INTEGRATED SYSTEM PLAN RULES (480-95 WAC)

WAC 480-95-010 Purpose.

The purpose of these rules is to ensure that a large combination utility meets the standards for the clean energy transformation standards outlined in WAC 480-100-610 and the requirements of Chapter 80.86 RCW in a timely manner and at the lowest reasonable cost. Pursuant to RCW 80.86.020(2)(a), the commission consolidates the following planning and reporting requirements into an integrated resource plan: renewable portfolio standard reports, electric integrated resource plans, gas integrated resource plans, electrification of transportation plans, and clean energy implementation plans. The statutorily required contents of any plan consolidated into an integrated system plan must be met by the integrated system plan.

WAC 480-95-020 Definitions.

The definitions below apply to all of Chapter 480-95 WAC.

(1) "Alternative lowest reasonable cost and reasonably available portfolio" means, for purposes of calculating the incremental cost of compliance in RCW 19.405.060(3), the portfolio of investments the large combination utility would have made and the expenses the large combination utility would have incurred if not for the requirement to comply with RCW 19.405.040 and 19.405.050. The alternative lowest reasonable cost and reasonably available portfolio must include the social cost of greenhouse gases in the resource acquisition decision in accordance with RCW 19.280.030 (3)(a).

(2) "Carbon dioxide equivalent" or "CO2e" means a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

(3) “Clean Energy Action Plan” or "CEAP" means the plan identified in RCW 19.280.030(2) and RCW 80.86.020(6).

(4) “Clean Energy Implementation Plan” or "CEIP" means the plan identified in RCW 19.405.060(1).

(5) “Commercially feasible” means, for the purpose of long-term planning, the technically achievable potential calculated in a conservation or demand response potential assessment. Responses to a request for information and request for proposal processes designed to identify all commercially available and achievable conservation and efficiency resources, demand response and demand flexibility may be used to demonstrate commercial feasibility during an emissions reduction period.

(6) “Commercially available” means that a resource is currently available for purchase, procurement, or installation, or is reasonably anticipated to be available within the integrated system plan’s study period, to be put into commercial operation supporting utility service.

(7) "Commission" means the Washington utilities and transportation commission.

(8) "Conservation and efficiency resources" means any reduction in electric or natural gas consumption that results from increases in the efficiency of energy use, production, transmission, transportation, or distribution.

(9) "Cost-effective" means that a project or resource is, or is forecast to: (a) be reliable and available within the time it is needed; and (b) reduce greenhouse gas emissions and meet or reduce the energy demand or supply an equivalent level of energy service to the intended customers at an estimated long-term incremental system cost no greater than that of the least-cost similarly reliable and available alternative project or resource, or any combination thereof, including the cost of compliance with chapter 70A.65 RCW, based on the forward allowance ceiling price of allowances approved by the department of ecology under RCW 70A.65.160.

(10) "Customer benefit indicator" means an attribute, either quantitative or qualitative, of resources or related distribution investments associated with customer benefits described in RCW 19.405.040(8).

(11) "Delivery system" includes any power line, pipe, equipment, apparatus, mechanism, machinery, instrument, or ancillary facility used by a large combination utility to delivery electricity or gas for ultimate consumption by a customer of the large combination utility.

(12) "Demand response" means changes in electric or natural gas usage by demand-side resources from their normal consumption patterns in response to changes in the price of electricity or natural gas service, or to incentive payments designed to induce lower electricity or natural gas 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 or messaging.

(13) "Demand flexibility" means the capacity of demand-side loads to change their consumption patterns hourly or on another timescale.

(14) "Distributed energy resource" or "DER" 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 a large combination utility and that is located on the distribution system, any sub-system of the distribution system, or behind the customer meter, including conservation and energy efficiency.

(15) "Electrical company" has the same meaning as provided in RCW 80.04.010.

(16)

(a) "Electrification" means the installation of energy efficient electric end-use equipment.

(b) Electrification programs may include weatherization and conservation and efficiency measures.

(17) "Electrification readiness" means the upgrades or changes required before the installation of energy efficient electric end-use equipment to prevent heat loss from homes including, but not limited to: Structural repairs, such as roof repairs, preweatherization, weatherization, and electrical panel and wiring upgrades.

(18) "Emissions baseline" means the actual cumulative greenhouse gas emissions of a large combination utility, calculated pursuant to chapter 70A.65 RCW, for the five-year period beginning January 1, 2015, and ending December 31, 2019.

(19) "Emissions reduction period" means one of five periods of five calendar years each, with the five periods beginning on January 1st of calendar years 2030, 2035, 2040, 2045, and 2050, respectively.

(20) “Emissions reduction target” means a targeted reduction of projected cumulative greenhouse gas emissions of a large combination utility approved by the commission for an emissions reduction period that is at least as stringent as the limits established in RCW 70A.45.020.
(21)"Energy assistance" means a program undertaken by a large combination 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.

(22) "Energy assistance need" means the amount of assistance necessary to achieve an energy burden equal to six percent for large combination utility customers.
(23)"Energy burden" means the share of annual household income used to pay annual home energy bills.
(24)"Equitable distribution" means a fair and just, but not necessarily equal, allocation of benefits and burdens from the large combination utility's transition to clean energy. Equitable distribution is based on disparities in current conditions. Current conditions are informed by, among other things, the assessment described in RCW 19.280.030 (1)(k) from the most recent integrated resource plan or the equivalent assessment included in the integrated system plan.
(25)“Gas company” has the same meaning as provided in RCW 80.04.010.
(26)"Geographically targeted electrification" means the geographically targeted transition of a portion of gas customers of the large combination utility with an intent to electrify loads of such customers and, in conjunction, to reduce capital and operational costs of gas operations of the large combination utility serving such customers.

