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Amanda Maxwell
Executive Director
Washington Utilities & Transportation commission
621 Woodland Square Loop SE
Lacey, WA 98503
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COMMISSION

Re: Docket No. U-210553 - Examination of Energy Decarbonization Impacts and Pathways for Electric and Gas Utilities to Meet State Emissions Targets - Written Comments on Decarbonization Pathways

Dear Executive Director Maxwell,

On behalf of Sierra Club and its 27,888 members in Washington, thank you for the opportunity to provide these comments on the Utility and Transportation Commission's examination of decarbonization pathways for the State's utilities. We urge the Commission to focus its examination on the specific policies and actions needed to equitably achieve Washington's decarbonization targets, rather than a general comparison between electrification and alternative fuel pathways. In particular, we urge the Commission to examine the policies and actions needed to support widespread building electrification and the accompanying changes to utility infrastructure, operations, and business models.

While we applaud the Commission's commitment to conducting a thorough and objective examination, this does not mean the Commission must give equal weight to electrification and alternative fuel pathways, just as an objective evaluation of climate science does not mean giving equal weight to climate skepticism. The Commission's current focus on comparing the relative costs and benefits of pathways focused on "electrification" and "alternative fuels" risks creating a false equivalency between these pathways, despite a growing body of research demonstrating that alternative fuels are not economically viable for building electrification, pose significant risk to Washington residents, and must be reserved for use in specific, hard-to-electrify sectors. Even more important, the current approach gives short shrift to evaluating the important electrification-related policy questions that the State Legislature directed the Commission to address, and to identifying opportunities to address these questions.

We recommend that the Commission's investigation:

- 1. De-emphasize pathways that rely on alternative fuels in buildings, which existing analyses have shown to be higher-cost and higher-risk than electrification;
- 2. Examine the types of policies and actions that will be needed to equitably and successfully electrify Washington's buildings; and
- 3. Ensure that the analyzed pathways incorporate key costs, benefits, and risks, including health and air quality benefits of electrification and risks of relying on non-commercial technologies and delaying near-term action under alternative fuel scenarios.
- 4. Provide members of the public and the Advisory Group information detailed enough to understand the study assumptions, data sets, modeling approaches, limitations and other substantive elements.

I. The Commission Should De-Emphasize Alternative Fuels and Examine the Policies Needed to Electrify Washington's Buildings

The Commission's current examination has focused on developing "electrification" and "alternative fuel" decarbonization pathways, and comparing the two pathways through modeling analysis. This approach overemphasizes the role of alternative fuels, and largely repeats analysis that has already been done. The 2021 State Energy Strategy concludes that electrifying the vast majority of buildings is the lowest-cost, lowest-risk pathway to building decarbonization, and multiple expert analyses have reached the same conclusion. Washington is not at a crossroads where it must determine *whether* to electrify its buildings or pursue strategies that rely on

¹ UTC. Notice of Opportunity to File Written Comments on Decarbonization Pathways at 2 (Dec. 14, 2022).

² Washington State Department of Commerce, *Washington 2021 State Energy Strategy* at 15,46, 66 (Dec. 2020), (finding that "decarbonizing the building sector requires the state to maximize electrification," which is the least-cost way to achieve decarbonization goals).

https://www.commerce.wa.gov/wp-content/uploads/2020/12/Washington-2021-State-Energy-Strategy-December-2020.pdf.

³ See, e.g., Charles Li et al., Financial Impact of Fuel Conversion on Consumer Owned Utilities and Customers in Washington, E3 (May 2022),

https://www.commerce.wa.gov/wp-content/uploads/2022/06/WA-COU-Building-Electrification-Final-Report.pdf; Poppy Storm et al., *Operation 2030: Scaling Building Decarbonization in Washington State*, Clean Energy Transition Institute & 2050 Institute (Jan. 2022),

https://uploads-ssl.webflow.com/5d8aa5c4ff027473b00c1516/61d7a479ba34328152be6239_CETI-2050%20Institute%20Operation%202030%20White%20Paper_2022-01-05.pdf; Jonny Kocher & Talor Gruenwald, *Washington State Could Lead the Nation on Building Electrification Codes*, RMI (Jan. 2022),

https://rmi.org/washington-state-could-lead-the-nation-on-building-electrification-codes/; Rewiring America, Bringing Infrastructure Home: A 50-State Report on U.S. Home Electrification at 108 (June 2021), https://www.rewiringamerica.org/policy/bringing-infrastructure-home-report.

alternative fuels.⁴ Instead, we must examine *how* to develop and implement policies to create an equitable, electrified utility system.

