BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

DIRECT TESTIMONY OF CYNTHIA A. MENHORN

EXHIBIT 800

November 2025

TABLE OF CONTENTS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Cynthia A. Menhorn and my business address is 520 Lake Cook Road, Suite 275, Deerfield, IL 60015.

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

A. I am employed by MCR Performance Solutions ("MCR") as the Vice President of the Regulatory Services practice.

Q. Please describe your educational and professional experience.

A. I received a Master of Business Administration (magna cum laude) with a concentration in Investments from Indiana University of Pennsylvania and a Bachelor of Business Administration (magna cum laude) with a concentration in Finance from Seton Hill University. I have been employed by MCR since June 2008. Prior to joining MCR, I held various positions at Allegheny Energy, a Mid-Atlantic utility with operations in five states, including Director of Regulation and Rates, Director of State Regulatory Affairs, Director of Energy Efficiency and Conservation, and General Manager, Pricing Services. My responsibilities in these various positions included managing all aspects of rate case development, including revenue requirement development, cost of service studies, load research, revenue allocation, revenue forecasting, innovative rate design, rate case strategy, testimony development, and interrogatory response development. Currently, my responsibilities include the overseeing and management of MCR's Regulatory Services practice, managing regulatory projects such as pricing strategies, development and implementation of formula rates, cost of service and rate design for distribution rate cases, and other projects. I am responsible for the development of expert testimony within these projects and have testified before a number of state commissions and the Federal Energy Regulatory Commission

("FERC"). Please see Exhibit CNGC/801, Witness Qualifications, for a complete resume.

II. SCOPE AND SUMMARY OF TESTIMONY

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of Cascade Natural Gas Corporation ("Cascade" or "Company").

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to detail the Company's proposed rate design based on the results of the Cost-of-Service Study ("COSS") presented in the Direct Testimony of Matthew Larkin[1] and the policy considerations presented in the Direct Testimony of Zachary L. Harris.[2]

Q. Please summarize your testimony.

A. My testimony begins with a general description of sound rate design principles and key considerations in developing rates for utilities such as Cascade. I then summarize the Company's existing rate schedules and detail the method by which the incremental revenue requirement was assigned to these schedules. Next, my testimony discusses the two primary rate design modifications Cascade is proposing in this case, including an increase to the Basic Service Charge for all rate schedules and the creation of new rate schedules related to emissions-intensive, trade-exposed ("EITE") customers and firm transport service. My testimony concludes with a summary of the Company's rate design proposal in this case.

Q. Have you prepared any exhibits to accompany your testimony?

A. Yes, I am sponsoring the following exhibits to accompany my direct testimony:

- Exhibit CNGC/801 – Witness Qualifications

[1] CNGC/700, Larkin.
[2] CNGC/1100, Harris.

- Exhibit CNGC/802 – Summary of Existing and Proposed Gas Rates and Revenues
- Exhibit CNGC/803 – Sample Bills on Present and Proposed Gas Rates

Q. Were these exhibits prepared by you or under your direction?

A. Yes, they were. Also, the source documents used in my testimony are the Company's documents, financial records, testimony, and exhibits of other Company witnesses.

III. CASCADE RATE DESIGN

Q. What do utilities wish to accomplish with rate design?

A. Rate design objectives vary by company. However, generally speaking, they all attempt to follow James Bonbright's fundamental attributes of a sound rate structure. That is, utilities design rates to recover costs incurred to provide services to customers. Customers are typically segmented into different rate classes or rate schedules based on similar usage characteristics. Rates for each rate class or rate schedule should reflect the costs to serve that class of customers. Rate structures should also produce stable revenue for the utility. In addition, rate structures should be simple and easy to understand. For example, historically, most rates consisted of a customer charge and inclining (the rate is higher in higher usage blocks) or declining (the rate is lower in higher usage blocks) block rates. In the case of larger customer classes, a demand charge can be added.

Q. Are there any other factors specific to Oregon that can be considered in rate design?

A. In 2021, House Bill 2475 provided the Public Utility Commission of Oregon ("Commission") with new authority to consider additional factors in ratemaking, including "differential energy burdens on low-income customers and other economic, social equity or environmental justice factors that affect affordability for certain classes of utility customers[.]" Cascade's Energy Discount Program ("EDP") and arrearage relief grant program (Oregon Low-Income Bill Assistance or "OLIBA") were developed and offered to provide rate mitigation for low-income and energy burdened customers and provide relief for customers experiencing financial crisis. These programs are discussed in detail in the Direct Testimony of Dan L. Tillis.[3]

Additionally, as discussed further in the Direct Testimony of Zachary L. Harris,[4] there are ongoing differential rates workstreams at the Commission in docket UM 2211, and until there is greater clarity regarding the differential ratemaking approach, Cascade is not proposing any new rate design approaches in this case, and instead is proposing to continue offering its EDP and OLIBA, which will provide meaningful financial assistance for customers in need.

Q. What do you regard as important factors to be considered in designing rate schedules for a utility such as Cascade?

A. A reasonable and practical tariff should, first and foremost, produce adequate revenue to meet the requirements of the utility. In addition, I believe the following factors are important considerations in rate design: 1) rates should reflect the conditions of service requirement by the customers, the facilities requirements to provide the service, and the effect on the system load patterns; 2) each rate should have a reasonable relationship to the other rates in the tariff such that, where practical, a customer will have a reasonable price schedule even if the customer's load conditions change and necessitate a switch from one rate schedule to another; and 3) rates should be designed to encourage the economical use of facilities installed by the utility.

Q. Please describe the Company's existing rate schedules.

A. The Company's residential, commercial, industrial, large volume, and interruptible service all have the same rate structure. These rate schedules have a Basic Service

---

[3] CNGC/300, Tillis.
[4] CNGC/1100, Harris.

Charge per bill and a Delivery Charge on a per therm basis. The Company's general distribution interruptible schedule has a Basic Service Charge per bill and a declining block Delivery Charge at the following steps: first 10,000 therms; next 10,000 therms; next 30,000 therms; next 50,000 therms; next 400,000 therms; next 500,000 therms; and over 1,000,000 therms.

These rate schedules are also subject to a purchased gas adjustment on a per therm basis, as well as additional rates for public purpose charges, Climate Protection Program, and others. None of these additional rates are being updated in this case, with the exception of the Environmental Remediation Cost Adjustment discussed in the Direct Testimony of Zachary L. Harris.[5]

Q. Is the Company proposing any changes to the existing rate schedules?

A. Yes. The Company proposes to separate the existing Schedule 163 into two schedules, one for EITE customers (Schedule 164) and one for non-EITE customers (Schedule 163). As discussed in detail in the Direct Testimony of Matthew Larkin,[6] the Company proposes to recover the identified renewable natural gas ("RNG") costs purely from non-EITE customers. The new Schedule 164 will have the same rate structure as Schedule 163 but will not receive an allocation of these RNG-related costs.

Additionally, as discussed in the Direct Testimony of Zachary L. Harris,[7] the Company is proposing two additional rate schedules—Schedules 161 and 162—offering a firm transport option in addition to the current interruptible transport option provided under the existing Schedule 163. Schedule 161 provides for firm transport

---

[5] CNGC/1100, Harris.
[6] CNGC/700, Larkin,
[7] CNGC/1100, Harris.

service to non-EITE customers, while Schedule 162 provides for firm transport service to EITE customers.

Q. How were rates developed for Schedules 161 and 162?

A. The Delivery Charges and Basic Service Charges for Schedules 161 and 162 were set equal to Delivery Charges for Schedules 163 and 164, respectively. To reflect the firm nature of this service, Schedules 161 and 162 also contain a cost-based Daily Contract Demand Charge of $0.12 per therm. The derivation of this charge is discussed in the Direct Testimony of Matthew Larkin.[8]

Q. Are the Company's rate schedules currently producing revenues based on the cost-of-service?

A. No. The Company uses the revenue-to-cost ("RtC") ratio to determine each class's existing revenues as a percentage of cost-of-service. This ratio can be found in the COSS presented in the Direct Testimony of Matthew Larkin (Exhibit CNGC/700). None of the Company's rate schedules currently reflect cost-of-service. Please see Table 1 below for the details.

Table 1 – RtC Ratio by Rate Schedule for Existing Rates

Rate Schedule	RtC Ratio
101	0.71
104	0.81
105	0.63
111	0.58
163/164	0.69
170	0.42
Total	**0.73**

[8] CNGC/700, Larkin.

Q. Please describe the steps taken to allocate the proposed revenue increase to the Company's rate schedules.

A. The requested total revenue increase was initially allocated to the rate schedules based upon the results of the COSS presented in the Direct Testimony of Matthew Larkin.[9] These results were then mitigated based upon the principle of gradualism.

Q. Please describe the steps taken to perform the rate design to ensure recovery of the proposed revenue.

A. Once these class allocations were determined, they were then allocated between the customer and usage rates within those individual rate schedules. The revenue increase by rate schedule was then added to the revenues at existing rates by rate schedule to arrive at a proposed revenue distribution. The proposed revenues were then divided by the billing determinants to create proposed rates for each rate schedule. Table 2 below shows the revenue increase for each class compared to their existing revenue, and Table 3 shows how that revenue allocation affected the RtC ratio for each class.

Table 2 – Proposed Changes to Margin Revenue by Class

Rate Schedules	Existing Revenue	Proposed Increase	Proposed Revenue	% Change
101	27,556,082	10,325,264	37,881,346	37.47%
104	10,829,051	4,331,620	15,160,671	40.00%
105	847,462	304,753	1,152,215	35.96%
111	470,192	230,403	700,594	49.00%
163/164	3,113,594	790,189	3,903,783	25.38%
170	336,496	185,679	522,175	55.18%
Total	**43,152,876**	**16,167,908**	**59,320,784**	**37.47%**

[9] CNGC/700, Larkin.

Table 3 – Proposed Revenue to Cost ("RtC") Ratio

Rate Schedules	Existing Rates RtC Ratio	Proposed Rates RtC Ratio
101	0.71	0.98
104	0.81	1.14
105	0.63	0.86
111	0.58	0.86
163/164	0.69	0.86
170	0.42	0.65
Total	**0.73**	**1.00**

Q. Is the Company proposing to modify the Basic Service Charge for each rate class?

A. Yes. As discussed in the Direct Testimony of Zachary L. Harris, Cascade is proposing to increase the Basic Service Charge for each rate class to an amount that is closer to cost-of-service.[10]

Q. Please generally describe the proposed modifications to the Basic Service Charge for each rate class.

A. The results of the COSS presented in the Direct Testimony of Matthew Larkin demonstrate that the Basic Service Charges for each rate schedule are not recovering the full fixed costs assigned to each schedule.[11] In order to take a step towards recovering more of those fixed costs through a fixed charge, the Company is proposing to increase the Basic Service Charges for all schedules except Schedule 163 by 100 percent. Schedule 163 (as well as new Schedules 161, 162, and 164) will have their Basic Service Charge set to $900 or a 44 percent increase. Table 4 below provides the current and proposed Basic Service Charge, as well as the charge that is supported by the COSS, for each customer class.

[10] CNGC/1100, Harris.
[11] CNGC/700, Larkin.

Table 4 – Basic Service Charge Comparison

Rate Class	Current Basic Service Charge	Proposed Basic Service Charge	COSS-Supported Basic Service Charge
101	$6.00	$12.00	$22.13
104	$12.00	$24.00	$28.44
105	$35.00	$70.00	$77.80
111	$144.00	$288.00	$421.85
163	$625.00	$900.00	$734.08
164	$625.00	$900.00	$734.08
170	$300.00	$600.00	$1,220.32

Q. Please describe the steps taken to perform the rate design for Rate Schedule 101.

A. Schedule 101 is the general residential service rate schedule. It has a Basic Service Charge per month and a Delivery Charge per therm. The Company proposes to increase the Basic Service Charge for this schedule from $6.00 to $12.00 per bill. The rest of the revenue increase was assigned to the Delivery Charge, increasing it from $0.39467 to $0.47916 per therm.

Q. Please describe the steps taken to perform the rate design for Rate Schedule 104.

A. Schedule 104 is the general commercial service rate schedule. It has a Basic Service Charge per month and a Delivery Charge per therm. The Company proposes to increase the Basic Service Charge for this schedule from $12.00 to $24.00 per bill. The rest of the revenue increase was assigned to the Delivery Charge, increasing it from $0.27282 to $0.35485 per therm.

Q. Please describe the steps taken to perform the rate design for Rate Schedule 105.

A. Schedule 105 is the general industrial service rate schedule. It has a Basic Service Charge per month and a Delivery Charge per therm. The Company proposes to increase the Basic Service Charge for this schedule from $35.00 to $70.00 per bill.

The rest of the revenue increase was assigned to the Delivery Charge, increasing it from $0.24226 to $0.31602 per therm.

Q. Please describe the steps taken to perform the rate design for Rate Schedule 111.

A. Schedule 111 is the large volume general service rate schedule. It has a Basic Service Charge per month and a Delivery Charge per therm. The Company proposes to increase the Basic Service Charge for this schedule from $144.00 to $288.00 per bill. The rest of the revenue increase was assigned to the Delivery Charge, increasing it from $0.16113 to $0.23492 per therm.

Q. Please describe the steps taken to perform the rate design for Rate Schedule 163.

A. Schedule 163 is the general distribution system interruptible transportation service rate schedule for non-EITE customers. It has a Basic Service Charge per month and a declining block Delivery Charge. The Company proposes to increase the Basic Service Charge for this schedule from $625.00 to $900.00 per bill. The rest of the revenue increase was assigned to the Delivery Charge. Each block received the same percentage increase in rate of 22.88 percent prior to the assignment of RNG-related costs. Revenue requirement specific to RNG was then applied on a uniform cents-per-therm basis to each block. For the first 10,000 therms, the Delivery Charge increased from $0.12833 to $0.15993 per therm. For the next 10,000 therms, the Delivery Charge increased from $0.11577 to $0.14450 per therm. For the next 30,000 therms, the Delivery Charge increased from $0.10877 to $0.13590 per therm. For the next 50,000 therms, the Delivery Charge increased from $0.06680 to $0.08433 per therm. For the next 400,000 therms, the Delivery Charge increased from $0.03389 to $0.04389 per therm. For the next 500,000 therms, the Delivery Charge increased from

$0.01816 to $0.02456 per therm. For over 1,000,000 therms, the Delivery Charge increased from $0.00189 to $0.00457 per therm.

Q. Please describe the steps taken to perform the rate design for Rate Schedule 164.

A. Schedule 164 is the general distribution system interruptible transportation service rate schedule for EITE customers. It has a basic service charge per month and a declining block distribution charge. The Company proposes to set the Basic Service Charge for this schedule at $900.00 per bill. The rest of the revenue allocated to this schedule was assigned to the Delivery Charge. Each block received the same percentage increase in rate from the rates these customers currently are charged on Schedule 163. For the first 10,000 therms, the Delivery Charge increased from $0.12833 to $0.15769 per therm. For the next 10,000 therms, the Delivery Charge increased from $0.11577 to $0.14225 per therm. For the next 30,000 therms, the Delivery Charge increased from $0.10877 to $0.13366 per therm. For the next 50,000 therms, the Delivery Charge increased from $0.06680 to $0.08209 per therm. For the next 400,000 therms, the Delivery Charge increased from $0.03389 to $0.04164 per therm. For the next 500,000 therms, the Delivery Charge increased from $0.01816 to $0.02231 per therm. For over 1,000,000 therms, the Delivery Charge increased from $0.00189 to $0.00232 per therm.

Q. Please describe the steps taken to perform the rate design for Rate Schedule 170.

A. Schedule 170 is the interruptible service rate schedule. It has a Basic Service Charge per month and a Delivery Charge per therm. The Company proposes to increase the Basic Service Charge for this schedule from $300.00 to $600.00 per bill. The rest of the revenue increase was assigned to the Delivery Charge, increasing it from $0.12376 to $0.18957 per therm.

IV. CONCLUSION

Q. Please summarize the proposed changes to rate design presented in your testimony.

A. The Company is proposing to largely maintain the rate design structure that currently exists, while taking a meaningful step toward cost-of-service by increasing the Basic Service Charge for all customer classes. Additionally, the Company is proposing to separate the existing Schedule 163 into two schedules to more appropriately assign the recovery of renewable natural gas-related costs between EITE and non-EITE customers. Additionally, the Company is proposing to offer firm transport service for non-EITE and EITE customers through new Schedules 161 and 162, respectively.

Q. Does the proposed rate design provide adequate recovery of Cascade's overall costs of providing service while balancing the rate design goals presented in your testimony?

A. Yes. The proposed rate design presented here provides a move to the overall Company's return and is based on sound cost causation and gradualism rate design principles.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

WITNESS QUALIFICATIONS OF CYNTHIA A. MENHORN

EXHIBIT 801

November 2025

Cynthia A. Menhorn

Career Overview

Cindy brings over 40 years of rates and regulatory experience, including work on over 100 rate cases and testimony before numerous state commissions, including Maryland, Pennsylvania, Virginia, West Virginia, Ohio, Tennessee, Louisiana, Illinois, Montana, New Jersey, Oregon, North and South Carolina, New Mexico and FERC. Prior to joining MCR, Cindy held various positions at Allegheny Energy, where she gained deep experience with regulatory commissions in numerous states and extensive knowledge of the rate case process, including widespread interaction with stakeholders.

Career History

MCR Performance Solutions, LLC

MCR provides consulting services to the utility industry, namely natural gas, electric and water utilities. The firm has extensive experience working with investor owned utilities, G&T cooperatives and public power agencies. MCR combines its industry knowledge with its unique elements of economic analysis, regulatory process, strategic insight, organizational change and information management. Since 1999, MCR has assisted clients in navigating the challenges of a complex energy environment and working with them to create a new future.

Vice President

Lead the Regulatory Services Practice at MCR. Responsible for continued growth of practice through acquisition of new clients and projects, leading to sustainable revenue growth. Also charged with facilitating a practice expansion to encompass cross practice engagements. Responsible for all aspects of project management for regulatory engagements, which includes analyzing rate and regulatory issues, reviewing and determining processes necessary to conform to new regulations, participating in statewide regulatory meetings, facilitating weekly update meetings for utility staff and contractors, preparing RFPs for clients to hire contractors, reviewing RFP responses and participating in contractor selection process, defining statements of work for newly hired contractors, facilitating workshops, drafting testimony, project team oversight (MCR staff, contractors and client staff), and presentation of final recommendations. Successfully manage projects aiming to resolve difficult regulatory issues under tight deadlines. Achieved ultimate success when existing multi-year client extended the project into yet another a multi-year contract.

Director

Generated multiple leads for new clients in electric regulatory practice. Orchestrated responses to request for proposals; successfully awarded nine-month project that expanded into a multi-year contract for the regulatory practice. Responsible for all aspects of project management of client engagements, encompassing management of several internal staff members and a variety of outside contractors. Responsible for overseeing work of project teams (MCR staff, contractors and client staff), establishing client processes and presenting final recommendations to senior management.

Allegheny Energy (merged with FirstEnergy in 2011)

Allegheny Energy was a Greensburg, Pa.-based company serving 1.6 million customers in Pennsylvania, West Virginia, Maryland, Virginia and Ohio. The company owned generation, transmission and distribution facilities until the time of the merger with FirstEnergy. They are now part of one of the largest utilities in the nation.

Director, Energy Efficiency and Demand Response

Directed an energy efficiency effort to develop and implement a corporate demand side management strategy, encompassing energy efficiency, conservation and demand response programs. Led a cross-functional team responsible for developing programs, branding an energy conservation and education program, preparing filings (including the development of revenue tests), responding to numerous data requests and providing oral and written testimony in multiple jurisdictions. In addition, successfully developed a program that partnered with a leading wind developer and provided residential, commercial and industrial customers with the option to pay an additional charge to purchase wind energy credits.

Provided leadership to analyze and develop a plan to institute an advanced utility infrastructure or smart grid, including two-way metering communication capabilities encompassing efficiencies gained for distribution line and transformer monitoring. Facilitated choice of a platform that allowed for innovative rate structures to send the proper price signals for more efficient use of energy while utilizing, to the extent possible, the existing architecture for the purpose of minimizing stranded investments.

Director, State Regulatory Affairs

Advocated company interests before the state regulatory commission as the single point of contract for state regulators while coordinating all regulatory efforts with Allegheny's Legal, Delivery, Supply, Finance, Accounting and Chief Commercial Officers functions. Encompassed policy/position development; developed and implemented advocacy strategies; and developed and maintained good working relationships with regulators. Directed and coordinated internal teams and analysis on regulatory initiatives.

Director, Regulation and Rates

Managed all aspects of electric rate case development and filing. Directed the development of revenue requirements, cost of service studies, revenue allocation and rate design, while managing rate case strategy, testimony development, interrogatory response development and ongoing discussions, leading to settlements in many instances. Managed filings for fuel clauses in five jurisdictions, which included participating in discovery and testimony development for the implementation of increasing purchased power cost values. Included dismantling fuel clauses and rolling the values into base rates during deregulation, often at values beneficial to the utility.

General Manager, Regulated Pricing Services

Managed filings and provided testimony for unbundling customer classes of rates during electric deregulation rate cases over multiple jurisdictions. Led to regulatory orders that accepted the cost allocation and individual tariff designs for the unbundled components. Participated in a high-profile team to develop a strategy for determining the proper post-restructuring split of a generation business from the electric utility. Participated in individual restructuring regulatory proceedings in multiple jurisdictions and was an expert witness regarding the proper revenue allocation and rate design for the generation components. This resulted in moving generation into an unregulated subsidiary under the corporate umbrella, allowing the unit to bid for competitive load in the generation market.

Manager, Cost and Pricing

Designed residential, commercial and industrial rates for five retail jurisdictions, including special contract rates for large industrial entities. Managed development of cost of service studies; load data services, including research and load profiling, power billing, tariff applications; and, provided multiple rate studies, as requested by senior management. Developed expert testimony for a variety of witnesses.

Core Team Member – Reorganization of Distribution Companies

Selected from 6,000 employees to join a nine member Core Team charged with reengineering the three operating companies affecting about 3,000 employees. Participated in this temporary position for nine months. Analyzed distribution companies' processes, interviewed employees, restructured departments and subsequently re-staffed the redesigned organization. Chosen to participate on the two member team that made formal, final recommendations to senior management.

Core Team Member – Reorganization of Rates

Participated in a reorganization of the rates organization. Analyzed rates processes, interviewed employees and restructured the department to maximize the benefits to the new organization of the distribution companies.

Manager, Rate Analysis

Designed residential, commercial and industrial rates for five retail jurisdictions, including special contract rates for large industrial entities. Managed development of cost of service studies; load data services, including research and load profiling, power billing, tariff applications; and, provided multiple rate studies as requested by senior management.

Supervisor, Rate Analysis

Directed regulatory staff in the development of tariffs and rate design, while ensuring regulatory compliance. Performed monthly proper rate schedule determination analysis across five jurisdictions for large commercial and industrial customers.

Education & Training

Master of Business Administration (magna cum laude) with concentration in Investments Indiana University of Pennsylvania

Bachelor in Business Administration (magna cum laude) with a concentration in Finance Seton Hill University

Professional Affiliations

Advisory Council of the New Mexico State University Center for Public Utilities: Member of the Advisory Board

Electric Energy Institute (EEI): Representative for Allegheny Energy on the Rates and Regulatory Affairs Committee

Southeastern Electric Exchange: Participated in the industry group from the Southeast and became the 2003 Chair of the Rates and Regulation Committee

Energy Association of Pennsylvania: Member of the Electric Board on behalf of Allegheny Energy

Energy Association of Pennsylvania: Member on the Regulatory Committee on behalf of Allegheny Energy

Association of Energy Service Professionals: Member of the Pricing and Load Profiling Committee and elected to be Chair in 1999

Electric Power Generation Association of Pennsylvania: Member of the Regulatory Committee on behalf of Allegheny Energy

Selected Rates and Regulatory Experience

Company	State	Case Number	Date Filed	Issue / Description
Jefferson Davis Electric Cooperative	LA	U-37769	11/7/2025	Retail Rate Impact of Transmission Assets Direct Testimony
Kiawah Island Utility	SC	2025-243-WS	9/26/2025	COST Model and Rate Design Direct Testimony
GridLiance Louisiana, LLC / SLEMCO	LA	U-37538	3/7/2025	Retail Rate Impact of Transmission Assets Direct Testimony
GridLiance Louisiana, LLC / Concordia	LA	U-37537	3/7/2025	Retail Rate Impact of Transmission Assets Direct Testimony
GridLiance Heartland, LLC	IL	23-0061	9/1/2024	Retail Rate Impact of Transmission Assets Surrebuttal Testimony
GridLiance Heartland, LLC	IL	23-0061	7/22/2024	Retail Rate Impact of Transmission Assets Rebuttal Testimony
SMECO	MD	9738	7/19/2024	COST Model and Rate Design Rebuttal Testimony
SMECO	MD	9738	5/1/2024	COST Model and Rate Design Direct Testimony
GridLiance Heartland, LLC	IL	23-0061	3/1/2024	Retail Rate Impact of Transmission Assets Direct Testimony
SMECO	MD	9688	2/24/2023	COST Model Rebuttal Testimony
SMECO	MD	9688	12/1/2022	COST Model and Rate Design Direct Testimony
Piedmont Natural Gas	NC	G-9, Sub 781	8/25/2021	Cost of Service Rebuttal Testimony
Piedmont Natural Gas	NC	G-9, Sub 781	3/22/2021	COST Model Direct Testimony
Columbia Natural Gas	PA	R-2018-3006818	6/17/2019	Flexed Gas Rates and Advertising Expenses
Citizens / Wellsboro	PA	R-2014-2419774	11/05/2014	EDI Rebuttal Testimony for Vendor Selection and Recovery of Costs

Company	State	Case Number	Date Filed	Issue / Description
Allegheny Energy	VA	PUE-2007-00033	2/5/2008	Trans-Allegheny Interstate Transmission Line
Allegheny Energy	WV	07-0508-E-CN	2/4/2008	Trans-Allegheny Interstate Transmission Line
Allegheny Energy	PA	A-110172, etc.	12/10/2007	Trans-Allegheny Interstate Transmission Line
Potomac Edison Co. dba Allegheny Power Co.	MD	9111	10/26/2007	Empower MD EE&C and DR Plan
Allegheny Power Co.	FERC	ER-03-738	2003	Schedule 12 – PJM OATT
Allegheny Power Co.	FERC	ER02-136-004	9/27/2002	Distribution rate design for Allegheny Electric Cooperative
Monongahela Power Co.	OH	01-2411-EL-UNC	10/08/2001	Universal Services
WV Power Gas Service	WV	01-1832-GT-T	08/2001	Pooling Tariff – Interruptible Gas Transportation
Mountaineer Gas Co.	WV	01-0011-G-42T 01-0007-G-PC 00-1833-GT-T	07/17/2001	Rate Case
Potomac Edison Co.	VA	PUE000346	10/24/2000	Retail Electric Metering and Billing
Monongahela Power Co.	OH	00-02-EL-ETP	01/03/2000	Ohio Restructuring
Monongahela Power Co. / Potomac Edison Co.	WV	98-0452-E-GI	07/06/1999	West Virginia Restructuring
Potomac Edison Co.	MD	8797	07/01/1998	MD Restructuring
West Penn Power Co.	PA	R-973981	08/01/1997	PA Restructuring
Potomac Edison Co.	VA	PUE940045	06/22/1994	Rate Design
West Penn Power Co.	PA	R-942986	03/31/1994	Rate Design
Potomac Edison Co.	VA	PUE930033	04/30/1993	Rate Design
Monongahela Power Co.	OH	91-1610-EL-AIR	07/15/1992	Rate Design

Company	State	Case Number	Date Filed	Issue / Description
Potomac Edison Co.	VA	PUE910020	03/26/1992	Rate Design
Monongahela Power Co.	WV	90-504-E-42T	07/30/1990	Rate Design

