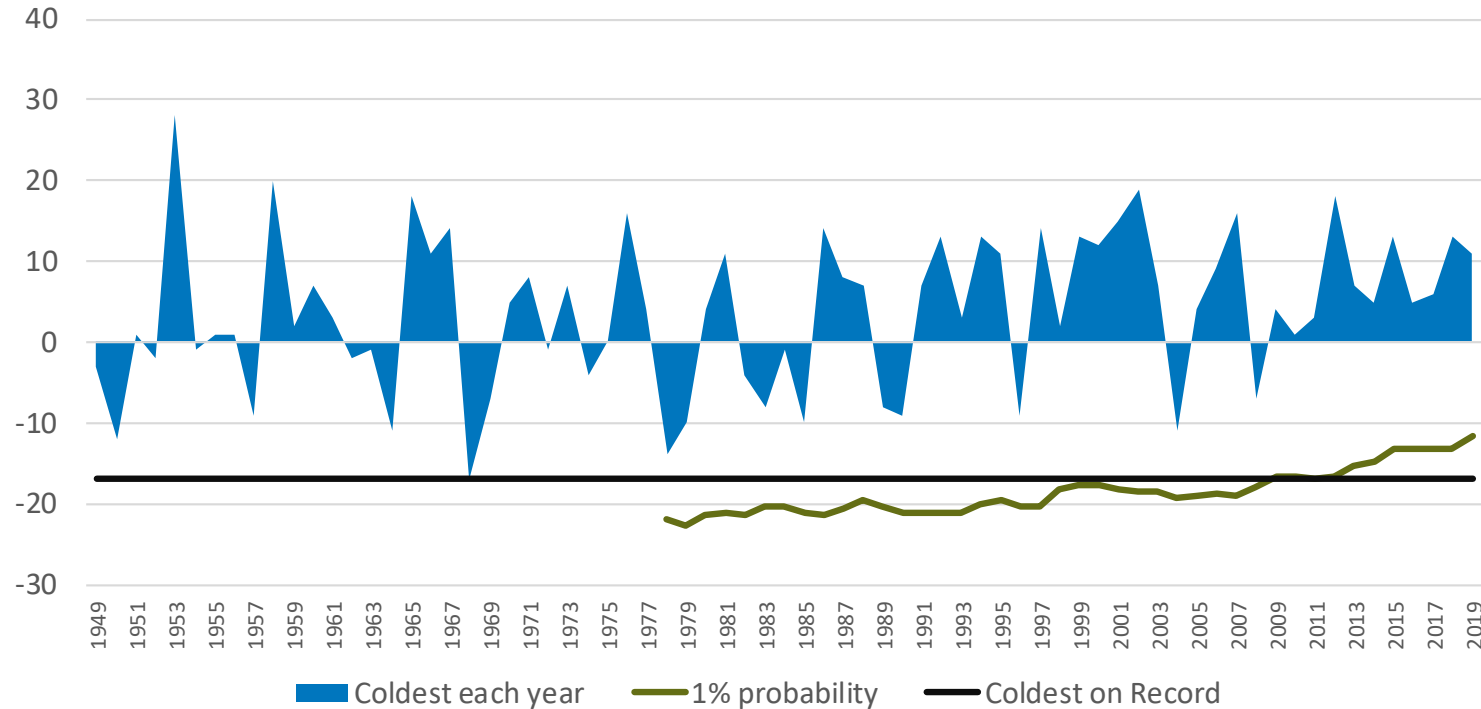
- Average Weather – 20 years daily average by planning area
- **Prices – blend of 2 consultants, forward price**
- Use – 3 year average by planning area
- DSM – Utility Cost Test – 7 million Dth
- Price Elasticity – 0.81% for every 10% change in price
- **Peak Weather Planning Standard – 99% probability of 1 in 30 years**
- **Carbon Price – SCC 2.5% Discount Rate in WA**
- 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