The State Legislature recognized as much when it specifically directed the Commission to examine several aspects of the transition to electrification,⁵ as well as the regulatory policy changes needed to facilitate this transition.⁶ Representative Ramel further underscored the limited consideration that alternative fuels like RNG should receive in comments to this Commission ⁷

Moreover, a growing set of state and federal policies aim to advance electrification, including new State Building Code requirements for heat pumps in new residential and commercial construction,⁸ this Commission's decision to reduce gas line extension allowances and two utilities' agreements in settlements to phase out these allowances altogether,⁹ Seattle's ongoing development of strong Building Performance Standards,¹⁰ and implementation of the Inflation

This is not to say that the mode

⁴ This is not to say that the modeling analysis being undertaken by SSG will have no value, but that the Commission's examination will not be complete without significant additional analysis of policy pathways to advance electrification. We expect SSG's analysis will identify similar barriers to alternative fuel use in buildings as previous analyses, adding to the evidence that electrification is the best approach to decarbonizing buildings. SSG's analysis of the "hybrid" scenario may also yield valuable insights about what gas utility service would look like if it was focused on providing alternative fuels to a small set of hard to electrify applications, such as heavy industry and aviation. These considerations are discussed further in Section III below.

⁵ SB 5092, Wash. Laws of 2021 Ch. 334 § 143(4) (directing the Commission to identify and consider "[t]he impacts of increased electrification on the ability of electric utilities to deliver services to current natural gas customers reliably and affordably," "[t]he ability of electric utilities to procure and deliver electric power to reliably meet that load," the electrification transition's "impact on regional electric system resource adequacy, and the transmission and distribution infrastructure requirements for such a transition," and related considerations including the transition's costs, benefits, and equity considerations).

⁶ SB 5092, Wash. Laws of 2021 Ch. 334 § 143(4) (directing the Commission to identify and consider "potential regulatory policy changes to facilitate" gas utility decarbonization).

⁷ Rep. Alex Ramel, Comments at the August 9, 2021 Workshop (recording available on the WUTC docket website) (noting that the study has a limited budget and given the minor contributions in the carbon transition that are expected from RNG, the analysis of this topic should be proportional, i.e., limited).

⁸ See Sierra Club, Washington State Will Build New Homes With Heat Pumps to Cut Energy Costs and Climate Pollution, Protect Health (Nov. 2022),

https://www.sierraclub.org/press-releases/2022/11/washington-state-will-build-new-homes-heat-pumps-cut-energy-costs-and.

⁹ UTC Docket UG-210729, Order 01 (Oct. 29, 2021) (ordering a reduction of gas line extension allowances); UTC Docket UE-220066, Final Order 24/10 (Dec. 22, 2022) (approving a settlement that agrees to phase out Puget Sound Energy's gas line extension allowances by January 1, 2025); UTC Docket UE-220053, Final Order 10/04 (Dec. 12, 2022) (approving a settlement that agrees to phase out Avista's gas line extension allowances by January 1, 2025).
¹⁰ See Seattle Office of Sustainability and Environment, Seattle Building Performance Standards Policy

https://www.seattle.gov/environment/climate-change/buildings-and-energy/building-performance-standards/bps-policy-development.

Reduction Act. These policies, along with ongoing technological and market developments, ¹¹ have created significant momentum that further solidifies electrification as the best pathway to building decarbonization in Washington. Against the backdrop of these developments, additional policies such as the Climate Commitment Act, the Clean Energy Transformation Act, and SB 5295 create enormous opportunities to thoughtfully and equitably advance electrification, which the Commission should examine in this docket.

