BEFORE THE WASHINGTON

UTILITIES & TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Complainant,

v.

CASCADE NATURAL GAS COMPANY,

Respondent.

DOCKET UG-240008

RESPONSE TESTIMONY OF STEFAN DE VILLIERS ON BEHALF OF THE WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL PUBLIC COUNSEL UNIT

EXHIBIT SDV-1CT

September 25, 2024

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I. INTRODUCTION AND SUMMARY

Q. Please state your name and business address.

A. My name is Stefan de Villiers, and my business address is 800 Fifth Avenue, Suite 2000, Seattle, Washington 98104.

Q. By whom are you employed and in what capacity?

A. I am a Regulatory Analyst with the Public Counsel Unit of the Washington State Office of the Attorney General (Public Counsel).

Q. On whose behalf are you testifying?

A. I am testifying on behalf of Public Counsel.

Q. Please describe your professional qualifications.

A. I have a Bachelor of Science degree in Economics, with minors in Mathematics and Data Science, from the University of Washington in Seattle, Washington.

I joined Public Counsel in April 2024 and have since actively participated in a variety of utility and transportation matters. I have filed testimony before the Washington Utilities and Transportation Commission (Commission) in Pacific Power & Light Company's (PacifiCorp) Clean Energy Implementation Plan proceedings (Docket UE-210829). I also serve or have served as Public Counsel's lead Regulatory Analyst in Commission cases including the PacifiCorp 2022 and 2023 Power Cost Adjustment Mechanism proceedings (Dockets UE-230482 and UE-240461), Clean Energy Transformation Act Markets and Compliance Requirements rulemaking (Docket UE-210183), Puget Sound Energy Petition for Planning Exemption proceeding (Dockets UG-240433 and UE-240434), Electric Vehicle Supply Equipment rulemaking (Docket UE-160799), Cascadia Water LLC 2024 general rate

case (Docket UW-240151), Summit View Water Works 2024 general rate case (UW-240589), Roche Harbor Water System 2024 general rate case (Docket UW-240203), and Waste Management of Washington, Inc. Staff Investigation (Docket TG-240189).

I participate on several advisory groups on behalf of Public Counsel, including the PacifiCorp Electric Integrated Resource Plan Advisory Group, Equity Advisory Group, Demand Side Management Advisory Group, and Low-Income Advisory Group and the Puget Sound Energy Resource Planning Advisory Group. Additionally, I represent Public Counsel on the Washington Interagency Electric Vehicle Coordinating Council's Charging Policy Committee.

I completed the National Association of Regulatory Utility Commissioners Regulatory Training Initiative Rate Case Basics course in May 2024.

Prior to joining Public Counsel, I worked as a Legal-Economic Program Analyst for The Mentor Group, based in Boston, Massachusetts, where I researched developments in environmental litigation, as well as antitrust, data privacy, intellectual property, foreign policy, and national security. Before that, I was an Economic Research Analyst in the United States Department of the Treasury's Office of Europe and Eurasia, in Washington, D.C., where I worked to mitigate the economic effects of Russia's war against Ukraine, especially related to Russian exports of natural gas and oil.

Q. What exhibits are you sponsoring in this proceeding?

A. I am sponsoring the following exhibits:

- Exhibit SDV-2: Cascade's Response to Public Counsel Data Request No. 98
- Exhibit SDV-3: Cascade's Response to Public Counsel Data Request No. 96

- Exhibit SDV-4: Cascade's Response to Public Counsel Data Request No. 97
- Exhibit SDV-5: Line Extension Allowance Caps
- Exhibit SDV-6: Cascade's Response to Public Counsel Data Request No(s). 6 & 7
- Exhibit SDV-7: Cascade's Response to Public Counsel Data Request No. 102
- Exhibit SDV-8: Cascade's Response to Public Counsel Data Request No. 99
- Exhibit SDV-9: Cascade's Response to Public Counsel Data Request No. 105, Attachment A & Revised Response to Public Counsel Data Request No. 1, Attachment B
- Exhibit SDV-10C: Cascade's Response to Public Counsel Data Request No. 100
- Exhibit SDV-11: Gas Verus Electricity Prices
- Exhibit SDV-12: Cascade's Response to Public Counsel Data Request No. 15
- Exhibit SDV-13: Cascade's Response to Staff Data Request No. 96
- Exhibit SDV-14: Cascade Growth and Gas Use Per Customer
- Exhibit SDV-15: Answer Testimony of Erin T. O'Neill, Hearing Exh. 401, *In re Advice No. 1029-Gas of Public Service Co. of Colo. Revise its PUC NO. 6-Gas Tariff,* Docket No. 24AL-0049G (July 11, 2024)

Q. Please describe the purpose of your testimony.

A. My testimony discusses line extension allowances offered by Cascade Natural Gas Company (Cascade or the Company) and recommends that the Commission order their elimination, sparing current natural gas customers from unnecessary rate hikes and aligning Cascade's policy with Washington's clean energy goals. I also discuss steps

the Commission can take to explore a regulatory paradigm that would further align Cascade with those clean energy goals.

II. THE COMMISSION SHOULD ELIMINATE CASCADE'S LINE EXTENSION ALLOWANCES AND DISALLOW CERTAIN ASSOCIATED COSTS

Q. What is a gas line extension allowance?

A. A gas line extension allowance is a ratepayer-funded subsidy offered by a gas utility to reduce or eliminate the costs to those applying to establish a connection to gas service (hereinafter referred to as gas service applicants). In Cascade's case, it covers the cost of extending main and service lines, as well as regulator and town border stations when needed to serve new customers.[1] Line extension allowances are paid for by current ratepayers, as capital additions funded by allowances are added to a utility's rate base, on which it is allowed to earn a rate of return recovered from customers through rates. Without line extension allowances, the cost of a line extension for a new gas connection would be borne entirely by the gas service applicant setting up the connection.

Q. Why do you describe the recipients of line extension allowances as "gas service applicants," rather than "new gas customers"?

A. Line extension allowances directly benefit those applying for a gas connection, who are predominately real estate developers and not end users like households or small businesses. I address the issue of who directly benefits from line extension allowances in more detail later in my testimony.

Q. Why do some gas utilities offer line extension allowances?

[1] Stefan de Villiers, Exh. SDV-2 (Cascade's Response to Public Counsel Data Request No. 98).

A. Historically, some gas utilities have offered line extension allowances to incentivize customer growth and expansion of the gas system on the principle that adding more customers to the system creates economies of scale and spreads the system's fixed costs over a larger customer base. Current ratepayers provide an upfront allowance to gas service applicants. Revenues from end users pay back that allowance over a period of years (seven years in the case of Cascade). Gas companies like Cascade claim that revenues from end users after the payback period reduce the overall cost of service to all ratepayers.[2]

This argument no longer applies in the face of Washington's climate transition. Rather than creating economies of scale, line extension allowances incentivize the construction of gas infrastructure likely to become stranded assets. These stranded assets captured in a company's rate base lead to higher future rates for gas customers who do not electrify or cannot afford to do so. The argument in favor of line extension allowances also assumes without sufficient evidence that line extension allowances make potential gas service applicants more likely to apply and new customers more likely to be added to the system.

Gas utilities also have financial incentives to offer line extension allowances. Line extensions funded by line extension allowances are considered capital investments and are added to a utility's rate base. There is an extensive literature on utility capital bias, beginning in 1962,[3] which establishes that utilities have an interest

[2] De Villiers, Exh. SDV-3 (Cascade's Response to Public Counsel Data Request No. 96).
[3] Harvey Averch & Leland L. Johnson, *Behavior of the Firm Under Regulatory Constraint,* 52 No. 5 Am. Econ. Review 1052–69 (Dec. 1962).

in expanding their rate base to increase their profits. Without line extension allowances, the capital investment required for line extensions would come entirely from gas service applicants and would not be added to a utility's rate base.

Companies have also justified gas line extension allowances on the basis that they reduce the costs for new customers to access a fuel source that has historically been relatively affordable and provided some environmental benefits over heating sources like coal or oil. These reasons are no longer valid. Natural gas prices have been high and volatile in recent years, and there is increasing evidence that electric alternatives are more affordable. Additionally, it has become abundantly clear that natural gas no longer provides environmental benefits given viable electric alternatives.

Changing conditions related to the energy transition and other external factors eliminate any justifications for gas line extension allowances that may have been previously valid.

Q. Has the Commission previously ordered the modification of gas line extension allowances because of these changing conditions?

