

December 20th, 2019

Mr. Mark Johnson Executive Director and Secretary Washington Utilities and Transportation Commission 621 Woodland Square Loop SE, Lacey, WA 98503 P.O. Box 47250, Olympia, WA 98504-7250

Re: Climate Solutions comments on Amending, Adopting, and Repealing WAC 480-100-238, Relating to Integrated Resource Planning, UE-190698.

Dear Mr. Mark Johnson,

Climate Solutions thanks you for the opportunity to submit comments and recommendations on the proposed rules in the matter of Amending, Adopting, and Repealing WAC 480-100-238, Relating to Integrated Resource Planning. Climate Solutions is a clean energy nonprofit organization working to accelerate clean energy solutions to the climate crisis. The Northwest has emerged as a hub of climate action, and Climate Solutions is at the center of the movement as a catalyst, advocate, and campaign hub.

A clean and efficient grid serves as the foundation to deeply decarbonizing Washington's economy. The proper implementation and compliance with the Clean Energy Transformation Act is critically important, and achieving the intent of the law for utilities to supply 100% clean electricity begins with an effective planning process. Climate Solutions offers the following recommendations as the Utilities and Transportation Commission ("Commission") moves forward with developing rules for utility Integrated Resource Plans.

I. Integrated Resource Plan and Clean Energy Implementation Plan Timeline

Timeline and Approval

The three investor-owned utilities currently go through an Integrated Resource Plan ("IRP") process every two years, with the opportunity for public input and a hearing before the Commission. With the rapid pace of technology, particularly as clean energy technologies mature and new technologies come on the market, we believe maintaining a two-year planning will provide a more effective and useful utility planning process that relies on the most up-to-date assumptions. Planning on a two-year time frame provides a sufficient amount of time to complete an IRP, while also preventing information being grossly outdated and losing its value.

Assuming a two-year cycle, we recommend accelerating the submission date for a utility's IRP work plan to be filed eighteen months prior to the final IRP submission date. With a slightly shorter timeline, this would still provide six months for a utility to develop an IRP work plan, while increasing the amount of time allotted for the hearings and public engagement during a Commission acknowledgement or approval process for utility IRPs. We recommend maintaining the four-month period between the



submission of the draft IRP and final IRP to allow time for a public hearing on both the draft and final IRP, while also providing sufficient time for the utility to update the draft IRP with input from the Commission and the public.

After the draft resource plan is filed with the Commission, we support the recommendation to hold a public hearing on the draft IRP, and additionally recommend a public hearing and/or comment period on the final IRP to address remaining concerns. The hearing on the draft IRP should be held at least four weeks after the draft is filed, giving stakeholders and Commission staff sufficient time to analyze and provide recommendations on a utility's draft IRP. The hearing date should also be scheduled with a enough time for a utility to meaningfully incorporate stakeholder feedback. After a utility incorporates feedback from stakeholders and the Commission, a final IRP should be submitted to the Commission, and an additional public hearing for the public to voice any remaining concerns before the final Commission acknowledgment or adoption.

A six-month period for development of a work plan, followed by eleven months of IRP development and submission of a draft IRP and a four-month approval process allows for an additional three months to complete and submit a final Clean Energy Implementation Plan ("CEIP"). Given that a utility CEIP is informed by the IRP, which requires formal approval by the Commission, we recommend that both the IRP and CEIPs be formally approved, rejected, or approved with conditions through a formal process by the Commission after public hearings with stakeholder input.

Public Participation

Decisions that are made in the planning process will directly impact all utility customers, and it is important that the public is able to provide meaningful input into the decision-making process. Interim targets, community benefits, and resource decisions will all be determined in the planning process, and feedback from the public, industry experts, and other stakeholders should be considered during the development of the plan. In addition, the law requires that the utility ensure an equitable distribution of benefits in the clean energy transition, so engagement with highly impacted communities is critically important.

The draft Commission rules require that a utility consult the public during the development of an IRP. While the definition of "consult" includes listening, acknowledging concerns, and providing feedback on how public input influences a decision, it is silent on how that feedback is to actually be incorporated into the utility's decisions. In order to meaningfully incorporate feedback, we recommend that the Commission broaden this definition to ensure that the utility actually work with stakeholders throughout the process and thoroughly consider stakeholder input, rather than just listen and acknowledge feedback.

II. Equitable Distribution of Benefits

Assessing Distributional Impacts

The Clean Energy Transformation Act builds upon and clarifies that environmental, public health, and economic benefits, as well as energy security and resiliency, are in the public interest. Additionally, the law requires that utilities ensure an equitable distribution of benefits to highly impacted communities in



the clean energy transition. This language appears in multiple sections throughout the Clean Energy Transformation Act, including for compliance with the 2030 greenhouse gas neutral standard, emphasizing the need for utilities to consider a broad range of benefits to all customers when selecting resource portfolios for compliance, as well as ensuring that benefits of the clean energy transition are flowing to highly impacted communities.