(27)"Greenhouse gas" has the same meaning as provided in RCW 70A.45.010.
(28)"Highly impacted community" has the same meaning as provided in RCW 19.405.020.
(29)"Integrated resource plan" or "IRP" means an analysis describing the mix of generating resources, conservation, methods, technologies, and resources to integrate renewable resources and, where applicable, address overgeneration events, and efficiency resources that will meet current and projected needs at the lowest reasonable cost to the utility and its ratepayers and that complies with the requirements specified in RCW 19.280.030(1).
(30) “Integrated system plan” or “ISP” means a plan that the commission may approve, reject, or approve with conditions pursuant to RCW 80.86.020.
(31)"Implementation period" means the four years after the filing of each integrated system plan, except for the first integrated system plan. The implementation period for the first integrated system plan will be April 1, 2027, through December 31, 2029. The implementation period for the second integrated system plan will be January 1, 2030, through December 31, 2033.
(32)“Large combination utility” means a public service company that is both an electrical company and a gas company that serves more than 800,000 retail electric customers and 500,000 retail gas customers in the state of Washington as of June 30, 2024.
(33)“Low-income” has the same meaning as provided in WAC 480-109-060(22).
(34)"Lowest reasonable cost" means the lowest cost mix of demand-side and supply side resources and decarbonization measures determined through a detailed and consistent analysis of a wide range of commercially available resources and measures. At a minimum, this analysis must consider long- term costs and benefits, market-volatility risks, resource uncertainties, resource dispatchability, resource effect on system operation, the risks imposed on the large combination utility and its

ratepayers, public policies regarding resource preference adopted by Washington state or the federal government, the cost of risks associated with environmental effects including potential spills and emissions of carbon dioxide, and the need for security of supply. The analysis of the lowest reasonable cost must describe the large combination utility's combination of planned resources and related delivery system infrastructure in compliance with chapters 19.280, 19.285, and 19.405 RCW.

(35)“Named communities” means all communities identified as a highly impacted community, vulnerable population, or an overburdened community.

(36)"Natural gas" has the same meaning as provided in RCW 19.405.020.

(37)"Nonemitting electric generation" has the same meaning as provided in RCW 19.405.020.

(38)“Nonpipeline alternative” means activities or investments that delay, reduce, or avoid the need to build, upgrade, or repair gas plant, such as pipelines or service lines.

(39) “Nonwires solutions” means activities or investments that delay, reduce, or avoid the need to build or upgrade components of an electric distribution system, transmission system, or both.

(40)"Nonpower attributes" means all environmentally related characteristics, exclusive of energy, capacity reliability, and other electrical power service attributes, that are associated with the generation of electricity including, but not limited to, the facility's fuel type, geographic location, vintage, qualification as a renewable resource, and avoided emissions of pollutants to the air, soil, or water, and avoided emissions of carbon dioxide and other greenhouse gases. Nonpower attributes does not include any aspects, claims, characteristics, and benefits associated with the on-site capture and destruction of methane or other greenhouse gases at a facility through a digester system, landfill gas collection system, or other mechanism, which may be separately marketable as greenhouse gas emission reduction credits, offsets, or similar tradable commodities. However, these separate avoided emissions may not result in or otherwise have the effect of attributing greenhouse gas emissions to the electricity.

(41)“Overburdened community” has the same meaning as provided in RCW 70A.65.010.

(42)“Overgeneration event” has the same meaning as provided in RCW 19.280.020.

(43)"Renewable energy credit" or "REC" means a tradable certificate of proof of one megawatt-hour of a renewable resource. The certificate includes all of the nonpower attributes associated with that one megawatt-hour of electricity and the certificate is verified by a renewable energy credit tracking system selected by the department of commerce.

(44)"Renewable resource" has the same meaning as provided in RCW 19.405.020.

(45)"Resource" includes, but is not limited to, generation, conservation, distributed generation, demand response, efficiency, storage, natural gas, and renewable natural gas.

(46)"Resource need" means any current or projected deficit to reliably meet energy demands created by changes in demand, changes to system resources, or their operation to comply with state or federal requirements. Such demands or requirements may include, but are not limited to, capacity and associated energy, capacity needed to meet peak demand in any season, fossil-fuel generation retirements, equitable distribution of benefits or reduction of burdens, cost-effective conservation and efficiency resources, demand response, and renewable and nonemitting resources.

(47)"Social cost of greenhouse gas emissions" or "SCGHG" is the inflation-adjusted costs of greenhouse gas emissions as required by RCW 80.28.395 and RCW 80.28.405, the updated calculation of which is published on the commission's website.

(48)“Supply side resource” means, as applicable:

(c) Any resource that can provide capacity, electricity, or ancillary services to the large combination utility’s electric delivery system; or

(d) Any resource that can provide conventional or nonconventional gas supplies to the large combination utility’s gas delivery system.

(49)"System cost" means actual direct costs or an estimate of all direct costs of a project or resource over its effective life including, if applicable: The costs of transmission and distribution to the customers; waste disposal costs; permitting, siting, mitigation, and end-of-cycle decommissioning and remediation costs; fuel costs, including projected increases; resource integration and balancing costs; and such quantifiable environmental costs and benefits and other energy and nonenergy benefits as are directly attributable to the project or resource, including flexibility, resilience, reliability, greenhouse gas emissions reductions, and air quality.
(50)"Vulnerable populations" has the same meaning as provided in RCW 19.405.020(39).

WAC 480-95-030 Cross-cutting assessment and planning requirements.

(1) This section outlines key planning assumptions, inputs, constraints, and process elements that will guide the development of, and apply to all sections of the ISP.

(2) **Requirement to use iterative analysis**. The large combination utility will utilize an iterative modeling framework and ISP development process that leads to an integrated plan wherein the different levels of the gas and electric systems are considered in conjunction with one another to achieve the ISP objectives. The large combination utility will clearly describe the modeling framework and steps in the modeling process it will use to develop the ISP and resulting action plans. The description will indicate how the framework effectuates integration across different levels of the gas and electric systems, including identifying feedback loops between steps in the framework and where there are opportunities for iteration, adjustments, integration and solution co-optimization throughout the modeling process.

