



Avista's Renewable Distributed Generation Incentive and Net Metering

Policy Description

Avista is an energy utility providing electricity and natural gas to parts of eastern Washington, southern and eastern Oregon, and northern Idaho. Avista has goals of a carbon-neutral electricity supply by 2027 and 100% clean electricity by 2045.¹ The utility incentivizes distributed generation (DG) and combined heat and power (CHP) in its service territory through policy efforts, including an incentive for renewable DG as energy efficiency and a net metering program.

Renewable Distributed Generation as Energy Efficiency

In Idaho and Washington, Avista offers an efficiency incentive for “renewable distributed generation” under its Schedule 90 “Electric Energy Efficiency Programs.”² Including renewable DG and CHP under Schedule 90 is a market transformation effort intended to support renewable energy measures in the residential and small commercial segments. Avista added DG to its Idaho Schedule 90 in 1999.³ The program incentive level is 20 cents per first year kilowatt-hour saved or \$3.00 per first year therm saved, up to the facility’s average annual energy use and capped at 70% of the incremental project cost. To be eligible, a project must have a simple payback of less than 15 years before factoring in incentives. The incentive is available to residential, commercial, and industrial customers. Avista may also provide non-monetary technical assistance that may include services such as design reviews, third-party bid evaluations, facility audits, or measurement and evaluation analysis.

Under this program, the energy savings and project costs of a renewable DG system are treated in the same way as other energy efficiency measures. The incremental project cost is based on actual project costs to the facility and in most cases equals the total project cost. This contrasts with other CHP incentive programs that treat CHP as generation instead of efficiency. Similarly, energy savings also are equal to total generation of the CHP project, rather than determined by a comparison of the heat rate of the CHP plant with the heat rate of new utility-scale generation.

Net Metering in Idaho and Washington

For both Idaho and Washington, Schedule 90 limits incentives for distributed renewable energy to net metering facilities operating under Schedule 63 Net Metering rules. A net metering system is a generation facility intended primarily to offset part or all of the customer-generator’s own requirements for electricity. The customer’s utility bill for a given period is based on the difference between the electricity supplied by the electric utility and the electricity generated by the customer and supplied to the grid. Any net excess generation (NEG) during a monthly billing period is credited to the customer's next bill at the utility's retail rate. At the beginning of each calendar year, any remaining NEG is granted to the utility with no compensation for the customer. Net metering incentivizes distributed energy generation by paying retail electricity rates for customer-generated power, rather than the much lower avoided cost rates for Qualifying Projects under the Public Utility Regulatory Policies Act of 1978.⁴ Avista’s incentive through its Energy Efficiency Program provides a second incentive on top of net metering for those CHP systems eligible to net meter.

Washington is one of 41 U.S. states, and the District of Columbia, that require utilities by law to offer net metering to eligible customer generators.⁵ Idaho, on the other hand, does not require net metering by law. Instead, the Idaho Public Utilities Commission (IPUC) has authorized utility net metering programs for the three investor-owned utilities (IOUs) in the state: Avista, Idaho Power, and Rocky Mountain Power/PacifiCorp. Thus, net metering rules for the three Idaho IOUs are slightly different from those in Washington. For all four sets of net metering rules, the generating capacity of a net metering facility is restricted to 100 kW or less.

¹ See Avista’s clean electricity goal: <https://myavista.com/about-us/our-commitment>

² Avista rate schedules are available at <https://www.myavista.com/about-us/our-rates-and-tariffs>

³ Refer to IPUC rate case AVU-EE-99-04 <http://www.puc.idaho.gov/fileroom/cases/elec/AVU/AVUE9904/ordnotc/28138.DOC>

⁴ Public Utility Regulatory Policies Act of 1978: <https://www.energy.gov/oe/services/electricity-policy-coordination-and-implementation/other-regulatory-efforts/public>

⁵ For a summary of state net metering policies, refer to the National Conference of State Legislatures website at <http://www.ncsl.org/research/energy/net-metering-policy-overview-and-state-legislative-updates.aspx>

