**Black** text denotes existing WAC language

Red text denotes WUTC Staff's proposed changes to existing WAC language released on 04/17/18

**Blue** text denotes PSE's edits to WUTC Staff's proposed changes to WAC language

WAC 480-100-238 Draft Rules for Distribution System Planning (Apr.2018)

WAC 480-100-238 Integrated resource planning. (1) Purpose. Each electric utility regulated by the commission has the responsibility to identify and meet its system demand system needs with a least the lowest reasonable cost mix of energy supply resources and conservation, generation, distributed energy resources, and infrastructure investments to meet its system demand with a least cost mix of energy supply resources and conservation. In furtherance of that responsibility, each electric utility must develop an "integrated resource plan." In furtherance of that responsibility, Each electric utility must develop and include as input to its an "integrated resource plan" the energy supply resource benefits gained by electric delivery system plans that use new distributed energy resources or additional conservation potential to address localized capacity or reliability needs and incorporate customer-owned distributed energy resources. This plan provides greater transparency of the planning process and provides opportunity for customers and stakeholder engagement in developing the resources available, including on the distribution system, to provide the lowest reasonable cost mix of energy supply resources and conservation. that cohesively plans for meeting resource needs through investments in the generation, transmission, and distribution systems." This cross functional planning approach will assist in identifying and developing: (1) new energy generation; (2) conservation and efficiency resources; (3) methods, commercially available technologies, and facilities for integrating renewable and distributed energy resources, including addressing any overgeneration event; and (4) related infrastructure to meet the state's energy needs.

(2) Draft Distribution Definitions. (Expected changes and additions to other definitions will be available for public comment in Summer 2018.)

"Advisory group" means a public group composed of commission staff and other interested parties that is consulted in public meetings convened by the utility at regular intervals during the planning process. A utility may convene separate advisory groups for integrated resource planning and distribution electric delivery system planning, where the distribution electric delivery planning advisory group is composed of a subset of members of the integrated resource planning advisory group and other interested parties who have demonstrated subject matter expertise in distribution electric delivery system planning or distributed energy resources. A utility must consider data security, critical infrastructure information and other information protection requirements along with other considerations for group membership to ensure successful progress through the planning process discussion and compliance with laws, regulations, and other requirements of the utilities in regards to data security and critical infrastructure information. The advisory group will consider distributed energy resources commercially available on the electric delivery system and how these may affect the utility's least cost mix of energy supply resources and conservation in the Integrated Resource Plan. Specific infrastructure locations, routing, or permitting requirements are considered implementation issues beyond the planning process. Implementation issues shall not be part of the advisory group responsibilities due to local jurisdictional control over permitting issues and community considerations that the utility must consider in making alternative decisions.

"Demand response" means a program designed to meet capacity needs by targeted reductions in customer usage during periods of high demand.

"Distributed energy resource" means any device that is connected to the distribution delivery system or is hosted by a retail customer that can generate electricity, reduce electric demand or use, manage the level or timing of electricity consumption, or provide ancillary and other grid services, including but not limited to conservation, demand response, distributed generation, electric vehicles, and energy storage.

"Distribution system" means the infrastructure needed to reduce manage electric voltage and deliver power to retail customers, including but not limited to substations, power lines and control systems. poles, capacitors, transform ers, switches,

controls, meters, communication devices, and associated hardware and software. For the purposes of this section, it also includes transmission system infrastructure that is not directly interconnected to another utility and has not been identified for regional cost allocation.

"Distribution Delivery system plan" means a plan identifying necessary investments and solutions to reliably meet customers energy delivery needs. improve or maintain the reliability of the distribution system, This plan may include evaluating potential cost-effective opportunities to defer or displace major traditional capital investments on the distribution system, developing and refining the analytical tools to improve distribution system modeling, and facilitating enabling the integration of distributed energy resources.

"Integrated resource plan" or "plan" means a plan describing the mix of energy supply resources and, and conservation, and also considers electric delivery system plan benefits and infrastructure investments that will meet current and future needs at the lowest reasonable cost to the utility and its customers. to the utility and its ratepayers.

