October 25, 2021
Washington Utilities and Transportation Commission
621 Woodland Square Loop SE
Lacey, WA 98503

Re: Chair Danner's motion to consider whether natural gas utilities should continue to use the Perpetual Net Present Value methodology to calculate natural gas line extension allowances, Docket UG-210729.

On behalf of RMI (formerly Rocky Mountain Institute) and the Natural Resources Defense Council (NRDC), we respectfully submit this comment in Docket UG-210729.

About RMI: RMI is an independent, non-partisan, non-profit organization whose mission is to transform the global energy system to secure a clean, prosperous, zero-carbon future for all. Since our founding in 1982, we have grown to over 400 staff working on four continents with a global reach. Our initiatives include researching the business models, policies, technologies, and financing mechanisms necessary to decarbonize the buildings and power sectors and advance an equitable clean energy transition. RMI has served as an advisor to several state utilities commissions, including in Oregon and Hawaii.

About NRDC: NRDC is a national, non-profit environmental organization that works to safeguard the earth—its people, its plants and animals, and the natural systems on which all life depends. We combine the power of more than three million members and online activists with the expertise of some 700 scientists, lawyers, and policy advocates across the globe to ensure the rights of all people to the air, the water, and the wild. NRDC has more than 14,000 members in Washington.

Introduction

Chair Danner's motion to consider the methodology Washington's gas utilities use to calculate line extension allowances is a timely addition to the UTC's broader efforts to examine the regulatory changes that may be required in light of the state's commitment to emissions reductions. Incentivizing the expansion of the gas system no longer makes sense as a policy priority or public benefit given Washington's climate policies, and technological and market changes that mean efficient, electric appliances are a cost-effective, carbon-reducing choice for new buildings. The practice of offering gas line extension allowances and calculating them based on the perpetual net present value (PNPV) methodology is no longer justified by economic expectations of the future and creates financial risk for ratepayers. The allowances generated by the PNPV methodology in Washington are 1.5 to 3 times higher

than those in states like Colorado and California that also use revenue-based formulas to calculate gas line extension allowances.[1] The Commission not only should no longer permit gas utilities to use the PNPV methodology, but also should determine that the provision of allowances for new gas hookups is no longer a prudent or permissible use of ratepayer dollars.

WA's climate policies indicate that gas throughput will fall.

Washington's 2021 State Energy Strategy explicitly recommends replacing "the direct consumption of fossil fuels, primarily natural gas, with high-efficiency electric heat pumps for space and water heating" based on analysis that electrification is the least-cost pathway to decarbonizing the vast majority of residential and commercial buildings in Washington.[2] In Seattle, all-electric new construction already significantly reduces emissions compared to a new mixed-fuel home.[3] Legally binding emissions reduction policies set by the 2019 Clean Energy Transformation Act and the 2021 Climate Commitment Act will drive further reductions in gas demand for all customer classes within the coming decade.[4]

As outlined by the 2021 State Energy Strategy, Washington's least-cost pathway to economy-wide decarbonization will require high levels of building electrification and investment in deep energy efficiency retrofits of existing buildings. These strategies will cause gas demand to fall significantly over the coming decades. Increasing attention to the health impacts of burning fuels in buildings as well as rising demand for space cooling may further drive the adoption of heat pumps and other electrification measures, causing gas demand to fall in ways that challenge the ability of the gas utility to plan for and mitigate the impacts of reduced throughput. Failing to account for falling gas demand in planning processes poses significant risks to gas ratepayers, utilities, and utility employees as revenue falls due to reduced throughput yet fixed system costs remain largely stagnant.[5]

Moreover, technology has evolved such that gas service is no longer the most societally beneficial way to meet building heating-related energy needs. Due to Washington's existing low-carbon electric energy mix, an electric heat pump installed today already produces lower emissions over the

