



U-210553

ATTORNEY GENERAL OF WASHINGTON

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SENT VIA WUTC WEB PORTAL

Amanda Maxwell
Executive Director and Secretary
Washington Utilities and Transportation Commission
P.O. Box 47250
Olympia, WA 98504-7250

Re: *Relating to the Commission's examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets, Docket U-210553, Second Comments of Public Counsel*

Dear Director Maxwell:

The Public Counsel Unit of the Washington State Attorney General's Office (Public Counsel) respectfully submits these comments pursuant to the Washington Utilities and Transportation Commission's (UTC or Commission) December 14, 2022, Notice of Opportunity to File Written Comments on Decarbonization Pathways (Notice). The Notice relates to the Commission's examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets pursuant to Section 143(4) of the 2021–23 Omnibus Operating Appropriations Act (Appropriations Act), which provides funding to the Commission to “examine feasible and practical pathways for investor-owned electric and natural gas utilities to contribute their share to greenhouse gas emissions reductions as described in RCW 70A.45.020.”

As explained in the Notice, the UTC has retained Sustainability Solutions Group (SSG) to model scenarios for reducing emissions from the electric and natural gas sectors and support public engagement throughout the project.¹ In the Notice, SSG and the UTC provide a list of actions for an electrification pathway and an alternative fuels pathway to greenhouse gas emissions reductions, which will be provided in the report to the appropriate Washington State legislative committees by June 1, 2023 (Pathways Analysis). Public Counsel's comments respond to the questions provided in the Notice regarding these two pathways and are an extension of Public Counsel's earlier comments filed earlier in this Docket on the required considerations for the Commission's examination as stated in the Appropriations Act.

¹ See Wash. Utils. & Transp. Comm'n, *Natural Gas Decarbonization*, <https://www.utc.wa.gov/decarbpathways> (last accessed Jan. 17, 2023).

To: Amanda Maxwell, Executive Secretary

Re: *Relating to the Commission's examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets*, Docket U-210553

Date: January 17, 2023

Page 2 of 8

PUBLIC COUNSEL COMMENTS ON NOTICE QUESTIONS

1. Electrification Pathways:

a. Are there any electrification actions not listed that should be considered?

To encourage electrification, Public Counsel recommends actions to reduce and ultimately eliminate gas line extension allowances. Public Counsel provided testimony on this issue in the recent Puget Sound Energy (PSE) General Rate Case, Dockets UE-220066 and UG-220067 (*consolidated*), in which the Commission approved a settlement term reducing natural gas line extension allowances over time for PSE customers.² In its Final Order in that docket, the Commission referenced its discussion of this issue in Docket UG-210729. In that docket, the Commission ordered investor-owned gas companies to adopt a net present value methodology with a seven-year timeline. The Commission noted the urgent issue of climate change in describing its decision as an “interim measure” and stating the Commission’s plan to continue the dialog with regulated utilities and interested parties.³ Public Counsel views the above referenced Docket as an appropriate venue to continue this dialog regarding reduction across all regulated natural gas utilities of reducing gas line extension allowances.

Public Counsel, however, is cautious of a general line extension subsidy for electrification, as this tends to benefit developers and not end-use customers. However, if line extension allowances are available, Public Counsel believes more conversation and action is required so as not to disproportionately harm low income or Highly Impacted Communities and Vulnerable Populations (Named Communities). For example, electric line extension allowances could be limited to benefit only low income or for Named Communities.

In addition, the Pathways Analysis should explore the possibility of a UTC rulemaking to create new UTC requirements for distribution planning. Public Counsel and other parties submitted significant commentary on this issue both in this Docket as well as in Docket U-161024.⁴ The UTC could propose rules to require distribution planning for the purpose of meeting increased electrification system requirements.⁵ The UTC could also propose distribution planning rules

² See *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066 and UG-220067 (*consol.*), Final Order 24, ¶¶ 288–290 (Dec. 22, 2022); Response Testimony of Shay Bauman Addressing the Settlement Stipulations, Exh. SB-9T at 21–22, Dockets UE-220066 and UG-220067 (*consol.*) (filed Sept. 9, 2022).

³ See Docket UE-220066 and UG-220067 (*consol.*), Final Order 24, ¶¶ 288–290; *In re: Chair Danner's Mot. to Consider Whether Nat. Gas Utils. Should Continue to Use the Perpetual Net Present Value Methodology to Calculate Nat. Gas Line Extension Allowances*, Docket UG-210729, Order 01 Authorizing and Requiring Tariff Revisions (Oct. 29, 2021).