(3) **Using social cost of greenhouse gas emissions**. A large combination utility shall consider the social cost of greenhouse gas emissions, as determined by the commission pursuant to RCW 80.28.395 and 80.28.405, when developing integrated system plans and clean energy action plans. A large combination utility must incorporate the social cost of greenhouse gas emissions as a cost adder when:
   (a) Evaluating and selecting conservation policies, programs, and targets;
   (b) Developing integrated system plans and clean energy action plans; and
   (c) Evaluating and selecting intermediate term and long-term resource options.

(4) Conservation and energy efficiency planning requirements. A large combination utility shall achieve two percent of electric load annually with conservation and energy efficiency resources, unless the commission finds that a higher target is cost-effective. However, the commission may accept a lower level of achievement if it determines that the requirement in this subsection is neither technically nor commercially feasible during the applicable emissions reduction period.

(5) Demand response and demand flexibility planning requirements. A large combination utility shall achieve annual demand response and demand flexibility equal to or greater than 10 percent of winter and summer peak electric demand, unless the commission finds that a higher target is cost-effective. However, the commission may accept a lower level of achievement if it determines that the requirement in this subsection is neither technically nor commercially feasible during the applicable emissions reduction period.

(6) **Emission reduction planning requirements.** In developing the ISP, a large combination utility shall include analysis of how different portfolios and actions contribute to achievement of emissions reductions for both gas and electric operations equal to at least their proportional share of emissions reductions required under RCW 70A.45.020.

(7) **Resource adequacy requirement and metric(s).** The integrated system plan must identify a resource adequacy requirement and measurement metrics consistent with RCW 19.405.030 through 19.405.050. The resource adequacy requirement and measurement metrics shall be used for prospectively assessing whether the large combination utility has adequate resources to meet energy system demand.

(8) **Cost Test.** The cost test shall be used to determine lowest reasonable cost pursuant to RCW 80.86.020(10), to guide the selection of the preferred portfolio per WAC 480-95-050(5), and as an input to the Commission's determination on whether the ISP is in the public interest pursuant to WAC 480-95-080(7). The cost test must consist of a multi-

component decision framework, as described in WAC 480-95-050(8), which evaluates each portfolio with societal, rate, and bill components.

(a) The societal component must account for all societal impacts for each year of the study period. The societal component shall include all impacts as described in subsection (a)(ii) below, including those that are monetized dentify?and not monetized.

(i) Monetization of Impacts.

(A) Costs and benefits that are monetizable will be presented in terms of present value dollars and will be used to estimate net benefits.

(B) Impacts that are not monetizable at the time an ISP is filed will be presented in the decision framework, pursuant to WAC 480-95-050(8), in quantitative terms to the extent practical. The large combination utility must document and identify why these costs and benefits are not monetizable.

(C) Impacts that are not monetizable and cannot be presented in quantitative terms will be described qualitatively in the decision framework, pursuant to WAC 480-95-050(8). The large combination utility must document and identify why these costs and benefits are not monetizable and cannot be presented in quantitative terms.

(ii) Societal impacts must include the following:

(A) Utility system impacts:

(a) All electric utility system impacts.

(b) All gas utility system impacts.

(c) Utility system impacts shall account for at a minimum market volatility risk, resource uncertainties, resource dispatchability, resource effect on system operation, and the risks imposed on the utility and its ratepayers.

(B) Host customer impacts

(C) Greenhouse gas emissions

(D) Other environmental impacts

(E) Health and safety impacts

(F) Reliability impacts

(G) Resilience impacts

(H) Security of supply

(I) Economic development

(J) Equity impacts as required in WAC 480-95-050(5)(j) and WAC 480-95-050(7)(d)(iii)

(K) Other fuels

(a) Other fuels shall include all fuels not sold by the large combination utility including but not limited to propane, wood, gasoline, and diesel.

(L) A risk reduction premium to account for the risks of greenhouse gas allowance ceiling prices and fuel prices, pursuant to RCW 80.86.020(5).

(b) The rate and bill impact components must indicate the extent to which each portfolio increases or decreases forecasted rates and bills.

(i) Forecasted rates must be presented separately for the electric utility and the gas utility.

(ii) Forecasted bills must be presented separately for the electric utility and the gas utility.

WAC 480-95-040 Assessment of resources and delivery system.

(1) Distributed energy resources and electrification.

(a) The integrated system plan must include assessments of a variety of distributed energy resources. These assessments must incorporate nonenergy costs and benefits not fully valued elsewhere within the integrated system plan model. Utilities must assess the effect of distributed energy resources on the large

combination utility's load and operations under RCW 19.280.030 (1)(h). These assessments must meet the requirements of RCW 19.280.100. While the following assessments must be included, a large combination utility may combine multiple DER types into a single assessment provided that each DER type is assessed consistently pursuant to this section:

(i) Conservation and demand response potential assessments – The integrated system plan must include an assessment of the commercially available conservation and efficiency resources, including demand response and load management, to achieve the conservation and energy efficiency requirements in RCW 80.86.020(4)(e) and demand response requirements of RCW 80.86.020(4)(g), as informed by the assessment for conservation potential under RCW 19.285.040 for the planning horizon consistent with subsection (2) of this section. Such an assessment may include, as appropriate, opportunities for the development of combined heat and power as an energy and capacity resource, currently employed and potential demand response and load management policies and programs, and currently employed and new policies and programs needed to obtain the conservation and efficiency resources. The value of recoverable waste heat resulting from combined heat and power must be reflected in analyses of cost effectiveness under this subsection. The results of this assessment must include the ten-year conservation potential used in calculating a biennial conservation target under chapter 480-109 WAC;

(ii) Energy assistance potential assessment – The integrated system plan must include distributed energy programs and mechanisms identified pursuant to RCW 19.405.120, which pertains to energy assistance and progress toward meeting energy assistance need; and

(iii) Other distributed energy resource potential assessments – The integrated system plan must assess other distributed energy resources that may be installed by the large combination utility or its customers including, but not limited to, energy storage, electric vehicles, photovoltaics. Any such assessment must include the effect of distributed energy resources on the large combination utility's load and operations.

