WASHINGTON UTC UTILITIES AND TRANSPORTATION COMMISSION

UTC STUDY OF DISTRIBUTED GENERATION AND RECOMMENDATIONS

Presentation for the Washington Future Energy Conference

October 19, 2011

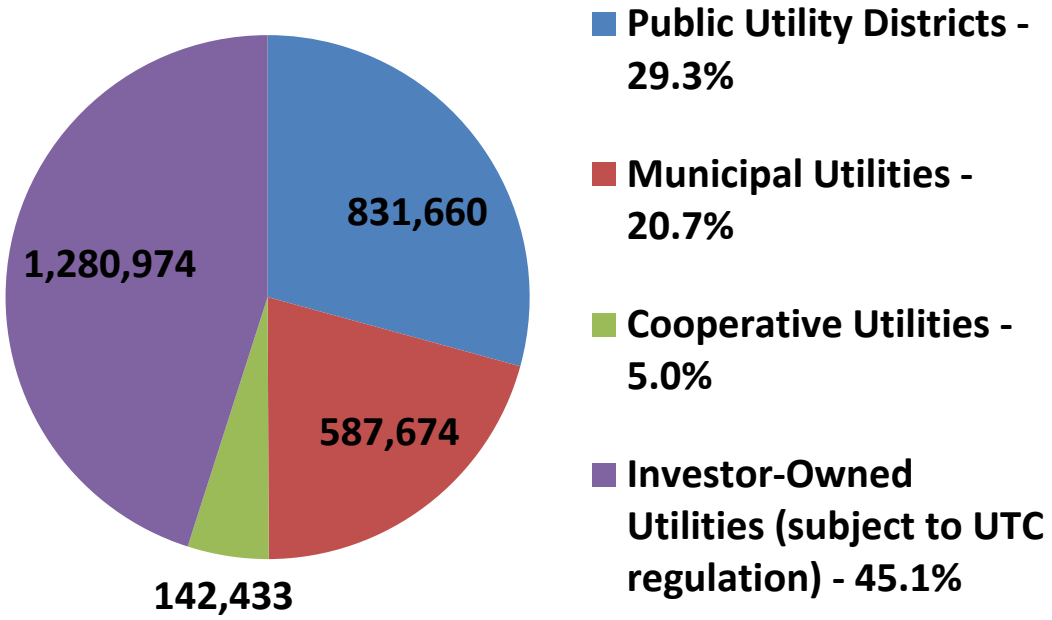
Washington Utilities and Transportation Commission

- UTC's mission is to protect consumers ensuring that utility and transportation services are fairly priced, available, reliable and safe.
- Regulates rates and services offered by investor-owned utilities (IOUs), including electric and natural gas utilities.

Washington State Utilities

- 23 Public Utility Districts
- 19 Municipal Utilities
- 16 Cooperative Utilities
- 3 Investor-Owned Utilities

Customers Served by Utility Type



Defining "Distributed Generation"

- RCW 80.80.010(10): "Electric generation connected to the distribution level of the transmission and distribution grid, which is usually located at or near the intended place of use."
- U.S. Department of Energy: "Small-scale electric generation that feeds into the distribution grid, rather than the bulk transmission grid, whether on the utility side of the meter or on the customer side."
- For purposes of qualifying for multiple renewable energy credits in Washington, RCW 19.285.030(9): "An eligible renewable resource where the generation facility or any integrated cluster of such facilities has a generating capacity of not more than five megawatts."

UTC Interim Study on Distributed Generation

- At the request of the House TEC Committee, Rep. Deborah Eddy invited the UTC to conduct a study of distributed generation issues applicable to IOUs.
- Purpose:
  - Provide background information about distributed generation;
  - Identify opportunities and challenges facing IOUs and their ratepayers in developing distributed generation; and
  - Offer recommendations on available options to encourage the development of cost-effective distributed generation in areas served by investor-owned utilities.

Regulatory Structure – Washington Net-Metering Law

- RCW 80.60 requires large utilities to offer consumer generators of renewable resources the option for net metering for projects up to 100 kW.
  - Up to 0.25% of a utility's peak capacity available for generation projects (will increase to 0.5% in 2014).
- Program allows a consumer-generator to offset electricity provided by the utility to that customer, and any excess energy produced by the customer in excess of use within a given billing period is credited equally to the following billing period.
- Consumer-generators are responsible for meeting safety, power quality, and interconnection requirements, and must pay all costs of installing generating and metering equipment.

Regulatory Structure – EIA and RECs

- The Energy Independence Act (EIA) requires utilities to use "eligible renewable resources or acquire equivalent renewable energy credits (REC), or a combination of both, to meet annual targets" of at least 3 percent of load by January 1, 2012, 9 percent by January 1, 2016, and 15 percent by January 1, 2020.
- The EIA gives distributed generation resources special treatment. To meet the RPS targets, the statute allows a utility to:
  - Count distributed generation at double the facility's electrical output if the utility: (i) Owns or has contracted for the distributed generation and the associated renewable energy credits; or (ii) has contracted to purchase the associated renewable energy credits.