The statute requires an assessment of benefits and burdens and their distributional impacts, which will be informed by the cumulative impacts analysis and identify where current benefits and burdens are flowing. This is critical component for ensuring an equitable distribution of benefits flow to highly impacted communities, but we view this as a separate and distinct requirement from utilities considering a broader range of benefits for all customers. In our comments below, we further explain how the Commission can provide guidance for utilities for incorporating a broad range of benefits in resource decisions for all customers, as well as ensuring those benefits flow to highly impacted communities.

Lowest Reasonable Cost

The first step in guiding utilities to consider a broader range of benefits as identified by the legislature, the Commission should update the definition of "Lowest reasonable cost" to include long-and short term public health, economic, and environmental benefits. The legislature clarified in numerous parts of the legislation, including legislative intent, that these benefits are broadly in the public interest, and therefore should be included when making resource decisions moving forward.

Guidance from the Commission

To incorporate these concepts into utility planning for all customers, Commission rules should first identify and define the range of benefits to be included as required by statute. Once benefits have been identified and defined, the Commission should provide guidance for how utilities are expected to incorporate the benefits into the planning and procurement processes. While the rules should identify the benefits to be included, we recommend that the Commission provide guidance through a policy statement on metrics by which each utility can measure or monetize the benefits for incorporation into the planning process. In developing metrics, the Commission should consult with stakeholders and look to other statutes and processes in Washington or elsewhere that provide guidance on how to quantify and measure the nonenergy benefits identified. For example, Washington has required the use of the social cost of greenhouse gas emissions in various planning process to monetize and account for projected climate impacts, and the Environmental Protection Agency recently released analysis evaluating the public health benefits per kWh of renewable energy and energy efficiency. These and other metrics can serve as a guideline for how utilities can incorporate various benefits into the planning process. The Washington Clean Air Act explicitly includes reference to environmental impacts beyond greenhouse gas emissions, highlighting the importance of also reducing air pollution, as well as environmental impacts to water and land. The identified impacts are both environmental impacts and public health impacts that should be considered during utility planning and procurement processes.

¹ Estimating the Health Benefits per-Kilowatt Hour of Energy Efficiency and Renewable Energy, EPA. https://www.epa.gov/statelocalenergy/estimating-health-benefits-kilowatt-hour-energy-efficiency-and-renewable-energy



Additionally, other Washington statutes have permitted compliance bonuses for distributed generation and the use of apprenticeship programs, incentives for strong labor standards, and has additional support for domestic and Washington-state based manufacturing. The benefits from those statutes provide legislative guidance on how to value additional economic and community benefits from distributed generation and resources that support good labor standards. These and other metrics can also help develop frameworks for utilities to quantify, measure, and create metrics for achieving the additional public interest benefits and goals set out in the law.

Once these benefits and burdens have been broadly identified by a utility, we recommend in-depth conversations with vulnerable community members on how to reduce burdens and ensure the benefits of a clean energy transition. Given that each community is unique, these metrics will be best developed in collaboration with community members where impacts have been identified through the assessment and cumulative impacts mapping. We recommend that this topic be further discussed at a joint workshop between the Utilities and Transportation Commission and the Utilities and Transportation Commission.

End-use Fuel Choices in IRPs

The 2019 legislature passed several bills into law that required multiple sectors to reduce harmful greenhouse gas emissions. RCW 80.28.400 requires that the Commission track the progress of natural gas utilities in meeting the state greenhouse gas emission reduction targets. Both electric and gas utilities are now required to use the social cost of carbon in various parts of planning and procurement. With natural gas emissions rising faster than any other sector in Washington, the regulatory and planning framework must be updated to ensure utilities do not continue to rapidly increase emissions from gas in homes and buildings. We recommend that IRPs for dual gas and electric utilities' planning processes be more integrated to analyze the two systems as a whole, rather than viewed as two completely separate systems run by separate utilities. More holistically integrating gas and electric IRPs would facilitate comparing the cost-effectiveness of broader electrification programs or other programs to reduce greenhouse gases when incorporating the social cost of carbon.