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

SUMMARY OF EXISTING AND PROPOSED GAS RATES AND REVENUES

EXHIBIT 802

November 2025

Summary of Existing and Proposed Gas Rates and Revenues
Margin Rates

Schedule	Description	Units	Test Year Billing Units		Current Rate	Current Revenue	Proposed Billing Units		Proposed Rate	Proposed Revenue	Difference - Amount	Difference - Percentage
101	**Residential Service**											
	Basic Service Charge		938,675	$	6.00	5,632,051	938,675	$	12.00	11,264,101	5,632,051	100.00%
	Delivery Charge		55,550,286	$	0.39467	21,924,031	55,550,286	$	0.47916	26,617,245	4,693,213	21.41%
	Total Schedule 101					**27,556,082**				**37,881,346**	**10,325,264**	**37.47%**
104	**Commercial Service**											
	Basic Service Charge		128,182	$	12.00	1,538,187	128,182	$	24.00	3,076,374	1,538,187	100.00%
	Delivery Charge		34,054,921	$	0.27282	9,290,864	34,054,921	$	0.35485	12,084,297	2,793,433	30.07%
	Total Schedule 104					**10,829,051**				**15,160,671**	**4,331,620**	**40.00%**
105	**Industrial Service**											
	Basic Service Charge		1,919	$	35.00	67,167	1,919	$	70.00	134,335	67,167	100.00%
	Delivery Charge		3,220,895	$	0.24226	780,294	3,220,895	$	0.31602	1,017,880	237,586	30.45%
	Total Schedule 105					**847,462**				**1,152,215**	**304,753**	**35.96%**
111	**Large Volume Service**											
	Basic Service Charge		193	$	144.00	27,823	193	$	288.00	55,646	27,823	100.00%
	Delivery Charge		2,745,416	$	0.16113	442,369	2,745,416	$	0.23492	644,949	202,580	45.79%
	Total Schedule 111					**470,192**				**700,594**	**230,403**	**49.00%**
161	**General Distribution Firm Non-EITE**											
	Basic Service Charge		-	$	-	-	-	$	900.00	-	-	0.00%
	Contract Demand Charge		-	$	-	-	-	$	0.12	-	-	0.00%
	Delivery Charge - first 10,000 therms		-	$	-	-	-	$	0.15993	-	-	0.00%
	Delivery Charge - next 10,000 therms		-	$	-	-	-	$	0.14450	-	-	0.00%
	Delivery Charge - next 30,000 therms		-	$	-	-	-	$	0.13590	-	-	0.00%
	Delivery Charge - next 50,000 therms		-	$	-	-	-	$	0.08433	-	-	0.00%
	Delivery Charge - next 400,000 therms		-	$	-	-	-	$	0.04389	-	-	0.00%
	Delivery Charge - next 500,000 therms		-	$	-	-	-	$	0.02456	-	-	0.00%
	Delivery Charge - over 1,000,000 therms		-	$	-	-	-	$	0.00457	-	-	0.00%
	Total Schedule 161					**-**				**-**	**-**	**0.00%**
162	**General Distribution Firm EITE**											
	Basic Service Charge		-	$	-	-	-	$	900.00	-	-	0.00%
	Contract Demand Charge		-	$	-	-	-	$	0.12	-	-	0.00%
	Delivery Charge - first 10,000 therms		-	$	-	-	-	$	0.15769	-	-	0.00%
	Delivery Charge - next 10,000 therms		-	$	-	-	-	$	0.14225	-	-	0.00%
	Delivery Charge - next 30,000 therms		-	$	-	-	-	$	0.13366	-	-	0.00%
	Delivery Charge - next 50,000 therms		-	$	-	-	-	$	0.08209	-	-	0.00%
	Delivery Charge - next 400,000 therms		-	$	-	-	-	$	0.04164	-	-	0.00%
	Delivery Charge - next 500,000 therms		-	$	-	-	-	$	0.02231	-	-	0.00%
	Delivery Charge - over 1,000,000 therms		-	$	-	-	-	$	0.00232	-	-	0.00%
	Total Schedule 162					**-**				**-**	**-**	**0.00%**

Schedule	Description	Units	Test Year Billing Units	Current Rate	Current Revenue	Proposed Billing Units	Proposed Rate	Proposed Revenue	Difference - Amount	Difference - Percentage
163	**General Distribution Interruptible Non-EITE**									
	Basic Service Charge		336	$ 625.00	210,000	336	$ 900.00	302,400	92,400	44.00%
	Delivery Charge - first 10,000 therms		2,847,912	$ 0.12833	365,467	2,847,912	$ 0.15993	455,472	90,005	24.63%
	Delivery Charge - next 10,000 therms		1,988,040	$ 0.11577	230,147	1,988,040	$ 0.14450	287,263	57,116	24.82%
	Delivery Charge - next 30,000 therms		2,768,332	$ 0.10877	301,114	2,768,332	$ 0.13590	376,218	75,103	24.94%
	Delivery Charge - next 50,000 therms		1,558,534	$ 0.06680	104,115	1,558,534	$ 0.08433	131,432	27,318	26.24%
	Delivery Charge - next 400,000 therms		1,524,828	$ 0.03389	51,673	1,524,828	$ 0.04389	66,918	15,244	29.50%
	Delivery Charge - next 500,000 therms		-	$ 0.01816	-	-	$ 0.02456	-	-	0.00%
	Delivery Charge - over 1,000,000 therms		-	$ 0.00189	-	-	$ 0.00457	-	-	0.00%
	Total Schedule 163				**1,262,517**			**1,619,703**	**357,186**	**28.29%**
164	**General Distribution Interruptible EITE**									
	Basic Service Charge		72	$ 625.00	45,000	72	$ 900.00	64,800	19,800	44.00%
	Delivery Charge - first 10,000 therms		840,000	$ 0.12833	107,796	840,000	$ 0.15769	132,457	24,662	22.88%
	Delivery Charge - next 10,000 therms		840,000	$ 0.11577	97,243	840,000	$ 0.14225	119,491	22,248	22.88%
	Delivery Charge - next 30,000 therms		2,520,000	$ 0.10877	274,103	2,520,000	$ 0.13366	336,813	62,711	22.88%
	Delivery Charge - next 50,000 therms		4,200,000	$ 0.06680	280,573	4,200,000	$ 0.08209	344,763	64,191	22.88%
	Delivery Charge - next 400,000 therms		27,268,601	$ 0.03389	924,078	27,268,601	$ 0.04164	1,135,493	211,415	22.88%
	Delivery Charge - next 500,000 therms		6,733,736	$ 0.01816	122,285	6,733,736	$ 0.02231	150,262	27,977	22.88%
	Delivery Charge - over 1,000,000 therms		-	$ 0.00189	-	-	$ 0.00232	-	-	0.00%
	Total Schedule 164				**1,851,077**			**2,284,080**	**433,003**	**23.39%**
170	**Interruptible Service**									
	Basic Service Charge		48	$ 300.00	14,400	48	$ 600.00	28,800	14,400	100.00%
	Delivery Charge		2,602,586	$ 0.12376	322,096	2,602,586	$ 0.18957	493,375	171,279	53.18%
	Total Schedule 170				**336,496**			**522,175**	**185,679**	**55.18%**
	Grand Total				**43,152,876**			**59,320,784**	**16,167,908**	**37.47%**

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

SAMPLE BILLS ON PRESENT AND PROPOSED GAS RATES

EXHIBIT 803

November 2025

Schedule	Description		Current Rate		Proposed Rate		Difference	% Diff	Usage	Base
101	**Residential Service**									
	Basic Service Charge	$	6.00	$	12.00					
	Delivery Charge	$	0.39467	$	0.47916					
	PGA Rate	$	0.51315	$	0.51315					
	Temporary Gas Cost	$	(0.00462)	$	(0.00462)					
	Intervenor Funding	$	0.00168	$	0.00168					
	CAP	$	0.02604	$	0.02604					
	Energy Discount Program	$	0.81	$	0.81					
	Environmental Remediation	$	-	$	0.00151					
	Climate Protection Plan	$	0.03210	$	0.03210					
	Residential Typical Bill	$	6.81	$	12.81	$	6.00	88.11%	0	
		$	30.89	$	39.04	$	8.15	26.39%	25	
		$	35.70	$	44.28	$	8.58	24.03%	30	
		$	40.52	$	49.53	$	9.01	22.24%	35	
		$	45.33	$	54.77	$	9.44	20.82%	40	
		$	50.15	$	60.02	$	9.87	19.68%	45	
		$	54.96	$	65.26	$	10.30	18.74%	50	
		$	64.59	$	75.75	$	11.16	17.28%	60	
		$	74.22	$	86.24	$	12.02	16.19%	70	
		$	83.85	$	96.73	$	12.88	15.36%	80	
		$	93.48	$	107.22	$	13.74	14.70%	90	
		$	103.11	$	117.71	$	14.60	14.16%	100	
		$	112.74	$	128.20	$	15.46	13.71%	110	
		$	122.37	$	138.69	$	16.32	13.34%	120	
		$	132.00	$	149.18	$	17.18	13.01%	130	
		$	141.63	$	159.67	$	18.04	12.74%	140	
		$	151.26	$	170.16	$	18.90	12.49%	150	
		$	160.89	$	180.65	$	19.76	12.28%	160	
		$	170.52	$	191.14	$	20.62	12.09%	170	
		$	180.15	$	201.63	$	21.48	11.92%	180	
		$	189.78	$	212.12	$	22.34	11.77%	190	
		$	199.41	$	222.61	$	23.20	11.63%	200	
		$	209.04	$	233.10	$	24.06	11.51%	210	
		$	218.67	$	243.59	$	24.92	11.40%	220	
		$	228.30	$	254.08	$	25.78	11.29%	230	
		$	237.93	$	264.57	$	26.64	11.20%	240	
		$	247.57	$	275.06	$	27.50	11.11%	250	

Schedule	Description		Current Rate		Proposed Rate		Difference	% Diff	Usage	Base
104	**Commercial Service**									
	Basic Service Charge	$	12.00	$	24.00					
	Delivery Charge	$	0.27282	$	0.35485					
	PGA Rate	$	0.51315	$	0.51315					
	Temporary Gas Cost	$	(0.00462)	$	(0.00462)					
	Intervenor Funding	$	-	$	-					
	CAP	$	(0.00351)	$	(0.00351)					
	Energy Discount Program	$	0.00889	$	0.00889					
	Environmental Remediation	$	-	$	0.00151					
	Climate Protection Plan	$	0.03210	$	0.03210					
	Commercial Typical Bill	$	12.00	$	24.00	$	12.00	100.00%	0	
		$	52.94	$	69.12	$	16.18	30.56%	50	
		$	61.13	$	78.14	$	17.01	27.83%	60	
		$	69.32	$	87.17	$	17.85	25.75%	70	
		$	77.51	$	96.19	$	18.68	24.11%	80	
		$	85.69	$	105.21	$	19.52	22.78%	90	
		$	93.88	$	114.24	$	20.35	21.68%	100	
		$	102.07	$	123.26	$	21.19	20.76%	110	
		$	110.26	$	132.28	$	22.02	19.98%	120	
		$	118.45	$	141.31	$	22.86	19.30%	130	
		$	126.64	$	150.33	$	23.70	18.71%	140	
		$	134.82	$	159.36	$	24.53	18.19%	150	
		$	143.01	$	168.38	$	25.37	17.74%	160	
		$	151.20	$	177.40	$	26.20	17.33%	170	
		$	159.39	$	186.43	$	27.04	16.96%	180	
		$	167.58	$	195.45	$	27.87	16.63%	190	
		$	175.77	$	204.47	$	28.71	16.33%	200	
		$	216.71	$	249.59	$	32.88	15.17%	250	
		$	257.65	$	294.71	$	37.06	14.38%	300	
		$	298.59	$	339.83	$	41.24	13.81%	350	
		$	339.53	$	384.95	$	45.41	13.38%	400	
		$	380.47	$	430.07	$	49.59	13.03%	450	
		$	421.42	$	475.18	$	53.77	12.76%	500	
		$	503.30	$	565.42	$	62.12	12.34%	600	
		$	585.18	$	655.66	$	70.48	12.04%	700	
		$	667.06	$	745.89	$	78.83	11.82%	800	
		$	830.83	$	926.37	$	95.54	11.50%	1000	
		$	1,035.54	$	1,151.96	$	116.42	11.24%	1250	
		$	1,240.25	$	1,377.55	$	137.31	11.07%	1500	
		$	1,444.95	$	1,603.14	$	158.19	10.95%	1750	
		$	1,649.66	$	1,828.73	$	179.07	10.86%	2000	
		$	2,059.08	$	2,279.92	$	220.84	10.73%	2500	
		$	2,468.49	$	2,731.10	$	262.61	10.64%	3000	
		$	2,877.91	$	3,182.29	$	304.38	10.58%	3500	
		$	3,287.32	$	3,633.47	$	346.15	10.53%	4000	

Schedule	Description	Current Rate	Proposed Rate	Difference	% Diff	Usage	Base
105	**Industrial Service**						
	Basic Service Charge	$ 35.00	$ 70.00				
	Delivery Charge	$ 0.24226	$ 0.31602				
	PGA Rate	$ 0.51315	$ 0.51315				
	Temporary Gas Cost	$ (0.00462)	$ (0.00462)				
	Intervenor Funding	$ 0.00036	$ 0.00036				
	CAP	$ -	$ -				
	Energy Discount Program	$ 0.00727	$ 0.00727				
	Environmental Remediation	$ -	$ 0.00151				
	Climate Protection Plan	$ 0.03210	$ 0.03210				
	Industrial Typical Bill	$ 35.00	$ 70.00	$ 35.00	100.00%	0	
		$ 114.05	$ 156.58	$ 42.53	37.29%	100	
		$ 193.10	$ 243.16	$ 50.05	25.92%	200	
		$ 272.16	$ 329.74	$ 57.58	21.16%	300	
		$ 351.21	$ 416.32	$ 65.11	18.54%	400	
		$ 430.26	$ 502.90	$ 72.64	16.88%	500	
		$ 509.31	$ 589.48	$ 80.16	15.74%	600	
		$ 588.36	$ 676.06	$ 87.69	14.90%	700	
		$ 667.42	$ 762.64	$ 95.22	14.27%	800	
		$ 746.47	$ 849.21	$ 102.75	13.76%	900	
		$ 825.52	$ 935.79	$ 110.27	13.36%	1000	
		$ 904.57	$ 1,022.37	$ 117.80	13.02%	1100	
		$ 983.62	$ 1,108.95	$ 125.33	12.74%	1200	
		$ 1,062.68	$ 1,195.53	$ 132.86	12.50%	1300	
		$ 1,141.73	$ 1,282.11	$ 140.38	12.30%	1400	
		$ 1,220.78	$ 1,368.69	$ 147.91	12.12%	1500	
		$ 1,616.04	$ 1,801.59	$ 185.55	11.48%	2000	
		$ 2,011.30	$ 2,234.48	$ 223.18	11.10%	2500	
		$ 2,406.56	$ 2,667.38	$ 260.82	10.84%	3000	
		$ 2,801.82	$ 3,100.28	$ 298.46	10.65%	3500	
		$ 3,197.08	$ 3,533.18	$ 336.10	10.51%	4000	
		$ 3,987.60	$ 4,398.97	$ 411.37	10.32%	5000	
		$ 4,778.12	$ 5,264.76	$ 486.64	10.18%	6000	
		$ 5,568.64	$ 6,130.56	$ 561.92	10.09%	7000	
		$ 6,359.16	$ 6,996.35	$ 637.19	10.02%	8000	
		$ 7,149.68	$ 7,862.14	$ 712.46	9.96%	9000	
		$ 7,940.20	$ 8,727.94	$ 787.74	9.92%	10000	
		$ 9,916.50	$ 10,892.42	$ 975.92	9.84%	12500	
		$ 11,892.80	$ 13,056.91	$ 1,164.11	9.79%	15000	
		$ 13,869.10	$ 15,221.39	$ 1,352.29	9.75%	17500	
		$ 15,845.40	$ 17,385.88	$ 1,540.48	9.72%	20000	
		$ 19,798.00	$ 21,714.85	$ 1,916.85	9.68%	25000	
		$ 23,750.60	$ 26,043.82	$ 2,293.22	9.66%	30000	
		$ 27,703.20	$ 30,372.79	$ 2,669.59	9.64%	35000	
		$ 31,655.80	$ 34,701.75	$ 3,045.95	9.62%	40000	
		$ 35,608.40	$ 39,030.72	$ 3,422.32	9.61%	45000	
		$ 39,561.00	$ 43,359.69	$ 3,798.69	9.60%	50000	
		$ 47,466.20	$ 52,017.63	$ 4,551.43	9.59%	60000	
		$ 55,371.40	$ 60,675.57	$ 5,304.17	9.58%	70000	
		$ 63,276.60	$ 69,333.51	$ 6,056.91	9.57%	80000	
		$ 71,181.80	$ 77,991.45	$ 6,809.65	9.57%	90000	
		$ 79,087.00	$ 86,649.39	$ 7,562.39	9.56%	100000	

Schedule	Description	Current Rate	Proposed Rate	Difference	% Diff	Usage	Base
111	**Large Volume Service**						
	Basic Service Charge	$ 144.00	$ 288.00				
	Delivery Charge	$ 0.16113	$ 0.23492				
	PGA Rate	$ 0.51315	$ 0.51315				
	Temporary Gas Cost	$ (0.00462)	$ (0.00462)				
	Intervenor Funding	$ 0.00036	$ 0.00036				
	CAP	$ -	$ -				
	Energy Discount Program	$ 0.00479	$ 0.00479				
	Environmental Remediation	$ -	$ 0.00151				
	Climate Protection Plan	$ 0.03210	$ 0.03210				
	Large Volume Typical Bill	$ 144.00	$ 288.00	$ 144.00	100.00%	0	
		$ 214.69	$ 366.22	$ 151.53	70.58%	100	
		$ 285.38	$ 444.44	$ 159.06	55.74%	200	
		$ 356.07	$ 522.66	$ 166.59	46.79%	300	
		$ 426.76	$ 600.88	$ 174.12	40.80%	400	
		$ 497.46	$ 679.10	$ 181.65	36.52%	500	
		$ 568.15	$ 757.33	$ 189.18	33.30%	600	
		$ 638.84	$ 835.55	$ 196.71	30.79%	700	
		$ 709.53	$ 913.77	$ 204.24	28.79%	800	
		$ 780.22	$ 991.99	$ 211.77	27.14%	900	
		$ 850.91	$ 1,070.21	$ 219.30	25.77%	1000	
		$ 921.60	$ 1,148.43	$ 226.83	24.61%	1100	
		$ 992.29	$ 1,226.65	$ 234.36	23.62%	1200	
		$ 1,062.98	$ 1,304.87	$ 241.89	22.76%	1300	
		$ 1,133.67	$ 1,383.09	$ 249.42	22.00%	1400	
		$ 1,204.37	$ 1,461.31	$ 256.95	21.33%	1500	
		$ 1,557.82	$ 1,852.42	$ 294.60	18.91%	2000	
		$ 1,911.28	$ 2,243.52	$ 332.25	17.38%	2500	
		$ 2,264.73	$ 2,634.63	$ 369.90	16.33%	3000	
		$ 2,618.19	$ 3,025.73	$ 407.54	15.57%	3500	
		$ 2,971.64	$ 3,416.83	$ 445.19	14.98%	4000	
		$ 3,678.55	$ 4,199.04	$ 520.49	14.15%	5000	
		$ 4,385.46	$ 4,981.25	$ 595.79	13.59%	6000	
		$ 5,092.37	$ 5,763.46	$ 671.09	13.18%	7000	
		$ 5,799.28	$ 6,545.67	$ 746.39	12.87%	8000	
		$ 6,506.19	$ 7,327.88	$ 821.69	12.63%	9000	
		$ 7,213.10	$ 8,110.08	$ 896.98	12.44%	10000	
		$ 8,980.38	$ 10,065.60	$ 1,085.23	12.08%	12500	
		$ 10,747.65	$ 12,021.13	$ 1,273.48	11.85%	15000	
		$ 12,514.93	$ 13,976.65	$ 1,461.72	11.68%	17500	
		$ 14,282.20	$ 15,932.17	$ 1,649.97	11.55%	20000	
		$ 17,816.75	$ 19,843.21	$ 2,026.46	11.37%	25000	
		$ 21,351.30	$ 23,754.25	$ 2,402.95	11.25%	30000	
		$ 24,885.85	$ 27,665.29	$ 2,779.44	11.17%	35000	
		$ 28,420.40	$ 31,576.33	$ 3,155.93	11.10%	40000	
		$ 31,954.95	$ 35,487.38	$ 3,532.43	11.05%	45000	
		$ 35,489.50	$ 39,398.42	$ 3,908.92	11.01%	50000	
		$ 42,558.60	$ 47,220.50	$ 4,661.90	10.95%	60000	
		$ 49,627.70	$ 55,042.58	$ 5,414.88	10.91%	70000	
		$ 56,696.80	$ 62,864.67	$ 6,167.87	10.88%	80000	
		$ 63,765.90	$ 70,686.75	$ 6,920.85	10.85%	90000	
		$ 70,835.00	$ 78,508.83	$ 7,673.83	10.83%	100000	
163	**General Distribution Interruptible Non-EITE**						
	Basic Service Charge	$ 625.00	$ 900.00				
	Delivery Charge - first 10,000 therms	$ 0.12833	$ 0.15993				
	Delivery Charge - next 10,000 therms	$ 0.11577	$ 0.14450				
	Delivery Charge - next 30,000 therms	$ 0.10877	$ 0.13590				
	Delivery Charge - next 50,000 therms	$ 0.06680	$ 0.08433				

Schedule	Description	Current Rate	Proposed Rate	Difference	% Diff	Usage	Base
	Delivery Charge - next 400,000 therms	$ 0.03389	$ 0.04389				
	Delivery Charge - next 500,000 therms	$ 0.01816	$ 0.02456				
	Delivery Charge - over 1,000,000 therms	$ 0.00189	$ 0.00457				
	PGA Rate	$ -	$ -				
	Temporary Gas Cost	$ -	$ -				
	Intervenor Funding	$ 0.00036	$ 0.00036				
	CAP	$ -	$ -				
	Energy Discount Program	$ 0.00207	$ 0.00207				
	Environmental Remediation	$ -	$ -				
	Climate Protection Plan	$ 0.03210	$ 0.03210				
	Interruptible Typical Bill	$ 625.00	$ 900.00	$ 275.00	44.00%	0	
		$ 2,253.58	$ 2,844.62	$ 591.04	26.23%	10000	
		$ 3,756.54	$ 4,634.88	$ 878.34	23.38%	20000	
		$ 5,189.55	$ 6,339.18	$ 1,149.63	22.15%	30000	
		$ 5,448.64	$ 6,647.32	$ 1,198.68	22.00%	31808	
		$ 6,622.56	$ 8,043.49	$ 1,420.93	21.46%	40000	
		$ 8,055.57	$ 9,747.79	$ 1,692.22	21.01%	50000	
		$ 13,122.22	$ 15,690.83	$ 2,568.61	19.57%	100000	
		$ 19,964.02	$ 23,532.37	$ 3,568.35	17.87%	200000	
		$ 26,805.82	$ 31,373.91	$ 4,568.09	17.04%	300000	
		$ 33,647.62	$ 39,215.45	$ 5,567.83	16.55%	400000	
		$ 40,489.42	$ 47,056.99	$ 6,567.57	16.22%	500000	
		$ 45,758.42	$ 52,965.90	$ 7,207.48	15.75%	600000	
		$ 51,027.42	$ 58,874.80	$ 7,847.38	15.38%	700000	
		$ 56,296.42	$ 64,783.71	$ 8,487.29	15.08%	800000	
		$ 61,565.42	$ 70,692.62	$ 9,127.20	14.83%	900000	
		$ 66,834.42	$ 76,601.52	$ 9,767.10	14.61%	1000000	
		$ 70,476.42	$ 80,511.20	$ 10,034.78	14.24%	1100000	
		$ 74,118.42	$ 84,420.87	$ 10,302.45	13.90%	1200000	
		$ 77,760.42	$ 88,330.55	$ 10,570.13	13.59%	1300000	
		$ 81,402.42	$ 92,240.22	$ 10,837.80	13.31%	1400000	
		$ 85,044.42	$ 96,149.89	$ 11,105.47	13.06%	1500000	
		$ 103,254.42	$ 115,698.26	$ 12,443.84	12.05%	2000000	

164	**General Distribution Interruptible EITE**						
	Basic Service Charge	$ -	$ 900.00				
	Delivery Charge - first 10,000 therms	$ -	$ 0.15769				
	Delivery Charge - next 10,000 therms	$ -	$ 0.14225				
	Delivery Charge - next 30,000 therms	$ -	$ 0.13366				
	Delivery Charge - next 50,000 therms	$ -	$ 0.08209				
	Delivery Charge - next 400,000 therms	$ -	$ 0.04164				
	Delivery Charge - next 500,000 therms	$ -	$ 0.02231				
	Delivery Charge - over 1,000,000 therms	$ -	$ 0.00232				
	PGA Rate	$ -	$ -				
	Temporary Gas Cost	$ -	$ -				
	Intervenor Funding	$ -	$ 0.00036				
	CAP	$ -	$ -				
	Energy Discount Program	$ -	$ 0.00207				
	Environmental Remediation	$ -	$ -				
	Climate Protection Plan	$ -	$ 0.03210				
	Interruptible Typical Bill	$ -	$ 900.00	$ 900.00	0.00%	0	
		$ -	$ 2,822.17	$ 2,822.17	0.00%	10000	
		$ -	$ 4,589.99	$ 4,589.99	0.00%	20000	
		$ -	$ 6,271.85	$ 6,271.85	0.00%	30000	
		$ -	$ 7,953.71	$ 7,953.71	0.00%	40000	
		$ -	$ 9,635.57	$ 9,635.57	0.00%	50000	
		$ -	$ 15,466.40	$ 15,466.40	0.00%	100000	
		$ -	$ 23,083.51	$ 23,083.51	0.00%	200000	
		$ -	$ 30,700.61	$ 30,700.61	0.00%	300000	

Schedule	Description	Current Rate	Proposed Rate	Difference	% Diff	Usage	Base
		$ -	$ 38,317.72	$ 38,317.72	0.00%	400000	
		$ -	$ 45,934.82	$ 45,934.82	0.00%	500000	
		$ -	$ 51,619.30	$ 51,619.30	0.00%	600000	
		$ -	$ 57,303.77	$ 57,303.77	0.00%	700000	
		$ -	$ 62,988.24	$ 62,988.24	0.00%	800000	
		$ -	$ 68,672.72	$ 68,672.72	0.00%	900000	
		$ -	$ 74,357.19	$ 74,357.19	0.00%	1000000	
		$ -	$ 78,042.43	$ 78,042.43	0.00%	1100000	
		$ -	$ 81,727.67	$ 81,727.67	0.00%	1200000	
		$ -	$ 85,412.91	$ 85,412.91	0.00%	1300000	
		$ -	$ 89,098.15	$ 89,098.15	0.00%	1400000	
		$ -	$ 92,783.39	$ 92,783.39	0.00%	1500000	
		$ -	$ 111,209.59	$ 111,209.59	0.00%	2000000	

Schedule	Description	Current Rate	Proposed Rate	Difference	% Diff	Usage	Base
170	**Interruptible Service**						
	Basic Service Charge	$ 300.00	$ 600.00				
	Delivery Charge	$ 0.12376	$ 0.18957				
	PGA Rate	$ 0.51315	$ 0.51315				
	Temporary Gas Cost	$ (0.00462)	$ (0.00462)				
	Intervenor Funding	$ 0.00036	$ 0.00036				
	CAP	$ -	$ -				
	Energy Discount Program	$ 0.00364	$ 0.00364				
	Environmental Remediation	$ -	$ 0.00151				
	Climate Protection Plan	$ 0.03210	$ 0.03210				
	Interruptible Typical Bill	$ 300.00	$ 600.00	$ 300.00	100.00%	0	
		$ 634.20	$ 967.86	$ 333.66	52.61%	500	
		$ 968.39	$ 1,335.71	$ 367.32	37.93%	1000	
		$ 1,302.59	$ 1,703.57	$ 400.98	30.78%	1500	
		$ 1,636.78	$ 2,071.42	$ 434.64	26.55%	2000	
		$ 1,970.98	$ 2,439.28	$ 468.30	23.76%	2500	
		$ 2,305.17	$ 2,807.13	$ 501.96	21.78%	3000	
		$ 2,639.37	$ 3,174.99	$ 535.62	20.29%	3500	
		$ 2,973.56	$ 3,542.84	$ 569.28	19.14%	4000	
		$ 3,307.76	$ 3,910.70	$ 602.94	18.23%	4500	
		$ 3,641.95	$ 4,278.55	$ 636.60	17.48%	5000	
		$ 4,310.34	$ 5,014.27	$ 703.93	16.33%	6000	
		$ 4,978.73	$ 5,749.98	$ 771.25	15.49%	7000	
		$ 5,647.12	$ 6,485.69	$ 838.57	14.85%	8000	
		$ 6,315.51	$ 7,221.40	$ 905.89	14.34%	9000	
		$ 6,983.90	$ 7,957.11	$ 973.21	13.94%	10000	
		$ 7,652.29	$ 8,692.82	$ 1,040.53	13.60%	11000	
		$ 8,320.68	$ 9,428.53	$ 1,107.85	13.31%	12000	
		$ 8,989.07	$ 10,164.24	$ 1,175.17	13.07%	13000	
		$ 9,657.46	$ 10,899.95	$ 1,242.49	12.87%	14000	
		$ 10,325.85	$ 11,635.66	$ 1,309.81	12.68%	15000	
		$ 11,996.83	$ 13,474.94	$ 1,478.12	12.32%	17500	
		$ 13,667.80	$ 15,314.22	$ 1,646.42	12.05%	20000	
		$ 15,338.78	$ 17,153.50	$ 1,814.72	11.83%	22500	
		$ 17,009.75	$ 18,992.77	$ 1,983.02	11.66%	25000	
		$ 20,351.70	$ 22,671.33	$ 2,319.63	11.40%	30000	
		$ 23,693.65	$ 26,349.88	$ 2,656.23	11.21%	35000	
		$ 27,035.60	$ 30,028.44	$ 2,992.84	11.07%	40000	
		$ 30,377.55	$ 33,706.99	$ 3,329.44	10.96%	45000	
		$ 33,719.50	$ 37,385.54	$ 3,666.04	10.87%	50000	
		$ 40,403.40	$ 44,742.65	$ 4,339.25	10.74%	60000	
		$ 47,087.30	$ 52,099.76	$ 5,012.46	10.65%	70000	
		$ 53,771.20	$ 59,456.87	$ 5,685.67	10.57%	80000	
		$ 60,455.10	$ 66,813.98	$ 6,358.88	10.52%	90000	
		$ 67,139.00	$ 74,171.09	$ 7,032.09	10.47%	100000	
		$ 83,848.75	$ 92,563.86	$ 8,715.11	10.39%	125000	
		$ 100,558.50	$ 110,956.63	$ 10,398.13	10.34%	150000	
		$ 117,268.25	$ 129,349.41	$ 12,081.16	10.30%	175000	
		$ 133,978.00	$ 147,742.18	$ 13,764.18	10.27%	200000	
		$ 150,687.75	$ 166,134.95	$ 15,447.20	10.25%	225000	
		$ 167,397.50	$ 184,527.72	$ 17,130.22	10.23%	250000	

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

DIRECT TESTIMONY OF PATRICK C. DARRAS

EXHIBIT 900

November 2025

TABLE OF CONTENTS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Patrick C. Darras and my business address is 400 North Fourth Street, Bismarck, North Dakota 58501.

