Part VIII-Planning

WAC 480-100-600

Definitions.

"Advisory group" means a group composed of utility representatives, commission staff, the public counsel division of the office of the Washington state attorney general, and any member of the public expressing a desire to be involved in the integrated resource plan (IRP) process, which the utility convenes at regular intervals during the planning process, and with which the utility consults in public meetings.

"Commission" means the Washington utilities and transportation commission.

"Conservation and efficiency resources" means any reduction in electric power consumption that results from increases in the efficiency of energy use, production, transmission, or distribution.

"Consults" means to listen to and acknowledge concerns, and provide feedback on how public input influenced a decision.

"Cost-effective" means that a project or resource is forecast: (a) To be reliable and available within the time it is needed; and (b) To meet or reduce the electric power demand of the intended consumers at an estimated incremental system cost no greater than that of the least-cost similarly reliable and available alternative project or resource, or any combination thereof.

"Demand response" means changes in electric usage by demandside resources from their normal consumption patterns in response to changes in the price of electricity, or to incentive payments designed to induce lower electricity use, at times of high wholesale market prices or when system reliability is jeopardized. "Demand response" may include measures to increase or decrease electricity production on the customer's side of the meter in response to incentive payments.

"Distributed energy resource" means a nonemitting electric generation or renewable resource or program that reduces electric demand, manages the level or timing of electricity consumption, or provides storage, electric energy, capacity, or ancillary services to an electric utility and that is located on the distribution

system, any subsystem of the distribution system, or behind the customer meter, including conservation and energy efficiency as well as demand response.

"Energy assistance" means a program undertaken by a utility to reduce the household energy burden of its customers.

(a) Energy assistance includes, but is not limited to, weatherization, conservation and efficiency services, and monetary assistance, such as a grant program or discounts for lower income households, intended to lower a household's energy burden.

(b) Energy assistance may include direct customer ownership in distributed energy resources or other strategies if such strategies achieve a reduction in energy burden for the customer above other available conservation and demand-side measures.

"Energy assistance need" means the amount of assistance necessary to achieve an energy burden equal to [RESERVED] percent for utility customers.

"Energy burden" means the share of annual household income used to pay annual home energy bills.

"Greenhouse gas" includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride,

and any other gas or gases designated by the department of ecology by rule under RCW 70.235.010.

"Highly impacted community" means a community designated by the department of health based on the cumulative impact analysis required by RCW 19.405.140 or a community located in census tracts that are fully or partially on "Indian country" as defined in 18 U.S.C. Sec. 1151.

"Integrated resource plan" means an analysis describing the mix of conservation and efficiency, generation, distributed energy resources, and delivery system infrastructure that will meet current and future resource needs and the requirements of chapters 19.280 and 19.405 RCW at the lowest reasonable cost to the utility and its customers and is clean, affordable, reliable, and equitably distributed.

"Lowest reasonable cost" means the lowest cost mix of resources determined through a detailed and consistent analysis of a wide range of commercially available resources. At a minimum, this analysis must consider resource cost, market-volatility risks, demand-side resource uncertainties, resource dispatchability, resource effect on system operation, the risks

imposed on the utility and its customers, public policies regarding resource preference adopted by Washington state or the federal government, and the cost of risks associated with environmental effects, including emissions of carbon dioxide.

"Nonemitting electric generation" means electricity from a generating facility or a resource that provides electric energy, capacity, or ancillary services to an electric utility and that does not emit greenhouse gases as a by-product of energy generation. "Nonemitting electric generation" does not include renewable resources.

"Planning horizon" means the period of time that the integrated resource plan forecasts into the future.

"Renewable resource" means: (a) Water; (b) wind; (c) solar energy; (d) geothermal energy; (e) renewable natural gas; (f)renewable hydrogen; (g) wave, ocean, or tidal power; (h) biodiesel fuel that is not derived from crops raised on land cleared from old growth or first growth forests; or (i) biomass energy.

"Resource need" means any current or projected deficit to meet demand or operational requirements, which may include, but

are not limited to, capacity and associated energy, capacity needed to meet peak demand in any season, Federal Energy Regulatory Commission jurisdictional operational requirements, delivery system infrastructure needs, or resources required for regulatory compliance, such as fossil-fuel generation retirements, costeffective conservation and efficiency resources, demand response, renewable and nonemitting resources.

"Social cost of greenhouse gas emissions" is the inflationadjusted costs of greenhouse gas emissions resulting from the generation of electricity, as required by RCW 80.28.405, and published on the commission's website.

"Vulnerable populations" means communities that experience a disproportionate cumulative risk from environmental burdens due to: (a) Adverse socioeconomic factors, including unemployment, high housing and transportation costs relative to income, access to food and health care, and linguistic isolation; and (b) Sensitivity factors, such as low birth weight and higher rates of hospitalization.

WAC 480-100-605

Purpose of integrated resource planning. Consistent with chapters 80.28, 19.280, and 19.405 RCW, each electric utility regulated by the commission has the responsibility to identify and meet its resource needs with the lowest reasonable cost mix of conservation and efficiency, generation, distributed energy resources, and delivery system investments to ensure a utility provides energy to its customers that is clean, affordable, reliable, and equitably distributed.