Under the new obligations to consider health impacts, both dual fuel and electricity-only utilities should consider the impacts of end-use fuel choices in their planning process. Reliance on gas releases a number of indoor pollutants, including NOx, carbon monoxide, and formaldehyde, as well as outdoor pollutants that are located very close to where people live and work. These chemicals are harmful to human health, especially for children and individuals with respiratory illnesses. Because of gas combustion indoors, indoor air quality is often shown to be worse than outdoor air quality² in many cities. In fact, over half of residences³ that used gas for cooking with no range hood had indoor air pollutant levels that would be prohibited under federal ambient air quality standards if they occurred outside. Continuing to expand the use of gas is inconsistent with the direction to consider human health impacts as part of resource plans, as well as achieving strong greenhouse gas emissions reductions. Utilities should likewise design programs to aid customers that choose to switch from wood stoves and

² Nitrogen Dioxide's Impact on Indoor Air Quality, EPA, https://www.epa.gov/indoor-air-quality-iaq/nitrogen-dioxides-impact-indoor-air-quality

³ Pollutant Exposures from Natural Gas Cooking Burners: A Simulation-Based Assessment for Southern California, https://ehp.niehs.nih.gov/doi/10.1289/ehp.1306673



heating oil, two heating sources with similar health concerns. Aiding customers in a gradual transition to zero-emission fuel sources in their homes and businesses helps advance the Clean Energy Transformation Act's statutory requirements.

III. Content of the IRP

Social Cost of Greenhouse Gas Emissions Methodology

The Clean Energy Transformation Act updated RCW 19.280, which now requires utilities to consider the social cost of greenhouse gas emissions when developing integrated resource plans. The social cost of greenhouse gas emissions must be incorporated as a cost adder when evaluating and selecting conservation policies, programs and targets; developing integrated resource plans and clean energy action plans; and evaluating and selecting intermediate term and long-term resource options. Incorporating the social cost of greenhouse gas emissions in utility planning and procurement processes is intended to ensure utilities internalize the greenhouse gas costs of new resources, as well as the greenhouse gas costs associated with their existing resource portfolio. We recommend that the Commission provide guidance for utilities to incorporate the social cost of carbon into planning so that utilities are consistently planning across the state. If utilities are not incorporating the social cost of carbon in a consistent way, there is a risk of differing utility assumptions distorting resource procurement and availability in Washington and across the WECC.

Incorporating the social cost of greenhouse gas emissions should strive to reflect how generating stations will operate in real-time after the planning process is complete. Utilities may own or contract with generating resources located both inside and outside of Washington's state boundaries. Additionally, electricity from generating stations located within Washington may be sold to out-of-state entities. In order to not distort the analysis and artificially impact resources that are not affected by Washington's Clean Energy Transformation Act, utilities should apply the social cost of greenhouse gas emissions to all WECC resources that are flowing into a utility's system, but only the portion of their electricity that is delivered to Washington customers, as well as the utility's existing resources, new resources being considered to serve the utility's load, and market purchases, regardless of geographic location. This will avoid the distortions that may arise from applying the adder to Washington or other WECC resources that are not used to serve a utility's load.

The Commission should additionally provide guidance to utilities on when in the modeling process to apply the social cost of greenhouse gas emissions adder. Applying the adder post-economic dispatch may better reflect reality, but we want to ensure that this does not underestimate the per-MWh cost of various portfolios. Given the potential implications under each application, Climate Solutions recommends that the Commission postpone developing guidance on this specific component until further dialogue at the workshop scheduled for January 16, 2020.

With regards to the emissions covered, utilities must consider the social cost of greenhouse gas emissions at the point of generation, as well as upstream emissions that are released as a part of the production and processing. The Clean Energy Transformation Act requires that the social cost of greenhouse gas emissions be considered, which includes a range of greenhouse gases beyond carbon dioxide. Upstream emissions may account for an estimated 5-37% of the total emissions from fossil fuel generating resources, and these emissions should not be ignored in the planning process. In order to



maintain consistency among utilities, the Commission should provide guidance on how to incorporate upstream emissions and how to determine a methane emissions leakage rate when incorporating the social cost of greenhouse gas emissions.

The social cost of greenhouse gas emissions is an adder that reflects the internal cost of the externalities associated with releasing greenhouse gas emissions, but does not incorporate the risk of future policy scenarios in which Washington - or a broader market - puts a price on carbon through a carbon tax, capand-invest program, or other market-based policy that prices carbon. Climate Solutions recommends that in addition to applying the social cost of carbon for planning and resource procurement, utilities also model a variety of policy scenarios in which a carbon tax is applied to a utility's resources being used to serve its load.

Finally, the social cost of greenhouse gases represents a real cost to society as a result of the negative impacts that will occur as a result of climate change. With the law now requiring utilities to incorporate this cost into planning and procurement processes, it is important that a utility's avoided cost calculation include the social cost of greenhouse gas emissions as an avoided cost for non-emitting resources.