"Major distribution capital investment" means a distribution delivery system infrastructure investment that is could be significant enough in scope and cost for there to be opportunities for a combination of one or more distributed energy resources to meet the same need, performance and timing requirements that the infrastructure investment is designed to meet.

(3) Distribution Delivery system plans. As part of its integrated resource plan, an electric utility must develop a distribution delivery system plan that consists of a short term plan identifying planned preliminary solutions capital investments, a long term planning process improvement plan identifying how the utility is improving planning process tools and data, and a plan for enabling distributed energy resource integration. distribution system operations and transparency, and a report identifying potential tools and practices to facilitate the integration of distributed energy resources. The distribution delivery system plan must serve as an input to the integrated resource plan by identifying solutions distribution system investments that may be leveraged to meet customer energy system needs, and by identifying points on the distribution

system where deploying distributed energy resources will benefit system energy the utility may be able to deploy distributed energy resources to meet system generation needs identified in the integrated resource plan.

- (a) Short term capital investment plan. A distribution delivery system plan must present a ten year investment plan by:
  - (i) Identifying areas locations on the distribution delivery system that have an anticipated need for a major distribution capital investment within the next ten years, with consideration given at minimum to circuits identified in the utility's reliability report, areas with above-average projected capacity needs load growth and areas with high present or expected penetration of distributed energy resources; and facilities that are near the end of their expected useful life;
  - (ii) Analyzing all technically viable options commercially available resource options that have been proven to can meet the needs identified at each location including infrastructure upgrades and distributed energy resources with all value methodology and cost assumptions transparently presented;
  - (iii) Identifying the type and timing of the resource(s) that will may meet the needs identified at each location at the lowest reasonable cost; and
  - (iv) Explaining how identified solutions resource investments will be reflected in the utility's integrated resource plan as it relates to impacts on energy supply resources.
- (b) Long term Planning and system process improvement. A distribution delivery system plan must discuss the utility's efforts to improve planning process tools and analytics the visibility and transparency of distribution system planning and operations. Util ities must develop the necessary infrastructure and tools to readily recognize distribution system needs and identify their optimal solu-tions, with infrastructure and distributed energy resource investments being considered on equal footing, by:
  - (i) Identifying areas of the distribution system where the utility does not have the level of operational data needed

- to define needs and solution performance potential; monitoring or control necessary to identify locational needs and analyze resource options;
- (ii) Proposing monitoring and control upgrades needed to obtain the required operational data, manage and operate the system utilizing the operational data;
- (iii) Proposing metering and related upgrades that will enable customers to modify their energy usage in response to signals from the utility through programs such as time of use rates and demand response;
- (iv) Providing a business case that identifies how the proposed monitoring and metering investments in subsections (ii) and (iii) will be leveraged for the benefit of customers;
- (iv) Describing advisory group participation in the preparation of the distribution system plan in developing the planning process that will be used in the development of the short term plan; and
- $(v \pm)$  Identifying planning and procedural improvements that the utility will implement in future planning cycles.
- (c) Enabling distributed energy resource integration. A distribution delivery plan must enable facilitate the integration of distributed energy resources by:
  - (i) Preparing Studying the a probabilistic forecast of customer-owned distributed energy resource adoption potential on the utility's system in order to evaluate enabling infrastructure needed;
  - (ii) Identifying potential tariffs and rate designs to both compensate customers for the value of their distributed energy resources and provide accurate price signals for the acquisition and utilization of those resources;
  - (iii) Identifying opportunities for pilot programs that will enable the utility to better understand define benefits and costs, determine scalability and applicability, and leverage developing technologies in order to feed the planning process improvement plan; and

- (iii\*) Discussing the utility's efforts to address cybersecurity and data privacy issues and costs posed by the expansion of distributed energy resources which may include requirements on distributed energy resource owners and customer engagement requirements; and.
- (iv) Proposing delivery system plan and operating upgrades needed to enable effective operate distributed energy resources when it arrives.
- (4) Draft rules for procedural changes in subsections 4 through 6 will be available for public comment in Summer 2018