



Distribution Generation Resources and the WA Clean Energy Bill

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Disclaimer

The presentation and statements of the presenter are his only and do not represent the opinions or positions of the commissioners of the Washington Utilities and Transportation Commission.



Commission Activities on the Distribution Energy Resource Front

- Implementation of 2019 energy related laws
- Policy statement on storage
- New PURPA rules
- New net metering requirements
- Previously initiated IRP rulemaking that includes revisions to evaluation of DER
- Requirements for demand response and energy efficiency RFPs
- Distribution planning and evaluation



The Western Interconnect Has a Resource Adequacy Problem

- What role will distributed energy resources (DER) play in capacity needs?
- What role will DER play in fulfilling WA clean energy needs?
- How can we evaluate DER's role in lowering the overall cost of electric service provisioning?
- How can we evaluate DER's operation within the operation of a utility's resourced portfolio?
- Multiple policies support DER, but do they have unintended consequences?



Washington Dept. of Commerce and CETA

- Tuesday, July 30, 2019, 9 a.m. to 12 noon, in Olympia (webinar option available)
 - The purpose of this workshop is to identify and prioritize issues that stakeholders believe should be addressed through administrative rules
- Thursday, Aug. 1, 2019, 1 p.m. to 4 p.m., in Seattle (webinar option available)
 - This workshop has a specific focus on provisions in CETA concerning low-income energy burden, energy assistance, and the equitable distribution of energy benefits.



Implementation of Washington's 100% Clean Electricity Law (and other new energy laws)

- UTC workshop: Tuesday, July 30, at 1:30 p.m., Docket U-190485.
- Investigation into Initiating Implementation Processes for Energy Legislation Passed in the 2019 Legislative Session, Docket U-190485
- Your opportunity to provide oral comments on work priorities and processes.



Implementation of Washington's 100% Clean Electricity Law, cont.

- The UTC will not open a rulemaking on HB 2042, electrification of transportation plans. Utilities may file an electrification of transportation plan at any time.
- The UTC will not open rulemakings on SB 5223, net metering. Utilities will file to comply with legally required programs or changes.



Net Metering Under SB 5223

- Increases limit of net meter capacity from 0.5 percent to 4 percent of utility's 1996 peak (or until to June 30, 2029).
- Forbids electric utilities to require customer-generators whose systems meet the standards specified by the law
 - To comply with additional safety or performance standards,
 - To perform or pay for additional tests, or
 - To purchase additional liability insurance



Net Metering Under SB 5223

- Adds fuel cells to eligible net-metering systems (solar, wind, and hydropower already included).
- Declares that electric utilities are not liable directly, or indirectly, for
 - permitting or continuing to allow attachments of net-metering systems, or
 - for the acts or omission of customer-generators that cause loss or injury, including death, to any third party.



Net Metering Under SB 5223

- Net meter aggregation revised to allow for excess kilowatt-hour credit from one designated meter to be applied to energy charges on one aggregated meter that serves the same or contiguous property in the same customer-generator's name.
- Allows additional metering equipment to monitor the flow of electricity in each direction.
- PSE Docket UE-190575, Avista Docket UE-190532, PacifiCorp Docket UE-190502.



Net Metering Under SB 5223

- Installed net meter capacity of 1996 peak load:
 - PSE has 1.0%.
 - Avista has about 0.25%.
 - PacifiCorp has 8.8 MW of installed net meter (~0.25%).
- Net meter customers avoid fully loaded volumetric rates that include fixed distribution, transmission, and system generation costs.
- Will net meter installations grow?

Newly Completed PURPA Rulemaking

- Contract length 15 years from the date of contract formation
- But not less than 12 years from the date of commercial operation of the qualifying facility
- Establishes a minimum term of 10 years for existing projects
- Extends standard offer to 5 MW or smaller capacity
- Utilities required to refile avoided cost prices and revised tariffs within 60 days of the order date of 6/12/2019



PURPA Rulemaking - Avoided Cost

- The least cost final contract entered into as a result of the competitive bidding process, or lacking a contract, the lessor of:
 - The price, terms, and conditions set forth in the least cost project proposal that meets the criteria specified in the RFP; or
 - Current projected market prices for power with comparable terms and conditions.
- PURPA Rulemaking UE-161024 and WAC 480-107.



Will PURPA Standard Offer Contracts Grow?

- What is the avoided cost under CETA?
 - Will load/resource gaps become hourly gaps as load is met with a mix of renewables?
- Solar provides no capacity to winter peaking utilities.
- Utility RFP will need locational value of resource, including for location on distribution system.
- Do we need site specific data for projecting a PURPA generator's production output to determine avoided cost under CETA and distribution planning?



Distributed Generation Annual Report Every August 1, Docket-131883

- Trends show new additions are almost all solar.
- Total growth is very small in nominal MW and MWhs.
- Trend in nominal growth rates year-over-year are very small.
- Large subsidies relative to wholesale market prices didn't create growth.
- Why green my electricity if the utility's electricity is greening?
- UTC updated reporting distribution generation requirements.



Storage and IRP Modeling

- Storage Policy Statement U-161024
- Commission staff energy storage white paper UE-151069
- Conclusion: better modeling needed in IRP to realize value of storage in the evaluation of resources in acquisition process.
- Multiple values: some mutually exclusive.
- Multiple values:
 - Changes to portfolio operation to realize value (IRP modeling versus reality).
 - Short-run portfolio position and market conditions determine DER application and magnitude of the value of storage.



Current IRP Distribution Resource Requirements

- WAC 480-100-238(3)(e) “A comparative evaluation of energy supply resources (including transmission and distribution) and improvements in conservation using the criteria specified in WAC 480-100-238 (2)(b). [Lowest Reasonable Cost]”
- IRP Plan must include consideration of, “resource effect on system operation” WAC 480-100-238(2)(b).
- Select and study distribution locations that are near capacity.



Distributed Energy Resources - EHB 1126

- Commission implementation:
 - Distributed energy resources principles from EHB 1126; and demand response” Attachment B, Docket U-190485.
- Identify data gaps impeding planning or upgrades such as AMI and grid monitoring. Section 1(2)(a).
- Develop tools for “locational and temporal value of resources on the distribution system.” Section 1(2)(a).
- “Propose monitoring, control, and metering upgrades that are supported by a business case identifying how those upgrades will be leveraged to provide net benefits for customers” Section 1(2)(b).



Distributed Energy Resources - EHB 1126, cont.

- “fairly compensate customers for the actual monetizable value of their distributed energy resources [if cost effective].”
- “Forecast, using probabilistic models if available, the growth of distributed energy resources on the utility's distribution system...”
- Provide, at a minimum, a 10-year plan for distribution system investments and an analysis of nonwires alternatives for major transmission and distribution investments as deemed necessary.



QUESTIONS?



Other Energy Laws Pass in WA in 2019

- ch. 285 (Energy Efficiency)
- ch. 284 (Hydrofluorocarbon Emissions)
- ch. 109 (Concerning the Electrification of Transportation)
- ch. 287 (Advancing Green Transportation Adoption)
- ch. 235 (Net Metering), ch. 286 (Appliance Standards), ch. 222 (Electrical Production Attribution Fuel Mix), ch. 205 (Distributed Energy Resource Plans), ch. 388 (Natural Disaster Mitigation and Resiliency Activities), ch. 77 (Electric Utility Wildland Fire Prevention)



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