WAC 480-100-610

Content of an Integrated Resource Plan. At a minimum, integrated resource plans must include the components listed in this rule. Unless otherwise stated, the assessments, evaluations, and forecasts should be over the planning horizon.

(1) Load forecast. The plan must include a range of forecasts of projected customer demand that reflect the effect of economic forces on the consumption of electricity and address changes in the number, type, and efficiency of electrical end-uses. (2) Demand-side resources. The plan must include assessments of load management that is cost-effective and commercially available. These assessments must include:

(a) Currently employed and new policies and programs needed to obtain all cost-effective conservation and efficiency and load management improvements, including the ten-year conservation potential used in calculating a biennial conservation target to be filed in the biennial conservation plan consistent with chapter 480-109 WAC;

(b) Currently employed and new policies and programs needed to obtain all demand response at the lowest reasonable cost; and

(c) Identification of opportunities to develop combined heat and power as an energy and capacity resource.

Distributed energy resources. The plan must include an (3) assessment of distributed energy resources including (a) distributed energy programs and mechanisms identified pursuant to the RCW 19.405.120(4)(b), which pertains to energy assistance and toward meeting energy assistance progress need; and (b) distributed energy resources that may be installed by the utility's customers. The assessment should also include the effect of

distributed energy resources on the utility's load and operations. Utilities are strongly encouraged to engage in a distributed energy resource planning process as described in RCW 19.280.100. If the utility uses that process, it should include a summary of the results.

(4) Commercially available supply-side resources. The plan must include an assessment of a wide range of generating resources, energy storage resources, and nonconventional generating, integration, or ancillary service technologies.

(5) Regional generation and transmission. The plan must include an assessment of the availability of regional generation and transmission capacity on which the utility may rely to provide and deliver electricity to its customers.

(6) Resource Evaluation. The plan must include a comparative evaluation of all identified resources that considers resource costs, risks, including those associated with environmental effects and the social cost of greenhouse gas emissions, and benefits that accrue to the utility, to customers, and program participants when applicable, including transmission and distribution delivery costs;; and public policies regarding

resource preference adopted by Washington state or the federal government.

(7) Resource adequacy metrics determination. The plan must include an assessment and determination of resource adequacy metrics.

(8) Identification of resource adequacy requirement. The plan should identify an appropriate resource adequacy requirement and measurement metric consistent with prudent utility practice identified in RCW 19.405.030 through RCW 19.405.050.

(9) Economic, health, and environmental burdens and benefits. The plan must include an assessment of energy and nonenergy benefits and reductions of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health and environmental benefits, costs, and risks; and energy security risk. The assessment should be informed by the cumulative impact analysis conducted by the department of health.

(10) Cases, scenarios, and sensitivities. The utility must define its cases, scenarios, and sensitivities modeled and examined, including those that are informed by public participation processes.

(11) Portfolio analysis and preferred portfolio. The utility must integrate the demand forecasts and resource evaluations into a long-range integrated resource plan solution describing the mix of resources that meet current and projected needs. Each utility must provide a narrative explanation of the decisions it has made, including how the utility's long-range integrated resource plan solution:

(a) Achieves requirements in RCW 19.405.030, RCW 19.405.040,and RCW 19.405.050 at the lowest reasonable costs, consideringrisk;

(b) Includes all cost-effective, reliable, and feasible conservation and efficiency resources, and demand response, using the methodology established in RCW 19.285.040, if appropriate;

(c) Considers acquisition of existing renewable resources and relies on renewable resources and energy storage in the acquisition of existing renewable resources, insofar as doing so is at the lowest reasonable cost, considering risks;

(d) Maintains and protects the safety, reliable operation, and balancing of the utility's electric system, including

mitigating over-generation events and achieving the identified resource adequacy requirement;

(e) Ensures all customers are benefitting from the transition to clean energy through (i) the equitable distribution of energy and non-energy benefits and reduction of burdens to vulnerable populations and highly impacted communities; (ii) long-term and short-term public health and environmental benefits and reduction of costs and risks; and (iii) energy security and resiliency; and

(f) Assesses the environmental health impacts to highly impacted communities.

(12) Clean Energy Action Plan. The utility must develop a ten-year clean energy action plan for implementing RCW 19.405.030 through RCW 19.405.050. The Clean Energy Action Plan must:

(a) Be at the lowest reasonable cost.

(b) Identify and be informed by the utility's ten-year costeffective conservation potential assessment as determined under RCW 19.285.040;

(c) Demonstrate that all customers are benefitting from the transition to clean energy;

(d) Establish a resource adequacy requirement;

(e) Identify the potential cost-effective demand response and load management programs that may be acquired;

(f) Identify renewable resources, nonemitting electric generation, and distributed energy resources that may be acquired and evaluate how each identified resource may reasonably be expected to contribute to meeting the utility's resource adequacy requirement;

(g) Identify four-year energy efficiency, demand response, and renewable energy goals;

(h) Identify any need to develop new, or to expand or upgradeexisting, bulk transmission and distribution facilities;

(i) Identify the nature and possible extent to which the utility may need to rely on an alternative compliance option identified under RCW 19.405.090, if appropriate; and

(j) Incorporate the social cost of greenhouse gas emissions.

