

Attachment A

WAC 480-100-xxx

Distribution System Planning

(1) Purpose. The intent of the distribution system plan is to provide a cost-effective short- term capital investment plan presenting projections of distribution system investments, a long-term future outlook of system improvement, and a report identifying potential tools and practices that may facilitate the integration of distributed energy resources. The distribution system plan must serve as an input to the integrated resource plan by identifying distribution system investments that may be leveraged to meet system needs, and by identifying points on the distribution system where the utility may be able to deploy distributed energy resources to meet system generation needs identified in the integrated resource plan. The distribution system plan must address the following goals:

- (a) Maintain and enhance the reliability, safety, and resiliency of the distribution system.
- (b) Provide an explanation of the utility’s current distribution system

(2) Definitions.

(a) “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 system planning, where the distribution 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 system planning or distributed energy resources.

(b) “Demand response” means a program designed to meet capacity needs by targeted reductions in customer usage during periods of high demand.

(c) “Distributed energy resource” means any device that is connected to the distribution system or is hosted by a retail customer that can generate electricity, reduce electric demand, 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.

(d) “Distribution system” means the infrastructure needed to reduce electric voltage and deliver power to retail customers, including but not limited to substations, power lines, poles, capacitors, transformers, 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.

(e) “Distribution system plan” means a plan identifying necessary investments to improve or maintain the reliability, safety, and resiliency of the distribution system, evaluating potential cost-effective opportunities to defer or displace major capital investments on the distribution system, developing and refining the analytical tools to improve distribution system modeling, and facilitating the integration of distributed energy re-sources.

(f) "Integrated resource plan" or "plan" means a plan describing the mix of energy supply resources and, conservation, and infrastructure investments that will meet current and future needs at the lowest reasonable cost to the utility and its ratepayers.

(g) “Major distribution capital investment” means a distribution system infrastructure investment that is significant enough in scope and cost for there to be opportunities for distributed energy resources to meet the same need that the infrastructure investment is designed to meet.

(3) Distribution system plans. As part of its integrated resource plan, an electric utility must develop a cost-effective distribution system plan that consists of a short term plan identifying planned capital investments, a long term plan identifying how the utility is improving distribution system operations and transparency, and a report identifying potential tools and practices to facilitate the integration of distributed energy resources. The distribution system plan must serve as an input to the integrated resource plan by identifying cost-effective distribution system investments that may be leveraged to meet system needs, and by identifying points on the distribution system where the utility may be able to deploy cost-effective distributed energy resources to meet system generation needs identified in the integrated resource plan. ~~As part of its integrated resource plan, an~~

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(a) Short term capital investment. A distribution system plan must present a ~~ten~~five year investment plan by:

- (i) Identifying locations on the distribution system that have an anticipated need for a major distribution capital investment within the next ~~ten~~five years, with consideration given at minimum to circuits identified in the utility's reliability report, areas with above-average projected load growth, 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 commercially available resource options that can meet the needs identified at each location, including infrastructure upgrades and distributed energy resources, with all cost assumptions transparently presented;
- (iii) Identifying the type and timing of the resource(s) that will meet the needs identified at each location at the lowest reasonable cost; and
- (iv) Explaining how identified resource investments will be reflected in the utility's integrated resource plan.

(b) Long term planning and system improvement. A distribution system plan must discuss the utility's efforts to improve the visibility and transparency of distribution system planning and operations. Utilities must develop the necessary infrastructure and tools to readily recognize distribution system needs and identify their optimal solutions, 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, 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;
 - (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;
 - (v) Describing advisory group participation in the preparation of the distribution system plan; and
 - (vi) Identifying planning and procedural improvements that the utility will implement in future planning cycles.
- (c) Distributed energy resource integration. A distribution plan must include a report of possible tools and practices for the cost-effective integration of distribution energy resources. In order to facilitate the potential integration of distributed energy resources, the report must: ~~A distribution plan must facilitate the integration of distributed energy resources by:~~
- (i) ~~Preparing~~ Prepare a probabilistic forecast of customer-owned distributed energy resources on the utility's system;
 - (ii) ~~Identifying~~ Identify 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~~ Identify opportunities for pilot programs that will enable the utility to better understand and leverage developing technologies; and
 - (iv) ~~Discussing~~ Discuss the utility's efforts to address cybersecurity and data privacy issues posed by the expansion of distributed energy resources.