The Commission appears to recognize this reality, stating that "[m]ost decarbonization plans include a significant shift towards electricity powered with renewable sources."¹² In line with this recognition, the Commission's examination should emphasize the transition to renewable electricity in buildings and the policies needed to accomplish it. Emphasizing these issues need not diminish the Commission's commitment to taking an objective approach to presenting "considerations" rather than "recommendations" in its report to the legislature. ¹³ As discussed in the next section, designing policy for successful, equitable electrification presents many questions and considerations that would benefit from neutral, objective examination by the Commission and the stakeholders participating in this docket. And some of these questions relate to what limited role alternative fuels will play in serving a small number of hard to electrify applications, and how gas utilities will fill that role. An objective examination of the issues identified in SB 5092 will involve consideration of these questions, aided by analysis such as that proposed in SSG's "hybrid" scenario. But an objective examination need not, and should not, give disproportionate weight to pathways involving widespread use of alternative fuels in buildings, which have repeatedly been shown to be higher-risk and higher-cost than electrification, and which have little support except from gas utilities with financial interests in pursuing them.

II. Electrification Policy Questions to Address in the Commission's Examination

In previous comments in this docket, Sierra Club joined a coalition of environmental and community groups in recommending several policy considerations for the Commission to address in this investigation.¹⁴ As noted in those comments, SB 5092 requires the Commission to

¹¹ See, e.g., Matthew Hill et al., *Trends in Residential Heat Pump Adoption in the United States*, Atlas Buildings Hub (Apr. 2022),

https://atlasbuildingshub.com/2022/04/22/trends-in-residential-heat-pump-adoption-in-the-united-states/; Jan Rosenow & Duncan Gibb, *Guest Post: How Heat Pump Sales Are Starting to Take Off Around the World*, Carbon Brief (March 2022),

https://www.carbonbrief.org/guest-post-how-heat-pump-sales-are-starting-to-take-off-around-the-world/; Jeff St. John, *Finally, A Heat Pump Water Heater that Plugs into a Standard Outlet*, Canary Media (Aug. 2022), https://www.canarymedia.com/articles/heat-pumps/finally-a-heat-pump-water-heater-that-plugs-into-a-standard-outlet.

¹² UTC, *Notice of Opportunity to File Written Comments on Decarbonization Pathways* at 2 (Dec. 14, 2022). ¹³ UTC, *Examination of Energy Decarbonization Impacts and Pathways* at slide 10, presentation from Aug. 9, 2021 Workshop, Docket U-210553.

¹⁴ Comments of Sierra Club, Columbia Riverkeeper, Washington Physicians for Social Responsibility, Breach Collective, and the Power Past Fracked Gas Coalition at 2-3 (Aug. 13, 2021).

examine at least the following issues: (a) how gas utilities can decarbonize; (b) impacts of increased electrification on the ability of electric utilities to deliver services to current gas customers reliability and affordably; (c) the ability of electric utilities to procure and deliver electric power to reliably meet that load; (d) the impact on regional electric system resource adequacy, and the transmission and distribution infrastructure requirements for such a transition; (e) the costs and benefits to residential and commercial consumers, including environmental, health and economic benefits; (f) equity consideration and impacts to low-income customers and highly impacted communities; and (g) potential regulatory policy changes to facilitate decarbonization of services that gas companies provide while ensuring customer rates are fair, just, reasonable, and sufficient.

The comments also recommended several related issues for the Commission to consider in the context of the categories listed above. We continue to recommend that the Commission examine these issues. Below is a selection of key issues from these earlier comments, along with some additional policy considerations that are particularly significant in light of recent developments:

- Identify and examine "no-regrets" policies and actions that the Commission should pursue under any building decarbonization pathway (possibly under section (g)). These include:
 - Expanding the Commission's emphasis on energy efficiency, weatherization, and whole-home retrofits, which have been identified as common actions under all of the pathways under consideration,¹⁵
 - Policies to facilitate successful electrification of all new buildings, which is largely expected under existing policies such as the latest State Building Codes,
 - Policies to take full advantage of electric appliances where they are installed, such as electrification-friendly rate structures and demand response programs that effectively incorporate appliances like heat pump water heaters,
 - Policies to minimize peak electric load, including support for upgrading existing electric resistance space and water heating to more efficient heat pump systems.
- Update utility planning and resource acquisition practices to adapt to the decarbonization transition (possibly under sections (a), (b), (c), and/or (d)). Relevant considerations include:
 - Expanding consideration of electrification and other non-pipeline alternatives in gas utility and resource procurement,
 - Considering stranded asset risk and appropriate depreciation schedules for new gas system assets,

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¹⁵ SSG, Washington Energy Decarbonization: Decarbonization Advisory Group Meeting 3 Presentation at slide 14, https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.utc.wa.gov%2Fsites%2Fdefault%2Ffile s%2F2023-01%2FWashington%2520 Tech%2520 meeting%25203.pptx&wdOrigin=BROWSELINK.