[1] Gas line extension allowances in California range from $1,700-$2,700, and from $550-$1,400 for Colorado's major gas utilities.
[2] Washington State 2021 Energy Strategy, page 8. https://www.commerce.wa.gov/wp-content/uploads/2020/11/WA-2021-State-Energy-Strategy-FIRST-DRAFT-2.pdf
[3] The New Economics of Electrifying Buildings. https://rmi.org/insight/the-new-economics-of-electrifying-buildings/
[4] Climate Commitment Act, Washington State Department of Ecology, https://ecology.wa.gov/Air-Climate/Climate-change/Reducing-greenhouse-gases/Climate-Commitment-Act
[5] Regulatory Solutions for Building Decarbonization: Tools for Commissions and Other Government Agencies, page 37. https://rmi.org/insight/regulatory-solutions-for-building-decarbonization/

equipment's lifetime than an equivalent gas furnace, delivering a significant environmental benefit and contributing to the state's progress in reducing emissions.[6] In Seattle, an all-electric new home costs less to build than a mixed-fuel home, and all-electric buildings eliminate many of the health and air quality impacts of burning fuels in buildings.[7] Through innovative rate design or enhanced energy efficiency incentives, the Commission could further maximize the economic, environmental, and societal benefits of electrification. The continuation of utility incentives for new gas connections distorts customer decisions.

The rationale underlying PNPV no longer holds in Washington's present policy environment.

A key component of the PNPV methodology is the assumption that a new customer will remain on the gas system indefinitely, and that they will consume gas at volumes consistent with today's near-term expectations. Given Washington's strong commitment to reducing emissions and the demand-side factors that drive electrification and energy efficiency, this assumption of consistent, perpetual gas usage from a new gas customer is dubious at best. Even if a new customer remains connected to the system long-term but consumes diminishing volumes of gas, the rationale underlying PNPV fails. If actual revenue from the customer is less than the projected annual revenue (based on the annual allowed revenue per customer) the utility under-recovers the cost of its investment (the amount of the allowance) from that customer and effectively recovers the difference across all customers' rates. This situation could arise even in situations other than full-electrification: when the customer upgrades to a more-efficient gas appliance, if the customer's gas usage declines due to a warming climate in the Pacific Northwest, or when the customer electrifies some or all of their heating load.

Line extension allowances for new gas customers create long-term risk for ratepayers.

Incentivizing expansion of the gas system using ratepayer dollars challenges the long-term affordability of the system. While gas line extension allowances may have made sense previously in order to support the expansion of affordable access to heating, given the availability of more-efficient alternatives and our present understanding of the health and climate impacts of combusting fuels in buildings, such policies are no longer a prudent use of ratepayer dollars. Even if new customers provide

[6] The New Economics of Electrifying Buildings. https://rmi.org/insight/the-new-economics-of-electrifying-buildings/

[7] "All-Electric New Homes: A Win for the Climate and the Economy." https://rmi.org/all-electric-new-homes-a-win-for-the-climate-and-the-economy/
In Washington, air pollution from burning fuels in buildings led to an estimated 559 early deaths and $6.266 billion in health impact costs in 2017 alone. "What is the Health Impact of Buildings in Your State?" https://rmi.org/health-air-quality-impacts-of-buildings-emissions/#WA

some short-term benefit to present gas customers as a whole, in the context of falling gas demand, all efforts should be made to limit additions to the gas rate base in order to limit the fixed costs that must be recovered over a shrinking customer base. Continuing to use ratepayer funds to support the expansion of the gas system puts upward pressure on rates by not only adding to rate base but also by building infrastructure that will be under-used or no longer used well short of its expected lifetime, creating additional risk for ratepayers.

Conclusion

The use of the PNPV methodology, and utilities' provision of line extension allowances to new gas customers more broadly, should be eliminated. The goal of ensuring affordable access to heat can be met through measures that do not create the same long-term risk for ratepayers. This may require further action from the Commission to modify policies on the electric system to lower up-front costs associated with electrification and ensure equitable access to affordable energy services.

Sincerely,

Denise Grab
Manager, Carbon-Free Buildings Program, RMI
dgrab@rmi.org

Sherri Billimoria
Manager, Carbon-Free Buildings Program, RMI
sbillimoria@rmi.org

Abby Alter
Associate, Carbon-Free Buildings Program, RMI
aalter@rmi.org

Dylan Sullivan
Senior Scientist, Climate & Clean Energy Program, NRDC
dsullivan@nrdc.org