(b) Electrification potential assessment – The integrated system plan must include an assessment of cost-effective electrification that encompasses the potential for geographically targeted electrification including, but not limited to, in overburdened communities, on gas plant that is fully depreciated or gas plant that requires accelerating depreciation pursuant to RCW 80.86.060(1) for the gas plant subject to such electrification proposal. As part of the electrification potential assessment, geographically targeted electrification may be delineated by customer class.

(2) **Supply-side resources.** The integrated system plan must provide an assessment and 20-year forecast of the availability of and requirements for regional supply-side resources to provide electricity and gas to the large combination utility's customers and to meet, as applicable, the requirements of chapter 19.405 RCW and the state's greenhouse gas emissions reduction limits in RCW 70A.45.020.

(a) The regional supply-side resource assessment and forecast must:

(i) include a wide range of commercially available generating and nonconventional resources, including nonconventional gas supplies and ancillary service technologies, and

(ii) assess commercially available supply-side resources, including a comparison of the benefits and risks of purchasing electricity or gas or building new resources.

(3) **Delivery system assessment.** The integrated system plan must provide an assessment and 20-year forecast of the availability of and requirements for delivery system capacity to provide and deliver electricity and gas to the large combination utility's customers and to meet, as applicable, the requirements of chapter 19.405 RCW and the state's greenhouse gas emissions reduction limits in RCW 70A.45.020.

(a) The delivery system assessment must:

(i) identify the large combination utility's expected needs to acquire new electric and gas transmission

rights, develop new, or expand or upgrade existing, delivery system facilities consistent with the requirements of RCW 80.60.020 and reliability standards,

(ii) take into account opportunities to make more effective use of existing delivery facility capacity through improved delivery system operating practices, conservation and efficiency resources, distributed energy resources, demand response, grid modernization, nonwires solutions and nonpipeline alternatives, and other programs if applicable,

(iii) include the large combination utility's existing gas and electric transmission capabilities and reliability, and future resource needs during the planning horizon, including identification of facilities necessary to meet future gas and electric transmission needs,

(iv) include an assessment of the capability and reliability of the gas transmission and distribution pipelines within or affecting the large combination utility's delivery system, and identify any necessary major categories of related investments including, but not limited to, replacements or upgrades that are included within the large combination utility's most recent Pipeline Replacement Plan,

(v) identify the general location and extent of transfer capability limitations on its transmission network that may affect the future siting of resources.

(b) **Nonpipeline alternatives.** The integrated system plan must assess nonpipeline alternatives, including geographically targeted electrification and demand response, as an alternative to replacing aging gas infrastructure or expanded gas capacity.

(i) Assessments that include geographically targeted electrification may include delineation by customer class, and all assessments must involve, at a minimum:

(A) Identifying all known and planned gas infrastructure projects, including those without a fully defined scope or cost estimate, for at least the 20 years following the filng;

(B) Estimating programmatic expenses of maintaining that portion of the gas system for at least the 10 years following the filing; and

(C) Ranking all gas pipeline segments for their suitability for nonpipeline alternatives.

(ii) A large combination utility must include in its integrated system plan the location and costs of planned pipeline replacements and repairs in its assessment and treatment of geographically targeted electrification. These costs must be presented with sufficient information about their timing, location, and impetus for the commission and interested parties to understand how they fit into the larger context of the integrated system plan and its proposed resource and delivery system investments.

(4) **Renewable resource integration.** An assessment of methods, commercially available technologies, or facilities for integrating renewable resources including, but not limited to, battery storage and pumped storage, and addressing overgeneration events, if applicable to the large combination utility's resource portfolio. The assessment may address ancillary services.

WAC 480-95-050 Content of an integrated system plan – long-term planning.

(1) **Range of forecasts.** Provide forecasts for at least the next 20 years, of projected customer electricity and natural gas demand that takes into account econometric data and addresses changes in the number, type, and efficiency of customer usage. In addition, the range of forecasts should include, on a consistent timeline:

(a) A forecast of DERs that may be installed by the large combination utility's customers, separately presenting naturally occurring DERs and those implemented through the large combination utility's programs and initiatives, and an assessment of their effect on the large combination utility's net electric load, natural gas demand, and operations.

(b) Load forecast scenarios that consider the anticipated levels of zero emissions vehicle use in the large combination utility's service area, including as provided in RCW 47.01.520, if feasible.

(2) **Resource evaluation.** The integrated system plan must include a comparative evaluation of all identified resources and potential changes to existing resources for achieving state energy laws and policies affecting energy planning, including, but not limited to the clean energy transformation standards in WAC 480-100-610 and the climate commitment act in 172-446 WAC, at the lowest reasonable cost. The comparative evaluation must consider gas and electric resources.

(3) **Economic, health, and environmental burdens and benefits.** The integrated system plan must include an assessment of energy and nonenergy benefits and reductions of burdens to named 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.

(4) **Scenarios and sensitivities.** The integrated system plan long-term analysis must include a range of possible future scenarios and input sensitivities for the purpose of testing the robustness of the large combination utility's resource portfolio under various parameters. The ISP must also provide a narrative description of scenarios and sensitivities the large combination utility used, including those informed by the advisory group process. The narrative description must identify the purpose for each scenario and sensitivity.

(a) At least one scenario must describe the alternative lowest reasonable cost and reasonably available portfolio that the large combination utility would have implemented if not for the requirement to comply with RCW 19.405.040 and 19.405.050, as described in WAC 480-100-660(1). This scenario's conditions and inputs should be the same as the preferred portfolio except for those conditions and inputs that must change to account for the impact of RCW19.405.040 and 19.405.050.

(b) All scenarios must incorporate the best science available to analyze impacts resulting from climate change such as, changes in snowpack, streamflow, rainfall, heating and cooling degree days, and load changes.

(c) At least one sensitivity must be a maximum customer benefit scenario. This sensitivity should model the maximum amount of customer benefits described in RCW 19.405.040(8) prior to balancing against other goals.