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Regulatory Structure – PURPA

- The Public Utilities Regulatory Policy Act (PURPA) of 1978, Section 210, created a market for the output of "qualifying small power production facilities" by requiring electric utilities to purchase the output under rules adopted by the Federal Energy Regulatory Commission (FERC).
- For qualifying facilities with a design capacity of 100 kW or less, state regulators must establish standard rates, and they may also do so for larger qualifying facilities.
- By UTC rule, PURPA qualified facilities with a generation capacity of one megawatt or less may accept a purchasing utility's standard published rates, i.e., a standard offer contract, without filing a bid, regardless of the generating technology used.

Regulatory Structure – UTC Interconnection Rules

- 2005 PURPA amendments obligated state commissions to consider whether to require electric utilities to offer "interconnection service" to the consumers they serve, using procedures that "promote current best practices of interconnection for distributed generation."
- The UTC adopted two sets of rules addressing electrical standards to ensure safety and reliability, and responsibility for the costs of interconnection.
  - The first set governs facilities with a generation capacity of 300 kW or less.
  - The second set applies to facilities with a generation capacity of 300 kW to 20 MW.

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Laws and Rules Related to Distributed Generation

Law or Rule	< 100 kW	100 kW - 300kW	300 kW – 5 MW	>5 MW	Renewable	Eligible Renewable
Interconnection Rules – Part 1	YES	YES	NO	NO	No distinction	No distinction
Interconnection Rules – Part 2	NO	NO	YES	YES – up to 20 MW	No distinction	No distinction
Net Metering	YES	NO	NO	NO	YES	No distinction
RECs	YES	YES	YES	YES	No distinction	YES
Double RECs	YES	YES	YES	NO	No distinction	YES
PURPA Standard Contract, e.g., Utility Tariff	YES	YES	YES – (Avista < 1 MW; PacifiCorp < 2 MW)	YES – under PSE Schedule 91	No distinction	No distinction
PURPA Avoided Cost Rate	YES	YES	YES – above 1-2 MW	YES – up to 20 MW	No distinction	No distinction

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Structure of Report

- Introduction – Overview of the DG landscape (interaction between DG, PURPA, net metering, renewables and RECs).
- Issues in relationship between generators and utilities, e.g., interconnection, contracts.
- Issues involving financial incentives – PURPA avoided cost contracts, feed-in tariffs, net metering, tax incentives, consumer incentives, and RECs.
- Appendices – DG potential for certain renewable technologies;
  - Literature guide – list of useful resources.
- Available at – http://www.utc.wa.gov/docs/Pages/DocketLookup.aspx?FilingID=110667

UTC Options

- **Review Interconnection Rules (WAC 480-108).**
  - Initiate a rulemaking to determine whether to amend certain rules governing the interconnection of generation facilities with utility electric systems, including requirements for external disconnect switches and insurance, and whether to adopt unique interconnection rules for generators between 300 kW and 20 megawatts (MW).

UTC Options

- **Clarify ownership of RECs under PURPA contracts** between developers and utilities through petitions for declaratory ruling, policy statements or rulemaking.

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UTC Options

- **Provide greater certainty for developers of distributed generation through longer duration standard offer PURPA contracts** established under utility tariffs, such as Puget Sound Energy's Schedule 91.

Legislative Options

- **Amend RCW 80.60, Net Metering, to increase the cap from 100 kilowatts (kW) and clarify whether third-party ownership of generation facilities results in the third-party owner being an electric company subject to UTC regulation.**
  - This occurs in circumstances where the third party develops and installs the generating resource on a utility customer's property, and sells the electric output to the customer, who engages in net metering with the utility.

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Legislative Options

- **Amend definitions in the Energy Independence Act, RCW 19.285.030,** of "eligible renewable resource" to include combined heat and power resources, and "distributed generation" to clarify the meaning of the term "generating capacity."

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Legislative Options

- **Review comprehensively the existing financial incentives for distributed generation**, e.g., cost recovery mechanisms, tax credits, tax reductions and exemptions, net metering, and multiple renewable energy credits to determine whether the incentives are consistent and work together in promoting cost-effective distributed generation.

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Legislative Options

- **Gather Information to Analyze the Costs and Benefits of Varying Levels of Distributed Generation.**
  - Request a group of utilities, representative of utility systems in Washington, to perform initial cost/benefit analyses of distributed generation resources assuming different levels of system peak load (e.g., .25, .50 and 1.0 percent) to provide legislators and other decision-makers with better information to shape state policies.

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QUESTIONS?