A. Yes. Until 2021, Cascade, Puget Sound Energy (PSE), and Avista Utilities (Avista) determined gas line extension allowance values based on a Perpetual Net Present Value (PNPV) calculation. Under the PNPV methodology, allowances were capped at a level equal to the net present value of the revenue recovered from a new customer over a period approaching infinity. The PNPV methodology was proposed in

Docket UG-143616 and adopted by Cascade, PSE, and Avista with tariffs filed throughout 2016.[4]

In 2021, on a motion by Chair David Danner, the Commission opened Docket UG-210729, seeking input from gas utilities and stakeholders on whether those utilities should continue using the PNPV methodology. Several parties, including the Washington Department of Commerce, submitted comments in that Docket recommending the elimination of gas line extension allowances altogether.[5]

In Order 01 in that Docket, the Commission ordered Cascade, PSE, and Avista to reduce gas line extension allowance by adopting a calculation methodology that assumes a payback period of seven years, rather than one approaching infinity. In that Order, the Commission stated the following:

> We appreciate the thoughtful perspectives offered by the companies, consumers, and stakeholders, most of whom agree that the current PNPV methodology is contrary to the legislature's clear direction to reduce greenhouse gas emissions and the use of fossil fuels. As many commenters aptly observed, it is imperative that we address climate change, including the health impacts of greenhouse gases and methane emissions on Washington's communities and citizens. Recognizing the urgency of this issue, **we view our decision today as an interim measure that will substantially reduce line extension allowances** while we continue to engage in dialogue with regulated utilities and other stakeholders in Docket U-210553, the Commission's broader examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets.[6]

[4] *In re Chair Danner's Motion to Consider Whether Natural Gas Utilities Should Continue to use the Perpetual Net Present Value Methodology,* Docket UE-210729, Order 01, ¶¶ 3–6 (Oct. 29, 2021).
[5] *Id.*, ¶¶ 9, 14, & 17–20.
[6] *Id.*, ¶ 27 (emphasis added).

Since issuing that Order, the Commission has used language reiterating its commitment to the decision only being an interim measure amid the ongoing issue of reconciling gas line extension allowances with state-wide decarbonization efforts.

Q. Since the Commission's action in Docket UG-210719, have other utilities in Washington taken additional steps to modify or eliminate gas line extension allowances?

A. Yes. PSE and Avista both agreed to fully eliminate gas line extension allowances in settlements in their respective 2022 general rate cases (GRCs). Both PSE and Avista's settlements required them to gradually reduce line extension allowances and eliminate them by January 1, 2025. [7]

In the Final Order approving the settlement in PSE's general rate case, the Commission stated that the proceeding provided "an appropriate opportunity to revisit this issue" and that gradually reducing gas line extension allowances was "consistent with public policy."[8] The Commission also reiterated that its decision in Docket UG-210729 revising the line extension allowance calculation methodology was an "interim measure" given the "urgent issue of climate change."[9]

The general rate case in this Docket is Cascade's first since the Commission's decision in Docket UG-210729 and the settlements in PSE and Avista's 2022 general rate cases.

[7] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066 & UG-220067 (*Consolidated*), Order 24: Final Order, ¶ 287 (Dec. 22, 2022) (hereinafter *2022 PSE GRC*); *Wash. Utils. & Transp. Comm'n v. Avista Corp.*, Dockets UE-220053, UG-220054, & UG-210854 (*Consolidated*) Order 10/04: Final Order, ¶ 86 (Dec. 12, 2022).
[8] *2022 PSE GRC,* Order 24: Final Order, ¶ 288.
[9] *Id.*, ¶ 289.

Q. Has the Commission provided any additional guidance regarding the need for line extension allowances?

A. Yes. The Commission's recent Energy Decarbonization Pathways Study (Decarbonization Study or Study) identified a need to reduce the expansion of natural gas systems and highlighted the reduction of line extension allowances as a means to do so. The Decarbonization Study was published in May 2024 with the stated intention to "identify and describe the various potential pathways for Washington's investor-owned electric and natural gas utilities to contribute to achieving the state's overall GHG emission reduction goals."[10] The Study's findings included the following:

- Regulatory agencies and utilities need to plan for a decadal drawdown on natural gas consumption.
- **Policy solutions are necessary to minimize and avoid stranded assets, including strategies such as preventing expansion**, managed decommissioning, accelerated depreciation of assets, performance-based regulation.[11]

Elsewhere in the Decarbonization Study, it stated that "avoiding gas system expansion" could mitigate scenarios in which expected reductions in gas demand would cause "dramatic rate increases."[12] The Study pointed to the Commission's work reducing line extension allowances in Docket UG-210729 as a way to "limit the number of new customers who can be brought onto the system going forward."[13]

The GRC in this Docket is Cascade's first since the Commission's Decarbonization Study was published.

[10] Wash. Utils. & Transp. Comm'n, *Energy Decarbonization Pathways Study*, at 13 (Oct. 2023) (hereinafter *Decarbonization Study*) https://www.utc.wa.gov/casedocket/2021/210553/docsets.
[11] *Id.* at 141 (emphasis added).
[12] *Id.* at 88–89.
[13] *Id.* at 88.

Q. Have other states eliminated gas line extension allowances because of changing conditions previously outlined?

A. Yes. In California, in September 2022, the California Public Utilities Commission (CPUC) ordered the elimination by July 1, 2023, of all gas line extension allowances in the state for all customer classes, declaring the following:

> These changes move the state closer to meeting its goals of reducing greenhouse gas (GHG) emissions and combating climate change. The result will not only be significant reductions in GHG emissions but also improved quality of life and health for customers, hundreds of millions of dollars in ratepayer savings annually, greater equity for low-income customers, and greater certainty for builders, developers, and individual customers.[14]

In Colorado, in May 2023, the state legislature passed SB23-291, which stated that gas utilities "shall not provide an applicant an incentive, including a line extension allowance, to establish gas service to a property" and required such incentives to be eliminated by the end of 2023.[15]

In Oregon, in October 2023, the Oregon Public Utilities Commission (OPUC) approved a GRC settlement for Avista that included the gradual reduction of its gas line extension allowances in the state and their full elimination by 2027.[16] Additionally, Northwest Natural Gas Company (NW Natural) has a pending GRC before OPUC in which three parties, including OPUC Staff and the Oregon Citizens'

[14] Pub. Utils. Comm'n of Cal., *Order Instituting Rulemaking Regarding building Decarbonization*, Rulemaking 19-01-011, at 2 (CPUC, Sept. 15, 2022) (hereinafter *CPUC Decision 22-09-026*) https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=496987290.
[15] Colo. Revised Statute § 40-3.2-104.3(2).
[16] *In re Avista Utilities Request for General Rate Revision*, Docket UG-461, Order No. 23-384, at 9 (Pub. Util. Comm'n of Or, Oct. 26, 2023).

Utility Board (CUB), have recommended the elimination of the Company's gas line extension allowances.[17]

The GRC in this Docket is Cascade's first since gas line extension allowances were eliminated in California, in Colorado, and for Avista in Oregon.

Q. Does eliminating line extension allowances constitute a natural gas ban?

A. Not at all. Without line extension allowances, gas service applicants are required to pay the upfront costs of establishing a gas service connection, but this has no effect on whether customers may establish gas service in the first place. Customers who want to use gas may still use gas. Customers already using gas may continue to do so and will no longer be required to pay for the infrastructure needed to serve new gas customers.

Q. How does Cascade calculate its line extension allowances?

A. Cascade's rules for line extension allowances are outlined in the Company's Rule 8, Extension for Distribution Facilities tariff sheet.[18] Consistent with the Commission's Order 01 in Docket UG-210729, Cascade's line extension allowances are currently capped at the net present value of the annual distribution revenue to be received from a customer over a seven-year period.[19] For residential (Schedule 503) customers, the allowance cap is based on an average monthly usage of 54 therms and currently equals $1,579.[20] For general commercial (Schedule 504) customers, the allowance cap is based on an average monthly usage of 271 therms and currently equals $6,047.[21]

[17] Staff Closing Brief at 4–6, *In re Northwest Natural Gas Request for General Rate Revision*, Docket UG-490 (filed on Aug. 26, 2024) https://edocs.puc.state.or.us/efdocs/HBC/ug490hbc330963025.pdf.
[18] Eric P. Martuscelli, Exh. EPM-6 (Mar. 29, 2024).
[19] *Id.*
[20] De Villiers, Exh. SDV-4 (Cascade's Response to Public Counsel Data Request No. 97).
[21] *Id.*

Allowances for customers in other classes are capped at an amount calculated for each individual customer, but based on the same general methodology.

Q. Would Cascade's line extension allowances change with rate increases?

A. Yes. Under Cascade's proposed rates filed in this case, line extension allowances would increase dramatically. Assuming no changes to average monthly therm usage, but incorporating Cascade's proposed basic service and delivery charge increases and its proposed rate of return, the Company's residential line extension allowance cap would reach $2,227.93 by March 1, 2026, a 41 percent increase from the current cap.[22] Cascade's general commercial line extension allowance cap would reach $7,177.29 by March 1, 2026, a 19 percent increase.[23]

Q. How much do Cascade's line extension allowances cost current ratepayers?

A. It is difficult to ascertain the total cost burden from line extension allowances for Cascade's ratepayers. According to Cascade, while it tracks the main and service line extension costs covered by allowances, it "cannot identify other line extension investments (e.g. meters, regulators, etc.) as specifically relating to customer growth."[24] Cascade "does not have a central database in which it tracks the calculation of allowable investment for line extension investment projects."[25] Additionally, Cascade "does not track its line extension investments by customer or rate schedule." In other words, Cascade cannot calculate exactly how much it has paid in line

[22] De Villiers, Exh. SDV-5 (Line Extension Allowance Caps).
[23] *Id.*
[24] De Villiers, Exh. SDV-6 (Cascade's Response to Public Counsel Data Requests No(s). 6 and 7).
[25] De Villiers, Exh. SDV-7 (Cascade's Response to Public Counsel Data Request No. 102).

extension allowances in any past year, and the limited data it does have includes no customer class granularity.