(d) The large combination utility must include scenarios that achieve emissions reductions for both gas and electric operations equal to at least their proportional share of emissions reductions required under RCW 70A.45.020.

(e) The large combination utility must include scenarios with emissions reductions targets for both gas and electric operations for each emissions reduction period that account for the interactions between gas and electric systems.

(5) **Portfolio analysis and preferred portfolio.** The large combination utility must integrate the demand forecasts, resource evaluations, and delivery system assessment into a long-range integrated system plan solution describing the mix of resources that meet current and projected resource needs. The large combination utility's long-term integrated system plan preferred portfolio will demonstrate how it represents a portfolio approach to system optimization across the gas and electric system and expects to:

(a) Comply with applicable state laws and policies affecting energy planning, including, but not limited to the clean energy transformation standards in WAC 480-100-610 (1) through (3) and the climate commitment act in 173-446 WAC, at the lowest reasonable cost;

(b) Serve large combination utility load, based on hourly electric system data and daily peak load gas system data, with the output of the large combination utility's owned resources, market purchases, and power purchase agreements, net of any off-system sales of such resources;

(c) Achieve two percent of electric load annually with conservation and energy efficiency resources, or provide an analysis that demonstrates that this is neither technically nor commercially feasible during the applicable emissions reduction period;

(d) Achieve annual demand response and demand flexibility equal to or greater than ten percent of winter and summer peak electric demand, or provide an analysis that demonstrates that this is neither technically nor

commercially feasible during the applicable emissions reduction period;

(e) Include all cost-effective, reliable, and feasible conservation and efficiency resources, using the methodology established in RCW 19.285.040, and demand response;

(f) Achieve all cost-effective electrification of end uses currently served by natural gas identified through an assessment of alternatives to known and planned gas infrastructure projects, including nonpipeline alternatives, rebates and incentives, and geographically targeted electrification;

(g) Consider acquisition of existing renewable resources;

(h) In the acquisition of new resources constructed after May 7, 2019, rely on renewable resources and energy storage, insofar as doing so is at the lowest reasonable cost;

(i) Maintain and protect the safety, reliable operation, and balancing of the large combination utility's energy system, including mitigating over-generation events and achieving the identified resource adequacy requirement;

(j) Achieve the requirements in WAC 480-100-610 (4)(c); the description should include, but is not limited to:

(i) The long-term strategy and interim steps the large combination utility will take to equitably distribute benefits and reduce burdens for named communities; and

(ii) The estimated degree to which benefits will be equitably distributed and burdens reduced over the planning horizon.

(k) Assess the environmental health impacts to highly impacted communities and overburdened communities;

(l) Analyze and consider combinations of distributed energy resource costs, benefits, and operational characteristics including ancillary services, to meet system needs; and

(m) Incorporate the social cost of greenhouse gas emissions as a cost adder as specified in RCW 19.280.030(3) and RCW 80.28.395 and when evaluating and selecting long-term resource options.

(6) **Electrification of Transportation Plan**. If a large combination utility chooses to file an electrification of transportation plan as described in RCW 80.28.365, it must be filed as part of an integrated system plan and must incorporate that electrification of transportation plan, including associated costs, revenues, and other impacts, into the integrated system plan.

(7) **Clean energy action plan (CEAP).** The large combination utility must develop a ten-year clean energy action plan for implementing RCW 19.405.030 through 19.405.050. The CEAP must:

(a) Be at the lowest reasonable cost;

(b) Identify and be informed by the large combination utility's ten-year cost-effective conservation potential assessment as determined under RCW 19.285.040, if applicable;

(c) Identify potential programs to achieve the requirements of RCW 80.86.020(4)(e);

(d) Identify how the large combination utility will meet the requirements in WAC 480-100-610 (4)(c) including, but not limited to:

(i) Describing the specific actions the large combination utility will take to equitably distribute benefits and reduce burdens for named communities;

(ii) Estimating the degree to which such benefits will be equitably distributed and burdens reduced over the CEAP's ten-year horizon; and

(iii) Describing how the specific actions are consistent with the long-term strategy described in WAC 480-95-050 (5)(j).

(e) Establish a resource adequacy requirement;

(f) Identify the potential demand response and load management programs that may be acquired including those needed to achieve the requirements of RCW 80.86.020(4)(g);

(g) Identify the potential cost-effective electrification programs that may be implemented to achieve the requirements of RCW 80.86.020(4)(h);

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

(i) Identify any need to develop new, or to expand or upgrade existing, bulk transmission and distribution facilities and document existing and planned efforts by the large combination utility to make more effective use of existing transmission capacity and secure additional transmission capacity consistent with the requirements of the ISP's delivery system assessment;

(j) Detail the large combination utility's planned capital investments in gas plant including:

(i) proposed capital expenditures and investments by category, and

(ii) the location and costs of planned pipeline replacement and repairs, presented with sufficient information about their timing, location, and impetus for the commission and interested parties to understand how the investments fit into the larger context of the ISP and its proposed resource and delivery system investments;

(k) Identify the nature and possible extent to which the large combination utility may need to rely on alternative compliance options under RCW 19.405.040 (1)(b), if appropriate; and

(l) Incorporate the social cost of greenhouse gas emissions as a cost adder as specified in RCW 19.280.030(3) and RCW 80.28.395.

(8) **Decision framework.** The large combination utility must analyze and select the preferred portfolio based on the lowest reasonable cost using the cost test as defined in WAC 480-95-030(8). The large combination utility will use a decision framework that narratively describes how the cost test led to the selection of the preferred portfolio.

(a) The decision framework must present separately all the impacts of the cost test.

(b) The decision framework must present the results of the cost test for each of the resource portfolios analyzed.

(c) Impacts that are monetized must be presented in cumulative present value dollars.

(d) Impacts that are not monetized but are quantified must be presented in quantitative terms to the extent practicable.

(e) Impacts that are not available in monetary or quantitative terms must be described qualitatively.

(f) The ISP must include a narrative description of how the decision framework was used to analyze and select the preferred portfolio.