Resource Adequacy

Climate Solutions recommends that Commission rules provide guidance for utilities to measure resource adequacy and identify transmission availability in a consistent manner across utilities. While we do not have a recommendation for a specific metric at this time, we recommend that these rules be informed by ongoing regional efforts related to resource adequacy and transmission availability, and be designed to maximize the intent of achieving the greenhouse gas reduction requirements the legislature sought to achieve. In order to maintain flexibility, we recommend that the Commission develop guidance through a policy statement that can be updated over time as resource adequacy metrics evolve. We note the importance of coordination with other markets regionally and WECC-wide to identify resource needs and integrated solutions across the west.

Interim Targets

Every four years, a utility must develop a clean energy implementation plan that includes specific targets for energy efficiency, demand response, and renewable energy. This is a statutory requirement of the CEIP, but given that the CEIP is based on the Clean Energy Action Plan ("CEAP"), we support the recommendation to include the specific targets for energy efficiency, demand response, and renewable energy in the CEAP as well, but believe this would only be necessary in every other CEAP with a continued two-year IRP schedule. Additionally, in the CEIP, utilities must propose interim targets for meeting the standard prior to 2030 and between 2030 and 2045, which would be separate from the CEAP.

Because each utility has a unique portfolio, customer demand, and resource need, Climate Solutions supports maintaining a level of flexibility for utilities to develop targets that are specific to each utility. However, we feel strongly that the Commission should develop guidance in rules to ensure utilities use consistent methodologies during the development of the specific targets for energy efficiency, demand response, and renewable energy, as well as the additional interim targets in the CEIP. To align with the CEIP schedule, we recommend that interim targets for energy efficiency, demand response, and



renewable energy be set in minimum intervals of four years, based on what is cost-effective and feasible, and that they be set to align with the law's intent that utilities rely on renewable resources and energy storage in the acquisition of newly constructed resources.

After developing interim targets, the Commission should develop a process for ensuring compliance with the interim targets, and ensuring utilities are demonstrating progress towards meeting the standards in the law. A key consideration in setting each both sets of interim targets should be intergenerational equity, ensuring that any potential cost savings associated with delaying progress years does not create overly burdensome costs on utility customers in 2045. For this reason, steady progress throughout the time period with considerations for long-term cost declines should be preferenced over clustered investments in the later years. Rules should identify a process for utilities to demonstrate these requirements, and should utilities fall short of the interim targets and demonstration of progress, rules should identify a penalty and process for utilities to achieve compliance.

IV. Additional Comments

Cost-protection Mechanism

Utilities are required to develop interim targets and demonstrate progress towards meeting the standards required by the law. Therefore, it is clear that utilities must begin planning for compliance immediately, especially to avoid undue impacts to future customers. While the majority of utilities are likely to comply through meeting the physical requirements of the standards, other utilities may rely on the cost-protection compliance mechanism. The cost-protection compliance mechanism allows a utility to be considered in compliance if the annual average incremental cost of meeting the standards or the interim targets over the four-year compliance period meets or exceeds a two percent increase in the retail revenue requirement above the previous year.

The law defined compliance periods between 2030-2045, but three of the compliance periods are four-year compliance periods and one is a three-year compliance period. Given that the defined compliance periods are a mix of three and four years, the intent was for the cost-protection mechanisms to be aligned in four-year clean energy implementation plan periods. This distinction is important in ensuring that utilities begin planning immediately, rather than assuming they will be considered in compliance by relying on the cost-protection mechanism between 2030-2033, without having demonstrated progress, making investments, and relying on the cost-protection mechanism in prior years. A future workshop and draft rules are likely to contemplate the methodology for the cost-protection calculation, but the Commission should also provide guidance on how to incorporate this compliance mechanism into near-term planning.

Nonemitting electric generation

The definition of nonemitting electric generation in statute refers to electricity from a generation facility or a resource that provides energy, capacity or ancillary services. This definition provides openness for electric storage to be considered nonemitting electric generation, but does not clarify the generating resources that supply energy to the storage facility or battery. The Commission should provide clarity in both the planning and the compliance rules that a storage facility that is charged with electric



generation that is not renewable nor nonemitting would not qualify for meeting the greenhouse gas neutral or 100% clean energy standard.

Resource Preference

In 480-100-610 (11)(c), the language should be changed to the following to align with the statute: "Considers acquisition of existing renewable resources and relies on renewable resources and energy storage in the acquisition of existing renewable new resources constructed after May 7 2019, insofar as doing so is at the lowest reasonable cost, considering risks."

V. Conclusion

Thank you again for the opportunity to provide comments and recommendations on the proposed rules in the matter of Amending, Adopting, and Repealing WAC 480-100-238, Relating to Integrated Resource Planning. Achieving the intent of the law is dependent on an effective planning process, and we look forward to continuing to engage with you as this process moves forward.

Sincerely,

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