Cascade argues that "the majority of the distribution facilities necessary to provide gas service are main and service line extensions," for which it does have limited data. However, when prompted to provide ten examples of recent line extension projects, Cascade included one with a $124,000 regulator station investment that makes up 36 percent of the total project cost and is covered entirely by line extension allowances.[26] This regulator station investment and other similar investments do not constitute main and service line extensions and thus are not captured by line extension investment data described below, even though they are paid for by line extension allowances.

Cascade's limited data indicates that the Company's line extension allowances funded $164.6 million in main and service line extensions between 2014 and 2023, with $10.6 million coming in 2023 alone.[27] Cascade anticipates additional main and service line extension investments of $11.1 million in 2024 and another $11.1 million in 2025.

The Commission should order Cascade to eliminate its line extension allowances going forward and disallow all line extension allowance costs associated with 2025 plant additions. Since the full extent of these costs have not yet been calculated, the Commission should order Cascade to audit its 2025 plant additions to determine the true costs of those line extension allowances. I discuss this

[26] De Villiers, Exh. SDV-8 (Cascade's Response to Public Counsel Data Request No. 99).
[27] De Villiers, Exh. SDV-9 (Cascade's Response to Public Counsel Data Request No. 105, Attachment A & Revised Response to Public Counsel Data Request No. 1, Attachment B).

recommendation further at the end of my testimony and provide more justification for the disallowance recommended.

Q. Do Cascade's line extension allowances benefit new gas customers directly?

A. In most cases, no. Line extension allowances are intended to offset costs for those applying to establish a connection to gas service, but these applicants are usually not the end users of gas. More often, as seen in examples Cascade provides, gas service applicants are real estate developers connecting new buildings to gas service during construction. The end users of gas (the new gas customers) are usually those that purchase or lease said buildings from the real estate developers (the gas service applicants) upon completion.

When prompted to provide 10 examples of recent line extension projects, Cascade provided only one in which a line extension allowance likely benefited a residential gas customer directly. Cascade provided seven residential projects serving multiple meters and one mixed-use project serving multiple meters, all cases where line extension allowances were presumably paid out to real estate developers.[28] Another project was for a [redacted].[29] In the sole line extension project benefiting a single residential building, where the line extension allowance likely benefited the end user of gas directly, the allowance only covered $1,579 in project costs, and the applicant was required to pay an additional $2,661 to cover the full line extension costs.

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[28] De Villiers, Exh. SDV-10C (Cascade's Response to Public Counsel Data Request No. 100, with Attachment A).
[29] De Villiers, SDV-10C (Cascade's Response to Public Counsel Data Request No. 100, with Attachment A); [redacted] (last visited Sept. 20, 2024).

While real estate developers may pass through some of the benefits of line extension allowances in the form of lower building purchase costs, there is no evidence that these benefits are fully passed through. In California's gas line extension allowance rulemaking, CPUC Energy Division Staff found that eliminating gas line extension allowances "minimally impacts property prices."[30] They calculated that without gas line extension allowances, "residential property prices would increase between 0.21–0.25 percent, and non-residential property prices would increase by 0.25 percent."[31]

Additionally, there is an equity consideration relevant to the direct benefit of line extension allowances. Low-income customers typically purchase new homes at relatively lower rates than other customers, and thus are even less likely to have the benefits of line extension allowances fully passed through. The CPUC acknowledged the same in its gas line extension allowance rulemaking, noting that low-income customers "are typically not the ones applying for, or benefiting from, the gas line subsidies (due to the fact that they are more likely to be renters than homeowners)."[32]

Q. Does Cascade address line extension allowances in its initial general rate case filing?

A. The Direct Testimony of Company Witness Eric Martuscelli addresses the costs of Cascade's main and service line extensions covered by line extension allowances in 2021 through 2023, and the forecasted costs for 2024 and 2025.[33] Mr. Martuscelli refers to these main and service line extensions as "Growth Mains" and "Growth Services" projects. As I

[30] *CPUC Decision 22-09-026*, at 21.
[31] *Id.*
[32] *Id.*, at 30.
[33] Direct Testimony of Eric P. Martuscelli, Exh. EPM-1T, at 22:1–25:20 (Mar. 29, 2024).

have previously explained, the costs of main and service line extensions do not encompass the total cost of investment covered by line extension allowances, as they do not include investments like regulator and town border stations. Martuscelli alludes to such additional investments by stating that "some Growth Mains projects require a supplemental system reinforcement to ensure system reliability for core customers."[34]

Q. Does Cascade's initial filing justify adding these line extension costs to rates?

A. No. Mr. Martuscelli states that Cascade's main and service line extension projects are justified by its Certificate of Convenience and Necessity and its obligation to serve pursuant to RCW 80.28.110.[35] The only customer benefit he offers is that "customers benefit when Cascade fulfills its obligation to serve new customers utilizing WUTC Rule 8, Extension of Distribution Facilities."

Cascade's obligation to serve new customers is irrelevant to its inclusion of line extension costs in rates. Put another way, Cascade could fulfill its obligation to serve with or without line extension allowances. RCW 80.28.110 only requires gas utilities to furnish suitable facilities for furnishing gas as demanded, but does not require utilities to cover the upfront costs of those facilities. In citing the obligation to serve as a reason for including line extension costs in rates, Mr. Martuscelli conflates Cascade's obligation to provide line extensions as demanded with a manufactured obligation to provide line extension allowances.

Q. Does Cascade provide any examples of specific line extension projects in its initial general rate case filing?

[34] *Id.* at 22:6–7.
[35] *Id.* at 23:3–5 & 25:1–4.

A. The Direct Testimony of Company Witness Patrick Darras addresses the Divert Inc. (Divert), Renewable Natural Gas (RNG) Project, a specific line extension covered entirely by line extension allowances. As Mr. Darras states, this project connects a Divert RNG biorefinery to Cascade's distribution system, allowing Cascade to serve Divert as a Schedule 663 transportation customer.[36] The project includes a 1,700-foot pipeline extension costing $237,522, as well as a regulator station costing $582,325. While the line extension cost is listed in Cascade's data on main and service line extensions, the regulator station, presumably also covered by Divert's line extension allowance, is not listed.

Mr. Darras states that the line extension allowance calculated was sufficient to cover all direct project costs, meaning there was no cost to Divert for this project. It is worth questioning whether this allowance was necessary, however. Divert has stated publicly that the RNG facility served by this line extension represents a $100 million investment.[37] Cascade's calculated line extension allowance assumes the Company will bring in revenue of $109,326 annually.[38] Considering the magnitude of Divert's investment in this RNG facility and the fact that Cascade is the only gas distribution company serving the Longview area where the Divert RNG facility is located, the line extension allowance granted to Divert may not have been a factor in the Company's decision to establish a connection to Cascade's system.

Q. Please summarize the reasons for eliminating Cascade's line extension allowances.

[36] Direct Test. of Patrick C. Darras, Exh. PCD-1T at 44:15–46:4.
[37] Press Release, Divert, *Divert Breaks Ground on New Facility in Washington State*, (Sept. 7, 2023), https://divertinc.com/divert-breaks-ground-on-new-facility-in-washington-state/.
[38] Darras, Exh. PCD-1T at 45:10.

A. I have already touched on many of the reasons for eliminating Cascade's line extension allowances. I summarize the main reasons here and follow with detailed explanations of each.

1. Natural gas does not offer health and environmental benefits over primary energy alternatives, meaning expansion of the natural gas system is not in the public interest for that reason.
2. Natural gas does not offer cost benefits over primary energy alternatives, meaning expansion of the natural gas system is not in the public interest for that reason.
3. Line extension allowances are not proven to affect the demand for gas service connections.
4. The economic justification of line extension allowances no longer holds in the face of Washington's climate policies. Continued use of line extension allowances may increase future rates for gas customers, rather than decreasing them. This is the primary argument for eliminating line extension allowances, and the one for which I provide the most detail below.
5. Line extension allowances disproportionately adversely affect low-income customers, without similarly benefiting them.
6. The need for line extension allowances is not apparent for industrial, large volume, transportation, or interruptible customers.

A. Health and Environmental Benefits

Q. Why do you say that natural gas does not offer health and environmental benefits over primary energy alternatives?

A. Natural gas has been described by its advocates as a "bridge fuel" for the energy transition because its burning generally emits less carbon dioxide, sulfur dioxide, and particulates than does the burning of coal or oil.[39] However, the extraction, transportation, storage, and use of natural gas also results in leakage of methane, the primary component of natural gas and a much more potent greenhouse gas than carbon dioxide.[40] Recent studies show that methane leakage rates may be three times higher than the U.S. government estimates.[41]

Studies also suggest that gas appliances emit air pollutants including carbon monoxide, nitrogen oxides, and particulate matter that worsen indoor and outdoor air quality and are linked to various negative health outcomes.[42]

Given that all-electric appliances now present a viable alternative to gas appliances in many scenarios, natural gas does not offer health and environmental benefits over alternatives.