(9) **Information relating to purchases of electricity from qualifying facilities**. Each large combination 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 estimates of the avoided cost of energy, capacity, transmission, distribution and emissions averaged across the large combination utility; and

(b) Resource assumptions and market forecasts used in the large combination 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.

(10) **Report of substantive changes.** Each ISP must include a summary of substantive changes to modeling methodologies or inputs that result in changes to the large combination utility's resource need, as compared to the large combination utility's previous applicable plans.

(11) **Use of recommendations**. The integrated system plan must include a report on the large combination utility's progress towards implementing the recommendations contained in its previously filed integrated system plan, or previous applicable plans.

(12) **Summary of public comments.** A large combination utility must provide a summary of public comments received

during the development of its integrated system plan and the large combination utility's responses, including whether issues raised in the comments were addressed and incorporated into the final integrated system plan as well as documentation of the reasons for rejecting any public input. The large combination utility may include the summary as an appendix to the final integrated system plan. Comments with similar content or input may be consolidated with a single large combination utility response.

WAC 480-95-060 Content of an integrated system plan – implementation.

(1) Interim Targets.

(a) Each utility must propose a series of interim targets that:

(i) Demonstrate how the utility will make reasonable progress toward meeting the standards identified in WAC 480-100-610 (2) and (3);

(ii) Are consistent with WAC 480-100-610(4); and

(iii) Demonstrate compliance with state laws and policies including, but not limited to, the climate commitment Act chapter 173-446 WAC.

(b) Each utility must propose interim targets in the form of the percent of forecasted retail sales of electricity supplied by nonemitting and renewable resources prior to 2030 and from 2030 through 2045.

(c) Each interim target must be informed by the utility's historic performance under median water conditions and the specific targets under subsection (2) of this section.

(2) Specific targets.

(a) Each large combination utility must propose specific targets for energy efficiency, demand response, renewable energy, and emissions reduction.

(i) **Energy efficiency.** The large combination utility's energy efficiency target must represent achieving two percent of electric load annually with conservation and energy efficiency resources, unless the commission finds that a higher target is cost effective. The energy efficiency target must encompass all other energy efficiency and conservation targets and goals the commission requires the utility to meet. The specific energy efficiency target must be described in the utility's biennial conservation plan required in chapter 480-109 WAC. The utility must provide forecasted distribution of energy and nonenergy costs and benefits.

(ii) **Demand response.** The large combination utility's demand response target must represent annual demand response and demand flexibility achieving at least 10 percent of winter and summer peak electric demand, unless the commission finds that a higher target is cost effective. The large combination utility must provide proposed program details, program budgets, measurement and verification protocols, target calculations, and forecasted distribution of energy and nonenergy costs and benefits for the utility's demand response target.

(iii) **Renewable energy.** The large combination utility must propose the renewable energy target as the percent of retail sales of electricity supplied by renewable resources and must provide details of renewable energy projects or programs, program budgets as applicable, and forecasted distribution of energy and nonenergy costs and benefits.

(iv) **Cost-effective electrification.** The large combination utility's electrification target must represent achieving all cost-effective electrification of end uses currently served by natural gas identified through an assessment of alternatives to known and planned gas infrastructure projects, including nonpipeline alternatives, rebates and incentives, and geographically targeted electrification,

(v) **Emissions reduction.** The large combination utility's emissions reduction target must represent combined gas and electric system emissions reductions for the emissions reduction period that are at least as stringent as the limits established in RCW 70A.45.020.

(b) The large combination utility must provide a description of the technologies, data collection, processes, procedures, and assumptions the utility used to develop the targets in this subsection. The utility must make data input files that are used to determine relevant targets available in native format and in an easily accessible format as an appendix.

(3) **Customer benefit data**. Each integrated system plan implementation section must:

(a) Identify highly impacted communities using the cumulative impact analysis pursuant to RCW 19.405.140 combined with census tracts at least partially in Indian Country;

(b) Identify vulnerable populations based on adverse socioeconomic factors and sensitivity factors developed through the advisory group process and public participation plan described in WAC 480-95-080, describing and explaining any changes from the utility's most recently approved CEIP or integrated system plan as applicable;

(c) Identify overburdened communities in accordance with RCW 70A.65.010;

(d) Include all customer benefit indicators, whether existing, proposed, or updated, and associated weighting factors related to WAC 480-100-610(4)(c) including, at a minimum, one or more customer benefit indicators associated with energy benefits, nonenergy benefits, reduction of burdens, public health, environment, reduction in cost, reduction in risk, energy security, and resiliency. Customer benefit indicators and weighting factors must be developed consistent with the advisory group process and public participation plan described in WAC 480-95-080. The utility should describe and explain any changes in customer benefit indicators or weighting factors from its most recently approved CEIP or ISP; and

(e) Include an assessment, informed by the cumulative impact analysis conducted under RCW 19.405.140, of: Energy and nonenergy benefits and the avoidance and reductions of burdens to named communities; long-term and short-term public health and environmental benefits, costs, and risks; and energy security and risk.

(4) **Specific actions**. Each integrated system plan implementation section must include the specific gas and electric system actions the utility will take over the implementation period. The specific actions must meet and be consistent with the clean energy transformation standards and other state laws and regulations affecting energy planning, including the climate commitment act, and be based on the utility's clean energy action plan and interim and specific targets. Taken together, the specific actions must represent a portfolio approach to investment plan optimization.

(a) Each integrated system plan implementation section must present the specific actions in a tabular format that provides the following information for each specific action:

(i) The general location, if applicable, proposed timing, and estimated cost of each specific action or remaining resource need, including whether the resource will be located in highly impacted communities, will be governed by, serve, or otherwise benefit named communities in part or in whole;

(ii) Metrics related to resource adequacy including contributions to capacity or energy needs; and

(iii) Customer benefit indicator values, or a designation as nonapplicable, for every customer benefit indicator described in subsection (4)(c) of this section.