⁴ Initial Comments of Public Counsel at 3 (filed Aug. 13, 2021); Public Counsel Comments on Distribution Planning, *Rulemaking for Integrated Resource Planning, WAC 480-100-238, and WAC 480-017*, Docket U-161024 (filed May 17, 2018).

⁵ See *id.*

To: Amanda Maxwell, Executive Secretary

Re: *Relating to the Commission's examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets*, Docket U-210553

Date: January 17, 2023

Page 3 of 8

within the Integrated Resource Planning (IRP) process and require transparency from investor owned utilities so that interested parties may more-effectively participate in the effort. As discussed at length in Docket U-161024, distribution planning information can be used to ensure reliability, safety, resiliency, customer benefits, cost-effectiveness, and energy efficiency.⁶

This process may help interested parties better understand what the needs are to accomplish rapid electrification discussed in the actions list in the Notice. This will help identify where certain system upgrades will be needed as well as the costs of rapid electrification and how it would impact customers. Public Counsel understands that some utilities already internally engage in distribution planning. However, this process and information should be more accessible so that interested parties may provide more effective input.

The actions listed in the notice appear to be very high-level. Public Counsel believes that the actions provided as part of the pathways analysis should provide more granularity. For example, the actions aiming to electrify heating systems in existing buildings and electrify new appliances in existing residential and commercial buildings are generic, and do not explain an actual pathway to do these things that have the potential to help Washington meet carbon reduction goals. It would be more helpful to provide specific actions to these ends so that the legislature has a better idea of the path forward beyond what it already expects utilities to work toward generally.

b. Public Counsel's concerns with the electrification actions listed in the Notice:

(1) Rapidly electrify all heating systems in existing buildings.

(2) Electrify new appliances in existing residential and commercial buildings.

A major concern Public Counsel has with electrification of heating systems and appliances is the potential for increased costs and how this may increase overall housing costs for Highly Impacted Communities and Vulnerable Populations (Named Communities). For this reason, it is especially important to pair electrification efforts and actions with energy efficiency for new buildings. While investments in more energy efficient electric appliances may cost more, the overall cost is less over time. Public Counsel also supports expansion of programs to increase the level of electrification if investment in energy efficient electric appliances for Named Communities.

Public Counsel also recommends defining the term "rapidly" with regard to the electrification of all heating systems. It is unclear how or what would constitute rapid electrification of heating

⁶ See *id.*

To: Amanda Maxwell, Executive Secretary

Re: *Relating to the Commission's examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets*, Docket U-210553

Date: January 17, 2023

Page 4 of 8

systems. Shortages in supply and labor may still exist that could add complication to this action and could increase costs.

Public Counsel notes that electrifying new appliances in existing residential and commercial buildings appears to be at odds with the similar action listed for the alternative fuels pathway to “incorporate dual electric and natural gas heat pumps into all existing buildings to reduce energy required for heating and cooling.” There should be clarification in each of these two actions of the circumstances where one or the other pathway would be most appropriate, considering cost effectiveness toward meeting the decarbonization target mandates.

(3) Ensure the majority of new vehicles purchased by businesses, i.e., fleets, are electric.

Public Counsel is concerned that the action of “ensuring the majority of new vehicles purchased by businesses, i.e., fleets, are electric” is outside the scope of the UTC’s current statutory mandate and regulatory authority. In addition, Public Counsel is concerned that ratepayers might be forced to subsidize costs associated with specific types of electric vehicles and supply equipment over other more cost-effective options. Public Counsel recommends that the Pathways report clarify that actions to this end are outside the scope of the UTC’s authority and would be within the purview of other agencies or legislative actions.

(4) Electrify the majority of industrial processes.

Public Counsel has similar concerns for the fourth action listed in the Notice for the electrification pathway regarding electrifying the majority of industrial processes. Similar to the third action listed in the Notice, the UTC’s statutory mandate and regulatory authority does not encompass the ability to force electrification of industrial processes. Public Counsel is concerned not only that UTC efforts would violate statutes, but also would improperly increase rates for customers to affect actions toward industrial electrification.

Additionally, even if the legislature were to apply this action outside of the UTC purview, it is very broad and encompasses many potential means towards its achievement. The legislature should be given more granularity and specific actions to effect this change. For example, which industrial processes currently use gas and could potentially benefit from electrification? What technologies exist or are in development to electrify these processes? Are there certain industries with higher emissions or higher emissions impacts to Named Communities that the legislature should prioritize? Do some industries have load profiles that would or could help balance peak demand if electrified? This is information that the legislature could use to affect positive change in the industrial sector.