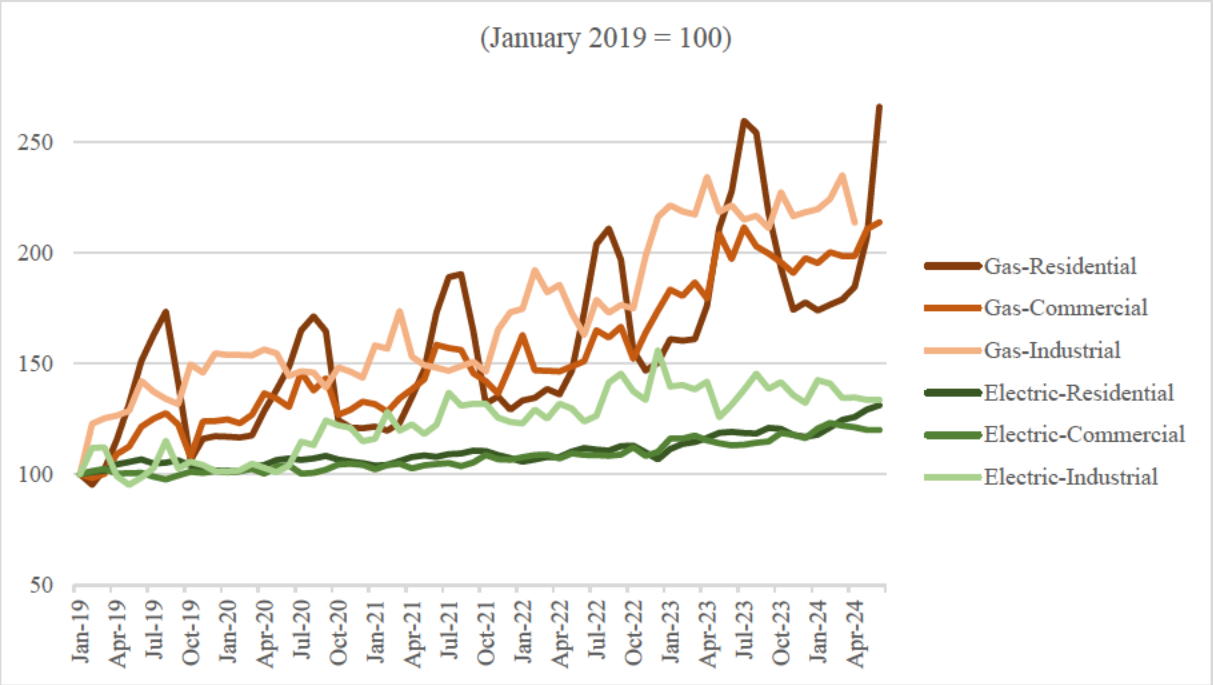
B. Cost Benefits

Q. Why do you say that natural gas does not offer cost benefits over primary energy alternatives?

[39] UN Environmental Programme, *Is Natural Gas Really the Bridge Fuel the World Needs?* (Jan. 12, 2023) https://www.unep.org/news-and-stories/story/natural-gas-really-bridge-fuel-world-needs.
[40] Steve Weissman, *Natural Gas as a Bridge Fuel Measuring the Bridge,* Center for Sustainable Energy (Mar. 2016) https://energycenter.org/sites/default/files/docs/nav/policy/research-and-reports/Natural_Gas_Bridge_Fuel.pdf.
[41] Sherwin Rutherford, ed al., *US Oil and Gas System Emissions from Nearly One Million Aerial Site Measures* Nature, 627, 328-334 (2024) https://www.nature.com/articles/s41586-024-07117-5.
[42] Dr. Yifang Zhu, *Effects of Residential Gas Appliances on Indoor and Outdoor Air Quality and Public Health in California,* UCLA Fielding School of Public Health Department of Environmental Health Services, (Apr. 2020) https://coeh.ph.ucla.edu/wp-content/uploads/2023/01/Effects-of-Residential-Gas-Appliances-on-Indoor-and-Outdoor-Air-Quality-and-Public-Health-in-California.pdf.

A. Data from the US Energy Information Administration shows that natural gas prices in Washington have increased significantly over the last five years, more than doubling in many cases. Electricity prices in the state have increased at much lower rates and are presently only 20–30 percent higher than in January 2019. Figure 1 below shows this price growth discrepancy, using January 2019 as a base month. In addition to natural gas prices being high, they have hit historical levels of volatility in recent years.[43] Given that electricity prices are traditionally both lower and less volatile than natural gas prices,[44] natural gas does not provide cost benefits over primary alternatives.

Figure 1: Gas Versus Electricity Retail Prices[45]



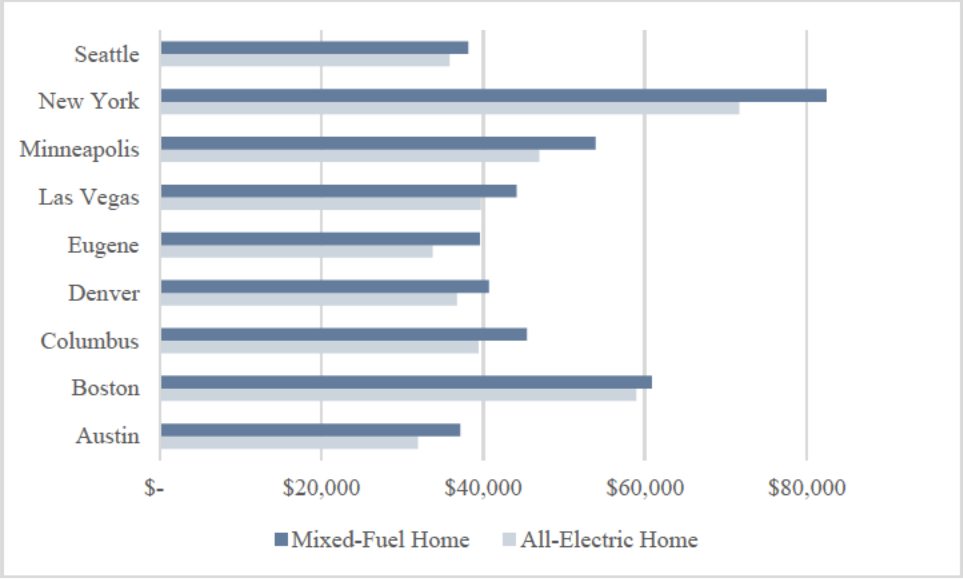
[43] U.S. Energy Information Administration, *U.S. NaturalGas Price Saw Record Volatility in the First Quarter of 2022* (Aug. 4, 2022). https://www.eia.gov/todayinenergy/detail.php?id=53579.
[44] Talor Gruenwald, *Reality Check: The Myth of Stable and Affordable Natural Gas Price,* Rocky Mountain Institute (Nov. 17, 2021) https://rmi.org/the-myth-of-stable-and-affordable-natural-gas-prices/#:~:text=In%20reality%2C%20gas%20prices%20are%20historically%20much%20more,graph%20below%29%2C%20especially%20during%20the%20winter%20heating%20season.
[45] De Villiers, Exh. SDV-11 (Gas Versus Electricity Prices).

Q. Do mixed-fuel homes cost more than all-electric homes?

A. Yes. A 2022 study by the Rocky Mountain Institute (RMI) examined the cost of constructing and operating all-electric single-family homes versus the cost of constructing and operating single-family homes using gas for space and water heating, a range, and a clothes dryer. RMI's study specifically looked at nine cities, including Seattle.

On average, the study found that the upfront costs of an all-electric home were five percent cheaper compared with the mixed-fuel home, and the all-electric home cost an average of 14 percent less per year to operate than the mixed-fuel home.[46] Overall, the 15-year net present cost of the all-electric home was lower than that of the mixed-fuel home in all nine cities, as seen in Figure 2.[47] Again, this shows that natural gas does not provide cost benefits over primary energy alternatives.

Figure 2: Mixed-Fuel versus All-Electric Home Prices[48]



[46] Report by Sherri Billimoria, et. al., *The Economics of Electrifying Buildings*, Rocky Mountain Institute, at 9-11 (2018) (Pagination is from the downloadable report).
[47] *Id.* at 11–12.
[48] *Id.* at 12 (reformatted data).

C. Demand for Gas Service Connections

Q. Why do you question the assumption that demand for gas service connections is affected by line extension allowances?

A. In Cascade's own words, it "has not conducted surveys or analyses, nor collected data from new customers to determine if line extension allowances were a significant factor in their decision to join the Company's system."[49] Without these studies, we cannot assume that line extension allowances are necessary to bring new customers onto Cascade's system.

If line extension allowances do not have a significant impact on whether customers join Cascade's system, they should be eliminated. That is, if gas service applicants are willing to pay the costs of line extensions, then the cost of adding resulting new gas customers should not be subsidized by current ratepayers. In that case, those new customers would bring in additional revenue without adding any fixed costs to the system at the margin. Thus, the revenue from new gas customers would immediately add downward pressure to current gas rates, rather than being delayed by a seven-year payback period.

Q. Is there any evidence that gas service applicants may be willing to pay the upfront costs of line extensions?

A. Yes. As noted previously, most projects receiving line extension allowances are carried out on a large scale by real estate developers. In these projects, the marginal cost per building to set up utility connections may not be a deterrent requiring a subsidy. In fact, other utility connections that developers set up and pay for, like

[49] De Villiers, Exh. SDV-12 (Cascade's Response to Public Counsel Data Request No. 15).

irrigation system connections, can cost more than gas service connections without being covered by any subsidies.