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

A. I am employed by Montana-Dakota Utilities Company ("Montana-Dakota"). Montana-Dakota is part of the MDU Utilities Group which is comprised of Montana-Dakota, Cascade Natural Gas Company ("Cascade") and Intermountain Gas Company ("Intermountain") (collectively known as "MDU Utilities Group"), which are all wholly owned subsidiaries of MDU Resources Group, Inc. ("MDU Resources"). I am employed as Vice President – Engineering, Operations Services, and Compliance for Cascade, Montana-Dakota, and Intermountain.

II. STATEMENT OF QUALIFICATIONS

Q. Please outline your educational and professional background.

A. I am a graduate of North Dakota State University with a Bachelor of Science degree in Construction Engineering. I also hold a Master of Business Administration degree along with a master's degree in management, both from the University of Mary in Bismarck, North Dakota. In June of 2014, I attended the Utility Executive Course at the University of Idaho in Moscow, Idaho.

I began my career in 2002 as a gas engineer with Montana-Dakota in Bismarck, North Dakota. I held that position for four years primarily working with the construction and service group in day-to-day operations. In 2006, I was promoted to the role of Region Gas Superintendent where I was responsible for the overall gas engineering, construction, and service of the Dakota Heartland Region of Montana-Dakota. I worked in that capacity for two years and was then promoted to Region Director for Montana-Dakota's Dakota Heartland Region. My responsibility in this role was oversight of all gas and electric operations for the region. In January 2015, I was promoted to Vice President of Operations for Montana-Dakota and its subsidiary Great Plains Natural Gas Company. My responsibilities in this role included gas and electric distribution operations and engineering across the five states of North Dakota, South Dakota, Montana, Wyoming, and Minnesota. In June 2018, I accepted the role of Vice President of Engineering and Operations Services and in January 2025 I accepted my current role as Vice President of Engineering, Operations Services, and Compliance for the MDU Utilities Group.

Prior to joining Montana-Dakota, I worked for a local industrial contractor specializing in refinery and power plant maintenance along with turn-key construction of industrial facilities such as refineries and food processing plants. I spent seven years with this group in various capacities in engineering, construction, and project management.

Q. Please describe your duties and responsibilities with respect to Cascade.

A. I have executive responsibility for the development, coordination, and implementation of Cascade's strategies and policies related to areas of engineering and operations including design, construction, compliance, and pipeline integrity and safety.

Q. Have you testified in other proceedings before regulatory bodies?

A. Yes. I have testified before numerous regulatory commissions, including the Public Utility Commission of Oregon ("Commission"), the Washington Utilities and Transportation Commission, and the Idaho Public Utilities Commission.

III. SCOPE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide an overview of the Company's project selection and budgeting process and an overview of the Company's capital projects that have been completed since the last rate case (2021-2025) or are scheduled to be completed before the end of the forecast test year (October 2027). In the Company's last general rate case, docket UG 390, the stipulating parties agreed that in the next general rate case, Cascade would provide support for all individual capital investments that are estimated to cost more than $150,000.[1] Given that the Company has not filed a general rate case since March 31, 2020, my testimony addresses a significant number of capital investments, both Programmatic and Specific. Accordingly, I have split the investments into major capital investments having an actual or estimated total cost of $1 million or more, and minor capital investments having an actual or estimated total cost of $150,000 or more, but less than $1 million.

Q. What is the difference between a Programmatic project and a Specific project?

A. The Programmatic projects, also called blanket projects, cover a specific category the costs that individually are estimated at less than $150,000 and cannot be specifically forecasted due to external factors. They can also include broader equipment management efforts, such as fleet replacement programs. Specific projects are separately budgeted projects that may emerge from one of the Programmatic categories but result in an estimated budget over $150,000.

Q. How are you presenting the minor capital investments?

A. In Exhibit CNGC/901, I provide information on the Programmatic and Specific capital investment projects over $150,000 but less than $1 million in table format. For each project, the table includes: (i) a project description; (ii) an explanation of how customers will benefit from the project (i.e., justification or rationale); (iii) a description of any demand study or analysis that was performed, if applicable; (iv) a description of any alternatives considered; and (v) the project costs. Exhibit CNGC/901 provides the information required per the stipulation in docket UG 390.

[1] *In the Matter of Cascade Nat. Gas Corp., Request for a Gen. Rate Revision,* Docket No. UG 390, Order No. 21-001 at 15 (Jan. 6, 2021).

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I sponsor the following exhibit:

- Exhibit CNGC/901 – Minor Plant Additions ($150,000 to $1 million)

Q. How is your testimony organized?

A. I first discuss Cascade's project selection process and budgeting. Then I discuss Cascade's Programmatic projects and Specific projects currently in service. Finally, I present Specific projects that will be placed in service between now and the end of the forecast test year.

IV. OVERVIEW OF PROJECT SELECTION AND BUDGETING PROCESS

Q. What types of major capital projects does the Company typically perform?

A. Cascade's major capital projects include pipeline replacement projects that have been identified for safety reasons and to reduce risk on Cascade's system, system reinforcements, or system expansions that have been identified as needed to ensure system reliability and to accommodate growth on the Company's system. A reinforcement is an upgrade to existing infrastructure or new system additions, which increases system capacity, reliability, and safety. An expansion is a new system addition to accommodate an increase in demand or to extend the distribution system to developing areas. Collectively, these are known as distribution enhancements. Distribution system enhancements do not reduce demand, nor do they create additional supply. Instead, enhancements can increase the overall capacity of a distribution pipeline system while utilizing existing gate station supply points. Distribution enhancements typically include:

- Pipeline reinforcement such as replacements;
- Pipeline loops and/or back feeds;
- Operating pressure increase;
- Uprates;

- Facility upgrades;
- Additional regulator station feeds or gate station supply;
- Compressor stations; or
- Demand side management strategies.

Q. How does the Company identify safety-related projects?

A. The Company uses the Distribution Integrity Management Program ("DIMP") and the expertise of its own engineers and district managers to identify areas of risk on its system and to develop the safety projects required to remediate risk. The DIMP supports Cascade's understanding of the system and material characteristics and are used to identify, assess, and prioritize integrity risks to Company-owned and operated infrastructure. The Company reviews and analyzes the DIMP risk model outputs after each model run to identify areas of highest risk and those areas where risk increased from the last model run.

Additionally, because the DIMP model does not perfectly capture all risk factors, the Company also considers input from its system engineers, district managers, and other subject matter experts ("SMEs") who have intimate knowledge of specific portions of Cascade's system to identify other areas of potential concern.

The Company then considers and analyzes existing and proposed measures to address the threats to Cascade's pipeline system. The prioritization and selection of the appropriate remediation actions depends on the type of threat being addressed, whether the threat is current or potential, and the viability of the remedial action in managing the relevant risk factors.

Q. What types of projects are typically performed to address safety-related concerns?

A. Pipeline replacement is typically the most viable option to remediate risks associated with corrosion, natural forces, material, weld, joint, and/or equipment. If Cascade determines that replacement is an appropriate action to reduce the risk, the Company establishes a replacement project.

Q. How does the Company prioritize and select safety-related projects?

A. Once pipe segments requiring replacement have been identified via the DIMP, the Company plans and prioritizes specific projects within these segments. This process ensures that higher risk threats are mitigated in a timely manner.

Q. Please provide an overview of Cascade's identification and selection process for distribution enhancement projects.

A. As part of the Integrated Resource Planning ("IRP") process, Cascade completes a comprehensive review of our distribution system models to ensure that the Company can maintain reliable service to our customers during design day events. Cascade also completes annual reviews of its distribution system models as part of our annual budgeting process and continually updates the five-year budget, as needed, based upon new information that impacts the five-year plan. If a deficit is predicted, the system is evaluated, and reinforcement options are reviewed, with an optimized reinforcement selected. The selected reinforcement will then be placed into the capital budget based on the timing needs of the predicted deficit.

The engineering department works closely with energy services representatives and district management to ensure the system is safe and reliable. As towns develop and add new homes and businesses, the need for pipeline expansions and reinforcements increases. The system expansion projects are historically driven by new city developments or new housing plats and core growth within the service territory. Before expansions and installation can be constructed to serve these new customers, engineering analysis is performed. Using system modeling software to represent design day conditions, predictions can be made about the capacity of the system. As new groups of customers seek natural gas service, the models provide feedback on how best to serve them reliably.

Another aspect of system planning involves gate capacity analysis and forecasting. Over time, each gate station will take on more and more demand, and it is Cascade's goal to stay ahead of potential reliability issues by predicting and identifying constraints on its system. The IRP growth data, along with design day modeling, allows Cascade to forecast necessary gate upgrades. Supervisory control and data acquisition, or SCADA, technology utilized by Cascade allows verification of numbers with real time and historic gate flow and pressure data.

Cascade uses its design day models that incorporate customer demand from historical billing in in its Customer Care and Billing system to identify deficits and then propose enhancement solutions to the address the deficit. The design day model facilitates modeling predicted core growth, constraint identification, and corresponding optimum combinations of pipe modification, and pressure modification solutions to maintain adequate pressures throughout the network. Annually the Company analyzes every system at design day conditions to identify areas where potential outages may occur. These constraint areas are then risk-ranked against each other to ensure the highest risk areas are corrected first and that others are properly addressed. Within a given area, projects/reinforcements are selected using the following criteria:

- The shortest segment(s) of pipe that improves the deficient part of the distribution system;
- The segment of pipe with the most favorable construction conditions, such as ease of access or rights or traffic issues and minimal to no water, railroad,

major highway crossings, etc.;

- The segment of pipe that minimizes environmental concerns including minimal to no wetland involvement, and the minimization of impacts to local communities and neighborhoods;
- The segment of pipe that provides opportunity to add additional customers; and
- Total construction costs including restoration.

Once a project is identified, the design engineer or energy services representative begins a more thorough investigation by surveying the route and filing for permits. This process may uncover additional impacts such as moratoriums on road excavation, underground hazards, discontent among landowners, etc., resulting in another iteration of review of the above project selection criteria. Figure 1, below, provides a schematic representation of the distribution project process flow.

///

///

///

///

///

///

///

///

///

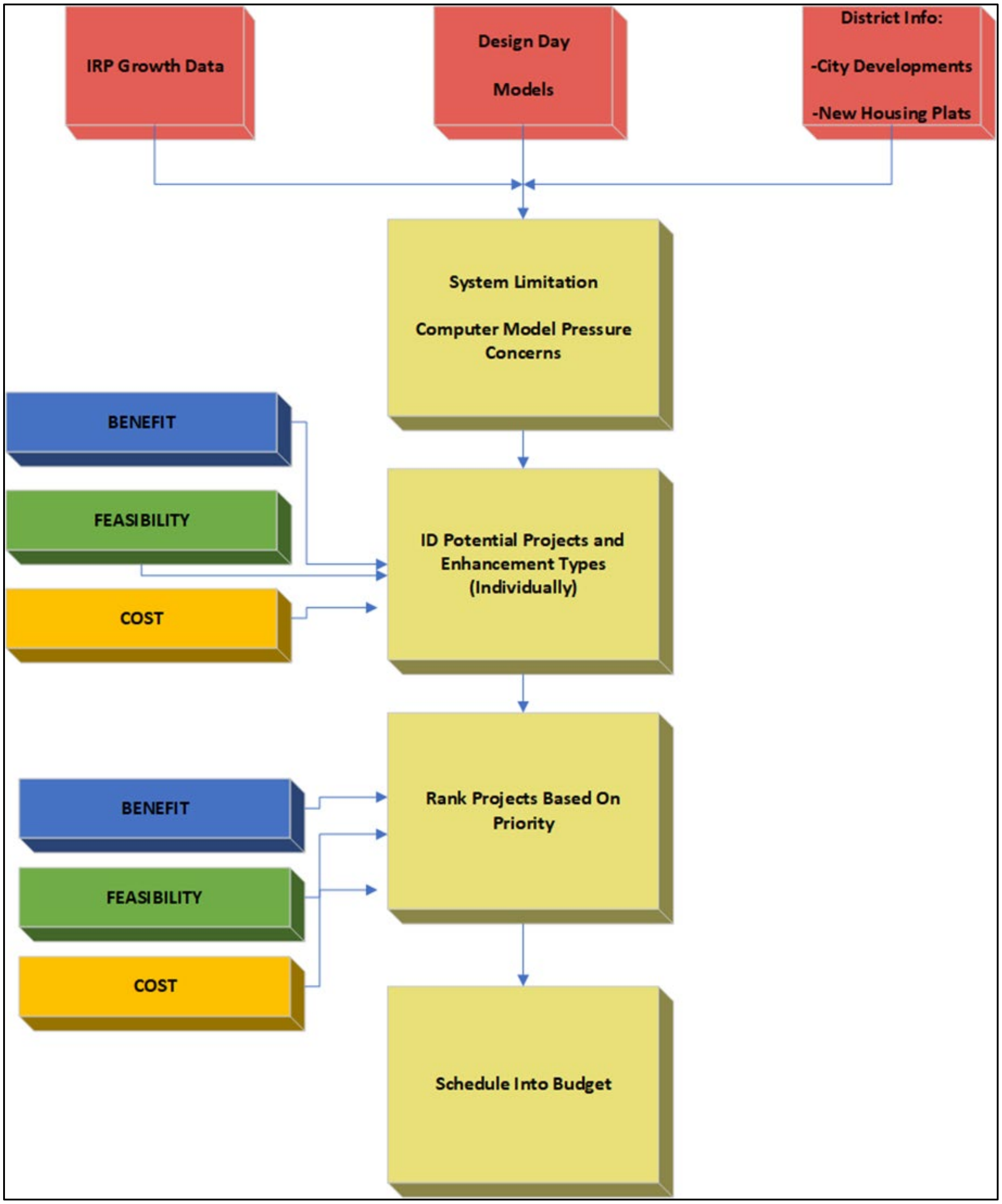
///

///

///

///

Figure 1 – Distribution Planning Project Process Flowchart



Q. Does Cascade conduct a demand study for each individual distribution system project?

A. No. Cascade identifies deficits using Cascade's design day models which has demands incorporated and then works through alternative analysis to identify the most favorable alternative from a cost and project timing need perspective. Cascade completes more robust demand studies for large complex laterals with a significant mileage (e.g., over 20 miles) that have compressor stations on the lateral. These larger, more complex laterals are modeled using unsteady state models using compressor dynamics and large volume customer load profiles to review and ensure the laterals can deliver the flows and pressures needed. Cascade does not operate any laterals that meet the demand study requirement in Oregon at this time.

Q. Does the Company also consider demand side management alternatives?

A. Yes. The Company has considered non-pipe alternatives to offset distribution enhancements. Cascade works with Energy Trust of Oregon ("ETO") to determine feasibility of demand side management for distribution systems that have potential for design day demand reduction using demand side management. Cascade's work with ETO has not yet identified a project to implement demand side management to offset a distribution enhancement due to the timing needs of the deficit. During collaboration with ETO, discussions identified that demand side management efforts need three years in advance of the deficit to implement and determine if those efforts effectively offset the need for the capacity enhancement. Cascade continues to work with ETO to identify non-pipe alternatives opportunities and integrate non-pipe alternatives to offset potential constraint areas.

Q. Are all of the major projects identified in the Company's IRP?

A. No. Safety-related projects are not typically included in the IRP due to safety-related projects being required by Federal and State pipeline safety regulations and to ensure we operate our gas system in the safest means possible. Forced relocations or customer funded projects are also not included in the IRP. Generally, the projects that are included in the IRP are distribution enhancement or expansions projects, which address system capacity deficits and support core growth to ensure reliable core service to the communities we serve. However, a project that may otherwise be analyzed in an IRP could be identified and placed into the budget on a non-IRP year based on timing needs of the deficit, or a project could be identified after the IRP is completed and constructed before the next IRP occurs.

Q. Please provide an overview of Cascade's capital project budgeting process.

A. Capital additions and changes are planned through the annual budget process using PowerPlan ("PP"). The budget process begins with an individual (originator) creating specific funding projects in PP for all new projects to be included in the five-year capital budget. Originators are generally managers at the district level or engineering staff at the corporate level. Sources of information for capital projects include the IRP, DIMP, the Transmission Integrity Management Program, state and local government agencies, and internal Cascade personnel. Funding projects are used to hold the capital budget estimates and will be linked to the capital work orders to be created when actual costs commence. A Fixed Asset Financial Analyst reviews the funding projects for proper setup. If the project is not considered a capital expenditure as it was submitted, it is rejected and sent back to the originator for revision, cancelled, or it is moved to Operations and Maintenance ("O&M") Expense. After the review has been completed; the Fixed Asset Financial Analyst will add appropriate overheads and approve the funding project. Programmatic funding projects are used year after year to budget for high volume mass property work orders typically under $100,000 each.

Once all the funding projects have been updated with expenditures, various Company operating managers generate reports to show estimated expenditures and justification for each project. The managers perform the review of funding projects and see that any necessary changes are made to the estimate and that the project is supported. Reports are then generated by the budgeting personnel for review and approval by the Directors and Vice Presidents of the utility group. Any final budget changes are made, and the budgets are then presented to the utility group's President for review and approval. At each stage of review and approval process a project (or projects) can be challenged for appropriateness and removed from the capital budget or moved to another year within the five-year budget. The addition or removal of projects can also be impacted by other factors such as available capital and/or borrowing capacity.

After final approval, an approved budget version is created in PP and locked for entry and the funding projects and estimated amounts in the approved budget version are copied back to the working budget version. Project managers are notified that the budget has been approved and the funding projects are open for work order creation. Projects are monitored and updated throughout the year as part of the review process and to ensure, as best as possible, that projects are completed on time and within the approved budget.

Q. What costs are addressed in your testimony?

A. My testimony provides support for both actual historical costs for plant in service from 2021 through August 2025. I also provide the estimated costs for projects that will go into service during the September 2025 through the October 2027 future test period. Table 1 below provides a summary of all costs addressed in my testimony.

Table 1 – Summary of Capital Additions – Historical and Forecasted (*in thousands*)

Category	2021	2022	2023	2024	2025[1]	2026	2027[2]	Grand Total
Programmatic	$1,342	$8,922	$9,547	$6,992	$8,637	$6,446	$5,473	**$47,360**
Specific	$-	$-	$1,005	$20,533	$1,847	$17,235	$8,983	**$49,603**
Total	**$1,342**	**$8,922**	**$10,552**	**$27,524**	**$10,484**	**$23,681**	**$14,456**	**$96,962**

Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December)
Note 2: 2027 only includes forecasted amounts through October (i.e., end of test period)

V. PROGRAMMATIC FUNDING PROJECTS

A. System Safety & Integrity Program – Pipe Replacement Program (FP-318184 and FP-318185)

Q. Please describe the System Safety and Integrity Program.

A. The System Safety and Integrity Program ("SSIP") is a structured pipe replacement program for replacing early vintage plastic pipe and early vintage steel pipe.

Early vintage plastic pipe includes plastic mains, service lines, and associated fittings installed earlier than January 1, 1995. Early vintage plastic pipe is further divided into Pre-1983 and Post-1982. Pre-1983 includes pipe installed prior to January 1, 1983 that may be susceptible to possible low ductile inner wall characteristics that can result in slow crack growth and slit failures, as documented by the Pipeline and Hazardous Materials Safety Administration ("PHMSA"), PHMSA–2004–19856.[2] Post-1982 includes pipe installed between January 1, 1983, and December 31, 1994, and is classified as early vintage plastic pipe to account for different inventory levels and rates of new material adoption throughout Cascade's operating locations.

Early vintage steel pipe includes steel mains, service lines, and associated fittings installed earlier than January 1, 1970. This pipe presents an increased risk of failure due to external corrosion, material failure, weld or joint failure, and equipment failure.

Cascade's SSIP replacement program focuses primarily on the replacement of early vintage steel pipe. The primary risks include: external corrosion; material, weld, or joint failure; equipment failure; Maximum Allowable Operating Pressure ("MAOP") documentation; and missing data.

[2] *Available at* https://www.federalregister.gov/documents/2007/09/06/07-4309/pipeline-safety-updated-notification-of-the-susceptibility-to-premature-brittle-like-cracking-of.

External corrosion on early vintage steel pipe is attributed to: bare, disbonded, damaged, or poorly performing pipe coatings; poor soil and backfill conditions; ineffective cathodic protection; and other factors. Material, weld, or joint failure on early vintage steel pipe is typically associated with issues with pipe welds made during installation (lack of weld standards and welder qualification), vintage acetylene gas welds, or pipe and fitting material leaks. Equipment failures that can contribute to leaks include failed O-rings in main to service connections, failed mechanical couplings and fittings, and failures of other aging equipment installed when the pipe was originally installed. Finally, there are also increased risks associated with early vintage steel pipe with unknown attributes or missing data, which includes unknown physical infrastructure (e.g., pipe material, pipe specifications, construction information), historical information (e.g., corrosion control records, maintenance records, leak records), and insufficient information to establish MAOP.

Q. Why did the Company start the SSIP?

A. The SSIP is a direct result of the United Stated Department of Transportation Pipeline and Hazardous Materials Safety Administration's requirement for operators to implement a DIMP that demonstrates an understanding of the distribution system design and material characteristics; describes the operating conditions and environment; provides the maintenance and operating history; identifies existing and potential threats; evaluates and ranks risks; identifies and implements measures to address risks; measures program performance; monitors results; evaluates effectiveness; and periodically assesses and improves the plan. The SSIP is a program that identifies and implements measures to address risks to Cascade's distribution system by replacing elevated risk pipe. DIMP requirements are outlined in 49 CFR Part 192 Subpart P - Gas Distribution Pipeline Integrity Management.

Q. How does the Company prioritize and select safety-related projects as part of its SSIP?

A. Cascade utilizes the DIMP and SSIP to identify, analyze, and monitor risks related to Cascade's distribution system, and to create programs that will reduce risk. To identify risks on the system, Cascade utilizes knowledge of distribution systems characteristics, historical maintenance information, available outside source information, and SMEs who are knowledgeable in operation, maintenance, design, and construction. From this information a risk model is used to manage and assess the risk and to assign appropriate likelihood and consequence factors to Cascade's distribution system. The SSIP then utilizes the DIMP risk model and relative risk score to establish a weighted average risk score for each town in Oregon. The weighted average risk score is then used to identify towns with increased risk related to early vintage plastic pipe and early vintage steel pipe. Ongoing analysis of early vintage plastic pipe and early vintage steel pipe continues to show that this pipe has a greater likelihood to leak and/or have substandard pipe conditions (corrosion, welds/joints, materials, equipment). These segments of main and service lines have an elevated risk of failure as validated by DIMP risk analysis and are, therefore, prioritized for replacement.

Q. Why did the Company undertake the project?

A. Pipeline replacement is typically the most viable option to remediate risks associated with corrosion, material failure, weld/joint failure, equipment failure, and missing data threats. The SSIP program addresses safety, reliability, and operational risks by replacing pipe systematically, where Cascade has determined that replacement is an appropriate action to reduce risk.

Q. How will customers benefit from the project?

A. The SSIP replaces early vintage plastic pipe and early vintage steel pipe prone to corrosion, material failure, weld/joint failure, equipment failure, and missing data threats. The replacement of these high-risk systems increases overall public safety, lowers O&M costs, and improves system reliability for customers.

Q. Did the company undertake a demand study or analysis?

A. No. The SSIP is a direct result of the PHMSA's requirement to implement a DIMP, so a demand study or analysis is not applicable. Cascade's Synergi models are used for planning SSIP replacements in the large town replacements to ensure the trunk line locations and sizes meet the needs of the required demand.

Q. Did the Company consider alternative ways to meet the need for the project?

A. Yes, but as noted, systematic pipe replacement is typically the most viable option for early vintage plastic and steel pipe. When feasible, Cascade will still work jointly with state, city, county, or general contractors performing highway, road, and underground infrastructure replacement projects within the same vicinity. This collaboration eliminates duplication of work, provides cost savings, and limits long-term interruptions to the public and Cascade's customers.

Q. What SSIP pipe replacement projects were completed in 2021, 2022, 2023, 2024, and 2025?

A. Cascade completed SSIP pipe replacement projects in Bend, Oregon in 2021 and 2022 and Baker City, Oregon in 2022, 2023, 2024, and 2025.

Q. Would you please describe the Bend SSIP pipe replacement project?

A. The Bend SSIP pipe replacement project was a multi-year project that started in 2012, primarily focusing on the replacement of early vintage steel main and service lines.

Q. Why did the Company undertake the Bend SSIP pipe replacement project?

A. In 2012, Cascade's DIMP risk model identified Bend as Cascade's highest risk town in Oregon.

Q. What is the project timeline for Bend SSIP pipe replacement project?

A. The Bend SSIP pipe replacement project started in 2012 and ended in 2022.

Q. When was the Bend SSIP pipe replacement project placed in service?

A. Segments of the Bend SSIP pipe replacement project were placed in service throughout 2021 and 2022. The 2021 and 2022 phases of the Bend SSIP pipe replacement project were completed before the end of 2021 and 2022, respectively.

Q. Would you please describe the Baker City SSIP pipe replacement project?

A. The Baker City SSIP pipe replacement project was a multi-year project primarily focusing on the replacement of early vintage steel main and service lines.

Q. Why did the Company undertake the Baker City SSIP pipe replacement project?

A. In 2022, Cascade's SSIP identified Baker City as one of Cascade's higher risk towns with early vintage steel pipe in Oregon. With the reduction in the overall risk in Bend from the Bend SSIP pipe replacement, Baker City became one of next highest risk towns to be considered for replacement.

Q. What is the project timeline for Baker City SSIP pipe replacement project?

A. The Baker City SSIP pipe replacement project started in 2022 and is currently anticipated to continue through 2027.

Q. When was the Baker City SSIP pipe replacement project placed in service?

A. Segments of the Baker City SSIP pipe replacement project were placed in service throughout 2022, 2023, 2024, and 2025. The 2022, 2023, 2024, and 2025 phases of the Baker City SSIP pipe replacement project were completed before the end of 2022, 2023, 2024, and 2025, respectively.

Q. Would you please describe the SSIP pipe replacement projects that will be completed in 2026 and 2027?

A. Yes, Cascade will be continuing SSIP pipe replacement in Baker City, Oregon in 2026 and 2027. The anticipated costs for 2027 in this proceeding only include costs through October 2027.

Q. What were the total costs for the project?

A. The total cost for the SSIP Main and Service Replacement projects are provided in Table 2 below.

Table 2 – SSIP Costs (*in thousands*)

Assets	Funding Project	2021	2022	2023	2024	2025[1]	2026	2027[2]	Total
Mains	FP-318184	$333	$4,205	$4,332	$3,538	$4,533	$2,379	$2,016	**$21,336**
Service	FP-318185	$26	$2,642	$3,129	$1,874	$2,508	$2,379	$2,016	**$14,574**
Total		**$359**	**$6,847**	**$7,461**	**$5,412**	**$7,041**	**$4,758**	**$4,032**	**$35,910**

Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December)
Note 2: 2027 only includes forecasted amounts through October (i.e., end of test period)

Q. Does the Company expect SSIP efforts to continue?

A. Yes. Pipeline operators have a requirement to implement integrity management programs that evolve and mature to fit an operator's unique operating environment. The evolution of an operator's integrity management program takes time and resources to collect and analyze data to accurately identify the most current high-risk pipelines within any given system. Once a system is prioritized and selected, it typically requires multiple years to develop and execute an action plan for full remediation or replacement. Based on this information, Cascade expects the SSIP program to continue for the foreseeable future.

Q. Was the SSIP project included in Cascade's IRP?

A. No, the project was not included in the IRP because it is not related to core growth and is a safety related project.

B. Gas Meters (FP-101210)

Q. Please describe the Gas Meters project.

A. Cascade budgets each year for the number of gas meters needed for new service and its existing operations and maintenance programs. Cascade has a meter replacement program where meters are tested and replaced as needed to stay within established meter read accuracy criterion.