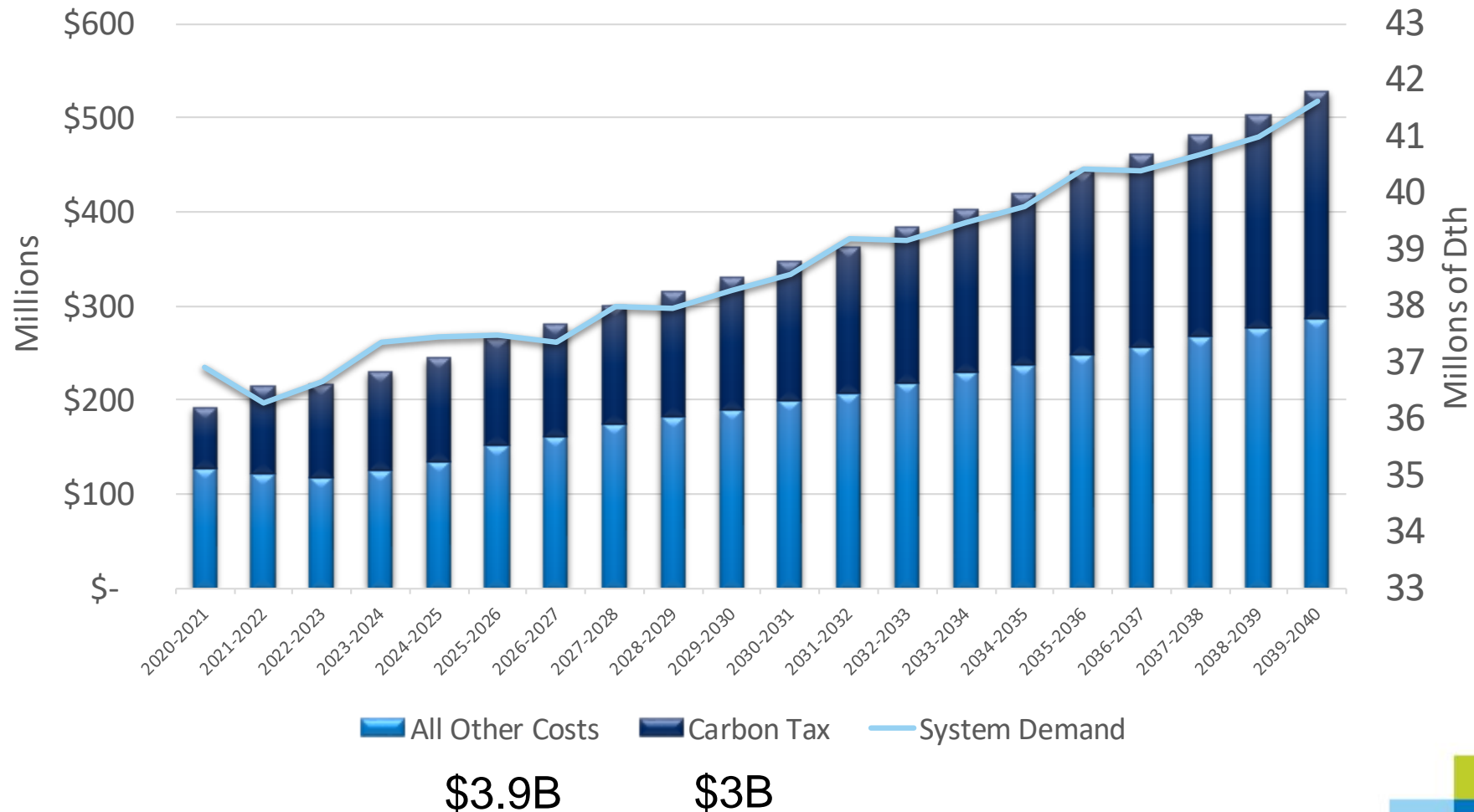
# Peak Weather Planning Standard



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

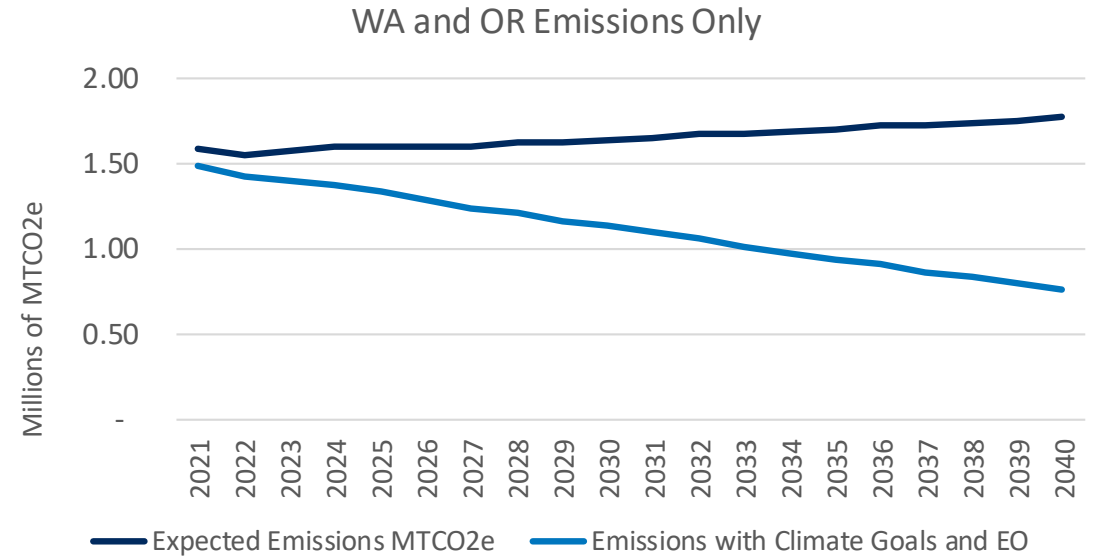
# Expected Case Costs (20 year – system)



\*No unserved demand based on existing resources and fossil fuel natural gas

# 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



# Action Items

- Further model carbon reduction
- Investigate new integrated resource planning 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
  
- Public Outreach meeting on February 24<sup>th</sup> @ 5pm



# Electrification

- WA – Residential and Commercial customers
- 80% reduction in natural gas customers load by 2045
- 75% of load switching is estimated to be within Avista electric territory
- 2045 electrical retail rate of energy increases by 8.3%
  - Excludes new transmission & distribution facility costs
  - Excludes customer conversion costs
  - Assumes CETA's 2045 clean energy target is an acquisition of 100% of retail sales rather than 100% delivered clean energy