To demonstrate this, I use the first line extension allowance project provided by Cascade as an example of such projects. For this project, [redacted], Cascade provided a line extension allowance of $15,466 to cover line extensions for 10 new residential gas meters, or $1,547 per meter.[50] Subdivision of the [redacted] was separately approved by the City of [redacted] in May 2023.[51] Attachments to that approval show that the development included irrigable land. Each unit built on irrigable land was required to be connected to the [redacted] Irrigation District ([redacted]) system, at a cost of $2,741.19 per unit.[52] From my discussions with an engineer from [redacted], I understand that this connection fee only offsets the cost of connecting to [redacted]'s irrigation transmission lines, and developers are separately required to install and pay for onsite irrigation piping. [redacted] generally does not offer subsidies to cover these connection fees.

If it were reasonable for the developers of [redacted] to connect to the local irrigation system at a cost of $2,741 per unit (even before considering irrigation piping costs), it seems unlikely that an additional fee of around $1,700 per unit (accounting for taxes) would have deterred the developer from establishing gas service. In other

[50] De Villiers, Exh. SDV-10C (Cascade's Response to Public Counsel Data Request No. 100, with Attachment A).
[51] [redacted] This document is not consecutively paginated, thus the pincite references the PDF page number).
[52] *Id.* at 26.

words, Cascade's line extension allowance may have been unnecessary, subsidizing a utility connection cost that the developer may have already been willing to pay.

D. Climate Policies

Q. Why do you say that Washington's climate policies undermine the economic justification of line extension allowances?

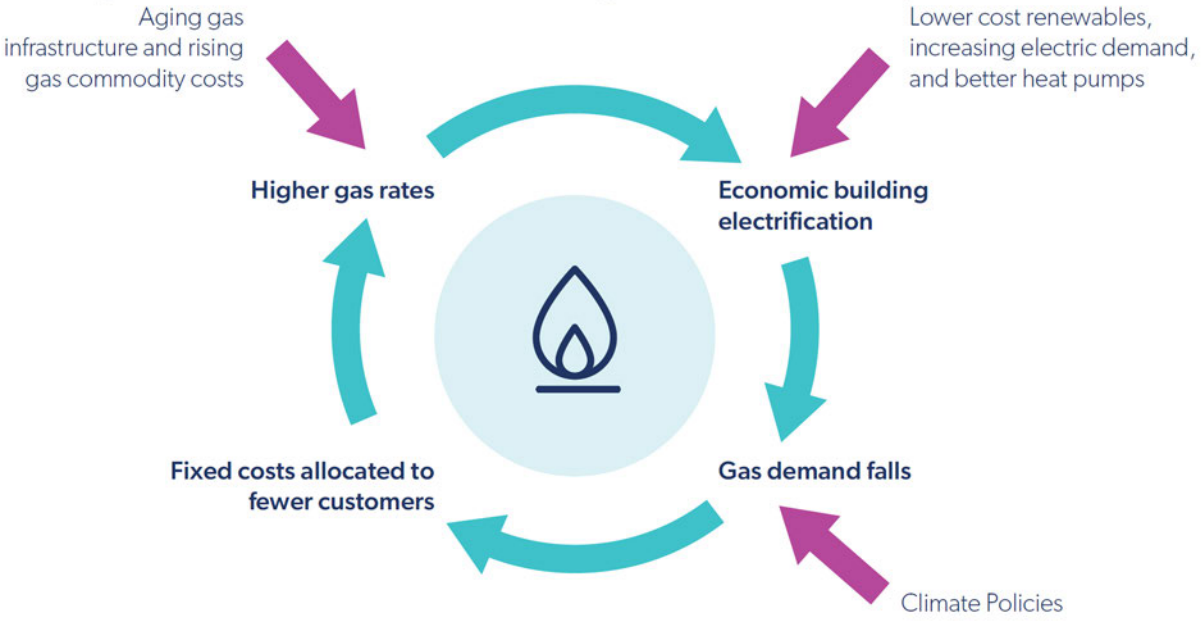
A. As explained earlier, some gas utilities claim that line extension allowances have an economic justification because adding new customers to the natural gas system creates economies of scale and spreads the system's fixed costs over a larger customer base. This argument assumes that gas demand continues to grow at a rate sufficient to offset increases in fixed costs resulting from line extension allowances. For gas demand to increase or at least remain flat, the system's customer base must increase or remain flat and gas usage per customer must increase or remain flat. If overall gas demand decreases, then continued line extension allowances increase fixed costs for a system recovering revenue from the delivery of a decreasing load, meaning rates must increase substantially for the gas utility to earn a sufficient return on its investments.

Washington's climate policies are expected to lead to a decrease in gas demand. The Commission's own recent Decarbonization Study notes that "the combination of Washington's climate policy, clean energy goals, and building codes and efficiency standards have the potential to significantly drive down demand for natural gas in Washington."[53] The Decarbonization Study also states that "regulatory agencies and utilities need to plan for a decadal drawdown of natural gas

[53] Decarbonization Study, at 88.

consumption."[54] Thus, the Study acknowledges that "as the number of customers using gas and overall gas demand falls but fixed costs remain flat or increase in the coming decades, utilities are likely to request dramatic rate increases to recover the revenue gap."[55] This dynamic is illustrated best in Figure 3 below, taken directly from the Commission's Decarbonization Study.

Figure 3: Climate Goals Lead to Falling Gas Demand and Higher Gas Rates[56]



As I will show below, Cascade's own customer count and gas usage per customer trends are consistent with future decreases in gas demand, likely driven by factors including Washington's statutory clean energy goals and new state energy code. As such, it is unreasonable to continue Cascade's line extension allowance policies, as they add fixed costs to the system that will lead to unnecessarily high future gas rates.

[54] *Id.* at 141.
[55] *Id.* at 88.
[56] *Id.* at 89 (figure title changed).

Q. Please describe Washington's statutory clean energy goals.

A. As Commission's Decarbonization Study states, "Washington State currently has some of the most ambitious energy and emissions goals in the United States."[57] Washington's legislature has set targets of reducing Washington's overall emissions of greenhouse gases to 45 percent below 1990 levels by 2030, 70 percent by 2045, and 95 percent by 2050.[58] Programs incentivizing expansion of the natural gas system are inconsistent with these statutory climate goals. Even without considering the factors that overturn the economic justification for line allowances, it is fundamentally contradictory for a Washington natural gas utility to subsidize gas service applicants joining the natural gas system, socializing the cost of expanding the natural gas system and increasing greenhouse gas emissions, when the state has codified goals to reduce greenhouse gas emissions.

Eliminating line extension allowances targets emissions in the buildings sector, a key priority for Washington's climate policy. According to the Washington State Department of Commerce, buildings contribute more than one-fifth of Washington's greenhouse gas emissions and are the "fastest growing source of statewide emissions."[59] The largest share of buildings emissions come from the "direct combustion of natural gas and other fossil fuels in buildings for space heating, water heating and cooking."[60] Eliminating line extension allowances eliminates the

[57] *Id.* at 55.
[58] RCW 70A.45.020(1)(a).
[59] Washington State Commerce, *2023 Biennial Energy Report*, at 46 (Mar. 22, 2023).
[60] *Id.*

subsidization of increasing emissions in the building sector, furthering progress toward Washington's clean energy goals.

Q. Please describe Washington's new state energy code.

A. Washington's legislature has directed the State Building Code Council (SBCC) to design a state energy code to "help achieve the broader goal of building zero fossil-fuel greenhouse gas emission homes and buildings by the year 2031."[61] The Washington State Energy Code (WSEC) is updated every three years, each time incorporating building standards that reduce greenhouse gas emissions and improve energy efficiency in new construction.

The 2021 WSEC became effective on March 15, 2024.[62] The new code prioritizes energy-efficient heat pumps in new buildings, bringing the SBCC closer to meeting its statutory mandates.[63] In turn, it makes natural gas much less likely to be used for primary space or water heating appliances, which currently make up almost 90 percent of household natural gas use.[64] As developers adjust to the new building codes, it is likely that a growing share of new buildings will be built with all-electric appliances.

[61] RCW 19.27A.020(2)(a).
[62] EarthJustice, *Judge Denies Industry Challenge to Delay Implementation of Washington's New Climate and Health-Friendly Building Codes* (Mar. 8, 2024) https://earthjustice.org/press/2024/judge-denies-industry-challenge-to-delay-implementation-of-washingtons-new-climate-and-health-friendly-building-codes.
[63] Isabella Breda, *WA Adopts New Rules to Phase Out Fossil Fuels in New Construction*, Seattle Times (Nov. 29, 2023) https://www.seattletimes.com/seattle-news/environment/wa-adopts-new-rules-to-phase-out-fossil-fuels-in-new-construction/.
[64] U.S. Energy Information Administration, *Residential Energy Consumption Survey (RECS) – 2020 Data* (Rel. Mar. 2024) https://www.eia.gov/consumption/residential/data/2020/c&e/pdf/ce4.1.pdf (Click on 'by End Users by fuel' see CE4.1) (See Pacific region, which includes WA, OR, and CA).

It is worth noting that while the 2021 WSEC is likely to significantly affect gas demand on its own, future iterations of the WSEC will continue striving toward the goal of zero-emissions new buildings in 2031 and may further impact gas demand.

Q. How will Washington's new state energy code affect gas use per customer?

A. The 2021 WSEC will likely lead to a decrease in gas use per customer. Even in cases where buildings built under the 2021 WSEC are not all-electric and do still require a gas connection, those buildings' gas appliances are more likely to be limited to backup heating appliances and non-heating appliances like ranges and clothes dryers. As a result, new gas customers in those new buildings will likely use significantly less natural gas than the current average.