Q. Please describe Cascade's meter replacement program.

A. Utilities are required to adopt schedules for periodic tests and repairs of meters.[3] Cascade Tariff Rule 8 – Meter Testing describes the Company's meter test procedures and meter sample program. The maximum permissible error of meters placed in service is 2.0 percent. Meters with capacity 3,000 cubic feet per hour ("cfh") are tested every ten years and meters with capacity greater than 3,000 cfh are tested every five years.

Cascade also employs a statistical meter sample program, where a meter in the sample group is assigned to a family according to its manufacturer, meter class, and set year. These families may be further subdivided according to meter type, size, location, age, or other factors. The performance evaluation of each meter family is then based on an evaluation of test results from random sampling of the family. Under the meter statistical sample program, corrective action can include either a selective removal program to raise the accuracy performance of the family to acceptable standards or removal of the entire family from service.

The program year begins on January 1 and ends of December 31. Sample data collected during the program year is analyzed, and a decision regarding meter family disposition made in the first quarter of the following calendar year.

[3] OAR 860-023-0015.

Additionally, any customer may request that the Company test their meter.

Q. What were the total costs for the Gas Meters project?

A. The total costs are provided in Table 3 below.

Table 3 – Gas Meters (*in thousands*)

Funding Project	2021	2022	2023	2024	2025[1]	2026	2027[2]	Total
FP-101210	$729	$1,752	$1.287	$1,279	$1,383	$1,454	$1,253	$9,146
Note 1: 2025 is a combination of historical information (January through August and forecasted amounts (September through December) Note 2: 2027 only includes forecasted amounts through October (i.e., end of test year)								

Q. Please summarize the costs identified in Table 3.

A. Table 3 includes costs for gas meters by year. The amounts for 2025 are based on the 2025 Funding Projects budgets. Cascade has actual amounts through August 2025, but not the remainder of the year.

Q. How did Cascade develop its budget for the Gas Meter project for 2025?

A. Cascade bases its budget on the previous year’s costs with a 3 percent escalation for inflation. Cascade then adds any special programs resulting from the meter inspection and testing program.

Q. Did Cascade follow the same process for 2026 and 2027?

A. Yes, however no special programs from meter inspection and testing have been identified for the forecasted test year.

<u>C. Gas Regulators (FP-101259)</u>

Q. Please describe Gas Regulators project.

A. The Gas Regulators project covers Cascade’s regulator purchases for inventory. Cascade budgets each year for the number of regulators needed for new service and or its operations and maintenance programs.

Q. What were the total costs for the Gas Regulators project?

A. The total costs are provided in Table 4 below.

Table 4 – Gas Regulators (*in thousands*)

Funding Project	2021	2022	2023	2024	2025[1]	2026	2027[2]	Total
FP-101259	$162	$184	$188	$212	$157	$210	$170	$1,284
Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December) Note 2: 2027 only includes forecasted amounts through October (i.e., end of test year)								

Q. Please summarize the actual costs identified in Table 4.

A. Table 4 includes costs for gas regulators by year. The amounts for 2025 are based on the 2025 Funding Projects budgets. Cascade has actual amounts through August 2025, but not the remainder of the year.

Q. How did Cascade develop its budgets for the Gas Meter project for 2025?

A. Cascade bases its budget on the previous year's costs with a 3 percent escalation for inflation. Cascade then adds any special programs. The budget will be adjusted if safety or integrity issues are identified.

Q. Did Cascade follow the same process for 2026 and 2027?

A. Yes.

<u>D. Fixed Network Equipment (FP-318192)</u>

Q. Please describe the Fixed Network Equipment project.

A. From 2018 to 2020 the Company installed Encoder Receiver Transmitters ("ERTs") at each gas meter, which are capable of electronically capturing and transmitting data. The Fixed Network ("FN") is constructed with collectors and repeaters, which are devices that relay the data from the ERTs via 900 MHz radio signals and transmit these data over cellular connections back to the Company's FN servers. The individual data is then compiled to a data management system so business applications and software programs can analyze the data. For the FN to gather the needed data, the devices must be placed in proximity to the gas meters and at a height of at least 20 ft above ground. These devices are typically placed on existing utility poles owned by local power utility providers or existing communication towers owned by local entities or utilities.

In 2021, a design of the proposed FN device installation locations, to maximize proximity to existing gas meters, was completed. The Company determined that developing a FN would provide a more durable, long-term solution for collecting customer usage data and would also provide potential operational benefits, that could lead to future cost savings, including reduced costs associated with meter reading.

Q. What were the total costs for the Fixed Network Equipment project?

A. The total costs are provided in Table 5 below.

Table 5 – Fixed Network Equipment (*in thousands*)

Funding Project	2021	2022	2023	2024	2025[1]	2026	2027[2]	Total
FP-318192	$93	$139	$611	$89	$46	$25	$19	$1,022
Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December) Note 2: 2027 only includes forecasted amounts through October (i.e., end of test year)								

Q. Please summarize the actual costs identified in Table 5.

A. Table 5 includes costs for the Fixed Network Equipment project by year. The project began in 2021 with system design and device installation planning and field review. Due to supply chain delays, the FN materials were not received until 2023. The costs in 2023 reflect the receipt of all the FN materials to complete device installations according to the design. Installation of FN devices in Oregon began in 2025 and will continue in 2026 and 2027. The amounts for 2025 are based on the 2025 Funding Projects budgets. Cascade has actual amounts through August 2025, but not the remainder of the year.

Q. How did Cascade develop its budgets for the Fixed Network Equipment project for 2025?

A. Cascade developed the Fixed Network Equipment project budget based on planned device installations for the year and estimated installation costs.

Q. Did Cascade follow the same process for 2026 and 2027?

A. Yes. The budget for 2026 and 2027 is based on planned device installations for each year and the estimated installation costs.

VI. SPECIFIC PROJECTS

A. Shevlin Park Project (FP-318733)

Q. Please describe the Shevlin Park project.

A. The Shevlin Park project is a reinforcement project designed to eliminate the need for the district to bypass during cold weather events and to address the supply issues presented by the ongoing accelerated growth in the western area of Bend. The project includes the installation of a high-pressure ("HP") lateral through Bend to serve a new regulator station in an area of high growth on the west side of Bend. This will address a distribution deficit and low-pressure area during design day peaking. The project consists of running two miles of 6-inch HP steel to Shelvin Park extending from previous high-pressure projects.

Q. Did the Company propose the Shevlin Park project in a previous rate case?

A. Yes. Cascade originally proposed the Shevlin Park project in docket UG 390. As part of the Third Stipulation in that proceeding, costs associated with the Shevlin Park project were removed from stipulated revenue requirement.[4]

[4] Order No. 21-001 at 12.

Q. Why did the Company undertake the Shevlin Park project?

A. The pressure in the Bend northwestern distribution system during peak usage was below design criteria, which requires the Bend District to bypass during cold weather events. This area is located on the outer edge of the Bend distribution system, farthest from previously existing high-pressure pipelines and pressure supply. Though the customers in northwestern Bend were primarily residential, most were large homes with higher gas demand. The system before completion was not able to accommodate the ongoing accelerated growth in the western area of Bend, taking into account the development that was in progress and already permitted by the City.

Q. How will customers benefit from the Shevlin Park project?

A. The new HP pipeline and regulator station brought the northwestern Bend distribution system above design criteria during peak usage and cold weather events, eliminating the need for bypass operations. Additionally, this project allowed Cascade to bring high-pressure gas closer to the areas of Bend with larger residential gas load, allowing for gas service to be offered to new growth occurring in this area of accelerated development.

Q. Did the Company consider alternative ways to meet the need for the Shevlin Park project?

A. Yes. In addition to the Shevlin Park Project as described above, the Company considered the following alternatives to address the system reinforcement needs:

1. <u>Postponing reinforcement.</u> Under this alternative, Cascade would postpone reinforcement for five years.
2. <u>Shorter reinforcement.</u> Under this alternative, Cascade considered changing the route and making the new pipe installation shorter (3,000-4,000 feet), which would put the HP pipeline and new regulator station farther away from the existing and new load.

Q. Why did the Company reject these alternatives and select the Shevlin Park Project?

A. None of the alternatives that the Company considered would adequately meet the Company's need to provide reliable service in the western Bend area and accommodate future load growth.

The Company determined that it could not pursue the first alternative because it would not address the Company's need to bypass during cold weather events to keep system pressures in the northwestern Bend system deliverable to customers. There are many factors that affect the decision to bypass regulation, some of these factors are dependent on current temperatures, inlet pressure from the transmission company, time of day, and flow rates. Due to these fluctuating variables, it is difficult to make a concrete rule on when bypass needs to occur and instead requires close on-site system observation often occurring in extreme weather conditions. There are risks involved with bypass operations with personnel required to manually bypass regulation and closely monitor system pressures to prevent over pressuring the downstream pipeline systems and customer services and meters. Other risks include not performing bypass operations soon enough and potentially losing gas service to thousands of customers.

Additionally, Cascade needs to bring higher pressure and regulation closer to the load to provide service to new gas customers and developers building homes in the western Bend area. There are efficiencies and cost savings that can be achieved by installing gas mains while developments and construction are in progress, and it can be more difficult and expensive to install main and services at a later date when the system capacity is increased and new neighborhoods are built out with finished infrastructure (roads, sidewalks, storm, sewer, water, phone, cable, and power).

The Company determined that it could not pursue the second alternative because this option would not adequately meet the Company's needs for reliability. While the Company's modeling showed that a shorter reinforcement option would provide some improvements in the northern Bend distribution system, there were still customers in the western Bend distribution system that experienced pressures below design criteria and would result in continuing need to bypass during peak usage and cold weather events.

As a result, the Company determined that the Shevlin Park Project was the best option to meet the Company's need for reinforcement in the area and accommodate future growth.

Q. When was the Shevlin Park project placed in service?

A. This project was placed in service in 2024.

Q. What were the total costs for the Shevlin Park project?

A. Total costs for the project were $13,580,944.

Q. Was this project included in an IRP, and were there any significant changes to design and construction following the IRP?

A. Yes, this project was acknowledged in Cascade's 2020 IRP Update, docket LC 76.[5] Permitting requirements from the City of Bend required rerouting a portion of the line and adding additional horizontal directional drills ("HDDs") to meet the specified requirements.

B. Umatilla River Crossing (FP-318684)

Q. Please describe the Umatilla River Crossing project.

A. The project consisted of installing a new river crossing to serve Umatilla due to the inability to perform inspections on the existing bridge crossing. This project installed

[5] *In re Cascade Nat. Gas Corp., 2020 Integrated Res. Plan Update,* Docket No. LC 76, Order No. 23-023 at 4 (Feb. 6, 2023).

1,260 feet of 4-inch steel distribution pipe under the Umatilla River at the Highway 730 bridge.

Q. Why did the Company undertake the Umatilla River Crossing project?

A. The existing crossing was attached to a bridge, which is not accessible for required compliance inspections. The gas line ran through the bridge abutment and was not accessible for inspection. Above ground lines must be accessible for inspection to meet required compliance requirements.

Q. How will customers benefit from the Umatilla River Crossing project?

A. The project will increase reliability and reduce O&M costs because the new crossing will have reduced inspection and O&M requirements. Additionally, the new crossing allows for a second feed into the Umatilla distribution system which provides service redundancy and enhanced reliability to Umatilla

Q. Did the Company consider alternative ways to meet the need for the Umatilla River Crossing project?

A. Yes. The Company considered the option of replacing the bridge crossing on the west side of Umatilla. That bridge, however, was slated for replacement and the governing body did not want Cascade to bore the river as they thought it would interfere with their replacement and potentially require a forced relocation in the future.

Q. When was the Umatilla River Crossing project placed in service?

A. The project was placed in service in 2024.

Q. What were the total costs for the Umatilla River Crossing project?

A. The total costs for the project were $1,417,772.

Q. Was the Umatilla River Crossing project identified in an IRP or conduct a demand study?

A. No. This project was a replacement project.

C. Highway 30 River Crossing Pendleton (FP-319980)

Q. Please describe the Highway 30 River Crossing Pendleton ("Highway 30 River Crossing") project.

A. The Highway 30 River Crossing project consists of installation of 1,550 feet of 6-inch high-pressure steel at the Umatilla river crossing along Highway 30 via an HDD.

Q. Why did the Company undertake the Highway 30 River Crossing project?

A. This crossing was to replace the existing crossing on Highway 30 that was hanging on the bridge. The crossing needed to be replaced and could not be rehung on the bridge since the bridge was determined to be historical, which would not allow us to install new hangers on the bridge that accommodate inspection requirements.

Q. How will customers benefit from the Highway 30 River Crossing project?

A. This project replaces the bridge crossing that needed to be replaced to maintain our high-pressure feed to Pendleton. It will provide better reliability in the event of flooding or road damage to the bridge since the crossing is now bored under the river.

Q. Did the Company undertake a demand study or analysis?

A. The Company did not undertake a demand study or analysis in this case as this project is a replacement of existing infrastructure.

Q. Did the Company consider alternative ways to meet the need for the Highway 30 River Crossing project?

A. Alternatives considered included other high-pressure routes that did not cross the river, however, no alternative route was comparable to replacement in the existing route via an HDD concerning capacity. Some of the alternatives considered are planned as future projects to gain capacity (an example would be the Highway 11 crossing).

Q. When was the Highway 30 River Crossing project placed in service?

A. This project was placed in service in 2024.

Q. What were the total costs for the Highway 30 River Crossing project?

A. Total cost for the project was $2,389,361.

Q. Was the Highway 30 River Crossing project included in an IRP or require a demand study?

A. No. This project was a replacement project and was a like for like project.

<u>D. Hermiston Orchard Avenue Reinforcement-Mains (“Hermiston Orchard Ave.”) (FP-323077)</u>

Q. Please describe Hermiston Orchard Ave. project.

A. The Hermiston Orchard Ave. project consists of installing 4,700 feet of 4-inch polyethylene (“PE”) pipe at West 6th Ave and Orchard Avenue in Hermiston, Oregon by running north on SW 6th Avenue and then west on Orchard Avenue to reinforce the existing distribution system.

Q. Why did the Company undertake the Hermiston Orchard Ave. project?

A. This project addresses a distribution pressure deficit on the east side of Hermiston due to core growth. The project returned distribution pressure to design day criteria for system reliability during cold weather events and will accommodate core growth.

Q. Did the Company consider alternative ways to meet the need for the Hermiston Orchard Ave. project?

A. Alternative distribution reinforcement routes, sizes, and lengths were considered, but this alternative was chosen as the lowest-cost option to address the deficit and support core growth in eastern Hermiston. The existing Hermiston system had limited reinforcement options due to limited trunk lines feeding the east side of Hermiston.

Q. When was the Hermiston Orchard Ave. project placed in service?

A. This project was placed in service in 2024.

Q. What were the total costs for the Hermiston Orchard Ave. project?

A. Project costs totaled $1,513,000.

Q. Was the Hermiston Orchard Ave. project included in an IRP or require a demand study?

A. No. A demand study was not required, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes.

<u>E. Nels Anderson Way Relocation Bend (FP-323478)</u>

Q. Please describe the Nels Anderson Way Relocation project.

A. This project consists of relocating approximately 1,700 feet of 4-inch gas main along Nels Anderson Way in Bend, Oregon. The City was conducting road construction on Nels Anderson Way and Cascade's existing 4-inch line was too shallow in the work area to avoid conflicts with the City's project.

Q. Why did the Company undertake the Nels Anderson Way project?

A. The Company moved and replaced the gas main per the terms of its franchise agreement with the City of Bend. The franchise agreement required Cascade to relocate facilities when they are in conflict with City of Bend facilities and projects.

Q. Did the Company consider alternative ways to meet the need for the Nels Anderson Way project?

A. Yes, but due to timing as well as the city's worksite boundaries, no acceptable alternatives were identified.

Q. When was the Nels Anderson Way project placed in service?

A. The project was placed in service in 2023.

Q. What were the total costs for the Nels Anderson Way project?

A. Total costs for the project were $1,036,970.

Q. Was the Nels Anderson Way project included in an IRP or require a demand study?

A. No. This project was a forced relocation and was replaced like for like.

F. Jamison Street Relocation Bend (FP-324960)

Q. Please describe the Jamison Street Relocation project.

A. This project was a forced relocation of a distribution main required by a City of Bend road upgrade project on Highway 97. This project replaced approximately 1,800 feet of 4-inch steel pipe along Jamison Road between Empire Avenue and Poe Sholes Drive and 50 feet of 2-inch plastic that had to be replaced at a deeper depth to avoid a City infrastructure depth conflict.

Q. Why did the Company undertake the Jamison Street Relocation project?

A. This was a forced relocation due to conflicts with a City road upgrade project.

Q. How will customers benefit from the Jamison Street Relocation project?

A. This will resolve conflicts with City of Bend infrastructure upgrades for the community and ensure continued service for Cascade customers.

Q. Did the Company consider alternative ways to meet the need for the Jamison Street Relocation project?

A. Yes, a portion of this project was replaced with PE. PE installation is lower cost than steel pipe installation.

Q. When was the Jamison Street Relocation project placed in service?

A. The project was placed in service in 2024.

Q. What were the total costs for the Jamison Street Relocation project?

A. Total cost for the project was $1,605,021.

Q. Was the Jamison Street Relocation project included in an IRP or require a demand study?

A. No. This project was a forced relocation and was a like for like replacement.

VII. FORECASTED MAJOR PROJECTS

A. Bend High-Pressure System Replacement ("Bend HP Replacement") (FP-316576, FP-316577, and FP-316578)

Q. Please describe the Bend HP Replacement project.

A. This project involves replacing high-pressure gas distribution lines in the Bend system both to remedy existing capacity issues and to account for projected growth that is already underway in Bend, Oregon. By replacing the high-pressure system, Cascade is both resizing the lines to meet current demand, as well increasing MAOP to allow for increased flow through the line. It is a multi-phase project. Phases 1 and 2 were completed in 2018 and 2020, respectively. Phases 4 (FP-316577) will be completed and in service by the end of 2025. Phase 3 (FP-316576) will be completed and in service by the end of 2026. Phase 5 (FP-316578) will be completed and in service before the end of the forecast test year, October 31, 2027.

Q. Why did the Company initiate the Bend HP Replacement project?

A. The pressure in the northwestern Bend distribution system during peak usage is below design criteria, which requires the district to bypass during cold weather events. The specific area of concern is the outer edge of Cascade's Bend distribution system, farthest from existing high-pressure pipelines and regulation. The area is primarily residential, with larger homes and higher gas demand. The existing system does not allow for ongoing accelerated growth in the western area of Bend that is expected over the next few years.

Q. How will Cascade's customers benefit from this project overall?

A. Customers will benefit from more reliable gas service with better pressures that will support core growth. In addition, new customers will be able to obtain reliable service from Cascade since the Bend HP Replacement project will enable the Company's system to support the industrial and commercial growth that is occurring in the northwest part of Bend.

Q. Did the Company consider alternative ways to meet the need for the Bend HP Replacement project?

A. Yes. Cascade considered several alternatives to the Bend HP Replacement project. One alternative considered was to add a third gate to the town of Bend in Northeast Bend and then run high-pressure east into Bend and tie-into the existing Bend high-pressure system for an additional back feed. This alternative was not selected due to higher cost required to install a third gate and significant pipeline length to connect to the existing high-pressure system. Cascade also considered alternative sizes of 8-inch or 10-inch high-pressure to the 12-inch high-pressure for cost consideration. Cascade determined that the capacity gained for 12-inch justified the cost increase difference between installing 8-inch or 10-inch high-pressure. Construction and installation cost is similar for 8-inch, 10-inch or 12-inch high-pressure since the trench size to install the pipe and complete right-of-way restoration is consistent and the main cost difference is in the material cost.

Q. Has the Commission acknowledged the Bend HP Replacement project and its various phases?

A. Yes. In docket LC 76, Cascade's 2020 IRP Update, the Commission adopted Staff's recommendation to acknowledge Bend 6-inch Phase 3 and all planned, subsequent phases.[6] In recommending approval of the project, Staff clarified that "Cascade no longer needs to have each individual phase of this project acknowledged."[7] Staff

[6] Order No. 23-023 at 3.
[7] Order No. 23-023, App. A at 7.

recognized that the high-pressure replacement project in Bend was needed due to "immediate safety or reliability concerns" for the Company's customers.[8]

1. Bend HP Replacement Phase 3 (FP-316576)

Q. Please describe Bend HP Replacement Phase 3.

A. This project is Phase 3 of the Bend HP Replacement project. Phase 3 includes replacing the 6-inch HP main along Bear Creek Road and through the Bear Creek School, up to Dean Swift Road with a 12-inch HP Main and establish MAOP of 500 psig for the HP Main for future pressure increase. The project starts at the intersection of Glenwood Drive and 9th Street to Bear Creek Road and Dean Swift Road. It is also proposed to install distribution main to eliminate some regulator stations, but continue to feed the existing customers, including approximately 18 high-pressure service sets.

Q. What work has been completed and when will the Bend HP Replacement project be placed in service?

A. Design and permitting have started. The Company anticipates completing this project before September 2026.

Q. What are the estimated costs for the Bend HP Replacement project?

A. Estimated costs for the project are $5,052,031.

Q. Please describe any significant project changes between what was described in the IRP and how it is being described in this testimony.

A. The project has been delayed due to City permitting issues and construction review requirements. The Company participated in multiple rounds of discussions with the City of Bend to identify specific project requirements including restoration required and potential alignment alternatives.

[8] Order No. 23-023, App. A at 7.

2. Bend HP Replacement Phase 4 (FP-316577)

Q. Please describe Bend HP Replacement Phase 4.

A. This project is Phase 4 of the Bend HP Replacement project. Phase 4 installed 1,200 feet of 12-inch HP steel main from the end of Phase 3 at Dean Swift Road to Ward Road on Bear Creek Road.

Q. When was the Bend HP Replacement Phase 4 project placed in service?

A. This particular phase was completed in July 2025 in conjunction with city roadwork.

Q. What were the costs for the Bend HP Replacement Phase 4 project?

A. Actual costs for the project were $1,842,039.

Q. Please describe any significant project changes between what was described in the IRP and how it is being described in this testimony.

A. This Phase 4 was reduced in scope to only include the section of main in conflict with the city's work on Bear Creek Road in 2025. The scope that was not addressed was added to Phase 5.

3. Bend HP Replacement Phase 5 (FP-316578)

Q. Please describe Bend HP Replacement Phase 5.

A. This project is Phase 5 of the Bend HP Replacement project. Phase 5 involves extending 6,400 feet of 12-inch high-pressure pipe from the end of the phase four extension to the Gate station.

Q. What work has been completed and when will Phase 5 of the project be placed in service?

A. No work has been completed on Phase 5, construction is planned to start in summer of 2027 and it is anticipated to be in-service by October 2027.

Q. What are the estimated costs for Phase 5 of the project?

A. Estimated costs for the project are $6,351,967.

Q. Please describe any significant project changes between what was described in the IRP and how it is being described in this testimony.

A. The scope of activities under Phase 5 was expanded to include some of the scope originally planned for Phase 4.

<u>B. Ward/Hamby HP Extension (FP-325751)</u>

Q. Please describe Ward/Hamby HP Extension project.

A. This project is a high-pressure main extension. Cascade prioritized this project based on an anticipated short permitting time period and the need to address a severe supply shortage the Company projects in the north and west parts of Bend before the Bend HP Replacement project (Phases 3, 4, and 5) can be completed. Continued growth in the area has shown that this extension will still be needed, after the high-pressure system upgrades are completed, to continue to supply customers in that area. This project will install 2.7 miles of 6-inch high-pressure steel from the Bend Gate station, going north, until we can install a new regulator and tie into the distribution system on NE Butler Market Road.

Q. Why did the Company undertake the Ward/Hamby HP Extension project?

A. Cascade projects there is a high probability of losing service to core customers in cold weather events until the full, high-pressure system upgrade can be completed. With continued developments, this extension will supply gas directly to the area where the Company is struggling to get gas. Further, this project can be completed in a shorter timeframe than the high-pressure upgrade based on immediate need.

Q. How will customers benefit from the Ward/Hamby HP Extension project?

A. Making this investment will improve reliability and return pressure to within design day criteria for core customers. This project will also serve continued growth in Bend.

Q. Did the company undertake a demand study or analysis?

A. No, the project was evaluated using Cascade’s normal capital budgeting process.

Q. Did the Company consider alternative ways to meet the need for the Ward/Hamby HP Extension project?

A. Yes, various sizes and routes were evaluated when designing this project. One alternative considered was to install a new gate in north Bend and then run a high-pressure line into north Bend to loop the high-pressure system. Given the cost of a gate and amount of high-pressure line required, this option was not chosen due to its higher cost.

Q. What work has been completed and when will the Ward/Hamby HP Extension project be placed in service?

A. A regulator site easement is being pursued. Survey and design work is ongoing. The project is scheduled to be in service by the end of 2026.

Q. What are the estimated costs for the Ward/Hamby HP Extension project?

A. Estimated costs for the project are $3,960,579.

Q. Has the Ward/Hamby HP Extension project been presented in an IRP?

A. The need for this project was identified in 2025 and budgeted for 2026.

C. Bend City Gate-TC Energy (FP-318745)

Q. Please describe the Bend City Gate-TC Energy project.

A. This project includes the costs of TC Energy's modifications to the Bend gate, to accommodate the upgrades from the Bend HP Replacement project (FP-316578, FP-316576, FP-316577) and the Ward/Hamby HP Extension project (FP-325751). All new gate stations or gate station upgrades have two components. The first component is the cost for the interstate transmission facility to install or upgrade their facilities to meet the station's capacity request. The interstate transmission company will determine what facilities are needed. Typical facilities include taps, a meter set and valves and piping that are sized for the capacity. On interstate transmission gates, Cascade pays for the interstate transmission company to complete the project including, project management, design, material acquisition, bidding the project to a contractor, construction, permitting and land acquisition to complete the project. The second component of a gate station upgrade is the Cascade facilities to take custody of the gas and regulate and odorize the gas to serve its distribution system. Cascade will design and install the Cascade facilities needed for the gate station project. Cascade is upgrading its side of the Bend gate.[9]

Q. Why did the Company undertake the Bend City Gate-TC Energy project?

A. The upgrades to TC Energy's facilities are required to accommodate Cascade's upgrades to its side of the Bend gate associated with the increased size and MAOP of the Bend HP Replacement project.

Q. How will customers benefit from the Bend City Gate-TC Energy project?

A. There will be increased reliability, pressure, and more physical capacity at the gate.

Q. Did the Company consider alternative ways to meet the need for the Bend City Gate-TC Energy project?

A. Yes, there were alternatives considered for the high-pressure system upgrade as a whole for Bend. Some of those alternatives have turned into projects like the high-pressure extension along Ward/Hamby road. An alternative previously discussed in this testimony is installing a new Bend gate in North Bend and then running high-pressure into the center of Bend to tie-into the existing Bend high-pressure system. However, this alternative has not been pursued due to higher cost.

Q. What work has been completed and when will the Bend City Gate-TC Energy project be placed in service?

A. No work has been completed. This work is anticipated to be completed in 2027.

[9] *See* CNGC/901, Darras/2.

Q. What are the estimated costs for the Bend City Gate-TC Energy project?

A. Estimated costs for the project are $1,258,875.

Q. Please describe any significant project changes between what was described in the IRP and how it is being described in this testimony.

A. This project is associated with the Bend HP Replacement project acknowledged in the 2020 IRP and 2020 IRP Update in docket LC 76. This project was anticipated to be done in 2026 and has since been pushed back in conjunction with the delayed timing of the Phases 3, 4, and 5 because those projects are needed to achieve the new capacity of the gate.

D. La Pine Reinforcement (FP-324532)

Q. Please describe La Pine Reinforcement project.

A. The La Pine Reinforcement project will install 6,400 feet of 6-inch PE reinforcement to support developments taking place in the north part of the La Pine, Oregon system. The reinforcement starts on Finley Butte Road runs west across Highway 97 and then runs north to Memorial Lane near the high school.

Q. Why did the Company undertake the La Pine Reinforcement project?

A. Proposed development in the north part of La Pine requires reinforcement to provide reliable gas service and support core growth.

Q. How will customers benefit from the La Pine Reinforcement project?

A. The installation will support the known development but was sized and placed to act like a trunk line and make small reinforcement effective for new customers coming onto other parts of the system.

Q. Did the company undertake a demand study or analysis?

A. No, the project was evaluated using Cascade’s normal capital budgeting process.

Q. Did the Company consider alternative ways to meet the need for the La Pine Reinforcement project?

A. Yes, high-pressure installations and other routes were reviewed and compared against the anticipated demands of the system. High-pressure installations were not selected due to higher costs and other routes were not selected due to longer routes that would have higher installation costs compared to the selected route.

Q. What work has been completed and when will the La Pine Reinforcement project be placed in service?

A. This project has been budgeted and is anticipated to be complete in August 2026.

Q. What are the estimated costs for the project?

A. The current cost estimate is $1,673,025.

Q. Has the La Pine Reinforcement project been presented in an IRP?

A. No. The need for this project was identified in 2025 and was then budgeted for 2026 based on deficit timing needs.

E. Umatilla Gate Station to Regulator Station 056-R-1010 ("Umatilla Gate Station") (FP-324099)

Q. Please describe the Umatilla Gate Station project.

A. The Umatilla Gate Station project is a replacement project for the existing 2-inch high-pressure line between the Umatilla Gate Station and the inlet of regulator station 056-R-101 with 4-inch high-pressure line. The project will require replacement of approximately 13,500 feet of new line.