To: Amanda Maxwell, Executive Secretary

Re: *Relating to the Commission's examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets*, Docket U-210553

Date: January 17, 2023

Page 5 of 8

(5) Add solar panels and energy storage to buildings to supply them with energy.

Public Counsel is concerned about cost effectiveness of the fifth action listed in the Notice for the electrification pathway relating to the addition of solar panels and energy storage to buildings to supply energy. Actions to this end should be considered through Washington's Integrated Resource Planning (IRP) process,⁷ which will need to consider the cost effectiveness of solar panels and energy storage in Washington, in comparison to other options for complying with decarbonization targets. Cost effectiveness of solar resources varies considerably by location, and may not always be optimal for much of the year in the Pacific Northwest. Similar cost concerns exist for distributed energy resources that would provide for energy storage. It remains unclear whether the increased cost of these actions makes sense where other resource options for electrifying are available. As far as potential legislative considerations outside of utility resource planning, the incidence of the cost of these actions to Named Communities should be a priority consideration.

(6) Import renewable electricity.

Currently, Washington imports renewable electricity and will likely continue to do so in connection with the IRP process through which investor-owned electric utilities must participate. In addition, the Clean Energy Transition Act (CETA) will require the electric utilities to consider and analyze cost effectiveness of imported renewable electricity.

(7) Increase the capacity of utilities to store renewable energy.

As stated for actions listed above, Public Counsel has concerns about the cost-effectiveness of actions associated with increasing capacity of investor-owned utilities to store renewable energy. However, energy storage has been discussed in IRP scenarios for future years, including utility-scale battery use. Public Counsel supports the continued consideration of energy storage as a resource option, and recommends consideration of the cost effectiveness of these actions against other clean energy resource options.

2. Alternative Fuel Pathways:

a. Are there any alternative fuel actions not listed that should be considered?

The Notice lists production of "clean hydrogen" and the use of "hydrogen fuel cells" as resource options. Public Counsel recommends that SSG provide more explanation for how these hydrogen resource options would be implemented. More specificity will help clarify the path forward for hydrogen and hydrogen fuel cells.

⁷ See WAC 480-100-620; WAC 480-90-238.

To: Amanda Maxwell, Executive Secretary

Re: *Relating to the Commission's examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets*, Docket U-210553

Date: January 17, 2023

Page 6 of 8

b. Are there any concerns with the alternative fuel actions listed, above?

Public Counsel is concerned with all of the alternative fuels actions in that they may continue or prolong greenhouse gas emissions in ways that will make it harder to meet the statutory decarbonization mandates. However, where it is cost effective to continue these options and a path toward meeting statutory mandates is clear, it may help control costs, especially for Named Communities. Public Counsel looks forward to grappling with these concerns with the Commission and interested parties. It remains unclear how to reconcile the need to decarbonize with the potential for increased costs to ratepayers. More cooperation, communication, and transparency will be needed in navigating the various resource options to determine whether and where an alternative fuels pathway will be viable.

(1) Incorporate dual electric and natural gas heat pumps into all existing buildings to reduce energy required for heating and cooling.

Public Counsel is concerned about the apparent conflict between this action and the electrification pathway action to “rapidly electrify all heating systems in existing buildings.” We recommend clarifying whether and where this action for alternative fuels would be preferable over the one for electrification so that meeting the decarbonization target is met in the most cost effective way possible. The goal should be to meet the statutory decarbonization mandates without needlessly increasing costs or making it unfeasibly harder to meet future mandates.

(2) Produce renewable natural gas to replace natural gas in the energy system.

While Renewable Natural Gas (RNG) programs have potential to reduce carbon emissions by taking advantage of gas sources that are produced without the consumption of fossil fuels, RNG programs are still carbon emitting programs.⁸ For this reason, Public Counsel sees potential for RNG programs to contradict or complicate efforts to meet decarbonization statutory mandates. RNG is also expensive in the current market, so we worry about the increase in costs to customers. However, as discussed earlier in this Docket, natural gas utilities are required under RCW 80.28.385 to offer RNG programs to customers.⁹ Legislative mandates could be expanded to incorporate new program offerings and injection of RNG into natural gas systems to help meet the decarbonization goals in RCW 70A.45.020.¹⁰ We understand that if its use expands, it will likely become more cost-effective. In the meantime, however, customers and Named Communities should be protected from unreasonable cost increases.