Table 1 below shows the American Gas Association's most recent estimate of monthly gas consumption in therms per appliance in the Pacific region of the United States (Washington, Oregon, and California). Based on this data, a customer using one of each gas appliance would consume 54.1 therms of gas per month, while a customer using all but space and water heaters would only consume 11.8 therms of gas per month. For reference, Cascade's line extension policy currently assumes that residential customers have an average monthly gas use of 54 therms. This gap, from 54.1 to 11.8 therms, demonstrates the potential reduction in gas use per customer that could result from eliminating gas-powered space and heating appliances.

Table 1: Gas Use and Market Share per Appliance, 2021[65]

Gas Appliance	Monthly Gas Use (in therms)
Furnace	28.9
Water Heater	13.5
Range	2.6
Clothes Dryer	1.6
Gas Fireplace	7.6

If gas service applicants without gas-powered primary space and water heating appliances receive line extension allowances calculated with an average monthly gas use of 54 therms, and the resulting new customers use significantly less than 54 therms per month, it may take much longer than seven years for revenue from those new gas customers to repay those allowances. In other words, current line extension allowances are likely to over-subsidize gas service applicants for buildings built under the 2021 WSEC without gas-powered primary space and water heating appliances.

Q. How are climate policies like Washington's clean energy goals and the 2021 WSEC likely to affect Cascade's gas demand?

A. As the Commission's Decarbonization Study noted, climate policies like Washington's clean energy goals and the 2021 WSEC may significantly reduce gas demand for utilities like Cascade.[66] Climate policies are likely to negatively impact Cascade's customer counts as current customers electrify and fewer new customers join the system. Cascade itself admits that the 2021 WSEC "could impact the number of customers requesting natural gas service."[67] Those customers who continue to use

[65] Gas Use Per Appliance, American Gas Association, *Residential Natural Gas Market Survey* (Jan. 2023.) https://www.aga.org/wp-content/uploads/2023/01/Table10-1.pdf.
[66] Decarbonization Study, at 88.
[67] De Villiers, Exh. SDV-13 (Cascade's Response to UTC Staff Data Request No. 96).

gas are likely to use fewer gas appliances, leading to a decrease in Cascade's gas use per customer. Cascade's customer count growth and gas use per customer are both already trending downward. As gas demand decreases, gas rates are likely to increase, an issue which would be exacerbated by line extension allowances.

Q. Please describe how Cascade's customer count growth is trending downward.

A. Cascade's customer count growth has slowed significantly in the last five years. In 2019 and 2020, Cascade's year-over-year customer count growth hovered around 1.8 percent. Since then, growth has slowed abruptly. Per Table 2, growth rates have fallen below one percent in 2023 and 2024.

Table 2: Cascade Customer Count Growth, 2018-2024[68]

A. Year	**B. Customer Count** (Average of monthly customer counts)	**C. Customer Count Growth Rate** (YoY change in B)
2018	214,984	N/A
2019	218,811	1.78%
2020	222,760	1.80%
2021	226,615	1.73%
2022	229,418	1.24%
2023	231,539	0.92%
2024*	233,174*	0.77%*
*Based on data provided through June 2024 and compared to customer counts over the same period in 2023. Please see Figure 1 for a more detailed look at growth rates on a monthly basis.		

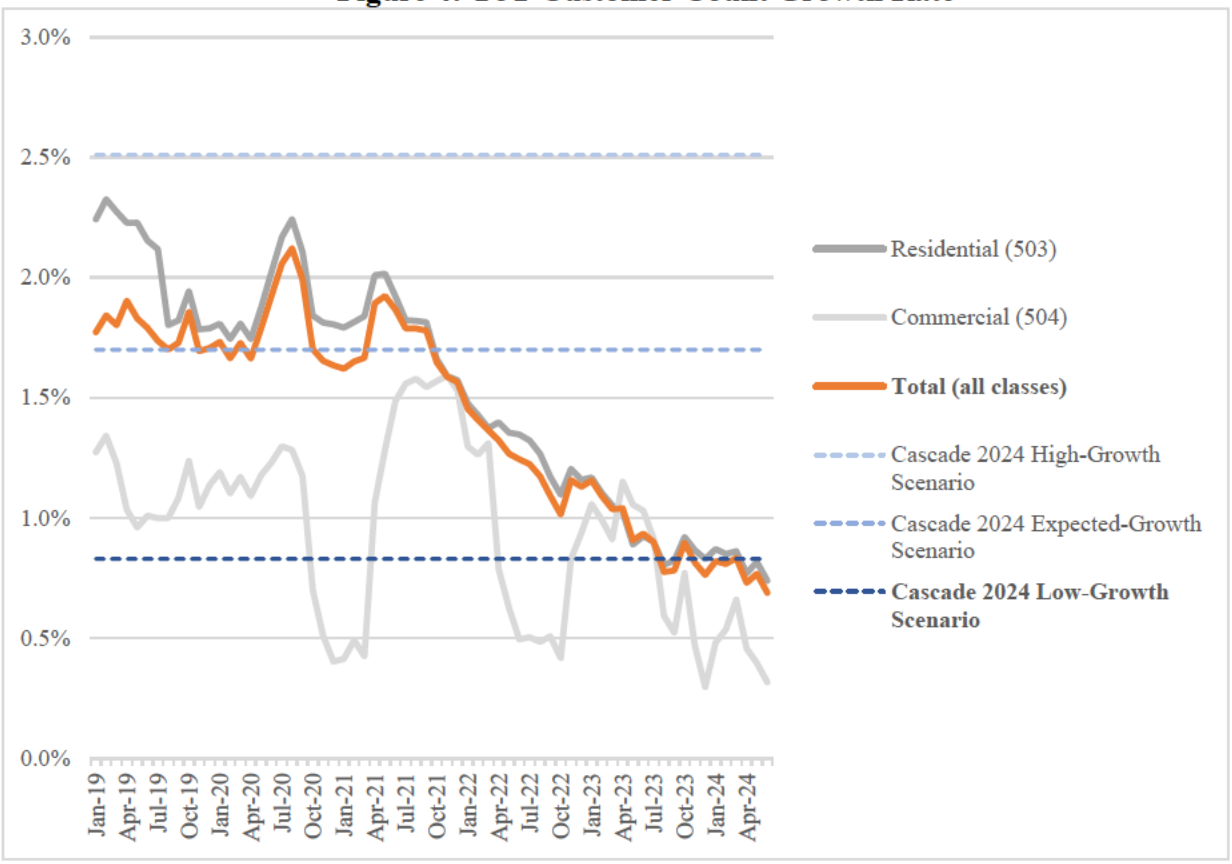
Figure 4 below provides a detailed examination of growth rates on a monthly basis, given as the year-over-year percent growth in customer counts for every month from January 2019 to June 2024. From this graph, it is clear to see that total customer growth rates have decreased steadily since a peak in 2020. The graph also includes

[68] De Villiers, Exh. SDV-14 (Cascade Growth and Gas Use Per Customer).

growth rates for residential and general commercial customers specifically. While the latter fluctuates more, a clear downward trend is still evident for both classes.

In its 2023 Integrated Resource Plan (IRP), Cascade forecasted customer growth from 2023–2050 under high-growth, expected-growth, and low-growth scenarios. Each of those scenarios produced a different customer count growth rate for 2024. Those growth rates are also included in Figure 4 and show that Cascade dramatically over-forecasted customer count growth in its planning process. Most strikingly, every month of 2024 so far has seen customer count growth rates at or below Cascade's forecast under its low-growth scenario.

Figure 4: YoY Customer Count Growth Rate[69]

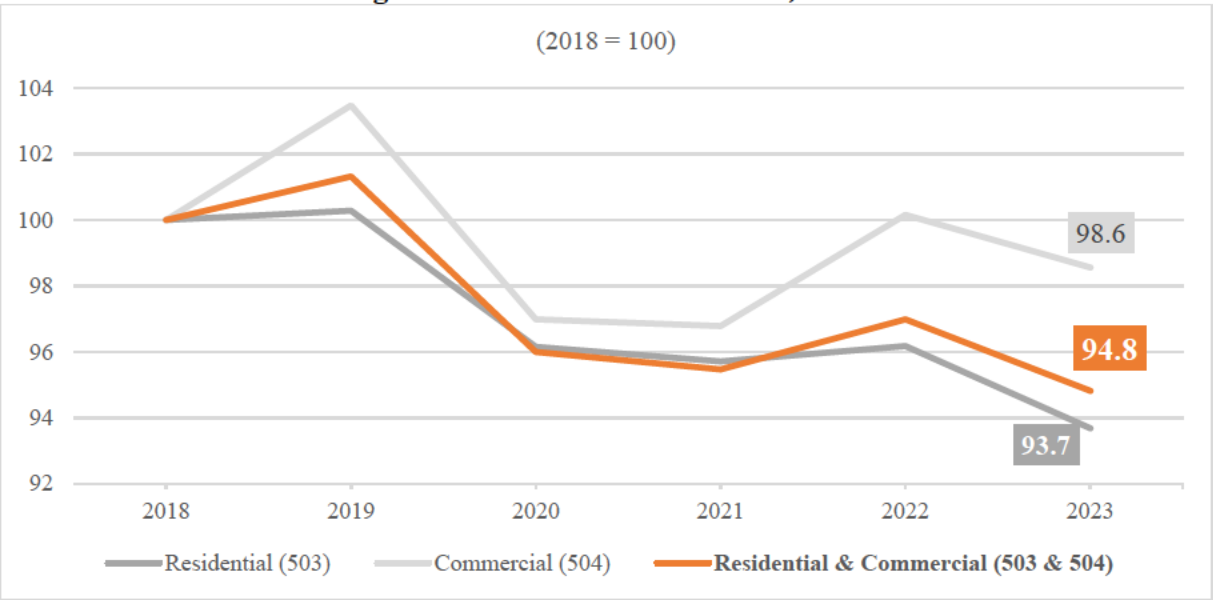


[69] De Villiers, Exh. SDV-14 (Cascade Growth and Gas Use Per Customer).

