

Avista's Decision to Join the EIM

RIF Meeting 8/27/2019

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Discussion

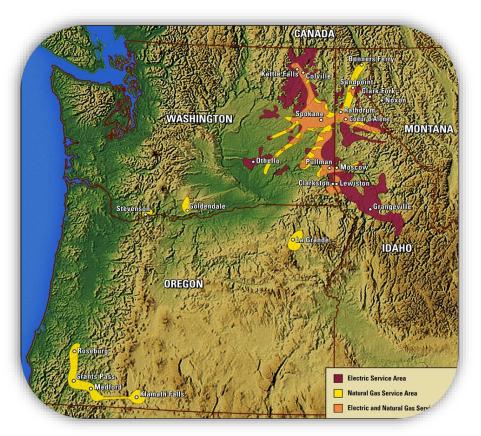
- Avista overview
- Decision to join the EIM
 - Market monitoring
 - Drivers and risks
 - Costs and benefits
- Implementation status update



Company Overview

- Generates, transmits and distributes electricity and distributes natural gas in WA, OR, ID, MT
- Electric customers: 379,000
- Natural gas customers: 343,000
- 1750 employees
- Alaska Electric Light and Power

Utility Service Territory



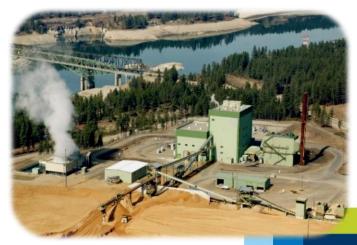


Generation and Load Overview

- Maximum generating capacity: 1875 MW
- Resources under long-term contract:
 - 550 thermal, hydro,
 - 50 MW PURPA,
 - 105 MW wind,
 - 20 MW solar,



- Native Load:
 - Average: 1070 aMW
 - Winter peak: 1763 MW
 - Summer peak: 1716 MW
- Balancing Area peak load:
 - Winter peak: 2380 MW
 - Summer peak: 2245 MW



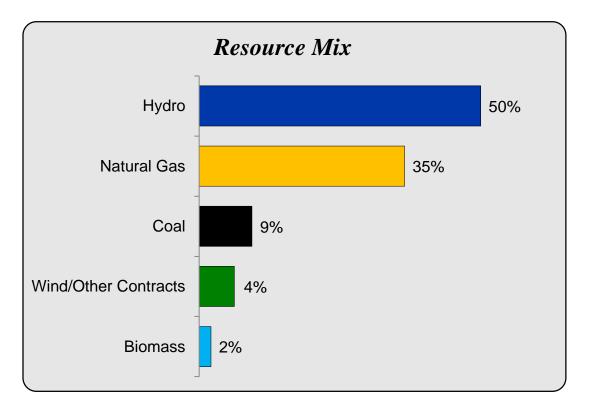




Noxon Rapids

Responsible Resources

Well positioned with a strong base of sustainable resources







From top: Post Falls Dam Palouse Wind Farm

AVISTA

WA RPS: 2016 – 9%, 2020 – 15%

Market Monitoring 2015-2018

- Limited needs and risks
 - Small renewable penetration
 - Economics not compelling
 - Other large technology projects
- Monitor market development
 - Engage in public processes and meetings
- EIM Entity outreach and site visits
- CAISO Scheduling Coordinator certification

 June 2016
- Infrastructure evaluation





Avista Decision Drivers and Risks

- In-hour market liquidity concerns
 - 2018 summer experience
 - NWE joining in 2021
 - BPA potential in 2022
- Renewable energy integration potential
 - Transmission interconnection queue 1100 MW
 - Increased PURPA interest
 - Rattlesnake Wind PPA 145 MW end of 2020
 - Avista's Clean Energy Goals
 - State policies and regulations
 - WA SB5116 No coal after 2025, 100% clean by 2045
 - WA PURPA rule changes
 - Oregon Cap and Trade



Avista Decision Drivers and Risks cont.

- Economics
 - Rate payer benefits
 - Cost/benefit ratio
 - Risks of not joining
 - Higher resource dispatch costs
 - Reduction in current optimization opportunities



Estimated EIM Costs and Benefits

- Anticipated EIM costs (Utilicast)
 - \$21 26 M start-up
 - \$3.5 4.0 M on-going
 - Estimate 12 new FTE for on-going support
- Estimated annual benefits (E3)
 - Full gross range \$ 2 12 M
 - Expected net range \$3.5 9.2 M
 - Base net \$5.8 M



Implementation Status Update

- Officer approval on April 15 to join EIM
 - Go-live April 1, 2022
- CAISO Integration Agreement signed on April 25
- Utilicast hired as System Integrator in May
- Current Efforts
 - Upgrade/replace meters and generation controls
 - Expand telecomm networks
 - RFP development for EIM applications
 - Issued Outage Management RFP on August 13
 - Plan to issue Bid to Bill RFP this fall
 - Staffing and training
- CAISO FERC Implementation Filing Q1 2020