Q. Why did the Company undertake the Umatilla Gate Station project?

A. Due to growth, during winter weather, the inlet pressure at Regulator Station 056-R-101 has been getting too low to allow for adequate differential pressure across the station and is not meeting design day criteria. This deficit contributes to lower outlet pressure, concerns of choke flow, the potential for bypassing to hold system pressures, and a risk of losing customers in low-pressure areas.

Q. How will customers benefit from the Umatilla Gate Station project?

A. Customers will benefit by having increased system reliability during winter weather conditions and allow for additional growth in the area.

Q. Did the company undertake a demand study or analysis?

A. No, the project was evaluated using Cascade's normal capital budgeting process.

Q. Did the Company consider alternative ways to meet the need for the Umatilla Gate Station project?

A The only feasible alternative to replacing the existing 2-inch main would be a new gate at a different location and high-pressure system to support the growth in Umatilla. But that alternative is not desirable because land acquisition and a new gate likely exceeds the cost of this replacement project. Additionally, the project timeline for a new gate station would exceed the required target in-service date of September 2026, to avoid the deficit heading into winter weather.

Q. What work has been completed and when will the Umatilla Gate Station project be placed in service?

A. The Company has initiated design work, and expects that the project will start construction in 2026 and be placed into service by the end of September 2026.

Q. What are the estimated costs for the Umatilla Gate Station project?

A. Estimated costs for the project are $2,089,756.

Q. Has the Umatilla Gate Station been presented in an IRP?

A. No. This project is planned to be completed before Cascade's next IRP filing.

F. Redmond HP Extension Rimrock/Highway 126 (“Redmond HP Reinforcement”) (FP-324424)

Q. Please describe the Redmond HP Reinforcement.

A. This Redmond HP Reinforcement project is part of a larger effort to extend the high-pressure system in Redmond, Oregon from the existing regulator located on Rimrock Road, along Highway 126 to a new regulator station site that has yet to be acquired. The extension will be 6-inch steel and is anticipated to be approximately 4,800 feet long, depending on where the regulator station easement can be acquired. The project will start from the stub on SW Rimrock Way and SW Evergreen Avenue, run south on Rimrock Way, and then west along Highway 126 to SW 35th Street to where a regulator station easement can be obtained.

Q. Why did the Company undertake the Redmond HP Reinforcement?

A. The high-pressure system has adequate pressure but does not extend far enough to adequately serve the extent of the system. During cold weather events, core customers are anticipated to lose pressure if this project is not pursued.

Q. How will customers benefit from the Redmond HP Reinforcement?

A. This high-pressure extension will reinforce the distribution system and provide reliability by adding another distribution feed to Redmond. The project will return distribution pressures to design day criteria to support core growth that has occurred in Redmond.

Q. Did the company undertake a demand study or analysis?

A. No, the project was evaluated using Cascade’s normal capital budgeting process.

Q. Did the Company consider alternative ways to meet the need for the Redmond HP Reinforcement?

A. Yes. Two alternatives were considered. The first alternative considered was a 6-inch PE distribution loop. The second alternative considered was a shorter high-pressure reinforcement with a 6-inch PE to loop the distribution system. Neither of these alternatives were able to restore the design day pressures to design criteria and would have required additional reinforcements and would have likely still required the HP to be extended to the same scope as project.

Q. What work has been completed and when will the Redmond HP Reinforcement be placed in service?

A. Project walks, survey, and design have begun. The project is anticipated to be in service by end of 2026.

Q. What are the estimated costs for the Redmond HP Reinforcement?

A. Estimated costs for the project are $3,474,371 for the mainline.

Q. Has the Redmond HP Reinforcement been presented in an IRP?

A. No. The need for this project was identified in late 2023.

G. Punkin Road Main Pendelton ("Punkin Road Main") (FP-326992)

Q. Please describe Punkin Road Main project.

A. The Punkin Road Main project includes the installation of approximately 4,500 feet of 4-inch steel high-pressure steel on Punkin Road in Pendleton, Oregon to extend the high-pressure main and add an additional regulator station to a low-pressure area to support core growth.

Q. Why did the Company undertake the Punkin Road Main project?

A. An extension of the existing high-pressure system is needed to reinforce the system to support growth on the eastern part of the system and address a pressure deficit.

Q. How will customers benefit from the Punkin Road Main project?

A. Customers will benefit from increased reliability of the system during winter weather conditions by having acceptable peak day system pressures. Customers will also benefit by increased capacity to support core growth in Pendleton by addressing a pressure deficit.

Q. Did the company undertake a demand study or analysis?

A. No, the project was evaluated using Cascade's normal capital budgeting process.

Q. Did the Company consider alternative ways to meet the need for the Punkin Road Main project?

A. Yes, alternatives were considered using other distribution reinforcements, but none were adequate to bring system pressures to design day criteria. Alternatives for this project were limited due to system dynamics, such that no other alternative apart from extending the existing nearby high-pressure and adding a regulator station could be identified.

Q. What work has been completed and when will the Punkin Road Main project be placed in service?

A. No work has been completed on the project thus far. The project will be completed in September 2027.

Q. What are the estimated costs for the Punkin Road Main project?

A. Estimated costs for the project are $1,372,306.

Q. Was the Punkin Road Main project included in a previous IRP?

A. No. The need for this project arose in June 2025.

VIII. CONCLUSION

Q. What is your recommendation to the Commission?

A. I recommend that the Commission find that the capital investments described in my testimony and in Exhibit CNGC/901 are reasonable and prudent.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

MINOR PLANT ADDITIONS

($150,000 TO $1 MILLION)

EXHIBIT 901

November 2025

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-302370	Corrosion Protection Programmatic Project. The Gas Cathodic Protection blanket funding project provides corrosion control to the Company's buried steel natural gas pipe from the effects of external corrosion. This includes the installation of corrosion control protection devices, which include rectifiers, galvanic ground beds, impressed current ground beds, AC/DC mitigation, and test stations. Individual installations go into service upon completion.	2021 - $34,514 2022 - $3,181 2023 - $0 2024 - $10,473 2025 - $103,541 2026 - $465,492 2027 - $472,099	The Gas Cathodic Protection blanket funding project provides corrosion control to the Company's buried steel natural gas pipe from the effects of external corrosion. Cascade is mandated by the Pipeline and Hazardous Materials Safety Administration (PHMSA) to provide cathodic protection for its steel natural gas pipelines. The Company's Corrosion Control department is responsible for monitoring and annual testing of our corrosion control systems.	A demand study was not required for this project as this is a blanket project not involving added load.	No comparable alternatives are available.	Not applicable.
FP-306990	Pendelton HP Expansion Project. Project extends a high-pressure feed to connect with the distribution system on the north side of the Umatilla River in the City of Pendelton, OR. The project will be a 4" HP steel line approximately 2,000 feet ("ft") in length dependent on where an associated regulator station site can be located. The project will run in public right-of-way from the existing HP line on Westgate along NW Carden Ave to a proposed regulator station which will connect to the existing distribution system. Project will go into service by end of 2026.	$621,808	This project has two main purposes. First, it creates a more direct flow of gas into the northern portion of Pendelton and brings distribution system pressures into design day criteria in that area of town. Second, it provides a feed for this area of Pendelton that does not cross the Umatilla River. In 2020, the Umatilla River flooded and threatened bridges holding pipelines that feed this area. This project would allow Cascade to isolate distribution bridge crossings in the event of another flood while maintaining service to the north side of the city.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes.	Two alternatives were identified: 1) locate a regulator station next to our existing HP line, and running a distribution pipeline to tie into the existing distribution system; or 2) run the HP pipeline along the north end of the city.	Both alternatives were rejected. The first alternative was rejected because there was no site located on which to place a regulator station in the area. The second alternative was rejected due to the required pipeline length and added cost.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-316854	Bend Gate Odorization/Regulation Project. This project will upgrade odorization and regulation facilities at the Bend gate to support flows needed for the planned Bend HP System Replacement (*see* FP-316578, FP-316576, FP-316577, and FP-325751) to meet core growth. This project will need to be completed in collaboration with the TC Energy gate upgrade in FP-318745. Project will go into service by October 2027.	$630,795	Current regulation and odorization facilities at the gate are undersized for long term growth planning and need to be upgraded to meet core needs.	See CNGC/900, Direct Testimony of Patrick C. Darras on Bend HP System Replacement	See CNGC/900, Direct Testimony of Patrick C. Darras on Bend HP System Replacement	See CNGC/900, Direct Testimony of Patrick C. Darras on Bend HP System Replacement
FP-317217	Ontario HP Replacement (coming out of the Ontario Gate Station). Project required installation of 2,600 ft of new 10" HP line to protect against future exposure. Project went into service in 2022.	$615,082	The existing high-pressure line crossed an agricultural field. The results of a survey showed that the existing line had shallow cover with high potential for excavation damage related to farm operations. The line had to be replaced with a new, deeper line to meet depth requirements for high-pressure.	A demand study was not required for this project as this was a like-for-like replacement with the same diameter pipelines and no added load.	No comparable alternatives were available.	Not applicable.
FP-318091	High-pressure Service Set (HPSS) Programmatic Project. Cascade budgets each year for a number of HPSS replacements. A HPSS is an isolated small regulator station off a high-pressure line required to serve a residential meter where distribution piping is not available. Individual installations go into service upon completion.	2021 - $51,458 2022 - $21,075 2023 - $58,328 2024 - $30,163 2025 - $0 2026 - $59,020 2027 - $59,265	HPSS sets need to be replaced to meet new HPSS inspection criteria, for instance Cascades' older HPSS designs do not have a bypass to complete HPSS maintenance requirements and need to be replaced to meet inspections requirements.	Not applicable for blanket projects.	No comparable alternatives are available.	Not applicable.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-318099	New District Regulator Station Programmatic Project. Cascade budgets for the number of new district regulator stations required to support growth. Individual installations go into service upon completion.	2021 - $0 2022 - $0 2023 - $173,836 2024 - $0 2025 - $43,781 2026 - $177,060 2027 - $201,501	District regulator stations cut pressure from high-pressure systems to serve lower pressure distribution systems. This project can be used for core growth to expanding areas and/or industrial or commercial growth.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes.	No comparable alternatives are available.	Not applicable.
FP-318174	District Regulator Station Replacement Programmatic Project. Cascade budgets each year for a number of regulator stations to be replaced. Individual installations go into service upon completion.	2021 - $0 2022 - $0 2023 - $216,693 2024 - $56,529 2025 - $283,579 2026 - $177,060 2027 - $177,795	An existing regulator station may need to be replaced due to a conflict/relocation request, undersized components due to growth or an operations concern that can only be addressed by replacement. Some examples could include corrosion or a non-working valve that limits functionality of the station which impacts O&M tasks.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes.	No comparable alternatives are available. Regulator replacements are typically like-for-like.	Not applicable.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-318741	Ponderosa Reinforcement Project. Project involves increasing the size of approximately 1,200 ft of existing 4" PE along Ponderosa Street coming out of R-84 to 6" PE, the regulator station that feeds this area. The project site starts at China Hat Road and Stonegate Drive and heads northwest to end at Ponderosa Street and Emigrant Drive. Project went into service in 2023.	$253,841	The pressure in the Bend southcentral distribution system during peak usage is below design criteria and the system is isolated due to the river on the west and the highway to the east. This scenario results in the district needing to perform bypass during cold weather events and restricts the Company's ability to install reinforcement loops from areas of the system above design criteria.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes	Two alternative routes were considered: 1) the Company evaluated the feasibility of installing 600 ft of 4" PE pipe under Highway ("HWY") 97 to connect the distribution system on SE Hayes Avenue; and 2) the Company evaluated the feasibility of replacing approximately 1,500 ft of 2" steel pipe with 4" steel pipe in SE Badger Road.	The alternatives that the Company considered would either not adequately meet the Company's needs to provide reliable service in the southcentral Bend distribution area or were determined to be infeasible. As a result, the Company determined that the Ponderosa Reinforcement Project was the best and most cost-effective option to meet the Company's need for reinforcement in the area.
FP-319723	Redmond Gate Odorizer Project. The existing Redmond gate odorizer was replaced with an injection style odorizer with 500-gallon tank, pad, cover, and flare assembly to support demand in Redmond, OR. Project went in service in 2024.	$363,481	The existing Redmond gate odorizer was undersized due to new growth and needed to be replaced with a new odorizer sized for existing and current flow at the Redmond gate.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes.	No comparable alternatives are available for an in-place odorizer replacement.	Not applicable.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-319924	Bend Gate Odorizer Project. The existing Bend gate odorizer was replaced with a larger odorizer to meet the Bend HP System Replacement project flow needs. Project went in service in 2024.	$230,288	Odorizer was undersized to meet odorant flow requirements and needed to be replaced with a new odorizer sized for Bend HP System Replacement project needs at the Bend gate.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes.	No comparable alternatives are available for an in-place odorizer replacement.	Not applicable.
FP-319969	Replace about 200 ft of 10" HP steel main at the Ontario gate to retire the odorizer station that was replaced a few years back but was not retired. Installed and placed into service in 2022.	$165,701	High-pressure line needed to be retired and replaced in order to address non-hazardous leaks and facilitate the removal of the odorizer, which had been out of service for the previous five years, but was never removed when the new odorizer was brought online.	Not applicable for retirements.	No comparable alternatives for an in-place retirement are available.	Not applicable.
FP-319993	Replace and relocate about 600 ft of 4” HP main located in an elevated berm in Hermiston. The main was relocated to meet depth requirements. Installed and placed into service in 2022.	$173,118	This berm was experiencing erosion due to off-road vehicles using the area. This caused our pipeline to be exposed or loss of cover along this section of pipeline.	A demand study was not required for this project as this was a like-for-like replacement with the same diameter pipelines and no added load.	No comparable alternatives for an in-place replacement are available.	Not applicable.
FP-320037	Replace about 750 ft of 4” steel DP hanging on HWY 395 bridge in Hermiston over railroad tracks with new 6” steel DP. Installed and placed into service in 2023.	$884,549	Pipe hangers created areas of concern for corrosion due to metal-on-metal contact. In addition, the Company was not able to inspect the pipe due to active railroad operations.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes. Pipe was upsized to accommodate future growth in the area.	No comparable alternatives are available for in-place replacement.	Not applicable.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-320038	The HWY 11 Replacement project will replace a bridge crossing on HWY 11 in Pendleton, Oregon with an HDD bore under the river with new 6" steel main. This project will replace approximately 1,200 ft of 6" steel along HWY 11 and will include a railroad crossing. This project will begin at SE Court Pl and then run north to a desirable bore pit location in county right-of-way. The estimated in-service date at this point is May 2026.	$984,789	The existing pipeline crossing has been subject to damage when the Umatilla River has flooded in the past. With this 6" steel line being the only feed to this area, there is risk that if damage is significant to the pipe hanging on the bridge, the area that this pipeline feeds will drop all downstream customers if the bridge fails or the pipe gets dislodged from the pipe supports causing a hazardous event or if Cascade chooses to take the pipe on the bridge out of service due to safety concerns associate with a flooding event.	A demand study was not required for this project as this was a like-for-like replacement with the same diameter pipelines and no added load.	Cascade evaluated alternate routes as part of its standard process.	Other routes resulted in higher costs because they required a longer distance to the single feed system and still required crossing the Umatilla River and some required private property easements.
FP-320039	Walla Walla River Regulator Station Relocation. Fabricate and install a new regulator station in a new location to replace the existing R-8 regulator station in conjunction with the FP-325003 main installation near Milton Freewater, OR. Planned to go into service in 2026.	$237,985	The current location of this regulator station is situated in a low elevation (depression) area adjacent to the Walla Walla River. The river flooded and inundated this area with water and washed debris against this facility in 2020. Cascade determined that this station was in danger of serious damage in the event of a flood.	A demand study was not required for this project as this was a like-for-like replacement/relocate	As an alternative to moving the regulator station, Cascade evaluated the existing site to determine whether it could be protected in a flood.	Cascade determined that no adequate flood protection could be implemented at the existing site. Moving the regulator station was the only option.
FP-321235	Replace the ageing regulator station R-9 in Weston with a new station in the same location. Installed and placed into service in 2025.	$282,190	The existing regulator station was experiencing leaks and had developed other compliance issues that could not be fixed without replacement.	A demand study was not required for this project as this was a like-for-like replacement.	No comparable alternatives are available for in-place replacement.	Not applicable.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-323238	Shorted Casing Replacement Programmatic Project. The blanket funding project replaces shorted casings. A steel carrier pipe installed inside a steel casing is required to be electrically isolated from the steel casing. To determine if a steel carrier pipe is electrically isolated from a steel casing, each casing is tested annually to determine if the casing is shorted or electrically isolated. If a casing is determined to be shorted, it must be mitigated or replaced before its status can be resolved as not shorted to be in compliance.	2025 - $80,558 2026 - $389,532 2027 - $352,034	Mitigation methods are a short-term remedial action as metal-to-metal contact may reoccur. Therefore, replacement or abandonment/removal are the preferred methods to minimize the threat of a shorted casing. Eliminating shorted casings reduces ongoing O&M maintenance costs associated with inspecting shorted casings.	A demand study was not required for this project as this was a like-for-like replacement.	No comparable alternatives are available for in-place replacement.	Not applicable.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-323258	Prineville HP Extension (NW Lamonta). Project to extend the existing high-pressure system to deliver HP gas further into town. The existing high-pressure line is located at the corner of Harwood Ave and Lamonta Dr in Prineville. 3000 ft of 6" steel pipeline will be installed down NW Lamonta Rd until N Main St, where a suitable regulator station location will be procured and then a 3" regulator will be installed to tie into the nearest 4" main. Project is planned to go into service in 2026.	$868,031	The town of Prineville, OR has low-pressure at its fringes. This project is to improve serviceability and reliability to the Prineville distribution system by addressing low-pressure and bringing distribution system pressures back into design criteria to support core growth.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes	An alternative to this project was to increase the capacity of the Prineville transmission line. The first alternative would be to loop a section of the Prineville transmission line. A second alternative considered was uprating the transmission line to 500 psig and upgrading the Prineville gate with Cascade taking over regulation.	Neither of these alternatives were pursued due to higher cost.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-323443	Cascade executed agreements with Pine Creek RNG for two RNG interconnect facilities located in close proximity to each other in Richland, Washington. This allows RNG from two of Pine Creek RNG's biomethane refining systems located at the City of Richland's Horn Rapids Landfill and Lamb Weston's plant on Saint Street to flow into Cascade's distribution system and provides for Cascade to purchase at least 50% of the total environmental attributes and all of the biomethane related to the RNG produced by both facilities. FP-323443 is for the infrastructure required for the City of Richland's Horn Rapids Landfill. The project will allow RNG from Pine Creek RNG's biomethane refining system at the Horn Rapids Landfill to flow into Cascade's distribution system. The project consists of a new interconnect facility at the Horn Rapids Landfill at the location of Pine Creek's biorefinery and approximately 9,100 ft of 6-inch plastic pipeline from the interconnect facility to Cascade's existing distribution system on Kingsgate Way. FP-323443 specifically is for the quality monitoring equipment and the odorizer station within the interconnect facility.	$364,283 (Oregon allocated)	The project will allow RNG from Pine Creek RNG's biomethane refining system at the Horn Rapids Landfill, Richland, WA to flow into Cascade's distribution system. Acquisition of the RNG has the added benefit of enabling Cascade to meet the requirements of the Oregon CPP and allow Cascade to make RNG available to its customers on a voluntary basis.	RNG project was identified in dockets LC 83 and UM 2307.	This project compares favorably with opportunities to purchase off-system attributes as well as other on-system projects, as the total market value per dekatherm per year and the total impact revenue requirement per dekatherm were lower on this project than the marginal abatement costs identified.	Not applicable.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-323469	Lamb Weston RNG Interconnection. This project relates to the other Pine Creek RNG interconnect facility in Richland, Washington as discussed above. FP-323469 is for the infrastructure required for the Lamb Weston plant. The project consists of a new interconnect facility at the Lamb Weston plant at the location of Pine Creek's biorefinery and approximately 2,800 ft of 4" steel pipeline from the interconnect facility to Cascade's existing distribution system on Hagel Road. FP-323469 specifically is for the quality monitoring equipment and the odorizer station within the interconnect facility.	$342,804 (Oregon allocated)	The project will allow RNG from Pine Creek RNG's biomethane refining system at the Lamb Weston's plant at 2013 Saint Street, Richland, WA to flow into Cascade's distribution system. Acquisition of the RNG has the added benefit of enabling Cascade to meet the requirements of the Oregon CPP and allow Cascade to make RNG available to its customers on a voluntary basis.	RNG project was identified in dockets LC 83 and UM 2307.	This project compares favorably with opportunities to purchase off-system attributes as well as other on-system projects, as the total market value per dekatherm per year and the total impact revenue requirement per dekatherm were lower on this project than the marginal abatement costs identified.	Not applicable.
FP-323747	Installation of a rectifier and deep well ground bed at 671 NE Ross Rd in Bend, OR. The project included a new ground bed, rectifier, remote monitoring unit, and power supply. Project went into service in 2023.	$161,656	Existing impressed current systems in Bend, OR have exceeded their life expectancies. Failure of ground beds would result in limited cathodic protection in this area of Bend. Proactive installation of an additional rectifier/ground bed avoids the impact of potential failure of GB-04.	Not applicable to cathodic protection facilities.	Alternative ways to address the cathodic protection facilities past their useful life were considered. An alternative was to continue using the existing impressed current system (GB-04) to provide cathodic protection in this area.	Alternative increased risk given age of current system (GB-04).

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-323824	Pasco Process Water Reuse Facility (PWRF) RNG Interconnection. The project consists of a new interconnect facility at the location of Burnham's biorefinery in Pasco, Washington and approximately 8,100 ft of 4" high-pressure steel from the interconnect facility to Cascade's existing system. Project went into service in 2025.	$445,921 (Oregon allocated)	The project will allow RNG from Burnham's RNG production biorefinery at the PWRF to flow into Cascade's distribution system and will allow Cascade to purchase all of the biomethane and environmental attributes from this RNG project. As with other projects where Cascade is purchasing the RNG, Cascade is making the investment in the facilities as a part of the negotiated price to obtain the RNG produced by the Burnham biorefinery. Acquisition of the RNG has the added benefit of enabling Cascade to meet the requirements of the Oregon CPP and allow Cascade to make RNG available to its customers on a voluntary basis.	RNG project was identified in dockets LC 83 and UM 2307.	This project compares favorably with opportunities to purchase off-system attributes as well as other on-system projects, as the total market value per dekatherm per year and the total impact revenue requirement per dekatherm were lower on this project than the marginal abatement costs identified.	Not applicable.
FP-324536	Redmond HP Reinforcement (Regulator Station). This project contains the cost to fabricate and install a new regulator to feed the distribution system from a new high-pressure main extension in Redmond, OR. The project is planned to go into service in 2026.	$251,771	This regulator station is needed to support the high-pressure extension and reinforce the distribution system with a north feed in conjunction with FP-324424 (addressed in CNGC/900, Direct Testimony of Patrick Darras.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes	See CNGC/900, Direct Testimony of Patrick Darras on Redmond HP Extension Rimrock/HWY 126.	See CNGC/900, Direct Testimony of Patrick Darras on Redmond HP Extension Rimrock/HWY 126.

Funding Project #	**Summary**	**Cost**	**Justification**	**Demand Study / Analysis**	**Alternatives**	**Rationale**
FP-324556	Mobile Leak Detection Upgrade Project (2024). Picarro – Advanced mobile leak detection system – is a mobile application used to detect methane in the air. The system is used for leak survey, quantification of emissions during emissions survey, and prioritizing leaks for repair in natural gas systems. Project went into service in 2024.	$329,382	The federal government is proposing a new code that would require natural gas companies to leak survey their systems more frequently than Cascade currently does. The Company sought an efficient way to meet the requirement with new technology and determined that Picarro would meet the need. In addition, the Picarro system electronically captures leak data during surveys and provides data analytics to quantify leaks that Cascade anticipates using in company-specific emissions reporting to Washington Department of Ecology. Applying leak survey data from the Picarro system combined with the Company's established leak mitigation process will allow Cascade to quantify leaks more accurately and demonstrate emissions reductions. With Picarro, Cascade will be able to perform leak surveys in a more efficient way, with increased accuracy in detecting leaks and quantifying emissions and will likely reduce O&M costs for leak surveys.	Not applicable.	None identified due to new requirements	Not applicable.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-324705	Ontario Replacement (NW 8th Ave). Project consists of replacing roughly 800 ft of 6" steel high-pressure pipeline down NW 8th Ave from the entrance of Beck Kiwanis Park to the alley east of Fortner St. in Ontario, OR due to depth conflicts with a city widening project. Project is planned to go into service in 2026.	$556,786	Pipe needed to be replaced to meet depth requirement and avoid conflicts in right-of-way for road widening project to support new development	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes. The relocation was like for like.	No comparable alternatives for a forced relocation; main was replaced in-place.	Not applicable.
FP-324721	Vale Replacement (Bully Creek). Project consists of replacing roughly 500 ft of 4" steel high-pressure pipeline on HWY 20 in Vale, OR from the southwest side of Bully Creek to the northeast side of the creek due to existing 4" main being inaccessible for pipeline inspections. Project planned to go into service in 2026.	$530,836	Pipe needed to be replaced in the same alignment in a location that can support O&M and pipeline inspection requirements.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes. The relocation was like for like.	No comparable alternatives were available for in place replacement	Not applicable.
FP-324723	Vale Replacement (Malheur River). Project consists of replacing roughly 1,300 ft of 4" steel high-pressure pipeline on HWY 20/26 from the east side of the Malheur River to the west side of the river with underground HDD. Project planned to go into service in 2026.	$648,819	The current 4" main is inaccessible for pipeline inspections on hangers under the bridge and has an exposed gas pipe condition deficiency. Project will address exposed gas pipe condition deficiency and address inspection inaccessibility by boring the river and relocating the pipe to a location that supports O&M requirements.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes. The relocation was like for like.	No comparable alternatives were available for in-place replacement.	Not applicable.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-325003	Install 4,500 ft of new 6" PE gas main to a new reg station (see FP-320039) to be installed near the town gate station running into the town to tie-into system. Project will be in service by end of 2025.	$702,575	The old regulator station required replacement due to flooding concerns; the existing station has flooded in the past and experienced operational issues from flooding compromising serviceability.	See FP-320039.	Alternatives were considered, but there were limited options for the new regulator station site to tie into the system and address the flooding concerns. See FP-320039.	Not applicable.
FP-325931	Sunriver Reinforcement (Bittern Lane). Project to install 1,200 ft 4" PE pipe along Bittern Ln, through Circle 7 and along N. Cascade Rd to loop system. Project planned to go into service in 2026.	$197,000	This project was created to address a low-pressure area in the NE section of the Sunriver development in the Bend District to support core growth. Due to pressure loss, pressures during cold weather events in the NE part of Sunriver fall below the design level and this reinforcement will bring the area pressure up, above design.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes.	Cascade considered an alternative of installing 3300 ft of 4" PE pipe on Hoodoo Ln up E Cascade Rd.	The alternative provided similar benefits to address the low-pressure issue but was more expensive due to the increased footage.
FP-325963	This project was created in conjunction with the Ward/Hamby HP Extension (FP-325751) and contains the cost to fabricate and install a new regulator to feed the distribution system from a new, high-pressure main extension. Project planned to go into service in 2026.	$267,948	This project was created in conjunction with the Ward/Hamby HP Extension (FP-325751). The regulator station is needed to support the high-pressure extension and reinforce the distribution system with a north feed.	See CNGC/901, Direct Testimony of Patrick Darras on Ward/Hamby HP Extension (FP-325751).	No alternatives considered since a regulator station is required to serve the high-pressure extension and loop the distribution system with a new regulator feed. See CNGC/901, Direct Testimony of Patrick Darras on Ward/Hamby HP Extension (FP-325751).	Not applicable.