Q. Please describe how Cascade's gas use per customer is trending downward.

A. While not as dramatic as the decrease in Cascade's customer count growth, Cascade's gas use per customer has also decreased in recent years. Figure 5 shows gas use per customer for Cascade's residential and general commercial customers, normalized with a base year of 2018. As seen in Figure 5, Cascade's gas use per customer has dropped by five percent since 2018 for residential and general commercial customers combined. Climate policies like the 2021 WSEC, implemented in March 2024, may dramatically accelerate that decrease going forward.

Figure 5: Gas Use Per Customer, 2018-2023[70]



Q. Does the argument for eliminating line extension allowances rely on any one Washington climate policy?

A. No, it does not. Even in the absence of policies like the 2021 WSEC, Washington remains committed to its statutory clean energy goals. As noted previously,

[70] De Villiers, Exh. SDV-14 (Cascade Growth and Gas Use Per Customer).

subsidizing the expansion of the natural gas system through line extension allowances is directly contrary to those goals.

By eliminating Cascade's line extension allowances, the Commission takes steps toward mitigating the high gas rates that will result from a decrease in gas demand likely to result from any climate policy aimed at reducing emissions and making progress toward Washington's clean energy goals.

E. Equity Considerations

Q. Why do you say that line extension allowances disproportionately adversely affect low-income customers?

A. Line extension allowances add fixed costs to Cascade's system as gas demand slows, likely resulting in dramatic future gas rate increases.[71] Low-income customers may be less likely to transition their homes to electricity, either because of the upfront costs of doing so or because they are more likely to be renters and thus less likely to have control over their home's utilities. As such, low-income customers are especially vulnerable to increasing gas rates.

The Commission's Decarbonization Study echoes this, stating that gas rate increases "would most significantly impact low-to-moderate income customers who might remain gas customers for longer if they lack resources to retrofit and electrify their homes."[72]

[71] Decarbonization Study, at 88.
[72] *Id.*

Q. Why do you say that line extension allowances disproportionately fail to benefit low-income customers?

A. As stated previously, the direct benefits of line extension allowances go to gas service applicants, who are often real estate developers. Indirect cost-saving benefits may be passed through to new gas customers in the form of lower property prices. However, because low-income customers are more likely to be renters than homeowners, relative to other customer classes, they are even less likely to receive the indirect benefits of line extension allowances, which must be passed through real estate developers as well as landlords.

F. Industrial, Large Volume, Transportation, and Interruptible Customers

B. Why do you say that line extension allowances are also not justified for customers beyond residential and general commercial customer classes?

A. While some of the arguments for eliminating line extension allowances are most applicable for residential and general commercial customers, most of them apply for other customer classes as well. Line extension allowances subsidizing the expansion of the natural gas system for the benefit of any customer are inconsistent with Washington's clean energy goals, and the adverse health and environmental effects of natural gas are universal. In the case of alternative fuel projects, such as the line extension to the $100 million Divert RNG facility previously mentioned, it is unclear that the subsidies from line extension allowances are necessary for companies to establish service connections. For projects of similar magnitude, Cascade must at least be able to show that line extension allowances are a significant factor in customers' decision to establish a service connection. They have never conducted studies or

analyses to show this.[73] Line extension allowances should thus be eliminated for all customer classes.

Q. In summary, what is your recommendation on line extension allowances?

A. For all the reasons given above, the Commission should order Cascade to eliminate its line extension allowances going forward. Additionally, due to the "urgent issue"[74] of climate change and its implications for gas demand and rates, the Commission should disallow all of Cascade's 2025 plant additions covered by line extension allowances. This will represent an added step toward mitigating the "dramatic rate increases"[75] that the Commission has identified are likely in the future as gas demand shrinks.

Cascade currently anticipates $11.1 million in main and service line extension investments covered by line extension allowances in 2025. As I have shown, this does not represent the full cost of line extension allowances for 2025. The Commission should order Cascade to audit all its capital investments covered by line extension allowances and remove those costs related to 2025 plant additions from its rate base.

Q. Why do you recommend disallowing 2025 line extension allowance costs specifically?

A. As noted, the urgency of the issue at hand means the Commission should take immediate action toward mitigating future rate increases. Disallowing 2025 costs represents a compromise position, allowing Cascade to still recover costs for plant additions in 2023 and 2024 covered by line extension allowances. Cascade should have taken note of settlements in PSE and Avista's 2022 GRCs eliminating line

[73] De Villiers, Exh. SDV-12 (Cascade's Response to Public Counsel Data Request No. 15).
[74] *2022 PSE GRC*, Final Order 24 ¶ 289.
[75] Decarbonization Study, at 88–89.

extension allowances, and the Company should be familiar with the Commission's own language describing previous reductions to line extension allowances as an "interim measure".[76] As such, Cascade should be prepared for the Commission-ordered elimination of their line extension allowances, and it is reasonable to disallow 2025 rate base expenses related to those allowances, which at this point have not yet been incurred.

In other states where line extension allowances have been eliminated, there have not been noticeable adverse effects from eliminating line extension allowances on a short timeframe. In Colorado, line extension allowances were eliminated by legislation passed in May 2023 and effective by the end of 2023. In California, line extension allowances were eliminated by CPUC action announced in September 2022 and effective July 2023, the minimum turnaround timeline allowed for CPUC investigation decisions under California Public Utility Code.[77] In meetings with Public Counsel, neither the Colorado Utility Consumer Advocate Office nor CPUC Energy Division Staff identified concerns that arose from these implementation timelines.

III. THE COMMISSION SHOULD EXPLORE ADDITIONAL STEPS TOWARD ALIGNING CASCADE WITH WASHINGTON CLEAN ENERGY GOALS.

Q. Does eliminating line extension allowances bring Cascade fully in line with Washington state energy goals?

A. No. While eliminating line extension allowances will have an impact on Cascade's gas system expansion, it does not halt that expansion. As the Commission's Decarbonization Study identified, in order to decrease the likelihood of dramatic

[76] *2024 PSE GRC*, Final Order 24 ¶ 289.
[77] Cal. Pub. Util. Code § 783(d) (2023).

future gas rate increases, "policy solutions are necessary to minimize and avoid stranded assets, including strategies such as preventing expansion."[78] Additional measures are necessary to ensure that Cascade's operations are aligned with Washington's clean energy goals.

Q. What additional steps could be taken to align Cascade with Washington's clean energy goals?

A. To prevent Cascade's gas system expansion and mitigate high gas rates in the future, the Commission could limit the return on equity (ROE) that Cascade receives for all capital investments related to new business and capacity expansion. A similar regulatory paradigm was recently proposed in a gas rate case before the Colorado Public Utilities Commission (Colorado PUC) by the Colorado PUC's Trial Staff (Colorado Staff). I explain this proposal in detail below and propose initial steps that the Commission can take to explore such a regulatory paradigm.

Q. Please describe the regulatory paradigm proposed by Colorado Staff.

A. Exhibit SDV-15 contains the testimony of Colorado Staff Witness Erin T. O'Neill in Colorado PUC Proceeding No. 24AL-0049G, an ongoing gas general rate case for the Public Service Company of Colorado (PSCo). In her testimony, Ms. O'Neill states:

> The Commission should order a lower ROE be applied to investments in new growth and capacity expansion projects in the gas utility business. These investments are counter to the state's policy objectives, and it is no longer just and reasonable for such investments to earn the same return as investments in safety or mandatory relocations.[79]

[78] Decarbonization Study, at 41.
[79] De Villiers, Exh. SDV-15, at 5:13–17.

Ms. O'Neill states that the reasonable range of ROE for growth investments ranges from the cost of debt (2.44 percent in this case) to the lower bound of the reasonable ROE range suggested by Colorado Staff's cost of capital analysis in the rate case (7.71 percent).[80] Ms. O'Neill ultimately recommends that the minimum reasonable ROE of 7.71 percent be applied to growth investments in this case and a higher ROE of 9.00 percent be applied to safety and other non-growth investments.[81]

Q. How does Colorado Staff define growth investments?

A. Colorado Staff's definitions are derived from Colorado PUC rules. In 2022, the Colorado PUC adopted rules for Gas Infrastructure Plans (GIPs), which require gas utilities to provide information and data on the kinds of gas system investments they seek to make in advance of making those investments.[82] As part of the GIP rules, the Colorado PUC outlined the following five categories of gas investment projects:

- System safety and integrity projects;
- New business projects;
- Capacity expansion projects;
- Mandatory relocation projects; and
- Defined programmatic expenses.[83]

Under these rules, new business projects include investment projects needed to provide new gas service. Capacity expansion projects include those needed to maintain system reliability and meet a specified capacity expansion need, including for

[80] *Id.* at 14:13–15:2.
[81] *Id.* at 18:3–10.
[82] Colo Dept. of Reg. Agency Pub. Utils. Comm'n, *Comm'n Decision Adopting Rules, Attachment B to C22-0760, Attachment A to C22-0760*, Docket 21R-0449G (Dec. 1, 2022).
[83] 4 Colo. Code Regs. § 723-4-4553(a)(III).

reliability and growth related to existing customers, and for new customers or facilities not otherwise categorized as new business.[84] Ms. O'Neill considers growth investments to be all those that are categorized as either new business projects or capacity expansion projects.