(b) The specific actions of an integrated system plan must include low-income electrification programs that:

(i) Include rebates and incentives to low-income customers and customers experiencing high energy burden for the deployment of high-efficiency electric-only heat pumps in homes and buildings currently heating with wood, oil, propane, electric resistance, or gas;

(ii) Provide demonstrated material benefits to low-income participants including, but not limited to, decreased energy burden, the addition of air conditioning and backup heat sources or energy storage systems, if necessary to protect health and safety in areas with frequent outages, or improved indoor air quality;

(iii) Enroll customers in energy assistance programs or provide bill assistance;
(iv) Provide dedicated funding for electrification readiness;
(v) Evaluate if participation will increase the household's energy burden, and if so, obtain explicit customer consent on a simple form with easy reading comprehension;
(vi) Include low-income customer protections to mitigate energy burden, if electrification measures will increase a low-income participant's energy burden; and
(vii) Coordinate with community-based organizations in the gas or electrical company's service territory including, but not limited to, grantees of the department of commerce, community action agencies, and community-based nonprofit organizations, to remove barriers and effectively serve low-income customers.

(c) If a large combination utility files an electrification of transportation plan as part of the integrated system plan, the programs described in RCW 80.28.365 must be included as specific actions.

(d) When an integrated system plan of a large combination utility proposes geographically targeted electrification of all or a portion of a service area in which the large combination utility provides gas service and one or more consumer-owned utilities provide electric service to such a service area, the integrated system plan of the large combination utility must include a process for outreach by the large combination utility to all consumer-owned utilities providing electric service to such a service area. The large combination utility shall provide gas delivery data of sufficient granularity for the consumer-owned electric company to assess the sufficiency of the capacity of the electric distribution system to accommodate the additional load from electrification at the circuit level. This data must be provided at least as part of the ISP filing prior to the ISP in which the utility intends to take the proposed electrification actions. This will allow affected consumer-owned electric companies sufficient time to upgrade electrical distribution equipment and materials as needed to preserve system reliance. When a large combination utility proposes geographically targeted electrification in an integrated system plan, it has the burden of clearly demonstrating that it exercised impartial treatment toward the electrification of gas customers that are within the large combination utility's combined electric and gas service territory, and the customers in its gas-only service territory.. Geographically targeted electrification proposals that target only areas where the large combination utility's gas and electric service territories overlap will be rejected unless:
(i) the utility provides evidence that the costs and benefits of electrification in the proposed area are materially different than the costs and benefits of geographically targeted electrification in the large combination utility's gas only service territory, or;
(ii) the large combination utility proposes geographically targeted electrification of areas in its gas only service territory that is approximately the same magnitude as the geographically targeted electrification proposed in its combination service territory within the same integrated system plan.

(e)

(5) **Narrative description of specific actions**. Each integrated system plan implementation section must describe how the specific actions:
(a) Demonstrate progress toward meeting the standards identified in WAC 480-100-610(2) and (3) and other state laws and regulations affecting energy planning, including the climate commitment act regulations in 173-446 WAC.
(b) Demonstrate consistency with the standards identified in WAC 480-100-610(4), including, but not limited to:
(i) An assessment of current benefits and burdens on customers, by location and population, and the projected impact of specific actions on the distribution of customer benefits and burdens during the implementation period.
(ii) A description of how the specific actions in the ISP implementation section mitigate risks to named

communities and are consistent with the longer-term strategies and actions described in the utility's most recently filed IRP or ISP long term section and CEAP as required by either WAC 480-100-620(11)(g) and (12)(c) or WAC 480-95-030(12)(j) and (13)(d).

(c) Are consistent with the proposed interim and specific targets.

(d) Are consistent with the utility's resource adequacy requirements, including a narrative description of how the resources identified in the most recent resource adequacy assessment conducted or adopted by the utility demonstrates that the utility will meet its resource adequacy standard.

(e) Demonstrate how the utility is planning to meet the clean energy transformation standards and other state laws and regulations affecting energy planning, including the climate commitment act regulations in 173-446 WAC, at the lowest reasonable cost ,including, but not limited to:

(i) A description of the utility's approach to identifying the lowest reasonable cost portfolio of specific actions that meet the requirements of (a) through (e) of this subsection, including a description of its methodology for weighing considerations in WAC 480-100-610(4);

(ii) A description of the utility's methodology for selecting the investments and expenses it plans to make over the next four years that are directly related to the utility's compliance with the clean energy transformation standards consistent with RCW 19.405.050(3)(a), and a demonstration that its planned investments represent a portfolio approach to investment plan optimization; and

(iii) Supporting documentation justifying each specific action identified in the integrated system plan implementation section.

(6) **Projected incremental cost**. Each integrated system plan implementation section must include a projected incremental cost as outlined in WAC 480-100-660(4).

(7) **Use of recommendations**. Each integrated system plan implementation section must include a report on the large combination utility's progress towards implementing the recommendations contained in its previously filed integrated system plan.

(8) **Alternative compliance**. The large combination utility must describe any plans it has to rely on alternative compliance mechanisms as described in RCW 19.405.040(1)(b).

WAC 480-95-070 Reporting and compliance.

(1) **Clean energy compliance report.** A large combination utility must file with the commission a clean energy compliance report as described in WAC 480-100-650(1)(a)-(l) within 6 months of the end of each implementation period. As part of this report, a large combination utility must also:

(a) Include a summary of the steps taken to adaptively manage the large combination utility's portfolio and programs throughout the implementation period.

(b) Report electrification achievements using metrics consistent with subsection (3), below.

(c) Demonstrate whether and how the large combination utility met its emissions reduction specific targets.

(d) Include a report of its work to comply with the requirements of RCW 80.86.030 during the last compliance period.

(2) **Clean energy compliance report review process**. The process for written comments, review, and determination of compliance will be conducted pursuant to the requirements in WAC 480-100-650(2).