(13) Avoided cost. The plan must include an analysis and summary of the avoided cost estimate for each supply- and demandside resource, including, but not limited to, avoided cost of energy, capacity, transmission, distribution, and greenhouse gas emissions. Listed nonenergy impacts should specify if they accrue

to the utility, customers, participants, vulnerable populations, highly impacted communities, or the general public. The utility may provide this content as an appendix.

(14) Information relating to Purchases of Electricity from Qualifying Facilities. Each utility must provide information and analysis that it will use to inform its annual filings required under chapter 480-106 WAC. The detailed analysis must include, but is not limited to, the following components:

(a) a description of the methodology used to calculate each avoided cost estimate;

(b) a description of the methodology used to calculate estimates of avoided cost of energy, capacity, transmission, distribution and emissions averaged across the utility; and

(c) Resource assumptions and market forecasts used in the utility's schedule of estimated avoided cost required in WAC 480-106-040, including, but not limited to, cost assumptions, production estimates, peak capacity contribution estimates and annual capacity factor estimates.

(15) Report of substantive changes. The integrated resource plan must include a summary of substantive changes to modeling

methodologies or inputs that result in changes to the utility's resource need, as compared to the utility's previous integrated resource plan.

(16) The utility must provide a summary of public comments received on the draft integrated resource plan and the utility's responses, including whether or not issues raised in the comments were addressed and incorporated into the final plan. The matrix may be included as an appendix to the final plan.

WAC 480-100-615

Integrated Resource Plan Timing. Unless otherwise ordered by the commission, each electric utility must file an integrated resource plan with the commission by January 1, 2021, and every four years thereafter.

(1) Work plan. Not later than fifteen months prior to the due date of its integrated resource plan, the utility must file a work plan that outlines the content of the integrated resource plan and the subsequent two-year progress report. The utility must include the following in its work plan:

(a) The method for assessing potential resources;

(b) The due date and proposed schedule for completing its conservation potential assessment and demand response potential assessment as outlined in WAC 480-109-100(2), which will serve as inputs to the integrated resource plan;

(c) A proposed schedule of integrated resource plan advisory
group meetings;

(d) A list of significant topics that will be discussed ateach integrated resource plan advisory group meeting;

(e) The date the draft plan will be filed with the commission;

(f) The date the final plan will be filed; and

(g) A link to a website accessible to the public and managed by the utility, to which the utility posts and makes publicly available the information identified in subsection (5)(a) of this section.

(2) Draft integrated resource plan. Not later than four months prior to the due date of the final plan, the utility must file its draft integrated resource plan with the commission. At minimum, the draft integrated resource plan must include all the elements required under this section and to the extent practicable all appendices and attachments. .

(3) Two-year progress report. Unless otherwise ordered by the commission, at least every two years after the utility files its integrated resource plan, a utility must file a two-year progress report. In this report, a utility must update its load forecast, demand-side resource assessment including a new conservation potential assessment, and portfolio analysis and preferred portfolio.

WAC 480-100-620

Public participation. Consultations with commission staff and public participation are essential to the development of an effective integrated resource plan and two-year progress report. The utility must inform, consult, and involve stakeholders in the development of its integrated resource plan and its two-year progress report.

(1) The utility must consult with stakeholders in developing the timing and extent of meaningful and inclusive public participation identified in the work plan for both the integrated resource plan and the two-year progress report. As part of its work plan, the utility must provide a link to its website which

must be accessible to the public. The website must be updated in a timely manner and contain the following information:

(a) Meeting summaries and materials for integrated resource plan advisory group meetings, including materials for future meetings.

(b) A current schedule of integrated resource plan advisory group meetings and significant topics to be covered, actively updated by the company, with meeting materials made available and changes highlighted; and

(c) Information on how the public may participate in integrated resource plan advisory group meetings.

(2) The utility must make available completed presentation materials for each integrated resource plan advisory group meeting at least five (5) business days prior to the meeting.

(3) The commission will hear comment on the draft integrated resource plan at a public hearing scheduled after the utility files its draft plan. The commission will accept comments in written, electronic, and other formats, as outlined in the commission's notice for public hearing and opportunity to comment.

(4) The utility must file with the commission completed presentation materials at least five (5) business days prior to the public hearing.

(5) The commission may require an electric utility to make the utility's data inputs and files available in native file format and in a format easily accessible. Contents of the integrated resource plan, two-year progress report, and supporting documentation must be available for public review to the greatest extent possible. Utilities should minimize their designation of information in the plan as confidential pursuant to WAC 480-07-160. Nothing in this subsection limits the protection of records containing commercial information under RCW 80.04.095.

WAC 480-100-625

The commission will consider the information reported in the integrated resource plan and two-year progress report when it evaluates the performance of the utility in rate and other proceedings.