In PSCo's GRC, the Company categorized its new capital additions into the five categories detailed above. Most of its capital additions were system safety and integrity projects (56.6 percent), new business projects (23.8 percent), or capacity expansion projects (12.7 percent).[85] Accordingly, Ms. O'Neill determined that approximately 36 percent of PSCo's new capital additions were growth investments.

Q. Why does Colorado Staff recommend a reduced ROE be applied to growth investments?

A. Ms. O'Neill argues that assets funded by growth investments are "at serious risk of becoming stranded in the future as [Colorado] pursues its goal of achieving 100 percent net-zero greenhouse gas emissions by 2050."[86] Ms. O'Neill also references Colorado's goal of reducing greenhouse gas emissions from the utility business by 22 percent by 2030 and states that "it is hard to understand how that goal will be met without downward pressure on new growth."[87]

Ms. O'Neill argues that reducing the ROE on growth investments "creates a financial incentive for the Company to manage investments in new growth and focus on the higher return investments such as safety and mandatory relocations."[88]

[84] 4 Colo. Code Regs. § 723-4-4553(c).
[85] De Villiers, Exh. SDV-15, at 11 (Table ETO-1).
[86] *Id.* at 17:7–9.
[87] *Id.* at 22:18–23:2.
[88] *Id.* at 19:5–7.

Q. How does this reasoning relate to Washington?

A. Just like Colorado, Washington has clean energy goals that put new gas infrastructure at serious risk of becoming stranded in the future. As the Commission's Decarbonization Study acknowledged, the premise for Washington climate policies like the 2021 WSEC is that "avoiding gas system expansion will reduce current development and future maintenance costs, and the number of potentially stranded assets."[89] The Commission went on to recommend pursuing policy solutions that avoid stranded assets, such as preventing expansion of the gas system.[90] When gas utilities are allowed to earn an equal ROE on growth investments as safety and other investments, there exists no financial incentive for the utilities to manage their growth investments, and they are likely to continue expanding the gas system. Under the regulatory paradigm proposed by Colorado Staff, a gas utility like Cascade would be incentivized to focus a greater share of its investment on safety and related projects, where it would earn a higher return, rather than on expansion projects.

Q. Does Ms. O'Neill propose that a reduced ROE be applied to all growth investments in a gas utility's rate base?

A. No. In this case, Ms. O'Neill's proposed reduced ROE only applies to growth investments made since PSCo's last rate case. If this paradigm were applied in Washington, a reduced ROE could be applied to all provisional capital investment categorized as growth investment.

[89] Decarbonization Study, at 90.
[90] *Id.* at 141.

Q. Why does Colorado Staff recommend the cost of debt as a lower bound for the reasonable range of ROE on growth investments?

A. Ms. O'Neill notes that "securitization, which generally results in a carrying charge similar to the cost of debt, is often discussed as a reasonable financial treatment for assets stranded as a result of decarbonization."[91] As such, the level of returns from securitization serve as a useful benchmark and it is reasonable to use the cost of debt as a lower bound for ROE on growth investments.

As of 2023, at least 10 states have passed legislation enabling securitization for early coal plant closures and 13 additional states have passed legislation enabling securitization broadly for stranded assets.[92] Washington has not passed similar securitization legislation, but this remains a useful example to show that applying returns approximating the cost of debt to stranded assets has broad national precedent.

Q. Why does Colorado Staff recommend the lower bound of its ROE analysis as an upper bound for the reasonable range of ROE on growth investments?

A. In this case, Colorado Staff's analysis suggests that 7.71 percent represents the lower bound of a reasonable ROE range based on PSCo's debt and equity capital structure. Given that gas growth investments are no longer consistent with Colorado's policy objectives, Ms. O'Neill states that "if the Commission determines that such investments should still earn a return based on the Company's debt and equity capital

[91] De Villiers, Exh. SDV-15 at 17:9–11.
[92] Kathryn Kline, *Mitigating Stranded Asset Risks to Utility Customers: an Exploration of Securitization and Retiring Coal Generation,* Nat'l Assoc. of Reg. Util. Comm'nrs at 5 (Feb. 2024) https://pubs.naruc.org/pub/D41DAF2A-9425-50CD-C1E2-70B694AAC1A4.

structure, the lowest ROE supported by financial modeling should be applied to these assets."[93]

Q. Why does Colorado Staff ultimately recommend adopting the upper bound of the reasonable range of ROE on growth investments in this case?

A. Given that the proposed regulatory paradigm is new, Ms. O'Neill recommends a policy of gradualism, proposing that the Colorado PUC order an ROE of 7.71 percent for PSCo's new growth investments and maintain that ROE for the life of those assets.[94] She recommends that the Colorado PUC continue evaluating the appropriate level of ROE for future growth investments to determine if further reductions are necessary.

Q. What is the impact of Colorado Staff's proposal?

A. Without a reduced ROE on growth investments, Colorado Staff's proposed weighted average cost of capital (WACC) is 5.88 percent, resulting in a revenue requirement for PSCo of $857 million.[95] When factoring in an ROE of 7.71 percent for all new growth investments, Colorado Staff's proposed WACC becomes 5.82 percent, resulting in a revenue requirement of $854 million. In other words, Colorado Staff's proposed regulatory paradigm only changes PSCo's revenue requirement by $3 million, while still restructuring the Company's incentives and creating a premium for investments into safety.

[93] De Villiers, Exh. SDV-15, at 16:7–10.
[94] *Id.* at 18:3–10.
[95] *Id.* at 16 (Table ETO-3).

Q. In Cascade's case, what would be the proposed reasonable range of ROE on growth investments under the regulatory paradigm described?

A. The testimony of my colleague Mike Gorman addresses Cascade's overall rate of return, including ROE and cost of debt. On cost of debt, Mr. Gorman accepts Cascade's proposed embedded cost of long-term debt, at 4.92 percent. Under the regulatory paradigm discussed, this would form the lower bound of the reasonable range of ROE on growth investments. On ROE, Mr. Gorman recommends an ROE range from 8.9 percent to 9.9 percent, with a midpoint of 9.4 percent. Under the described paradigm, 8.9 percent would be the upper bound of the reasonable range of ROE on growth investments. Mr. Gorman's proposed ROE of 9.4 percent would be applied to safety and other investments.

Q. Do you recommend the Commission adopt this paradigm in Cascade's GRC?

A. Not yet. I believe this regulatory paradigm, if applied in Washington, would structure gas utilities' financial incentives to be more consistent with state policy. It would also represent a policy solution aimed at minimizing expansion of the gas system, as recommended by the Commission's Decarbonization Study.[96] While I do not yet recommend the Commission adopt this paradigm in Cascade's current GRC, I recommend the Commission take steps exploring this policy approach.

Q. How do you recommend the Commission explore this regulatory paradigm?

A. I recommend the Commission order Cascade to begin tracking the share of its investment which can be considered growth investment. I adopt Colorado Staff's definition of growth investment, constituting all new business or capacity expansion

[96] Decarbonization Study, at 141.

investment. New business investment includes all investment necessary to establish gas service to new customers or to establish new gas service to existing customers. Capacity expansion investment includes all investment necessary to maintain system reliability and meet a specific capacity expansion need, including for all new customers not otherwise considered new business projects, or for reliability and growth related to existing customers. The Commission should order Cascade to provide this data in its next general rate case for all provisional capital investment, allowing the Commission to see the scope of proposed new growth investment and make an informed decision about the need to adopt a regulatory paradigm which limits the return on such investment.

Q. What is the impact of your recommendation?

A. If the Commission agrees and orders Cascade to begin tracking its growth investment, the administrative burden on the Company will be negligible, while the new data available to the Commission will be highly valuable and allow the Commission to make an informed decision on whether to pursue the regulatory paradigm described above. Importantly, by ordering Cascade to track new growth investment, the Commission does not commit itself to pursuing this new regulatory paradigm. Instead, it only ensures for itself more data with which to make an informed decision in Cascade's next GRC.

IV. CONCLUSION

Q. Please summarize your recommendations in this general rate case.

A. I recommend the following:

- The Commission should order Cascade to eliminate all line extension allowances going forward.
- The Commission should order Cascade to audit all its capital investments covered by line extension allowances and remove those costs related to 2025 plant additions from its rate base.
- The Commission should order Cascade to begin tracking the share of its capital investments that are growth investments and provide this data in its next general rate case.

Together, these recommendations represent ways for the Commission to take steps toward aligning Cascade's operations with Washington's clean energy policy objectives. They advance solutions that the Commission has previously expressed interest in, either through action reducing and eliminating line extension allowances, or in language emphasizing the importance of minimizing and avoiding stranded assets during the clean energy transition. Accordingly, the Commission should adopt these recommendations.

Q. Does this conclude your testimony?

A. Yes, it does.