Funding Project #	Summary	Cost	Justification	Demand Study / Analysis	Alternatives	Rationale
FP-326246	Remote Monitoring Unit Replacement (“RMU”). RMUs are installed at rectifier and critical bond locations, allowing the department to collect regulated inspection data remotely. Project went into service in 2025.	$175,528	RMUs provide synchronized interruption of cathodic protection currents, enabling instant-off pipe-to-soil measurements to be recorded for annual inspections. Replacing all RMUs due to existing units losing network connection from provider because AT&T is sunsetting its NB-IoT cellular network.	Not applicable to cathodic protection facilities.	No comparable alternatives were available, like for like replacement	Not applicable.
FP-326339	Pendleton 4" HP Reinforcement. This project installed approximately 1,200 ft of 6" PE pipe to loop the distribution system located on the north side of the Umatilla River in Pendleton and provide redundancy for the area in the event that the other pipe feeding into the area hanging on a bridge over the river is threatened by high spring water flows. Project placed in service in 2025.	$354,291	Spring runoff significantly raises the Umatilla River level and endangers the pipelines which hang on the road bridges. Project provides redundancy to the Pendleton distribution system to address existing river crossings that have been susceptible to flooding damage and the potential for service interruption during a flooding event.	No, Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes.	Cascade identified one alternative to this project -- rebore the Umatilla River and eliminate a bridge crossing.	Reboring the Umatilla River would have higher cost, this project is looping the distribution system to allow us to isolate a bridge crossing if it is in flooding risk.
FP-326782	Mobile Leak Detection Upgrade Project (2026). Picarro – Advanced mobile leak detection system – is a mobile application used to detect methane in the air. The system is used for leak survey, quantification of emissions during emissions survey, and prioritizing leaks for repair in natural gas systems. Project planned to be in service in 2026.	$302,012	Please refer to FP-324556	Please refer to FP-324556	Please refer to FP-324556	Please refer to FP-324556

Funding Project #	**Summary**	**Cost**	**Justification**	**Demand Study / Analysis**	**Alternatives**	**Rationale**
FP-327264	Replace 2” Steel Shorted Casing in Hermiston near 915 Columbia Dr. with a 4” Steel HDD. Project will be placed in service in 2026.	$206,621	Project addresses high risk due to shorted casing and vintage of pipe. Replacing a shorted casing reduces O&M cost due to eliminating additional inspection requirements to monitor the shorted casing.	Project was identified using DIMP risk ranking. Cascade identified and evaluated the project using its design day modeling using its normal capital budgeting review and selection processes.	No comparable alternatives to address the shorted casing.	Not applicable.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

DIRECT TESTIMONY OF ERIC P. MARTUSCELLI

EXHIBIT 1000

November 2025

TABLE OF CONTENTS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Eric P. Martuscelli and my business address is 8113 West Grandridge Boulevard, Kennewick, Washington 99336.

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

A. I am employed by Montana-Dakota Utilities Co. ("Montana-Dakota"), a wholly-owned subsidiary of MDU Resources Group, Inc., as Vice President of Field Operations and Customer Experience for Cascade Natural Gas Corporation ("Cascade" or "Company"), Great Plains Natural Gas Company, Intermountain Gas Company, and Montana-Dakota (collectively, "MDU Utilities Group").

Q. Please describe your educational background and professional experience.

A. I hold a bachelor's degree in organizational management from the Forbes School of Business, Ashford University. I have held executive level positions at MDU Utilities Group since 2012.

Q. Please describe your work experience.

A. I have worked in the utility industry since 1992. From 1992 to 2004, I held various non-supervisory roles with Cascade, in Walla Walla, Washington and Bend, Oregon, related to meter reading, construction, service, administrative, and customer acquisition. From 2004 to 2008, I was District Manager in Pendleton, Oregon and Mount Vernon, Washington. From 2008 to 2012, I held the position of Region Director in Cascade's Southern Region, consisting of the Bend, Oregon district, the Eastern Oregon District (Ontario and Baker City), and the Pendleton District (Pendleton and Hermiston). In 2012, I was promoted to Vice President, Operations at Cascade in Kennewick, Washington. In 2018, my executive role expanded across all brands as Vice President, Field Operations for MDU Utilities Group. In 2025, my executive role further expanded as Vice President, Field Operations & Customer Experience. Today, my role provides executive leadership, directs, and coordinates activities for the entire gas and electric distribution field operations, customer experience team, and fleet in the MDU Utilities Group service territory.

Q. Have you testified in other proceedings before regulatory bodies?

A. Yes. I have presented testimony before the Washington Utilities and Transportation Commission, the Idaho Public Utilities Commission, and the North Dakota Public Service Commission.

II. SCOPE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony in this docket?

A. My testimony addresses the capital investments in various Programmatic project categories and the budgeting process. These categories represent ongoing capital costs essential to utility operations. I then discuss three larger specific asset relocation projects that received separate budget treatment. These projects are generally not included in the Company's Integrated Resource Plans because they are either reactionary to the requests for service or requirements to relocate lines and to support business continuity of the existing system infrastructure. Finally, I discuss two software investments that modernized Cascade's work and asset management.

In the Company's last general rate case, docket UG 390, the stipulating parties agreed that in the next general rate case, Cascade would provide support for all individual capital investments that are estimated to cost more than $150,000.[1] Given that the Company has not filed a general rate case since March 31, 2020, my testimony addresses a significant number of capital investments. Accordingly, while my testimony discusses the larger Programmatic projects, I have split the Specific projects into major capital investments having an actual or estimated total cost of

[1] *In re Cascade Nat. Gas Corp., Request for a Gen. Rate Revision,* Docket No. UG 390, Order No. 21-001 at 15 (Jan 6, 2021).

$1 million or more and minor capital investments having an actual or estimated total cost of over $150,000 but less than $1 million.

Q. Is there another Company witness supporting capital investments as well?

A. Yes. Patrick C. Darras provides testimony supporting Cascade's Programmatic and Specific projects related to meters, pressure regulation, odorization, cathodic protection, measurement, system safety and integrity, and large-scale infrastructure projects. My testimony is focused on the Programmatic projects along with certain Specific projects for which I am responsible. Those include, primarily, growth projects within distribution systems for new subdivisions, industrial customers, and commercial developments, along with required system reinforcements and expansions due to growth.

Q. How are you presenting the minor capital investments?

A. In Exhibit CNGC/1001, I provide information on the Programmatic and Specific capital investment projects over $150,000 but less than $1 million in table format. For each project, the table includes: a project description; an explanation of how customers will benefit from the project (i.e. justification or rationale); a description of any demand study or analysis that was performed, if applicable; a description of any alternatives considered; and the project costs. Exhibit CNGC/1001 provides the information required per the stipulation in docket UG 390.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I sponsor the following exhibits/tables:

- Exhibit CNGC/1001 – Minor Plant Additions ($150,000 to $1 million)

III. OVERVIEW OF PROJECT CATEGORIES AND BUDGETING PROCESS

Q. Please explain Cascade's service area and Field Operations organization in Oregon.

A. Cascade's service area falls within three distinct areas of Oregon: Central, Eastern, and Northeast, serving nearly 90,000 customers throughout 28 communities. Company offices are in Bend, Baker City, Hermiston, Ontario, and Pendleton. There are approximately 50 field employees in Oregon. Their purpose is to provide safe, reliable natural gas service to our communities while providing excellent customer service with each interaction. The philosophy of Field Operations is to execute the "playbooks" and seek continuous improvement. The "playbooks" consist of Cascade's organizational integrity guide and our operations policies and procedures, the latter incorporating federal regulatory and state administrative codes applicable to the safe operation of the natural gas distribution system.

Q. Please identify the project categories you will discuss in your testimony.

A. My testimony addresses project categories related to growth and replacement, along with ongoing capital investments in vehicles and equipment. The project categories include Main Growth, Service Growth, Main Replace, Service Replace, and Vehicles & Work Equipment. System Reinforcements are triggered when a service request requires additional pipeline expansion in the region. All of these categories, with the exception of System Reinforcements, are Programmatic. Programmatic projects, also called blanket projects, are Funding Projects used year after year to budget for anticipated capital spend in these categories. Programmatic projects are generally investments that are necessary to provide safe, reliable service to existing customers and potential customers seeking natural gas services. Specific projects are clearly defined, identifiable, or discrete investments over $150,000 in estimated total costs. Reinforcements generally fall into the specific project category. All projects, whether

Programmatic or Specific, are assigned a Funding Project number for budgeting purposes.

Q. How are Programmatic project costs budgeted?

A. Funding Projects that fall into the Programmatic category include Main Growth and Service Growth projects, Main Replace and Service Replace projects, and Vehicles and Work Equipment requirements. Growth-related budget forecasts are based on a combination of historical customer growth, historical capital expenditures, current/forecasted pricing trends (i.e., labor and/or material increases), and current conditions related to the economy (i.e., external residential and small commercial development trends). Once an initial budget forecast is prepared, Field Operations works with our Business Development team to compare it to the Customer Forecast Methodology in the current Integrated Resource Plan (“IRP”).

Main Replace and Service Replace projects are more difficult to forecast prospectively. In any year, replacements of Cascade facilities will be required due to requests from jurisdictional authorities in the communities Cascade serves or for safety or reliability reasons. Because the numerous smaller replacement projects cannot be anticipated with specificity, the estimated capital expenditure is based on historical costs and updated when a specific relocation request is made from a jurisdictional authority.

Vehicles and Work Equipment (i.e., excavation equipment, trailers, welders, and compressors) forecasts, however, are based on an assessment of Company needs with an analysis of existing vehicles and work equipment and incremental addition of the same. The frequency of these investments mandates a Programmatic approach.

Q. How are Specific projects budgeted?

A. Specific projects include any capital investments estimated to cost $150,000 or more and fall into two categories: known (budgeted) and unknown (unbudgeted). Known projects are forecast during the annual capital budgeting process and assigned a funding project number to a year in the five-year plan. An example of a known project would be working with a municipality on a road improvement project scheduled for construction in a future budget year. The road improvement project would require relocation of Cascade's infrastructure to accommodate the project. Accordingly, this type of project can be budgeted in advance.

Unknown projects are, by nature, more immediate than can be planned through the annual budgeting process. Using the same example above, Cascade is sometimes unaware of a road improvement project in advance. However, the municipality will require the Company to relocate its infrastructure pursuant to its franchise agreement. In this case, the road improvement project would be unbudgeted. In either case, the approval process follows the established Company authorization policy.

Q. Please provide an overview of Cascade's capital project budgeting process.

A. Capital additions and changes are planned through the annual budget process using PowerPlan ("PP"). The budget process begins with an individual (originator) creating specific Funding Projects in PP for all new projects to be included in the five-year capital budget. Originators are generally managers at the district level or engineering staff at the corporate level. Funding Projects are used to hold the capital budget estimates and will be linked to the capital work orders to be created when actual costs commence. A Fixed Asset Financial Analyst reviews the Funding Projects for proper setup. If the project is not considered a capital expenditure as it was submitted, it is rejected and sent back to the originator for revision, cancelled, or it is moved to

Operations and Maintenance Expense. After the review has been completed, the Fixed Asset Financial Analyst will add appropriate overheads and approve the funding project. As mentioned above, the Programmatic projects are used year after year to budget for anticipated capital projects under $150,000 each.

Once all the Funding Projects have been updated with expenditures, various Company operating managers generate reports to show estimated expenditures and justification for each project. The managers perform the review of Funding Pprojects and see that any necessary changes are made to the estimate and that the project is supported. Reports are then generated by the budgeting personnel for review and approval by the Directors and Vice Presidents of the respective departments. Any final budget changes are made, and the budgets are then presented to the Utility Group's President for review and approval. At each stage of the review and approval process, a project (or projects) can be challenged for appropriateness and removed from the capital budget or moved to another year within the five-year budget. The addition or removal of projects can also be impacted by other factors such as available capital and/or borrowing capacity.

After final approval, an approved budget version is created in PP and locked for entry and the Funding Projects and estimated amounts in the approved budget version are copied back to the working budget version. Project managers are notified that the budget has been approved and the Funding Projects are open for work order creation. Projects are monitored and updated throughout the year as part of the review process and to ensure, as best as possible, that projects are completed on time and within the approved budget.

Q. What costs are addressed in your testimony?

A. My testimony provides support for actual historical costs for plant in service from 2021 through August 2025. I also provide support for the estimated costs for projects that will go into service during the September 2025 through October 2027 future test period. Table 1 below provides a summary of all costs addressed in my testimony.

Table 1 – Summary of Capital Additions – Historical and Forecasted
(*in thousands*)

Category	2021	2022	2023	2024	2025[1]	2026	2027[2]	Total
Programmatic	$6,479	$6,576	$6,726	$6,605	$7,889	$8,123	$4,243	**$46,641**
Specific	$334	$1,517	$ -	$2,263	$1,350	$498	$ -	**$5,962**
Total	**$6,812**	**$8,092**	**$6,726**	**$8,869**	**$9,239**	**$8,622**	**$4,243**	**$52,603**
Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December). Note 2: 2027 only includes forecasted amounts through October (i.e. end of test period).								

IV. MAJOR PROJECT ADDITIONS TO PLANT IN SERVICE

A. Programmatic Projects

1. Growth Mains (FP-317660, FP-317664, and FP-317754)

Q. What is included in the Growth Mains projects?

A. The Growth Mains projects are Funding Projects that address anticipated growth needs and distribution system expansion projects to serve natural gas to new customers throughout Cascade's service territory. All Growth Mains requests follow Tariff Rule 10 – Main Installations. Under the current Tariff Rule 10, the Company will furnish an extension of its distribution main system free of charge to provide firm natural gas service to any applicant for such service located beyond the existing main system up to an estimated cost of construction to provide such service equal to four and one-half (4-1/2) times the estimated gross annual revenue less cost of gas to be derived.

Cascade budgets for these investments annually because it is prudent to assume and prepare for distribution system expansions to meet the Company's statutory obligation to serve.

Q. Does the company undertake any system analysis for each installation under the Growth Mains projects?

A. Yes. Engineering Services performs a review of individual projects to ensure they meet design specifications, material specification, and system capacity requirements.

Q. Does the Company consider alternative ways to meet the need for the Growth Mains projects?

A. No. Under OAR 860-021-0051, each gas utility is required to develop, with the Public Utility Commission of Oregon's (Commission) approval, a uniform policy governing the amount of service extension that will be made free to connect a new customer. The Company's Tariff Rule 10 has been reviewed and approved by the Commission.

Q. When are individual installations under the Growth Mains projects placed in service?

A. Individual installations are placed in service as completed, which means that they are placed in service at various times over the course of the year on a rolling basis.

Q. What are the total costs for the Main Growth Funding Projects?

A. The total costs by district are provided in Table 2 below.

Table 2 – Main Growth Costs (*in thousands*)

District	Funding Project	2021	2022	2023	2024	2025[1]	2026	2027[2]	Total
Bend	FP-317754	$1,159	$859	$934	$1,404	$1,822	$1,255	$383	**$7,816**
Eastern Oregon	FP-317660	$107	$107	$352	$53	$49	$152	$68	**$888**
Pendleton	FP-317664	$486	$553	$297	$225	$295	$191	$63	**$2,111**
Total		**$1,752**	**$1,518**	**$1,584**	**$1,682**	**$2,167**	**$1,598**	**$515**	**$10,815**

Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December).
Note 2: 2027 only includes forecasted amounts through October (i.e. end of test period).

Q. Please summarize the actual costs identified in Table 2.

A. Table 2 includes actual costs for gas main projects due to customer requests in each of Cascade's districts for 2021 through August 2024. The amounts for 2025 are based on the 2025 Funding Projects budgets for each district. Cascade has actual amounts through August 2025, but not the remainder of the year.

Q. How does Cascade develop its budgets for the Main Growth Funding Projects in each district for 2025?

A. Growth Mains budgets are estimated to align with anticipated service growth while also factoring in historical main footage installation. For example, if service growth is expected to increase by two percent, that is an indicator that two percent more main will be required and main footage would be adjusted, as well. The budgets are also adjusted for known or anticipated distribution contract increases. If a contract will expire during a specific budget year, the budget is increased by the anticipated contract rate increase. Distribution contracts typically increase approximately fifteen percent following a request for proposals. Because the Bend District is transitioning to more internal construction crews, the 2026–2030 budget was increased three percent year-over-year from prior years to account for inflation. Lastly, Cascade will adjust for large-scale projects installed in the prior year. If a district installed a large-scale project that is not typical for that district, those dollars would not be carried into the following year's budget.

Q. Did Cascade follow the same process for the forecast test year?

A. Yes. However, Cascade modified the 2026 and 2027 amounts in Table 2 to incorporate the Company's proposed changes to the Line Extension Allowance ("LEA"), described in the Direct Testimonies of Travis R. Jacobson[2] and Zachary L. Harris.[3] The calculation of the LEA adjustment is described in the Direct Testimony of Matthew Larkin.[4]

---

[2] CNGC/600, Jacobson.
[3] CNGC/1100, Harris.
[4] CNGC/700, Larkin.

Q. Cascade is proposing to include only budgeted costs for 2027 through October. How did you determine that amount from an annual budget?

A. Through collaboration with the Business Development team, Cascade uses a combination of historical spend averages, IRP demand forecast and distribution system planning info, and current distribution contract pricing for estimating projected annual spend. Projected capital spend is placed in the appropriate month based on estimated construction activity.

2. Growth Services (FP-317662, FP-317666, and FP-317756)

Q. Please describe the Growth Services projects.

A. Growth Services projects are distribution system expansion projects to serve natural gas to new customers throughout the service territory. Growth Services projects are installed in conjunction with Growth Mains projects or as stand-alone installations from existing infrastructure.

Q. Why does the Company undertake the Growth Services projects?

A. Cascade has an obligation to serve new customers under Tariff Rule 9 – Service Line Installation. It is prudent to budget and prepare for distribution system expansions to ensure the Company can meet that obligation.

Q. What process does the Company use to forecast service line needs?

A. A customer load summary is completed for service lines with loads of 1.5 metric million British Thermal Units ("MMBTU") or 1.5 thousand cubic feet ("MCF") per hour or greater, and/or pressure requests greater than 2 pounds per square inch gauge ("PSIG"). The customer load summary is the method for gathering pertinent customer information that is used to evaluate a customer's possible impact on system capacity at peak load, and to determine meter and regulator sizing.

Q. Does the Company consider alternative ways to meet the need for the Growth Services projects?

A. No. Under OAR 860-021-0050, each gas utility is required to develop, with the Commission's approval, a uniform policy governing the amount of service extension that will be made free to connect a new customer. The Company's Tariff Rule 9 has been reviewed and approved by the Commission. The Company is proposing to update Rule 9 in this case, as described in the Direct Testimonies of Travis R. Jacobson[5] and Zachary L. Harris.[6]

Q. When are individual installations under the Growth Services projects placed in service?

A. Individual installations are placed in service as they are completed, which means that they are placed in service at various times over the course of the year on a rolling basis.

Q. What are the total costs for the Service Growth Funding Projects?

A. The total costs by district are provided in **Error! Reference source not found.** below.

Table 3 – Service Growth Costs (*in thousands*)

District	Funding Project	2021	2022	2023	2024	2025[1]	2026*	2027[2]	Total
Bend	FP-317756	$2,058	$2,043	$1,815	$2,706	$2,525	$2,510	$766	**$14,422**
Eastern Oregon	FP-317662	$196	$172	$128	$143	$144	$196	$61	**$1,040**
Pendleton	FP-317666	$478	$471	$506	$479	$552	$468	$153	**$3,107**
Total		**$2,732**	**$2,686**	**$2,449**	**$3,328**	**$3,221**	**$3,174**	**$980**	**$18,569**

Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December).
Note 2: 2027 only includes forecasted amounts through October (i.e. end of test period).

[5] CNGC/600, Jacobson.
[6] CNGC/1100, Harris.

Q. Please summarize the actual costs identified in Error! Reference source not found..

A. **Error! Reference source not found.** includes actual costs for gas service projects due to customer requests in each of Cascade's districts for 2021 through August 2024. The amounts for 2025 are based on the 2025 Funding Projects budgets for each district. Cascade has actual amounts through August 2025, but not the remainder of the year.

Q. How did Cascade develop its budget for the Service Growth Funding Projects in each district for 2025?

A. The 2025 budget was based on a 50 percent reduction in the number and cost of new services lines installed compared to 2024, along with an estimation of a 25 percent increase in distribution contractor pricing.

Q. Did Cascade follow the same process for 2026 and 2027?

A. Yes. For the 2026 and 2027 budget, Cascade assumed modest year-over-year growth. In districts where service lines are installed by contractors, Cascade added fifteen percent beginning in June 2026 to account for contractor rate increases following the expiration of the current distribution contract on May 31, 2026. Cascade also modified the 2026 and 2027 amounts in Table 3 to incorporate the Company's proposed changes to the LEA, as described in the Direct Testimony of Matthew Larkin.[7]

Q. Cascade is proposing to include only budgeted costs for 2027 through October. How did you determine that amount from an annual budget?

A. Through collaboration with the business development team, Cascade uses a combination of historical spend averages, IRP demand forecast and distribution

[7] CNGC/700, Larkin.

system planning info, and current distribution contract costs for estimating projected annual spend. Projected capital spend is placed in the appropriate month based on estimated construction activity.

3. Main Replace Projects (FP-317661, FP-317665 and FP-317755)

Q. Please describe the Main Replace projects.

A. Main Replace refers to gas main replacement projects that respond to forced relocation requirements and safety assessments. Most of Cascade's infrastructure is within public rights-of-way ("ROW"), and permission to occupy the space is granted through various franchise agreements with respective cities or permits from highway districts. When conflicts arise between jurisdictional projects and Cascade's infrastructure, Cascade is required to mitigate the conflict and may not charge the public entity for the cost. Other main replacement projects can originate from leaks, corrosion, and inoperable valves and/or equipment not associated with the Company's formal distribution integrity management program. Main replacement projects of this nature are generally identified through leak investigations or scheduled compliance survey programs.

Q. Why does the Company undertake the Main Replace projects?

A. When conflicts arise between jurisdictional projects and Cascade's infrastructure within the franchise area, the franchise agreements require Cascade to mitigate the conflict at Cascade's expense. For projects outside the franchise scope, the issues identified are generally safety or compliance related. In such cases, mitigation is more immediate and not always able to be planned.

Q. How do customers benefit from the Main Replace projects?

A. Customers benefit through coordinated expansion of services between local jurisdictional partners and the Company. It also fosters good relations with jurisdictional partners and avoids the cost of unnecessary litigation of any potential disputes. Jurisdictional projects can be disruptive to communities, and it is Cascade's intention to facilitate agreeable conflict resolution so as not to delay these projects.

Q. Does the Company consider alternative ways to meet the need for the main replacements?

A. Yes. In the case of franchise conflicts, Cascade meets with jurisdictional representatives to determine if an alternative to replacing the main is available. For many projects this is possible, but not all. In all main replacement projects, all alternatives to replacement are considered before a decision to replace is made.

Q. When are individual installations under these projects placed in service?

A. Individual projects are placed in service as completed, which means that they are placed in service at various times over the course of the year on a rolling basis.

Q. What are the total costs for the Main Replace Funding Projects?

A. The total costs by district are provided in Table 4 below.

Table 4 – Main Replace Costs (*in thousands*)

District	Funding Project	2021	2022	2023	2024	2025[1]	2026	2027[2]	Total
Bend	FP-317755	$306	$425	$393	$345	$697	$1,888	$1,620	**$5,673**
Eastern Oregon	FP-317661	$34	$68	$60	$30	$51	$40	$35	**$319**
Pendleton	FP-317665	$165	$476	$219	$53	$101	$163	$167	**$1,344**
Total		**$505**	**$969**	**$672**	**$428**	**$849**	**$2,092**	**$1,822**	**$7,337**

Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December).
Note 2: 2027 only includes forecasted amounts through October (i.e. end of test period).

Q. Please summarize the actual costs identified in Table 4.

A. Table 4 includes actual costs for main replacement projects due to customer requests in each of Cascade's districts for 2021 through August 2024. The amounts for 2025 are based on the 2025 Funding Projects budgets for each district. Cascade has actual amounts through August 2025, but not the remainder of the year.

Q. How did Cascade develop its budget for the Main Replace Funding Projects in each district for 2025?

A. The volume of Main Replace projects is typically consistent from year to year as they are primarily forced relocations that accommodate improvements in city, county, and state ROWs. The timing and scope of Main Replace projects is dictated by the governing agencies. Cascade anticipates a three to six percent increase in costs annually due to material and labor increases.

Q. Did Cascade follow the same process for 2026 and 2027?

A. Yes.

Q. Cascade is proposing to include only budgeted costs for 2027 through October. How did you determine that amount from an annual budget?

A. Most often, we become aware of necessary main replacements during the current budget year, not in advance of the forecast annual budget process. For this reason, Cascade populates the five-year budget by month using historical spend and current distribution contract pricing. Estimated spending is forecast in the typical construction season months.

4. Service Replace Projects (FP-317663, FP-317667, and FP-317757)

Q. Please describe the Service Replace projects.

A. Just as with the Main Replace projects, most of Cascade's infrastructure is within public ROW, and permission to occupy the space is granted through various franchise agreements with respective governing jurisdictions. When conflicts arise between jurisdictional projects and Cascade's infrastructure within the franchise area, the franchise agreements require Cascade to mitigate the conflict at Cascade's expense. Service Replace projects are often a result of such requirements.

Other Service Replace projects that fall within this category that are not due to conflict with a franchise project can originate from isolated circumstances such as leaks, corrosion, and inoperable valves or equipment not associated with the Company's formal distribution integrity management program. Service Replace projects of this nature are generally identified through leak investigations and/or scheduled compliance survey programs and managed by local representatives. The investment projections for these projects are primarily derived from historical spend, as most projects cannot be anticipated.

Q. Why does the Company undertake the Service Replace projects?

A. When conflicts arise between jurisdictional projects and Cascade's infrastructure within the franchise area, the franchise agreements require Cascade to mitigate the conflict at Cascade's expense. For projects outside the franchise scope, the issues identified are generally safety or compliance related. As such, mitigation is more immediate and not always able to be planned.

Q. How do customers benefit from the Service Replace projects?

A. Customers benefit when the Company promotes good relations with its jurisdictional partners and fulfilling the contractual obligations in franchise agreements keeps these relationships healthy. Jurisdictional projects can be disruptive to communities, and it is the Company's intention to facilitate agreeable conflict resolution so as not to delay these projects.

Q. Does the company undertake demand studies or analyses for these projects?

A. Service replacements are typically one-for-one replacements with like-sized pipe and, as such, a demand study is not required.

Q. Does the Company consider alternative ways to meet the need for the Service Replace projects?

A. Yes. In the case of franchise conflicts, Cascade meets with jurisdictional representatives to determine if an alternative to replacing the service line(s) is available. For many projects this is possible, but not all. In case of other Service

Replace projects, all alternatives to replacement are considered before a decision to replace is made.

Q. When are the individual installations under these projects placed in service?

A. These projects are placed in service as completed, which means that they are placed in service at various times over the course of the year on a rolling basis.

Q. What are the total costs for the Service Replace Funding Projects?

A. The total costs by district are provided in **Error! Reference source not found.** below.

Table 5 – Service Replace Costs (*in thousands*)

District	Funding Project	2021	2022	2023	2024	2025[1]	2026	2027[2]	Total
Bend	FP-317757	$129	$213	$34	$16	$115	$515	$44	**$601**
Eastern Oregon	FP-317663	$196	$92	$101	$47	$65	$140	$132	**$772**
Pendleton	FP-317667	$213	$163	$174	$76	$94	$149	$162	**$1,030**
Total		**$538**	**$467**	**$309**	**$138**	**$274**	**$340**	**$337**	**$2,404**
Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December). Note 2: 2027 only includes forecasted amounts through October (i.e. end of test period).									

Q. Please summarize the actual costs identified in Error! Reference source not found.**.**

A. Table 5 includes actual costs for service replacement projects due to customer requests in each of Cascade's districts for 2021 through August 2024. The amounts for 2025 are based on the 2025 Funding Projects budgets for each district. Cascade has actual amounts through August 2025, but not the remainder of the year.

Q. How did Cascade develop its budget for the Service Replace projects in each district for 2025?

A. The volume of Service Replace Projects is typically consistent from year to year. Cascade anticipates a three to six percent increase in costs annually for material and labor.

Q. Did Cascade follow the same process for 2026 and 2027?

A. Yes.

Q. Cascade is proposing to include only budgeted costs for 2027 through October. How did you determine that amount from an annual budget?

A. Cascade populates the five-year budget by month using historical data. Estimated spending is placed in the appropriate month.

5. Gas Work Equipment (FP-101163)

Q. Please describe the Gas Work Equipment project.

A. The Gas Work Equipment project is the annual purchase (additions) and replacement (existing) of Company fleet assets. These assets include equipment used for the installation and maintenance of Company assets and are generally monitored based on hours of use. Planning for work equipment purchases and replacements is done in conjunction with preparation of the annual capital budget and takes into consideration equipment needs for the ensuing year compared to the existing fleet vehicles, their age, and operating condition. The fleet department meets with Operations leadership annually to understand operational needs, in advance of preparing the annual budget.

Q. Why did the Company undertake the Gas Work Equipment project?

A. Gas Work Equipment is essential to our business. Having a coordinated purchase and replacement philosophy ensures Cascade Natural Gas has the equipment needed to provide safe and reliable service to our customers. This is an annual process designed to proactively identify where additions are necessary to meet growth demands and to minimize downtime of existing fleet assets due to age and/or general condition.

Q. How do customers benefit from the Gas Work Equipment project?

A. Gas Work equipment must be operational when needed to support required construction, maintenance, and emergency repairs. Inoperable work equipment negatively impacts Cascade's customer service and can delay projects, potentially increasing costs to customers.

Q. How does the Company manage work equipment?

A. Replacements for existing work equipment (i.e., excavation equipment, trailers, welders, and compressors) are determined by a combination of hours used, maintenance costs, and lifespan projections. Each year, prior to establishing the annual budget, the fleet department reviews all recommendations and requests with local leadership to ensure equipment meets response and work requirements based on known upcoming projects.

Q. Does the Company consider alternative ways to meet work equipment needs?

A. Yes. The fleet department first assesses the availability of existing work equipment across the Company to determine if there are existing assets available or underutilized in another district or region. If so, relocation of the existing asset will be the first consideration. Our philosophy emphasizes the high utilization of Company work equipment to avoid unnecessary purchases and costs to customers.