- Explicitly considering indoor and outdoor air pollution and health harms, as well as the social costs of gas system greenhouse gas emissions (including methane leakage), when evaluating gas system investments and their alternatives,
- Combining dual-fuel utilities' gas and electric Integrated Resource Plans and facilitating coordination between single-fuel utilities with overlapping service territories in development of their IRPs,
- Planning for a managed decommissioning of the gas system to maximize safety and reliability while minimizing ratepayer burdens, using strategies such as zonal electrification to decommission segments of the system at a time.
- Revisit policies that encourage expansion of gas infrastructure, which is incompatible
 with state climate targets and related policy objectives (possibly under section (a)).
 Relevant opportunities include:
 - Building on the Commission's 2021 decision to reduce gas line extension allowances by completely phasing them out,¹⁶
 - Phasing out energy efficiency incentives for gas equipment, ¹⁷ and instead focusing incentive funds on building shell improvements and efficient electric appliances,
 - Requiring full consideration of gas infrastructure's costs, societal impacts, and risks when evaluating gas infrastructure investments, as described in the planning considerations above.
- Examine opportunities to align utilities' incentives and business models with equitable electrification (possibly under sections (a) and/or (g)). Opportunities include:
 - Implementing performance-based ratemaking under SB 5295 to incorporate performance metrics and incentives focused on equitable electrification,
 - Exploring opportunities for utilities to develop appliance incentive programs to aid in fuel switching, ¹⁸ with special consideration for low-income customers,
 - Exploring alternatives to traditional gas distribution, such as heating as a service and geothermal districts.
- Examine policies to make electrification accessible and affordable, especially for low-income customers and Named Communities (possibly under section (f)).
 - Exploring low-income pilot programs for building electrification,

¹⁶ UTC Docket UG-210729, Order 01 (Oct. 29, 2021) (ordering a reduction of gas line extension allowances).

¹⁷ At the very least, incentive funds should be reserved for appliances that are compatible with decarbonization pathways, which would mean restricting gas appliance incentives to gas heat pumps. *See* SSG, *Washington Energy Decarbonization: Decarbonization Advisory Group Meeting 3 Presentation* at slide 10 (noting that under the "Alternative Fuels" scenario, "[e]xisting residential and commercial natural gas heating systems [are] replaced by natural gas heat pumps),

 $[\]underline{https://view.officeapps.live.com/op/view.aspx?src=https\%3A\%2F\%2Fwww.utc.wa.gov\%2Fsites\%2Fdefault\%2Ffiles\%2F2023-01\%2FWashington\%2520\ Tech\%2520\ meeting\%25203.pptx\&wdOrigin=BROWSELINK.$

¹⁸ See, e.g., California Public Utility Commission Docket A-21-12-009, Application of Southern California Edison Company (U338E) for Approval for Its Building Electrification Programs (filed Dec. 20, 2021), https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M432/K773/432773552.PDF; California Public Utility Commission Docket A-22-08-003, Application of Pacific Gas and Electric Company for Approval of Zonal Electrification Pilot Project (U39G) (filed Aug. 10, 2022), https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M496/K451/496451495.PDF.

- Evaluating barriers to electrification faced by low-income customers and Named Communities, and prioritize development of policies to overcome them,
- Accounting for the disproportionate energy burden experienced by low-income and historically marginalized communities, and investigating opportunities to buffer these demographics from greater impacts related to transitioning off of gas.
- Section (e) on health and environmental impacts to ratepayers should calculate the significant indoor and outdoor air pollution, and health and safety impacts like gas explosions, associated with gas and the implications for public health.

In the Commission's report on this investigation of gas decarbonization, we encourage the Commission to identify any ongoing or planned proceedings where each of the considerations above will be addressed, and to outline plans to open any new proceedings needed to address considerations that do not fit into existing or planned dockets.