(3) **Annual clean energy progress reports**. By June 1 of each calendar year, a large combination utility must file with the commission, in the same docket as its most recently filed ISP, an informational annual clean energy progress report regarding its progress in meeting targets during the preceding year. A large combination utility

must make annual clean energy progress reports available on its website. These reports must include all of the requirements of WAC 480-100-650(3) and (4), and:

(a) Planned and claimed electrification achievement expressed as both the reduction in peak dekatherms per day, first year dekatherms, and lifetime dekatherms, and the associated increase in peak MW, and first-year MWh;

(b) Emissions reduction achievement in carbon dioxide equivalent emissions, and percent reduction from emissions baseline;

(c) A summary of the steps taken to adaptively manage the large combination utility's portfolio and programs throughout the preceding year;

(d) Meet the renewable portfolio standard annual reporting requirements as described in WAC 480- 109-210. To the extent these reporting requirements would be duplicative of requirements of the annual clean energy progress report, a large combination utility may provide a table that cites the specific place(s) within its annual clean energy progress report where renewable portfolio standard annual reporting requirements are met.;

(e) Metrics used to track progress towards implementing the large combination utility's electrification of transportation plan, if applicable; and

(f) Metrics used to track customer benefit indicators.

WAC 480-95-080 Procedures.

(1) **Public participation.** Public participation in an integrated system plan must meet the requirements for public participation in a CEIP under WAC 480-100-655, and must:

(a) Provide to the large combination utility's gas customers the same level of participation and notice provided to its electric customers

(2) **Publicly available information**. The large combination utility must make the following information publicly available on its website:

(a) Meeting summaries and materials for advisory group meetings, including materials for future meetings;

(b) A current schedule of advisory group meetings and significant topics to be covered, actively updated by the company and changes highlighted;

(c) Information on how members of the public may participate in advisory group meetings; and

(d) Advisory group comments about the ISP and its development received to date, including responses communicating how the subject of the input was considered or used. Comments with similar content or input may be consolidated with a single large combination utility response.

(3) **Data disclosure.**

(a) The large combination utility must file its modeling data inputs with the commission in native format per RCW 19.280.030 (10)(a) and (b) and in an easily accessible format as soon as they are reasonably available during the integrated system plan developing process.

(b) The large combination utility must file the outputs, and any associated modeling files with the commission in native format per RCW 19.280.030 (10)(a) and (b) and in an easily accessible format as an appendix to the integrated system plan.

(c) The large combination utility must provide any confidential inputs, outputs, and any associated modeling files in native format and in an easily accessible format to commission staff and interested parties who have signed a confidentiality agreement or nondisclosure agreement.

(d) If the large combination utility's integrated system plan analysis relies on software that is subject to a license fee, the utility must provide licenses for commission staff and up to three interested parties.

(4) **Timing**.

(a) Unless otherwise ordered by the commission, a large combination utility must file its first integrated system plan or ISP with the commission on the following timeline:

(i) A final ISP by April 1, 2027;

(b) A large combination utility must file subsequent ISPs and ISP midway updates with the commission on the following timeline, and every four years thereafter, unless otherwise ordered by the commission:

(i) A final ISP by October 1, 2029;

(ii) An ISP midway update by July 1, 2032, if required under subsection (6) of this section.

(5) **ISP work plan**. No later than fifteen months prior to the due date of its integrated system plan or six months before the large combination utility anticipates it will need to finalize any key ISP inputs, whichever is earlier, the large combination utility must file a work plan that includes advisory group input and outlines the content of the ISP and expectations for the subsequent midway update. The large combination utility must include the following in its work plan:

(a) The methods for assessing potential resources;

(b) A proposed schedule of meetings for the large combination utility's advisory groups, and the public, for the ISP;

(c) A list of significant topics, consistent with WAC 480-100-620, that will be discussed at each advisory group meeting for the ISP;

(d) The date the draft ISP will be filed with the commission;

(e) The date the final ISP will be filed;

(f) A link to the large combination utility's website, updated in a timely manner, to which the utility posts and makes publicly available information related to the IRP, including information outlined in subsection (3) of this section;

(g) If the large combination utility anticipates significant changes in the workplan, it must file an updated workplan.

(6) **ISP midway update**.

(a) On the timeline described in subsection (4), above, a large combination utility must file a midway update if any of the following conditions are true:

(i) The large combination utility is proposing changes to its interim or specific targets, or

(ii) The large combination utility's assumptions have substantially changed since its most recent ISP.

(b) The large combination utility must discuss with its advisory groups whether it meets any of the conditions under (a) to file a midway update at least one year prior to the potential filing deadline.

(c) If none of the conditions in (a) are met, a large combination utility is not required to file a midway update. The utility must instead file a report demonstrating that its assumptions have not substantially changed.

(d) In each midway update, the large combination utility must update at least the following elements of its ISP long term section:

(i) Load forecast;

(ii) Demand-side resource assessment, including a new conservation potential assessment;

(iii) Resource costs; and

(iv) The portfolio analysis and preferred portfolio.

(e) In each midway update, the large combination utility must provide an update to its ISP implementation section. This update may be limited to the biennial conservation plan requirements under chapter 480-109 WAC and must also include an explanation of how the update will modify targets in its ISP implementation section, if applicable. The utility may file in the midway update other proposed changes

to the ISP implementation section resulting from updates to the ISP long term section of the midway update.

(f) The midway update must include other updates that are necessary due to changing state or federal requirements, or significant changes to economic or market forces.

(7) **Final ISP and midway update approval process**. The utility's ISP and midway update filing will be set for an open public meeting. On the commission's own motion or at the request of any person who has a substantial interest in the subject matter of the filing, the commission may initiate an adjudication, or if appropriate a brief adjudicative proceeding, to consider the filing. The commission will enter an order approving, rejecting, or approving with conditions the utility's ISP or midway update at the conclusion of its review within twelve months of the filing. The commission may, in its order, recommend or require more stringent targets than those the utility proposes.

(a) The commission may adjust or expedite interim and specific target timelines when issuing a decision on an ISP or midway update.

(b) Any party requesting the commission make existing targets more stringent or adjust existing timelines has the burden of demonstrating the utility can achieve the targets or timelines in a manner consistent with the requirements of RCW 19.405.060 (1)(c)(i) through (iv).