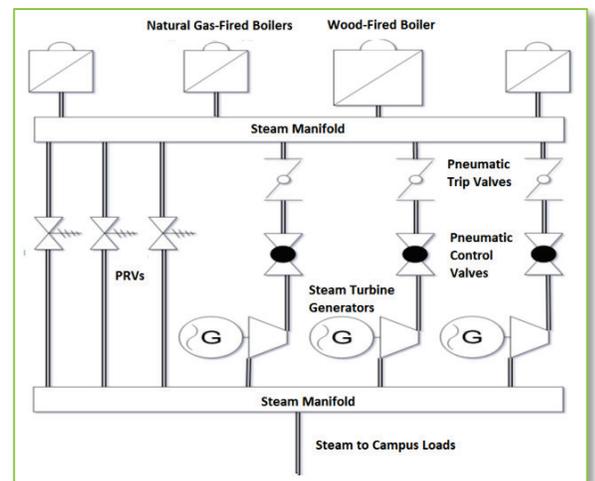
In Washington, there are two definitions of “renewable energy” that may pertain to net metered CHP systems. Avista’s Schedule 63 defines eligible renewable fuel sources in Washington under RCW 80.60.020: “water, wind, solar energy, or biogas from animal waste.”⁶ This narrow definition of renewable energy does not restrict other types of biomass CHP projects, such as woody biomass CHP, because Washington is one of the 41 states that include CHP under net metering.⁷ The definition of “net metering system” under RCW 80.60.020 includes facilities that generate both electricity and “used and useful thermal energy” from a common fuel source (CHP), in addition to facilities that use renewable energy.

While Avista’s Schedule 63 in Idaho does not specifically include CHP in the definition of eligible facilities, its definition of renewable energy as “solar, wind, biomass or hydropower” is less restrictive than in Washington. Also, renewable energy is defined more broadly under Idaho statute (Section 67-89038) and includes, among other sources, biomass, cogeneration, and waste heat. Avista’s Schedule 90 in Washington also contains a provision giving it flexibility in implementation, stating Avista will “actively pursue electric efficiency opportunities that may not fit within the prescribed services and simple pay-back periods described in this tariff.” In these cases, Avista may enter into a site-specific services agreement with the customer.

Policy Outcomes

As of 2017, Avista had 490 customer-installed net-metered generation projects on its system, with 88% located in Washington State.⁹ Solar is the primary net-metered technology in Avista’s service territory, although biomass gasifier organic Rankine cycle and natural gas-fired CHP projects have used net metering with other Washington and Oregon utilities.

The first renewable CHP project to receive a Schedule 90 Energy Efficiency grant from Avista is under construction as of fall 2019 at the University of Idaho. The university currently produces high-pressure steam to provide space and water heating to 70% of its campus buildings. About 92% of the university steam energy is produced from a woody biomass-fired boiler, with the remaining energy provided by natural gas back-up boilers. Wood-fired cooling is also provided with a 620 ton steam absorption chiller installed in 2017. A second 520 ton absorption chiller is expected to become operational in 2020. Three 275 kW back pressure steam turbines are being installed in parallel with existing pressure reducing valves at an estimated total installed cost of \$1,559,000. The grant of \$1,091,300 brings the simple payback of the CHP project down from 8.2 years to 2.5 years. The project has also received a \$250,000 U.S. Forest Service Wood Innovations grant.



Conceptual schematic of wood-fired CHP system at University of Idaho.

GRAPHIC COURTESY OF NLINE ENERGY

Lessons to Share

- As of 2019, both Idaho Power and Rocky Mountain Power/PacifiCorp have rate cases before the IPUC studying the costs and benefits of net metering. IPUC staff indicated that a change in compensation structure of net metering facilities is likely and that it will impact the financial viability of on-site projects.¹⁰ Avista’s 2017 Integrated Resource Plan noted that the utility may need to adjust rate structures for net-metered customers.
- Both Idaho and Washington have multiple definitions of “renewable energy” that may affect eligibility of projects.

For More Information

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More CHP Profiles:
<http://www.nwchptap.org>

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⁶ In Washington, another definition of renewable energy is given in RCW 19.25 “Energy Independence Act” where a renewable source is defined as “(a) water; (b) wind; (c) solar energy; (d) geothermal energy; (e) landfill gas; (f) wave, ocean, or tidal power; (g) gas from sewage treatment facilities; (h) biodiesel fuel ...not derived from crops raised on land cleared from old growth or first-growth forests where the clearing occurred after December 7, 2006; or (i) biomass energy.”

⁷ Yanmar, “Net Metering for Combined Heat and Power Systems”: <http://www.yanmar-es.com/news/net-metering-for-combined-heat-and-power-systems/>

⁸ See Idaho Statutes Title 67, Chapter 89 “Idaho Energy Resources Authority Act”: <https://legislature.idaho.gov/statutesrules/idstat/Title67/T67CH89/SECT67-8903/>

⁹ Avista’s 2017 Electric Integrated Resource Plan: <https://www.myavista.com/about-us/our-company/integrated-resource-planning>

¹⁰ See IPUC staff procedural comments on Case No. IPC-E-19-15, May 2, 2019:

<http://www.puc.idaho.gov/fileroom/cases/elec/IPC/IPCE1915/staff/20190502PROCEDURAL%20COMMENTS.PDF>