III. Responses to Questions for Consideration

With the above recommendations to de-emphasize alternative fuel scenarios and further explore the policy questions related to electrification in mind, we offer the following responses to the Commission's questions for consideration:

1. Electrification Pathways

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

The electrification pathway should be designed to fully account for electric appliances' efficiency and flexibility. For example, the pathway should account for opportunities to minimize impacts on peak electric loads, including upgrading electric resistance equipment to more efficient heat pumps and optimizing electric appliance use through demand response programs. It should also account for the latest improvements in heat pump technologies, including high-efficiency cold climate heat pumps and 120V heat pump water heaters, which can significantly reduce retrofit costs. And the pathway should account for expected efficiency improvements and cost reductions of electric appliances as the market develops.

b. Are there any concerns with the electrification actions listed above?

We urge the Commission to carefully consider the full range of benefits of electrification, including health and air quality benefits as directed in SB 5092. 19 A growing body of evidence points to significant air quality impacts from the use of gas appliances in homes and buildings.

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¹⁹ SB 5092, Wash. Laws of 2021 Ch. 334 § 143(4)(b)(v).

Dozens of peer-reviewed scientific studies connect gas stoves with unhealthy air quality in homes, and health harms like asthma. A few key studies include:

- A <u>2013 meta-analysis</u> of 41 studies found that children living in homes with gas stoves are at a 42% increased risk of having current asthma and at a 24% increased risk of lifetime asthma.
- A 2008 study from researchers at Johns Hopkins found asthma flare-ups directly related to high concentrations of NO₂ in inner city homes, with inner city preschoolers particularly impacted. The researchers recommended interventions including choosing a home without gas stoves to reduce asthma morbidity in these vulnerable populations.

Additionally, vented appliances such as furnaces and water heaters contribute significant quantities of pollutants including Nitrogen Oxides (NOx) to outdoor air. In Washington State alone, burning fossil fuels in buildings emits over 8,000 tons of NOx per year. Fossil fuel emissions from buildings caused an estimated 53 premature deaths statewide in 2017, producing a combined health and climate cost of at least \$1 billion. These emissions and health harms can be eliminated through building electrification.

2. <u>Alternative Fuel Pathways</u>

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

As discussed above, we recommend that the Commission de-emphasize alternative fuel pathways in its investigation. Extensive examination of the alternative fuel pathway is unlikely to yield findings that have not already been made in previous examinations, such as the 2021 State Energy Strategy. The hybrid pathway more appropriately reflects the limited role that alternative

²⁰ Emissions data from EPA 2017 National Emissions Inventory.

https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data. Appliance emission estimates include residential and commercial emissions for the gas, oil, and other fuel categories. Some commercial source classification codes have been excluded to avoid counting certain non-appliance sources like pipeline compressor stations and industrial-size boilers. All commercial nonpoint source emissions are included, and commercial point source emissions are included if they have input heat capacities less than 10 MMBtu/hr or if they are classified as space heaters.

²¹ RMI analysis using EIA GHG emissions data, Interagency Working Group 2020 social cost of carbon values using a 3% discount rate, EPA's value of statistical life, and median pollution-related mortality estimates from the results of 3 reduced complexity models used in: Jonathan J. Buonocore (Harvard T.H. Chan School of Public Health) et al., A Decade of The U.S. Energy Mix Transitioning Away from Coal: Historical Reconstruction of the Reductions in the Public Health Burden of Energy, 2021 Environ. Res. Lett. 16 054030, https://doi.org/10.1088/1748-9326/abe74c, as well as additional analysis from Jonathan Buonocore, Sc.D., the study's lead author. U.S. Energy Information Administration, Environment, Sectoral Specific Emission Tables by State,

https://www.eia.gov/environment/emissions/state/; Interagency Working Group on Social Cost of Greenhouse Gases, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990 (2021),

https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethane NitrousOxide.pdf; EPA, Technical Support Document: Estimating the Benefit per Ton of Reducing Directly-Emitted PM2.5, PM2.5 Precursors and Ozone Precursors from 21 Sectors, at 19 (Table 6) (2022), https://www.epa.gov/system/files/documents/2021-10/source-apportionment-tsd-oct-2021_0.pdf.

fuels may play in decarbonizing hard to electrify applications like heavy industry, although the pathway should incorporate greater electrification of commercial water heating and vehicles to better reflect this role. With these improvements, the hybrid scenario is more likely to yield valuable insights about the likely role of alternative fuels and the policies and actions needed for them to best fill that role.

