

2021 Electric Integrated Resource Plan



11. Preferred Resource Strategy

Avista needs to acquire additional reliable sources of power to meet peak planning requirements for both summer and winter peak loads while also identifying clean generation resources to meet state and corporate clean energy goals. To achieve these goals, Avista must maintain system reliability at affordable rates, while meeting the regulatory and legal obligations of Idaho and Washington, including the new requirements of Washington State’s Clean Energy Transformation Act (CETA) requiring service of its state’s retail loads with 100 percent non-emitting resources by 2045. This chapter outlines a potential path for Avista to meet its future resource needs under these objectives.

Avista generally acquires new resources through a competitive request for proposal (RFP) process. Avista shortlisted proposals from its 2020 Renewable RFP and is in contract negotiations to acquire new clean energy and any associated capacity for the Company’s resource portfolio. Potential additions from the RFP are not included in this plan since contracts were not completed prior to the required IRP filing date. Any resources acquired from that RFP will result in changes to the Preferred Resource Strategy (PRS). While the IRP indicates a resource acquisition plan, it does not include final pricing, resource availability or account for existing resource opportunities.

Section Highlights

- The 2020 Renewable RFP may displace some resources selected in this plan.
- It is economic to exit the Colstrip coal-fired facility; however, an exit strategy has yet to be agreed upon by all the owners.
- 200 MW of Montana wind is the most economic new resource to meet the CETA requirements beginning in 2024.
- 211 MW of natural gas CTs are needed for reliability by November 1, 2026 to offset Colstrip and expiring power contracts. Existing resource options may allow for a more economic replacement than constructing new facilities.
- Energy efficiency meets 68 percent of customers’ new energy requirements.
- Demand response programs begin in 2024 and provide 71 MW of capacity by 2032.

The IRP acquisition strategy identified as the PRS uses the best information available at the time of its analyses, including Avista’s interpretation of CETA requirements. However, some rules for CETA are still incomplete. The IRP uses a least-cost planning methodology using specific social costs specified by the law’s planning requirements. Avista did not assume alternative compliance options in meeting its CETA goals. Final rules for CETA may change future resource assumptions and plans.

Avista’s PRS describes the lowest reasonable cost portfolio of resources given Avista’s need for new capacity, energy and clean non carbon emitting resources, while accounting for social and economic factors prescribed by state policies. This analysis also considers

in 2026, but it may occur earlier if a resource exits the portfolio prior to that date or loads grow faster than forecasted.

Avista's interpretation of CETA allows for the financially compensated transfer of clean energy attributes from Idaho to Washington customers. Avista limits these transfers in earlier years of the plan to ensure compliance with renewable energy targets. A complete description of these assumptions is provided in Chapter 7 – Long-Term Position.

The PRS is separated between the first decade (2022-2031), second decade (2032-2041) and after 2041. The next several sections of this chapter detail the expected resource acquisitions summarizing demand response and energy efficiency projections separately.

2022-2031 Supply-Side Resource Selections

Avista must acquire new energy and capacity resources to meet clean energy goals and capacity deficits. Table 11.1 shows a complete list of new generation selections and exiting resources for the 2022 to 2031 period. The first planned resource change is an economically driven exit of Colstrip. Avista, like other Washington utilities with an ownership share in Colstrip, is unable to recover costs of coal-fired generation in Washington rates after 2025. While the fate of the plant will depend on a joint decision between all owners based on their own economic circumstances, Avista's most economic decision based on modeling in this IRP would be exiting both Units 3 and 4 as soon as possible. Additional scenario analysis on Colstrip is presented in Chapter 12 – Portfolio Scenarios, showing an exit prior to 2025 modestly benefitting both Idaho and Washington customers compared with later dates. Given the difficulty of exiting ownership of this facility, Avista cannot commit to a specific exit or retirement date at this time, but Avista continues to work toward the optimal exit from the resource.

Avista's first new resource additions include 200 MW of wind from Montana in 2023 and 2024. The PRS includes wind due to it generating during higher-priced hours compared to solar, and the potential for Montana wind projects to provide generation during winter peak load conditions. Another 100 MW of Montana wind is added in 2028.

Avista is investigating the possibility of increasing the capacity of its Kettle Falls biomass plant by up to 12 MW before 2026. The 35-year old plant is reaching a point where major equipment replacements are required and repowering at a higher generation level may be justified given CETA requirements.

In the 2020 IRP, Avista found it to be cost effective to modernize the Post Falls hydro facility, including increasing the capacity by 8 MW for an energy increase of 4 aMW. Avista included this upgrade as an assumed upgrade in the plan, meaning the PRiSM model includes this resource as a fixed resource.

With the exit of Colstrip and the expiration of the Lancaster PPA in October 2026, the PRS adds 211 MW of natural gas-fired CTs. The 2020 IRP assumed the capacity lost