⁸ See RCW 80.28.385; Report and Policy Statement on Investigation of Renewable Natural Gas Programmatic Design and Pipeline Safety Standards, *In re: the Investigation into Renewable Nat. Gas Programmatic Design and Pipeline Safety Standards*, Docket U-19818 (Dec. 16, 2020).

⁹ Initial Comments of Public Counsel at 2 (filed Aug. 13, 2021).

¹⁰ See CETA Implementation Workshop Recording (filed Aug. 9, 2021).

To: Amanda Maxwell, Executive Secretary

Re: *Relating to the Commission's examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets*, Docket U-210553

Date: January 17, 2023

Page 7 of 8

(3) Produce clean hydrogen to replace natural gas in the energy system.

As discussed above, Public Counsel would like to see more explanation for how clean hydrogen resources could be developed and what the associated cost would be. Without this information, it is hard to judge whether this action is going to be cost effective or whether and to what extent customer rates would be impacted. In addition, hydrogen is also harmful when emitted into the atmosphere, and the issue of leakage must be addressed in order for this to be a viable option. According to the Environmental Defense Fund, in order for hydrogen to be a viable option in decarbonizing, there must be more research into its warming effects, appropriate equipment to measure leakage, the use of climate metrics to reflect its role over the near-term, and leakage likelihood and mitigation.¹¹ The legislature should be made aware of the risks of hydrogen so that any action taken on its behalf is well designed to mitigate these risks.

(4) Deploy hydrogen fuel cells to power homes.

In addition to the concerns listed above for action three for alternative fuels, Public Counsel is concerned that actions to deploy hydrogen fuel cells to power homes introduces unnecessary safety issues. Public Counsel recommends a more detailed discussion for this action regarding the safety issues it presents and how they would be addressed or resolved, particularly with the development of new technologies.

(5) Use clean hydrogen and renewable natural gas (compressed) to power commercial vehicles; and

(6) Use clean hydrogen and renewable natural gas to power most industrial processes.

Public Counsel is concerned that taking additional actions to use clean hydrogen (without proper leakage mitigation and measurement) and Renewable Natural Gas (RNG) for commercial vehicles and in industrial processes will not conserve greenhouse gases relative to continued use of natural gas. Therefore, it is possible that these actions will not yield sufficient gains, and could substantially increase customer costs without yielding cost-effective decarbonization benefits. More detail should be provided to explain whether and how these actions could be implemented such that the benefits outweigh the societal costs of the continued use of natural gas. Public Counsel is also concerned that this technology may not be scalable to meet the needs cost-effectively.

¹¹ Steven Hamburg & Illisa Oeko, *For Hydrogen to be a Climate Solution, Leaks Must Be Tackled*, Env't Def. Fund, <https://www.edf.org/blog/2022/03/07/hydrogen-climate-solution-leaks-must-be-tackled> (last visited Jan. 13, 2023).

To: Amanda Maxwell, Executive Secretary

Re: *Relating to the Commission's examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets*, Docket U-210553

Date: January 17, 2023

Page 8 of 8

3. Equity Considerations—How should equity be considered with these pathways?

Consistent with the equity mandate in CETA, the actions considered in the Pathways Analysis should all be viewed with an equity lens to make sure disproportionate bill impacts are not incurred by low income customers and customers in Named Communities. As discussed above, if natural gas line extension allowances are eliminated, more action is necessary to assist low income and Named Community customers in electrification.

For alternative fuels, Public Counsel is concerned that perpetuating the use of RNG could serve to increase indoor air emissions in low income and Named Communities. The choices between the two pathways set up in this analysis should not increase negative impacts for these customers. Public Counsel is also concerned that if technologies will ultimately need to switch to electrified technologies, that any investments in RNG or continued natural gas resources will end up as stranded assets. Low income customers or customers in Named Communities may have the least flexibility to switch technologies, and so Public Counsel is concerned that any investments to expand the use of natural gas service for these customers will lead to disproportionate impacts in terms of air quality.

* * *

Public Counsel appreciates the opportunity to submit comments. If you have any questions about this filing, please contact the undersigned, Ann Paisner at (206) 573-1127 or Ann.Paisner@ATG.WA.GOV, Shay Bauman at (206) 389-3040 or Shay.Bauman@ATG.WA.GOV, or Corey Dahl at (206) 254-0562 or Corey.Dahl@ATG.WA.GOV.

Sincerely,

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