Q. Does the Gas Work Equipment project include equipment that is already being used for the benefit of customers?

A. Yes. Cascade has included work equipment that is being used for the benefit of customers during the 2021 through August 2025 period.

Q. What are the total costs for the Gas Work Equipment project?

A. The total costs are provided in **Error! Reference source not found.** below.

Table 6 – Work Equipment Costs (*in thousands*)

Funding Project	2021	2022	2023	2024	2025[1]	2026	2027[2]	Total
FP-101163	$644	$604	$1,141	$752	$729	$173	$74	**$4,117**
Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December). Note 2: 2027 only includes forecasted amounts through October (i.e. end of test period).								

Q. Please summarize the actual costs identified in Error! Reference source not found..

A. Table 6 includes actual costs for work equipment for 2021 through 2024. The amounts for 2025 are based on the 2025 Funding Project budget. Cascade has actual amounts through August 2025, but not the remainder of the year.

Q. How does Cascade develop its budget for the Gas Work Equipment Funding Project?

A. The fleet department meets with Operations leadership annually to understand operational needs, in advance of preparing the annual budget. Replacements for existing work equipment (i.e., excavation equipment, trailers, welders, and compressors) are determined by a combination of hours used, maintenance costs, and lifespan projections. In addition to work equipment replacements, the capital budget also includes new work equipment required due to operations decisions (i.e., incremental employee additions in service or construction requiring new equipment additions). The fleet department reviews all recommendations and requests with local leadership.

Work Equipment removed from service and having residual value will be sold through an internal auction site or through consignment to a reputable auction house. Proceeds from these sales are designated “salvage” values internally and will directly reduce the overall capital dollars estimate for new equipment.

Q. Did Cascade follow the same process for 2026 and 2027?

A. Yes.

Q. Cascade is proposing to include only budgeted costs for 2026 through October 2027. How did you determine that amount from an annual budget?

A. Cascade populates the five-year budget by month using historical data. Estimated spending is placed in the appropriate month.

6. Gas Vehicles (FP-101215)

Q. Please describe the Gas Vehicles project.

A. The Gas Vehicles project is the annual purchase (additions) and replacement (existing) of Company fleet assets. Planning for vehicle purchases and replacements is done in conjunction with preparation of the annual capital budget and takes into consideration vehicle needs for the ensuing year compared to the existing fleet vehicles, their age, and operating condition. The fleet department meets with Operations leadership annually to understand operational needs, in advance of preparing the annual budget.

Q. Why does the Company undertake the Gas Vehicles project?

A. Vehicles are essential to our business. This is an annual process designed to proactively identify where additions are necessary to meet growth demands and to minimize downtime of existing fleet assets due to age and/or general condition.

Q. How do customers benefit from the Gas Vehicles project?

A. Having a coordinated purchase and replacement philosophy ensures Cascade has the vehicles needed to provide safe and reliable service to our customers.

Q. Has the Company developed a policy or procedure for managing gas vehicles?

A. Yes. For existing vehicles, we rely on a Vehicle Replacement Analysis Model ("VRAM") to determine and prioritize replacements. Vehicles removed from service and having residual value will be sold through an internal auction site or through consignment to a reputable auction house. Proceeds from these sales are designated "salvage" values internally and will directly reduce the overall capital dollars estimate for new vehicles. Additionally, to ensure we right size assets to our operational needs, the fleet department works with local management to ensure vehicles meet response and work requirements.

Q. Does the Company consider alternative ways to meet the need for the Gas Vehicles project?

A. Yes. Our philosophy emphasizes the high utilization of Company vehicles. If a vehicle is needed in a specific district or region and is available and underutilized in another district or region, relocation of the existing asset will be the first consideration.

Q. Does this project include vehicles already being used for the benefit of customers?

A. Yes. Cascade has included gas vehicles added to the fleet and used for the benefit of customers during the 2021 through August 2025 period.

Q. What are the total costs of the Gas Vehicles project?

A. The total costs are provided in Table 7 below.

Table 7 – Gas Vehicle Cost (*in thousands*)

Funding Project	2021	2022	2023	2024	2025[1]	2026	2027[2]	Total
FP-101215	$308	$332	$572	$278	$649	$747	$514	$3,399

Note 1: 2025 is a combination of historical information (January through August) and forecasted amounts (September through December).
Note 2: 2027 only includes forecasted amounts through October (i.e. end of test period).

Q. Please summarize the actual costs identified in Table 7.

A. Table 7 includes actual costs for work equipment for 2021 through 2024. The amounts for 2025 are based on the 2025 Funding Project budget. Cascade has actual amounts through August 2025, but not the remainder of the year.

Q. How are the forecast budgets determined?

A. Utilizing the VRAM, Cascade can arrive at an objective replacement ranking of all vehicles. The purpose of the VRAM is to prioritize the replacement of vehicles in advance of costly maintenance and operational downtime. The prioritization is based on a system of weights and measures applied to several key factors that have an impact on the vehicle longevity. By applying the weights and measures to a data snapshot, a list is generated of the entire fleet ranked in order of most in need of replacement, to least. Key elements of the analysis include 10-year maintenance spend, vehicle mileage, vehicle age, and criticality to operations. In addition to vehicle replacements, the capital budget also includes new vehicles required due to operations decisions (i.e., incremental employee additions in service or construction).

Q. Did Cascade follow the same process for 2026 and 2027?

A. Yes.

Q. Cascade is proposing to include only budgeted costs for 2026 through October 2027. How did you determine that amount from an annual budget?

A. Cascade populates the five-year budget by month using historical data. Estimated spending is placed in the appropriate month.

B. Specific Projects

1. US Highway 20 Mervin Samples/Greenwood Bend (FP-320482)

Q. Please describe the US Highway 20 Melvin Samples/Greenwood Bend project (“HWY 20 Project”).

A. This project consists of relocating approximately 2,800 feet of 4” steel gas main and 230 feet of 2” gas main from the east ROW of Highway (“HWY”) 20 west to the east fog line. This was a forced relocation required by Oregon Department of Transportation (“ODOT”) to be completed before the start of the HWY20/3rd Street construction to avoid conflicts with curb, Americans with Disabilities compliant ramps, storm water laterals, and swales.

Q. Why did the Company undertake the HWY 20 Project?

A. The Company moved and replaced the gas main per the terms of our franchise agreement with the City of Bend. The franchise agreement requires Cascade to relocate facilities when they are in conflict with City of Bend facilities and projects.

Q. Did the Company consider alternative ways to meet the need for the HWY 20 Project?

A. No. This project was a forced relocation directed by the City of Bend to accommodate the highway development. The particular gas main was required to continue reliable service to customers in the area. However, after coordination with the highway contractor, Cascade was able to reduce the scope of the relocation by showing that 800 feet of 2” main and 6 service lines were not in conflict with the highway project, reducing the cost of the relocation and cost to customers.

Q. When was the HWY 20 Project placed in service?

A. The project was placed in service in 2022.

Q. What were the total costs for the HWY 20 Project?

A. The total costs were $1,516,520.

2. State Highway 126 Forced Relocation (FP-324961)

Q. Please describe HWY 126 Forced Relocation project (“HWY 126 Project”).

A. This project was a forced relocation of gas main in conflict with the ODOT HWY 126 corridor improvement project in the City of Redmond. Cascade removed the preexisting gas main running along HWY 126 due to expansion of the highway ROW. After removing the gas main, Cascade re-installed new main at the outside edge of the new highway ROW.

Q. Why did the Company undertake the HWY 126 Project?

A. The Company is required to move and replace gas mains under the terms of ODOT ROW statutes. Under ORS 772.620, Cascade is required to relocate facilities to outside edge of the highway ROW when they are in conflict with other ODOT facilities and projects.

Q. Did the Company consider alternative ways to meet the need for the HWY 126 Project?

A. Yes. Cascade conducted an internal evaluation and coordinated with ODOT to determine if there were any viable alternatives or cost reductions, but relocation was the only option to mitigate the conflict.

Q. When was the HWY 126 Project placed in service?

A. The project was placed into service in 2024.

Q. What were the total costs for the project?

A. Total project costs were $1,083,378.

3. Main Replace Awbrey Bend (FP-326022)

Q. Please describe the Main Replace Awbrey Bend project ("Awbrey Main Project").

A. This project was a forced relocation of a 4" steel main in conflict with a City of Bend's Awbrey Butte water distribution system upgrades project. After removing the 4" main, Cascade re-installed a new main to continue providing service to customers in the community.

Q. Why did the Company undertake the Awbrey Main Project?

A. The Company moved and replaced the gas main per the terms of its franchise agreement with the City of Bend. The franchise agreement requires Cascade to relocate facilities when they are in conflict with City of Bend facilities and projects.

Q. Did the Company consider alternative ways to meet the need for the Awbrey Main Project?

A. Yes. Cascade met with the City of Bend engineers to determine if there was a solution to the facilities in conflict other than relocation. Ultimately, Cascade, in consultation with city engineers, determined relocation was the only option to mitigate the conflict.

Q. When was the Awbrey Main Project placed in service?

A. This project was placed in service in 2025.

Q. What were the total costs for the Awbrey Main Project?

A. Total project costs were $1,318,378.

V. SOFTWARE SOLUTION PROJECTS

<u>A. Work and Asset Management System (FP-101480)</u>

Q. Please describe Cascade's Work and Asset Management System ("Maximo") project.

A. Maximo is an integrated software solution which stores assets, work orders, work order tracking information, and maintenance schedules. Cascade is in the third phase of a three-phase and multi-year implementation of Maximo. The first phase was for maintenance work and was implemented in 2019-2021. The maintenance phase included equipment maintenance and all gas compliance maintenance (e.g., corrosion control, leak survey, atmospheric corrosion survey, patrolling, measurement, and equipment maintenance). The construction phase is being implemented in two gas and electric stages. The gas stage went into service in 2024. The final stage is in progress and is planned to be implemented in 2026. The construction phase includes the full lifecycle of construction—initiate, design, estimate, plan/schedule, construct, close out and documentation of construction work. This is a full electronically driven construction process integrated into core systems which reduces touchpoints and data entry. The originally planned final phase will be implemented over time and may include enhancements to the overall work and asset management system, and the addition of transmission electric, electric generation, and environmental.

Q. Why did the Company undertake the Maximo project?

A. The primary reason Cascade is implementing Maximo is to move to a modern work and asset management system, and mobile solutions, allowing the Company to better manage operations. This includes the elimination of paper processes. Additionally, Maximo will provide seven primary benefits:

- Aligns operations business processes across the enterprise.
- Replaces fragmented and unintegrated operations technology systems and processes with one unified work and asset management system which improves efficiency of implementation and support.
- Reduces touch points, data entry, and redundancy.
- Gains enterprise-wide insight into asset tracking, construction, maintenance, compliance, and costs.
- Drives consistent workflows across the enterprise, improving work product results.
- Improves the user experience with consistent field data entry technology, lowering training needs, and limiting confusion and errors.
- Improves overall quality using smart forms, integrated solutions, high accuracy GPS, bar code scanning, and electronic workflows.

Q. How will customers benefit from the Maximo project?

A. Customers will benefit through the elimination of redundancy of systems and the inherent resources that are necessary to support multiple systems to complete the same or similar tasks. The electronic system will improve the overall quality of information collected in the field and provide a central data repository for information related to all utility maintenance and construction activity. This will improve the safe operation of the system through higher quality gas facility installations, improved maintenance/compliance tracking, and reporting.

Q. Did the Company consider alternative ways to meet the need for the Maximo project?

A. Yes. The Company did its due diligence when selecting Maximo. An exploratory team was formed in 2017 and evaluated the implementation of work and asset management systems across the gas and electric utility industry. The team determined Maximo was the best choice because it was a lower cost solution, the system integrates well to disparate systems, and Maximo is mature and proven compared to other work and asset management systems. The company then visited other utilities to learn best practices for implementing work and asset management systems. This information was used to develop the phased implementation approach and to leverage internal resources to develop expertise to support the system going forward. The strategy has worked thus far through the successful implementation of the gas compliance phase of the project.

Q. When was the Maximo project placed in service?

A. The initial phases of the project were placed in service in 2021 and 2024, with the final deployment planned to be in service in 2026.

Q. What were the total costs for the Maximo project?

A. The in-service cost portion allocated to Cascade during 2021–2024 was a combination of amounts, $333,864 and $1,211,157 for a total of $1,545,020. In addition, the final deployment is planned for 2026 in the amount of $498,463, company-allocated.

VI. CONCLUSION

Q. What is your recommendation to the Commission?

A. I recommend that the Commission find that the capital investments described in my testimony are reasonable and prudent.

Q. Does this conclude your direct testimony?

A. Yes.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

MINOR PLANT ADDITIONS

($150,000 TO $1 MILLION)

EXHIBIT 1001

November 2025

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-320317	Baker City Relocate. Retire and replace mains and services in mobile home park. Project required relocation of 46 service lines in a mobile home park. New lines went into service in 2021.	$177,375	Since the installation of the original mains and service lines at this mobile home park, the original trailers have been replaced in new locations, placing structures above Cascade's underground facilities. Company procedures do not allow mains and services to be located under any structure that is normally occupied by humans for business, residential, or other purposes; and where gas could accumulate. This project was installed to mitigate that abnormal operating condition ("AOC") that was discovered during a leak survey.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	No alternatives given the safety issues related to infrastructure under structures intended for human occupancy.	Not applicable.
FP-320513	Ontario Relocate (Surrey Lane). Retire and replace mains and services in mobile home park. Project required relocation of 5 – 2" steel mains and 40 service lines. New lines went into service in 2022.	$198,148	Since the installation of the original mains and service lines at this mobile home park, the original trailers have been replaced in new locations placing structures above Cascade's underground facilities. Company procedures do not allow mains and services to be located under any structure that is normally occupied by humans for business, residential, or other purposes; and where gas could accumulate. This project was installed to mitigate that AOC that was discovered during a leak survey.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	No alternatives given the safety issues relate to infrastructure under structures intended for human occupancy.	Not applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-321269	Ontario Relocate (Winegar Drive). Retire and replace mains and services in mobile home park. Project required retirement of 8 – 2" steel mains and 16 service lines, and replacement with 6 – 2" mains and 11 service lines to active meters and 5 idle risers. New lines went into service in 2022.	$625,119	Since the installation of the original mains and service lines at this mobile home park, the original trailers have been replaced in new locations placing structures above Cascade's underground facilities. Company procedures do not allow mains and services to be located under any structure that is normally occupied by humans for business, residential, or other purposes; and where gas could accumulate. This project was installed to mitigate that AOC that was discovered during a leak survey.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	No alternatives given the safety issues relate to infrastructure under structures intended for human occupancy.	Not applicable.
FP-321278	Vale Relocate (Hope Street). Retire and replace mains and services in mobile home park. Project required retirement of 2 – 2" steel mains and 16 service lines, and replacement with 3 – 2" mains and 10 service lines to active meters and 4 idle risers. New lines went into service in 2022.	$191,285	Since the installation of the original mains and service lines at this mobile home park, the original trailers have been replaced in new locations placing structures above Cascade's underground facilities. Company procedures do not allow mains and services to be located under any structure that is normally occupied by humans for business, residential, or other purposes; and where gas could accumulate. This project was installed to mitigate that AOC that was discovered during a leak survey.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	No alternatives given the safety issues relate to infrastructure under structures intended for human occupancy.	Not applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-321286	Ontario Relocate Mains (4th Avenue). Retire and replace mains and services in mobile home park. Project required retirement of 10 – 2” steel mains and 40 service lines, and replacement with 7 – 2” mains and 40 service lines. New lines went into service in 2022.	$382,563	Since the installation of the original mains and service lines at this mobile home park, the original trailers have been replaced in new locations placing structures above Cascade’s underground facilities. Company procedures do not allow mains and services to be located under any structure that is normally occupied by humans for business, residential, or other purposes; and where gas could accumulate. This project was installed to mitigate that AOC that was discovered during a leak survey.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	No alternatives given the safety issues relate to infrastructure under structures intended for human occupancy.	Not applicable.
FP-321288	Ontario Relocate Service (4th Avenue). Retire and replace mains and services in mobile home park. Project required retirement of 10 – 2” steel mains and 40 service lines, and replacement with 7 – 2” PE mains and 40 service lines. New lines went into service in 2022.	$197,113	Since the installation of the original mains and service lines at this mobile home park, the original trailers have been replaced in new locations placing structures above Cascade’s underground facilities. Company procedures do not allow mains and services to be located under any structure that is normally occupied by humans for business, residential, or other purposes; and where gas could accumulate. This project was installed to mitigate that AOC that was discovered during a leak survey.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	No alternatives given the safety issues relate to infrastructure under structures intended for human occupancy.	Not applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-321289	Nyssa Relocate Mains (Locust Avenue). Retire and replace mains and services in mobile home park. Project required retirement of 2 – 2” steel mains, 1 PE Main and 10 service lines. These assets were replaced with 1 – 2” PE main and 9 service lines and 1 idle risers. New lines went into service in 2022.	$302,996	Since the installation of the original mains and service lines at this mobile home park, the original trailers have been replaced in new locations placing structures above Cascade’s underground facilities. Company procedures do not allow mains and services to be located under any structure that is normally occupied by humans for business, residential, or other purposes; and where gas could accumulate. This project was installed to mitigate that AOC that was discovered during a leak survey.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	No alternatives given the safety issues relate to infrastructure under structures intended for human occupancy.	Not applicable.
FP-321910	Caldera Springs Sunriver. This a Growth Main project. Cascade installed main for a new subdivision that includes 4,090 feet (“ft”) of 1” PE, 6,810’ of 2” PE, and 3,775’ of 4” PE. Lines went into service in 2022.	$184,207	Cascade maintains an obligation to serve customers upon request. New subdivision sought service for 100 new customers, requiring the extension of new mains to an area that does not currently have gas.	Growth Main project required supplemental system reinforcement to provide system reliability for core customers. The Engineering review concluded this new growth load did not necessitate an additional reinforcement.	No alternatives identified. Area did not currently have service and required extension of distribution main system to accommodate service request.	Not applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-322106	Baker City Relocate (Campbell). Retire and replace main. Project required retirement of 4” DP Steel main and replacement with 4” MDPE main outside the bike lane on Campbell St. from the intersection of Campbell St. and Cherry St. to the intersection of Campbell St. and Cedar St. in Baker City, Oregon. New lines went into service in 2022.	$310,126	Project required to accommodate City of Baker City ADA Ramp project. Cascade is obligated to relocate facilities in ROW that conflict with City projects under its franchise agreement.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	No alternatives because this was a forced relocation and main is in active use.	Not applicable.
FP-322135	Nyssa Relocate Service (King Avenue). Retire and replace mains and services along King Ave. and Thompson Ave. in Nyssa, Oregon. Project required new 1” PE main and 34 service lines. New lines went into service in 2022.	$198,399	Construction in neighborhood had resulted in structures over existing Company facilities. Relocation reduces risk of future construction over relocated facilities. Company procedures do not allow mains and services to be located under any structure that is normally occupied by humans for business, residential, or other purposes; and where gas could accumulate. This project was installed to mitigate that AOC that was discovered during a leak survey.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	No alternatives given the safety issues.	Not applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-322136	Nyssa Relocate Mains (King Avenue). Retire and replace mains and services in Nyssa, Oregon. Project required retirement of 2" steel main and service lines, and replacement with 2" PE main. New main went into service in 2022.	$463,314	Construction in neighborhood had resulted in structures over existing Company facilities. Relocation reduces risk of future construction over relocated facilities. Company procedures do not allow mains and services to be located under any structure that is normally occupied by humans for business, residential, or other purposes; and where gas could accumulate. This project was installed to mitigate that AOC that was discovered during a leak survey.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	No alternatives given the safety issues.	Not applicable.
FP-323314	Bend Reinforcement (Woodriver Drive). Project required to help address low-pressure issues on the West side of Bend during exceptionally cold weather. It consisted of trenching approximately 2,000 ft beginning at the intersection of McClellan Rd & Wood River Ln, continuing North on Wood River Ln, and finally terminating on Wood River Dr. Mains went into service in 2023.	$327,715	Per the Synergi model, this reinforcement increases system pressures from less than 5 psig to 10 psig during cold weather events. This area has experienced customer outages during cold weather events.	Synergi model is used for the demand study/analysis. Per the Synergi model, this reinforcement increases system pressures from less than 5 psig to 10 psig during cold weather events.	No identified alternatives. This area has experienced customer outages during cold weather events. This project increased pressure to this part of our service territory ensuring safe reliable service in cold weather.	Not applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-323406	Bend Reinforcement (Blakely). Project required to help address low-pressure issues on the West side of Bend during exceptionally cold weather. Project consisted of trenching approximately 900 ft beginning with a tie in to existing 2” main just south of Reed Ln on Blakely Rd and terminating by tying back into 2” main at the intersection of Blakely and Silver Lake Blvd. Main went into service in 2024.	$248,901	This area has experienced customer outages during cold weather events.	Cascade's Synergi model is used for the demand study/analysis. Per the Synergi model, this reinforcement increases system pressures from less than 5 psig to 10 psig during cold weather events to enhance reliability.	No other cost-effective alternatives were identified. This project increased pressure to this part of our service territory ensuring safe reliable service in cold weather.	No applicable.
FP-323685	Nyssa Main. Increased customer load required upgraded facilities. Project required new regulator station, 250 ft of 4" HP steel main, and 5,400 ft of 6" PE main. New facilities went into service 2023.	$254,841	Customer expanded operations in Nyssa, Oregon. Customer required additional load due to added natural gas-fueled equipment. Peak load increased from 36,491 cfh new peak hourly demand of 50,214 cfh.	Analysis indicated new 6" PE main was required to serve the increased load per the Synergi model.	Customer timing limited alternatives. An alternative line was evaluated as an option to upgrading main to 6".	The alternate main option was rejected because of timing due to railroad permitting delays.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-323751	Relocate Bend (Awbrey Water). Project includes approximately 1,200 ft of 2” steel main, 17 service tie overs, and 2 service replacements. Work went from NW Wilmington Ave south on the west side of NW Awbrey Road to NW Utica Ave. Project also required relocating a 200 ft of 2” steel main from the west side of NW 2nd Street to the east side. Project went into service in 2023.	$500,607	Project required to accommodate City of Bend waterline project. Cascade is obligated to relocate facilities in ROW that conflict with City projects under its franchise agreement.	A demand study was not required for this project as this was a one-for-one relocation and replacement of main. There was no added load.	No alternatives were available due to the conflicts with the City of Bend upgrade plans.	Not applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-324020	Locusview Software. A new electronic mobile construction solution was needed to track the installation of parts, materials, and components during construction in the field. Locusview Software IGC was the chosen solution. Locusview is tightly integrated into Maximo and eliminated the need for paper forms, while leveraging electronic capabilities through data entry on field tablets to gather the information currently captured through manual entry on paper or spreadsheets. Also, spatial mapping and GPS capabilities will capture spatial data, which will then be integrated into the Utility GIS system.	$381,416	The Company previously used paper forms, spreadsheets, and other documents to capture construction activities in the field. The Locusview solution allowed tracking the construction processes electronically improving accuracy and data validation. The solution leverages field tablets connected to a high accuracy GPS and electronic code scanners. Locusview provided: • Increased accuracy when performing construction tasks. • The ability to track, more accurately, the spatial location of installed parts, materials, and components during construction. • Shortened time to update the Utility GIS system with spatial features and data. • Help capturing construction activities to ensure compliance with applicable laws, regulations, policies, and procedures. • The current Work and Asset Management System project (Maximo) required an electronic mobile system to perform field data capture.	Demand study not required.	The company considered utilizing CGI PCAD mobile as an alternative. The company compared the two products and determined that Locusview was the best option to meet the needs of the project.	Locusview had several advantages over the alternatives, including: High accuracy GPS, bar code scanning, and electronic workflows; tracking and traceability of assets with integrated GIS mapping; compatibility with quality management solution; electronic as-built documentation delivery; contractor solution and managed services; and utility focused vendor.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-324280	Reinforcement Hermiston (NW 7th Street). Reinforcement project to address negative pressure in modeling following additional customer load. The reinforcement consists of installing 1,000 ft of 2" PE main. Expected to be place in service in 2027.	$356,250.	System reinforcement to increase reliability and maintain core customers in Hermiston. This project gets distribution pressure back into design day criteria.	Cascade's Synergi model is used for the demand study/analysis. Per the Synergi model, this reinforcement increases system pressures.	Alternative reinforcement routes were considered, including using OR Highway 207 right of way or crossing railroad easement to tie into the system on the east side.	Alternatives presented more difficult permitting or construction conditions, which would have resulted in a higher project cost.
FP-324534	Bend Reinforcement (Brookswood Boulevard). Project to install 3900 ft of 6" PE loop on Granite Dr and Mahogany St. The loop will connect to the 4" PE main that runs along Ponderosa/Lodgepole. Project will be in service by end of 2025.	$885,292	SW Bend experienced low pressure and customer losses during a 2023 cold weather event. The Synergi model identified areas for reinforcement to increase pressures to provide reliable service during cold weather. This project will increase pressure in this area by ~25 pounds on a design degree day.	Cascade's Synergi model is used for the demand study/analysis. Per the Synergi model, this reinforcement increases system pressures.	No other cost-effective alternatives were identified. This project increased pressure to this part of our service territory ensuring safe reliable service in cold weather.	No applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-325213	RMLD Gas Detector Equipment Purchase. This capital purchase consists of the procurement of 108 Gas Trac LZ-30 RMLD gas detectors. This tool is utilized by Service Department field employees within Cascade. Purchased in 2024.	$240,950	The upgraded remote gas detectors allow technicians to more safely and efficiently respond to gas emergencies. These units are intrinsically safe for field personnel, come with a calibration cell in the carrying case to be used for bump testing, and utilize laser technology to detect gas up to 100 ft away. During emergency response, technicians will be able to more efficiently identify the source and scope of the leak by eliminating the need to physically walk the emergency location and adjacent areas. This improves safety by allowing the technician to detect gas from a safer distance and in areas with limited access. The units can also detect gas through a window for readings inside of a structure without approaching the door.	Not applicable	Cascade assessed two alternatives. First, continue to utilize existing PMD and bar probe with the CGI to respond to emergencies in which the benefits outlined above would not materialize. Second, an alternate RMLD tool was the Heath RMLD-CS which would also provide an approved emergency response and walking survey tool. The Heath tool costs over $17,000 per unit and is not compact like the LZ-30.	The LZ-30 was the least expensive tool that met company requirements.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-325325	Reinforce Bend (Highway 20). Installing a new 1600 ft 4” loop from the existing 4” PE line running along Highway 20, to the new roundabout at NW Robal Rd. Project went into service in 2024.	$360,272	Addition of a new customer north of Cooley Rd in Bend, Oregon reduced pressure in area. The service area is on the extremity of the existing system and the pressure in that area is 20-24 psig before the new load was added. Due to the distance from higher pressure sources, new loads impact the gas system by causing exaggerated pressure to drop. This load reduces pressure in the system from 20-24 psig to around 11 psig and more distant, already low areas, to 8 psig during a cold weather event. Growth in Bend, Oregon has required a sequence of reinforcements planned to bolster pressures in existing service areas and to deliver gas to new service areas. Cold weather events strain the system and drop operating pressures, putting the system at risk of losing pressure and shutting off service to customers. Pressure modeling indicated the north part of the Bend system is at risk of maintaining pressure during cold weather events, after this customer’s demand is introduced.	Cascade's Synergi model is used for the demand study/analysis. Per the Synergi model, this reinforcement increases system pressures.	High pressure reinforcement in the area.	Due to the remote location, a high-pressure reinforcement would provide the longest-term benefits to the area. However, upgrades to that system were already planned over the next 5 years and anything directly impacting this area could not be undertaken until that is complete.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-325380	Relocate Bend (Awbrey Water). The project involves relocating 500 ft of 4” steel main with an 8” tie in, 20 ft of 2” steel main, and 8 services. The project went into service in 2024.	$694,695	Project required to accommodate City of Bend waterline project. Cascade is obligated to relocate facilities in ROW that conflict with City projects under its franchise agreement.	A demand study was not required for this project as this was a one-for-one relocation and replacement of main. There was no added load.	No alternatives. Cascade confirmed facilities were in conflict with the city’s water main upgrade and had to be moved.	Not applicable.
FP-325907	Pendleton Reinforcement (Tutuilla Road). Reinforcement project involving the installation of approx. 2,000 ft of 4” PE main along Tutuilla Rd. The reinforcement will parallel the existing 2” PE pipe from Murphy Rd to SW Perkins Ave. Project is expected to be in service in 2026.	$405,072	This project will improve serviceability and reliability to the Pendleton distribution system by addressing a low-pressure area and bringing distribution system pressures back into design criteria to support core growth. Due to growth, the end of the system on Tutuilla Creek Rd has fallen to below 10 psig in the model.	Cascade's Synergi model is used for the demand study/analysis. Per the Synergi model, this reinforcement increases system pressures.	Alternative reinforcement routes included crossing US 395 and I 84.	Alternatives would require more difficult permitting or construction conditions, which would have resulted in a higher project cost.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-326014	Relocate Bend Service (Despain Avenue). Retire and replace main. Project required retirement and replacement of existing main and service lines along NW Despain Ave. from N Main St. to NW 7th St. Upon review of our facilities, both main and service lines were older and extremely shallow in the impacted area. New lines went into service in 2024. Project included this FP and FP-326015.	$224,094	Project required to accommodate City of Pendleton NW Despain Ave. reconstruction project. Cascade is obligated to relocate facilities in ROW that conflict with City projects under the franchise agreement. Prior facilities were also aging and shallow infrastructure. Replacement improved safety by reducing failure risk, enhance reliability with new materials, lowered expected maintenance costs going forward, and ensured compliance with current safety, environmental and health regulations.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	This is a forced relocation due to a franchise agreement with the City of Pendleton.	Not applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-326015	Relocate Bend Mains (Despain Avenue). Project required retirement and replacement of existing main and service lines along NW Despain Ave. from N Main St. to NW 7th St. Upon review of our facilities, both main and service lines were older and extremely shallow in the impacted area. New lines went into service in 2024. Project included this FP and FP-326014.	$171,618	Project required to accommodate City of Pendleton NW Despain Ave. reconstruction project. Cascade is obligated to relocate facilities in ROW that conflict with City projects per the franchise agreement. Prior facilities were also aging and shallow infrastructure. Replacement improved safety by reducing failure risk, enhance reliability with new materials, lowered expected maintenance costs going forward, and ensured compliance with current safety, environmental and health regulations.	A demand study was not required for this project as this was a one-for-one replacement with the same diameter pipelines and no added load.	This is a forced relocation due to a franchise agreement with the City of Pendleton.	Not applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-326191	Umatilla Reinforcement (Powerline Road). Reinforcement project installing 2,200 ft of 4" PE main along Powerline Rd in Umatilla. The reinforcement will be located from the outlet of regulator station 056-R-101 to the existing 4" PE at the intersection of Powerline Rd and Jefferson St. Project will go in service by end of 2025.	$496,215	This project is to improve serviceability and reliability to the Umatilla distribution system by addressing a low-pressure area and bringing distribution system pressures back into design criteria to support core growth.	Cascade's Synergi model is used for the demand study/analysis. Per the Synergi model, this reinforcement increases system pressures.	This project had no alternatives to address the low-pressure area due to the existing distribution system configuration and available right of opportunity. Alternatives were not capable of fully correcting the low-pressure issues without this 4" reinforcement.	Not applicable
FP-326287	Relocate Bend (Olney Avenue). City of Bend Forced Relocation Project that includes relocating 300 ft of 2" main and 4 services to avoid conflict with the city's new infrastructure. Project went into service in 2025.	$187,998	Project required to accommodate City of Bend waterline project. Cascade is obligated to relocate facilities in ROW that conflict with City projects under its franchise agreement.	A demand study was not required for this project as this was a one-for-one relocation and replacement of main. There was no added load.	No alternatives. Cascade confirmed the facilities were in conflict with the city's water main upgrade and had to be moved.	Not applicable.