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

We are concerned about several risks and limitations of the alternative fuels pathway. First, the pathway relies on several technologies that are not yet commercially available in Washington, including gas heat pumps, green hydrogen electrolysis, and synthetic methane production. By contrast, electric heat pump technology has existed for decades and is widely available. The pathway's reliance on non-commercial technologies presents significant risks of near-term inaction increasing the costs of meeting climate targets down the road, or causing Washington to miss those targets altogether. Second, the alternative fuels pathway presents significant risks related to limited availability and high costs of alternative fuels. Finally, the production, distribution, and combustion of alternative fuels present significant environmental and health risks, including emissions and environmental harms associated with fuel production, and health elekage throughout the supply chain, explosion risk, and combustion-related emissions of nitrogen oxides (NOx) and other health-harming pollutants (which RNG combustion emits to the same extent as fossil gas combustion, and which can increase if hydrogen is blended with methane gas²⁵). The Commission's analysis should explicitly account for these emissions, social costs, and risks.

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https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M493/K760/493760600.PDF

²² See, e.g., Laura Feinstein and Eric de Place, *The Four Fatal Flaws of Renewable Natural Gas*, Sightline Institute (March 2021) (describing these risks and noting that even under optimistic assumptions, RNG could only meet half as much demand as is currently used by the industrial sector, making it unlikely that appreciable amounts of RNG will be available for buildings),

 $[\]frac{https://www.sightline.org/2021/03/09/the-four-fatal-flaws-of-renewable-natural-gas/\#:\sim:text=RNG\%20may\%20play\%20a\%20niche, carbon\%20intensity\%2C\%20and\%20industry\%20obfuscation.}$

²³ *Id.* (describing emissions associated with RNG production and noting that "a profitable market for manure-based RNG likely increases localized pollution by reinforcing industrial livestock farming practices that result in liquid-based manure storage and crowded feedlots").

²⁴ Hydrogen is more susceptible to leakage than gas, and can be ignited more easily. *See, e.g.*, U.S. Department of Energy, *Safe Use of Hydrogen*, https://www.energy.gov/eere/fuelcells/safe-use-hydrogen. A recent study from the United Kingdom found that if hydrogen were used in homes to replace gas, the annual predicted number of explosions would more than quadruple. *See* Leigh Collins, 'Hydrogen in the home would be four times more dangerous than natural gas': government report, Recharge News (Aug. 2021),

https://www.rechargenews.com/energy-transition/hydrogen-in-the-home-would-be-four-times-more-dangerous-than-natural-gas-government-report/2-1-1047218.

²⁵ See, e.g., Madeleine L. Wright and Alastair C. Lewis, "Emissions of NO_x from blending of hydrogen and natural gas in space heating boilers," *Elementa: Science of the Anthropocene* (2022) 10(1) at 7, 11 (finding "a huge range of possible changes in NOx emissions from [hydrogen-methane] fuel blends," with a mean case showing that hydrogen blends of 5-10% led to NOx emission increases of 7-30%), https://doi.org/10.1525/elementa.2021.00114; UC Riverside, *Final Report: Hydrogen Blending Impacts Study*, at 8 (Jul. 18, 2022) (cautioning that hydrogen blending can result in heightened NOx emissions),

3. Equity Considerations

a. How do you think the actions described above could affect you and others in your community?

The Commission should fully examine the disproportionate health impacts to overburdened frontline communities from indoor and outdoor air pollution associated with fuel combustion, and opportunities to reduce these disparities through electrification. The examination should also examine the potential for disproportionate health burdens associated with production of alternative fuels such as biogas from factory farms.

b. How should equity be considered with these pathways?

The pathways should prioritize opportunities to electrify low income, historically marginalized and overburdened communities in order to expand access to efficient heating and cooling, reduce utility bills and reduce indoor and outdoor pollution.

IV. Conclusion

This Commission investigation is the first of many steps in a well-planned transition away from gas in Washington. We hope that this investigation will provide a critical foundation to support future policy and regulatory changes—whether in this docket or in other dockets—to ensure that Washington makes progress in the critical task of decarbonizing buildings and transitioning off of polluting fossil fuels, while also protecting frontline communities and low-income ratepayers. We urge the Commission to recognize the risks and limitations of alternative fuel use in buildings, as well as the extensive body of existing literature documenting these limitations, and focus its investigation on evaluating the policies needed to equitably and successfully electrify Washington's buildings.

Sincerely,

Jim Dennison
Associate Attorney
Sierra Club
jim.dennison@sierraclub.org