Funding Project Number	Summary	Cost	Justification	Demand/Study Analysis	Alternatives	Rationale (for choice between alternatives)
FP-327265	Growth Bend (Ponderosa PH 1). This a Growth Main project for a new subdivision that includes 1,378 ft of 4" PE main, and 1,984 ft of 2" PE to serve 53 residential lots. Project went into service in 2025.	$170,900	Cascade maintains an obligation to serve customers upon request. New subdivision sought service for 53 new customers, requiring the extension of new mains to an area that does not currently have gas.	While some Growth Main projects require supplemental system reinforcement to provide system reliability for core customers, the engineering review concluded this new growth load did not necessitate an additional reinforcement.	No alternatives identified. Area did not currently have service and required extension of distribution main system to accommodate service request.	Not applicable.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

DIRECT TESTIMONY OF ZACHARY L. HARRIS

EXHIBIT 1100

November 2025

TABLE OF CONTENTS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Zachary L. Harris. My business address is 8113 West Grandridge Boulevard, Kennewick, Washington 99336.

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

A. I am employed by Cascade Natural Gas Corporation ("Cascade" or "Company"), a wholly owned subsidiary of MDU Resources Group, Inc. ("MDU Resources"), as Manager of Regulatory Affairs. In this capacity, I am primarily responsible for rate design concepts, cost of service studies, tariff administration, and the Company's decoupling mechanism.

Q. Please briefly describe your educational background and professional experience.

A. In December of 2008, I received a Bachelor of Science degree in Accounting from Brigham Young University-Hawaii. In December of 2011, I received a Master of Science degree in Accounting from Boise State University.

I have been employed in the utilities industry since 2011, primarily in Regulatory Affairs. I have experience in the electric utility industry, the freight handling and transportation utility industry, and the natural gas utility industry. I have attended the utility ratemaking course offered through New Mexico State University's Center for Public Utilities, as well as other utility specific courses. In November 2021, I became employed by Intermountain Gas Company ("Intermountain"), an affiliated entity that is also a subsidiary of MDU Resources, as a Regulatory Analyst.

In 2023, I was promoted to Manager, Regulatory Affairs, with responsibility for both Cascade and Intermountain. I have previously sponsored testimony and exhibits before the Idaho Public Utilities Commission and the Washington Utilities and Transportation Commission regarding various filings.

II. SCOPE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony in this docket?

A. My testimony (i) provides general information regarding Cascade's rate design; (ii) proposes Schedule 225, Renewable Natural Gas Cost Recovery Adjustment, a cost recovery mechanism designed to recover Cascade's future investments in renewable natural gas ("RNG") infrastructure; (iii) proposes an update to the rates in Schedule 197 Environmental Remediation Cost Adjustment; (iv) introduces two new General Distribution System Firm Transportation Service options; (v) proposes changes to the Company's Line Extension Allowances; and (vi) provides an overall summary of the Company's proposed tariff changes.

Q. What are you requesting approval of in this testimony?

A. I am requesting approval of the proposed Renewable Natural Gas Cost Recovery Adjustment; the updated rates in Schedule 197 Environmental Remedial Cost Adjustment; the new optional firm transportation service schedules; the proposed line extension allowance in the tariff; and the tariff revisions to implement the proposed rate increase by the Company.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I sponsor the following exhibits in support of my testimony:

- Exhibit CNGC/1101 – Peer Utilities' Basic Service Charges
- Exhibit CNGC/1102 – Environmental Remediation Costs
- Exhibit CNGC/1103 – Line Extension Allowance Scenarios
- Exhibit CNGC/1104 – Cascade's Revised Clean Tariff Sheets
- Exhibit CNGC/1105 – Cascade's Revised Redlined Tariff Sheets

III. PROPOSED RATE DESIGN

Q. What rate design considerations were part of this general rate case?

A. The Company engaged MCR Performance Solutions ("MCR") to perform a Cost-of-Service Study ("COSS") and develop resulting rate design options. The Company's intent is to take a meaningful step towards establishing cost-of-service based rates. Specifically, the Company proposes to increase the Basic Service Charge for all customer classes to more closely align with the COSS. This is discussed more fully in the Direct Testimony of Matthew Larkin.[1]

Q. Why does Cascade believe increasing customers' Basic Service Charge is appropriate?

A. The Company believes a reasonable increase in its Basic Service Charges will bring the charge closer to a cost-based allocation. Increasing the Basic Service Charge to include customer-related costs sends the proper price signal to customers that costs are assigned to the appropriate rate components. Currently, a large portion of customer-related costs are embedded in the volumetric per therm charge.

Q. What is Cascade's current Residential Basic Service Charge?

A. Cascade's current Residential Basic Service Charge is $6.00. This charge has only increased from $3.00 to the current amount of $6.00 over more than fourteen years. The gap between the current Basic Service Charges and customer-related costs, as identified in the COSS, is significant.

Q. How does Cascade's current Residential Basic Service Charge compare with peer utilities?

A. The Company's Residential Basic Service Charge is notably lower compared to its peer natural gas utilities, as shown in Table 1 below.

---

[1] CNGC/700, Larkin.

Table 1 – Comparison of Residential Basic Service Charges

Customer Class	Cascade	Avista[2]	NW Natural[3]
Residential	$6.00	$11.25	$10.00

For additional context, Avista assessed a $6.00 Basic Service Charge—the Company's current charge amount—in 2008.[4] NW Natural assessed a $6.00 Basic Service Charge in 2003.[5] In other words, between 17 and 22 years ago, the other utilities were charging the same amount Cascade currently charges.

Q. What Basic Service Charge is Cascade proposing for residential customers?

A. Cascade is proposing to increase the Residential Basic Service Charge from $6.00 per bill to $12.00 per bill.

Q. Why does Cascade believe this proposal is reasonable?

A. Cascade believes increasing its Residential Basic Service Charge is reasonable for three reasons:

- First, Cascade's COSS demonstrates that the Company's Residential Basic Service Charge is insufficient to recover its fixed costs.
- Second, as demonstrated in Table 1, Cascade's Residential Basic Service Charge is not aligned with its peer utilities in the region.
- Third, the current $6.00 per bill Residential Basic Service Charge has not kept pace with increases in customer-related costs. The currently approved Residential Basic Service Charge was last updated in 2021 (increasing from $5.00 to $6.00).[6] In addition to continued inflationary pressures, other

[2] CNGC/1101, Harris/1.
[3] CNGC/1101, Harris/14.
[4] CNGC/1101, Harris/3.
[5] CNGC/1101, Harris/13.
[6] *In re Cascade Nat. Gas Corp., Application for a Gen. Rate Revision*, Docket No. UG 390, Order No. 21-001 at 7 (Jan. 6, 2021).

customer-related costs have increased while the Residential Basic Service Charge has remained stagnant.

Q. Has Cascade considered the impact this increase in Residential Basic Service Charge will have on low-income customers?

A. Yes. Cascade is mindful of its vulnerable customers within its service territory and their ability to stay connected to their natural gas service. As discussed in the Direct Testimony of Dan L. Tillis, Cascade offers its Energy Discount Program which discounts income-qualified customers' bills such that their energy burdens are reduced.[7] Cascade also offers arrearage relief grants for income-qualified customers who need additional financial assistance or who are experiencing an unexpected crisis. Cascade seeks to work with customers who struggle to pay by offering them financial assistance or time payment agreements. Cascade has not lost sight of its most vulnerable customers in its request to increase the rates and is confident that resources are available to enable customers to stay connected to their gas service without being unduly burdened.

Q. Is Cascade proposing changes to the Basic Service Charge for other customer classes?

A. Yes. The Basic Service Charge for all customer classes is misaligned with the fixed costs to serve each class as demonstrated in the COSS, as described in the Direct Testimony of Matthew Larkin.[8]

---

[7] CNGC/300, Tillis.
[8] CNGC/700, Larkin.

Q. What other rate design changes are proposed?

A. Cascade is proposing to move all non-gas per therm charges closer to cost-based rates as determined by the COSS, as described in the Direct Testimony of Matthew Larkin.[9]

Q. Did Cascade consider equity in its rate design?

A. Yes. Cascade is aware that equity is an important consideration in ratemaking policy. The Company is expecting the Commission Staff's differential rates workstream under docket UM 2211, expected to start January 2026, to put forward the Commission's more immediate goals regarding equity in rate design with specific recommendations for each utility. Until the direction of that workstream in docket UM 2211 is understood, Cascade's Energy Discount Program and its arrearage relief grant program, Oregon Low-Income Bill Assistance ("OLIBA"), continue to offer meaningful financial assistance for customers in need. The Direct Testimony of Dan L. Tillis describes Cascade's programs and offerings designed to keep customers connected to their utility service.[10]

IV. RENEWABLE NATURAL GAS COST RECOVERY ADJUSTMENT

Q. What is Cascade proposing related to RNG cost recovery?

A. Cascade seeks to establish Schedule 225, Renewable Natural Gas Cost Recovery Adjustment for the purpose of recovering future costs for RNG infrastructure. Schedule 225 is a stand-alone schedule, allowed per ORS 757.210(1)(b), that will be used to separately track and recover costs for RNG infrastructure which the Company will incur complying with the Climate Protection Program ("CPP") established in OAR chapter 340, division 273. The CPP requires statewide emissions reductions from fossil fuel combustion by 50 percent by 2035 and by 90 percent by 2050. These

[9] CNGC/700, Larkin.
[10] CNGC/300, Tillis.

aggressive greenhouse gas emissions reduction requirements will require multiple compliance strategies including investments in RNG production. The Direct Testimony of Hart Gilchrist describes Cascade's compliance investments and approach towards CPP planning generally.[11]

Q. What costs will be included for recovery in Schedule 225?

A. Schedule 225 will recover the revenue requirement associated with Cascade's future investments in RNG infrastructure. These are RNG infrastructure costs that have not been rolled into base rates with this rate case because the infrastructure is not yet used and useful. When the RNG infrastructure is used and useful in the future, Cascade will seek to recover the associated costs through Schedule 225. These costs will include incremental depreciation expense; property and other taxes; return on investment; income taxes; operating and maintenance costs; and other costs relating to the Company's investment. The capital structure and the cost of capital to be used in the calculation of return on rate base will be as adopted in this general rate case proceeding, docket UG 525.

Q. Which customer classes would pay the Schedule 225 charge?

A. The Schedule 225, RNG Cost Recovery Adjustment will apply to all customers subject to the CPP charges under Schedule 220, Climate Protection Program Cost Recovery Adjustment. Applicable customers include all non-Emissions-Intensive and Trade Exposed ("EITE") customers served on Schedules 101, 104, 105, 111, 161, 163, 170, and 800.

[11] CNGC/1200, Gilchrist.

Q. What is the proposed Schedule 225 rate?

A. Because Cascade is not proposing to flow any costs through Schedule 225, the proposed rate value is zero and will remain so until Cascade seeks cost recovery for its future RNG investments.

Q. Why is Cascade proposing Schedule 225?

A. Cascade seeks to establish the cost recovery methodology for future RNG investment costs since a general rate case is the appropriate forum for such discussions. Schedule 225 will provide Cascade with a mechanism to allow it to make CPP compliance investments and annually track investment costs into rates without necessitating the pancaking of general rate cases. Additionally, Schedule 225 will provide a needed ratemaking tool in light of potential limitations on the timing and frequency of rate cases resulting from House Bill 3179.[12]

Q. When does Cascade expect to file an advice filing to recover costs through Schedule 225?

A. Cascade expects to file and update its Schedule 225 rates annually, if needed, concurrently with its Purchased Gas Adjustment filing, effective annually on October 31.

Q. Has the Commission previously granted a utility approval to separately track RNG infrastructure costs into rates through a stand-alone rate mechanism?

A. Yes. In NW Natural's 2022 general rate case, docket UG 435, the Commission approved NW Natural's Schedule 198, which is designed to collect RNG infrastructure investment made pursuant to ORS 757.390 to 398.[13]

---

[12] *See* HB 3179, 83rd Or. Leg. Assemb., 2025 Reg. Sess (Or. 2025).
[13] *In re Nw. Nat. Gas Co., dba NW Natural, Request for a Gen. Rate Revision (UG 435), Advice 20-19, Schedule 198 Renewable Nat. Gas Recovery Mechanism (ADV 1215) (UG 411)*, Docket No. UG 435, Order No. 22-388 at 79-86 ((Oct. 24, 2022).

V. ENVIRONMENTAL REMEDIATION COST ADJUSTMENT

Q. Please provide a brief history of the Eugene Remediation Site and process.

A. A predecessor in interest to Cascade operated a Manufactured Gas Plant in Eugene, Oregon, which resulted in the need for environmental remediation. The Eugene Water & Electric Board ("EWEB") now owns the property, and Cascade, along with PacifiCorp and EWEB, participated with Oregon Department of Environmental Quality ("DEQ") oversight to perform initial studies and to determine cleanup project objectives. EWEB, PacifiCorp, and Cascade entered into a participation agreement for site investigation and executed a cost sharing agreement under which Cascade is responsible for a portion of the investigation and remedial design costs. In January 2015, the DEQ issued a Record of Decision ("ROD") identifying the measures to remediate the site.[14]

Q. Has Cascade been deferring the expenses associated with environmental remediation that have been incurred to date?

A. Yes. Consistent with Cascade's petition for deferred accounting in docket UM 1636, and the Commission's orders approving the same, the Company deferred expenses associated with environmental remediation work from 2013 through 2022.[15]

Q. Has the Company amortized any portion of the amounts deferred?

A. Yes. The Commission has granted Cascade the authority to amortize its environmental remediation costs in two prior general rate cases, docket UG 305 and

[14] *In re Cascade Nat. Gas Corp., Request for a Gen. Rate Revision*, Docket No. UG 287, Direct Testimony of Michael P. Parvinen, CNG/309 (Mar. 31, 2015) (Cascade included a copy of the ROD, issued January 15, 2014, as Exhibit CNG/309 in its 2015 rate case filing, docket UG 287.).

[15] Cascade filed its initial petition for deferred accounting on November 30, 2012, and the Commission granted Cascade's subsequent requests for reauthorization of its deferral for environmental remediation expenses through 2022. *In re Cascade Nat. Gas Corp., Application for Reauthorization for Deferral of Env't Remediation*, Docket No. UM 1636, Order No. 13-004 at 1, App. A at 1 (Jan. 15, 2013); Order No. 13-484 at 1, App. A at 1 (Dec. 19, 2013); Order No. 15-010 at 1, App. A at 1 (Jan. 13, 2015); Order No. 16-010 at 1, App. A at 1 (Jan. 12, 2016); Order No. 17-306 at 1, App. A at 1 (Aug. 10, 2017); Order No. 17-491 at 1, App. A at 1 (Dec. 6, 2017); Order No. 19-046 at 1, App. A at 1 (Feb. 15, 2019); Order No. 19-427 at 1, App. A at 1 (Dec. 6, 2019); Order No. 21-065 at 1, App. A at 1 (Feb. 25, 2021); and Order No. 21-452 at 1, App. A at 1 (Dec. 2, 2021).

docket UG 347.[16] The intent of amortizing costs before remediation was complete was to begin recovering a portion of the costs as they were incurred, rather than waiting until a future date when costs could be substantially greater. The Company began collecting costs through Schedule 197, Environmental Remediation Cost Adjustment.

Q. Is Cascade currently collecting any environmental remediation costs?

A. No.

Q. Is Cascade proposing to collect any environmental remediation costs in this case?

A. Yes. Cascade seeks to amortize its deferred balance of approximately $600,000. The balance consists of the final costs to clean up the Eugene site, less insurance payments of $1.1 million, plus interest on the balance as authorized by the Commission orders issued in docket UM 1636.

A summary of the deferral balance is provided as Exhibit CNGC/1102. Cascade is seeking to recover these deferred costs in Schedule 197 over a three-year amortization period as it did in docket UG 305 and docket UG 347. Any over- or under-collection of the amortized balance at the end of the three-year term will be rolled into a deferral with like customer applicability.

Q. How are environmental remediation costs being allocated to customers in the Company's proposal?

A. The environmental remediation costs are allocated on an equal cents per therm basis, as authorized for Schedule 197 in Commission Order No. 16-477, issued in docket UG 305, Cascade's 2016 general rate case. If approved, all customer classes will be

[16] *In re Cascade Nat. Gas Corp., Request for a Gen. Rate Revision*, Docket No. UG 305, Order No. 16-477 at 5-6 (Dec. 12, 2016); *In re Cascade Nat. Gas Corp., Application for a Gen. Rate Revision*, Docket No. UG 347, Order No. 19-088 at 11-12 (Mar. 14, 2019).

charged $0.00151 per therm under Schedule 197. See Exhibit CNGC/1102 for the derivation of the rate.

Q. Will Cascade be accruing additional remediation costs beyond what is amortized as a part of this general rate case?

A. No. Cascade does not foresee incurring any more costs to remediate the manufactured gas plant in Eugene, Oregon. The remediation work is complete, and the related insurance claims were received.

VI. NEW RATE SCHEDULES

Q. Is Cascade adding new rate schedules in this general rate case?

A. Yes, Cascade is revising its current Rate Schedule 163, General Distribution System Interruptible Transportation Service ("Schedule 163"), and adding three new rate schedules for transportation service customers. New Schedules 161 and 162 will offer a firm transportation service and Schedules 163 and 164 will be for interruptible transportation service.

Q. Why is the Company proposing three new rate schedules for transportation service?

A. The Company is proposing three new rate schedules for transportation service to add a firm transportation service option and then create separate firm and interruptible transportation schedules for EITE customers and non-EITE customers. Under the CPP, OAR chapter 340, division 273, Cascade is responsible for compliance with the declining greenhouse gas emissions cap for its customers. However, the current CPP provides an alternative compliance pathway for EITE sources. Because Cascade is not responsible for EITE customers' compliance with the CPP, Cascade is not assigning CPP compliance costs to those customers. Creating a new rate schedule ensures those customers will not be required to pay CPP compliance costs included in Cascade's Schedule 220, CPP Cost Recovery Adjustment, proposed Schedule 225, Renewable Natural Gas Cost Recovery Adjustment, and any other CPP compliance costs that may be included in other rate schedules in the future. The proposed new rate schedules and titles and the revised title for Schedule 163 is below:

- Schedule 161, General Distribution System Firm Transportation Service – Non-EITE
- Schedule 162, General Distribution System Firm Transportation Service – EITE
- Schedule 163, General Distribution System Interruptible Transportation Service – Non EITE
- Schedule 164, General Distribution System Interruptible Transportation Service – EITE

Q. Why is Cascade proposing firm transportation service?

A. The Company's current service offering under Schedule 163 is provided strictly as an interruptible service. As explained in the Purpose section of current Schedule 163, "service under this schedule is subject to entitlement and curtailment." Cascade is introducing a firm transportation service for transportation customers who want a more reliable service option. The Company believes customers appreciate having options as their service needs or their risk tolerance levels change.

Q. What is the benefit for customers taking firm transportation service?

A. Cascade believes an optional firm service would ensure an increased level of reliability for customers that prefer that level of service. If a curtailment is needed, customers taking firm service would have a higher level of certainty that they would not experience a service interruption.

Q. Will the proposed firm transportation service be an optional service?

A. Yes, if capacity is available, firm transportation service will be provided for customers electing to receive firm service on an optional basis to mitigate the risk of potential interruptions.

Q. Why does Cascade propose to separate EITE customers from non-EITE customers within its firm and interruptible transportation schedules?

A. As detailed above, EITE customers are responsible for their own CPP compliance obligations. Cascade does not plan to assign costs associated with CPP compliance to EITE customers. In this rate case proceeding, the Company is creating separate rate schedules for EITE customers to ensure those customers are not allocated RNG-related costs. In Cascade's COSS, included as part of the Direct Testimony of Matthew Larkin, RNG capital projects are allocated to customers subject to the CPP, and excluded from EITE customers.

Q. What is the difference in cost between firm and non-firm transportation service?

A. Customers opting to receive firm transportation service under Schedules 161 and 162 will pay for capacity reservations in a demand charge. Please see the Direct Testimony of Matthew Larkin for more details.[17]

VII. LINE EXTENSION ALLOWANCE POLICY

Q. Is Cascade proposing a new line extension allowance ("LEA") policy in this rate case?

A. Yes. Cascade is proposing a change to its LEA policy in response to Commission Order No. 25-370, issued September 17, 2025, in docket LC 83, the docket for Cascade's 2023 Integrated Resource Plan. Commission Order No. 25-370 adopted Commission Staff's memo which says:

[17] CNGC/700, Larkin.

> Staff recommends review of LEA changes in the context of a general rate case proceeding. This provides an opportunity to make rate design choices with a holistic view of rate spread and rate design factors. If Cascade has not filed a general rate case with LEA changes by the end of 2025, Staff commits to returning to the Commission in the first quarter of 2026 with new recommendations for direction to the Company. Staff supports Cascade hosting at least one workshop before its next rate case to refine its LEA update based on stakeholder feedback.[18]

Q. What is Cascade's current LEA?

A. The Company provides an allowance or a reduction in upfront costs for both main installations and service line installations. The service line extension allowance is in Rule 9 of the Company's tariff, and the main extension allowance is in Rule 10. For context, the main is the primary feeder delivering gas down a street and a service line is generally a smaller pipe running from the main to the Company's service meter at the customer's premise.

The current service line extension allowance policy offers a new customer 40 feet of service line at no upfront cost. Additional footage at no upfront cost is available based on the customer's installed natural gas appliances. The installation of space heating offers 20 additional feet (60 total), the installation of space heating and water heating adds 40 feet (80 total), and a commercial or industrial load of over 150,000 British thermal units offers 40 added feet (80 total). In addition, customers are given an allowance for the installation of a main line extension equal to 4.5 times the customer's estimated gross margin. The current payback period is no less than 4.5 years, with the additional length in time depending on the service line allowance.

Q. Please provide an overview of the Company's proposed LEA policy.

A. The Company is proposing to combine its service line and main line extension allowances under one LEA policy established in Rule 9, withdrawing Rule 10. The

[18] *In re Cascade Nat. Gas Corp., 2023 Integrated Res. Plan*, Docket No. LC 83, Order No. 25-370 at 1, App. A at 4 (Sept. 17, 2025).

proposed policy results in a simplified allowance based on a customer's estimated annual gross margin. Table 2 below presents Cascade's proposed LEA policy for each customer class.

Table 2 – Proposed LEA

Rate Class	Allowance
Residential, Commercial, Industrial	4.0 x Margin
Large Volume, Transportation	4.5 x Margin

Under this LEA policy, Customers will pay any estimated costs to install their service line that exceed the line extension allowance with a payback period between 4 and 4.5 years, depending on the customer class.

Q. What are the results of this proposed LEA policy?

A. The proposed LEA policy results in the following:

- The allowance is a simple calculation and easy to explain to all customers.
- The proposed allowance is a reduction from the current LEA policy.
- The payback period under this proposed LEA policy is shorter than the payback period under Cascade's current policy.
- Retaining an LEA preserves the option for customers to choose natural gas service when contemplating energy options.
- The proposed LEA continues to comply with OAR 860-021-0050 and OAR 860-021-0051.

Q. Please explain how the proposed LEA policy balances costs and benefits among existing customers.

A. Cascade believes that retaining a modest LEA policy, as proposed, is useful to all customers. First, by offering an allowance, natural gas continues to be an accessible fuel choice for customers who, without an LEA, may not be able to afford to connect to natural gas. Customers appreciate options and many people continue to prefer natural gas. A Bend and Deschutes County Survey performed in 2023 found that 69 percent of Bend voters have a positive impression of natural gas and 81 percent agree they should not be forced to use only electric appliances.[19] A Pacific Northwest regional survey found that 81 percent believe that communities need both natural gas and electricity for reliability during extreme weather events.[20]

Second, an LEA provides commercial and industrial customers access to the distribution system, which is useful to other customers, especially residential customers, as large volume customers can alleviate the cost burden for fixed costs and income-qualified programs such as bill assistance, arrearage relief grants, and low-income weatherization services. Large volume customers also can help with system efficiency by optimizing existing capacity. Beyond system benefits, some large customers need natural gas for their processes. By making natural gas accessible through an LEA, the community benefits through the job and product creation that the larger customers bring. For these reasons, Cascade believes that lowering the barrier to installing natural gas service is beneficial to existing customers and the communities in which they live.

Q. What is the cost difference between the current line extension policy and the proposed line extension policy?

A. In general, the proposed line extension policy offers a substantially reduced allowance compared to the existing policy. The difference in the amount of the LEA will vary

[19] DHM Research, on behalf of Cascade Nat. Gas Corp., Key Findings from a Survey of Voters in Bend, Oregon on Natural Gas and Natural Gas Policy Options at 1 (May 2023), available at https://www.cngc.com/wp-content/uploads/PDFs/energy_choice/oregon/Cascade-Natural-Gas-Bend-Memo-2023-.pdf.

[20] NW Coalition for Energy Choice, Natural Gas Facts (citing "DHM Research survey of voters in the Willamette Valley, coastal Oregon, Clark County, WA, and the Columbia Gorge"), https://nwenergychoice.org/natural-gas-facts) (last visited Nov. 22, 2025).

depending on individual circumstances. Please see Exhibit CNGC/1103 for a comparison between the current LEA and proposed LEA under different scenarios.

Q. Does the Company have a provision to protect other customers from subsidizing the LEA in the event the new customer's connected demand is not as expected?

A. Yes. Rule 9 contains a provision wherein a customer receiving an LEA will sign a customer commitment contract ensuring that the customer will reimburse the Company for any portion of the LEA that was based on an estimation of natural gas demand that does not materialize within a defined timeframe (one year for single-service customers and five years for developers).

Q. How is this proposed LEA policy presented in the tariff?

A. Cascade is combining its service line and main installations allowance policies in Rule 9 under the heading, Line Extension Allowance Policy, and withdrawing Rule 10, Main Installations. The terms and conditions remain the same as stated in the currently approved versions of Rules 9 and 10. Also, Cascade retains the provision to refund line extension costs not covered by an allowance, when one or more additional customers connect to the distribution system within five years of the first customer's payment. The current refunding provision applies only to main line extensions. This is revised to accommodate the changes to the LEA policy, which combines service line and main line costs under one LEA policy.

VIII. TARIFFS

Q. Has the Company provided proposed tariff sheets?

A. Yes, the Company is filing the revised tariff sheets provided in Exhibit CNGC/1104 to my direct testimony. As a courtesy, redlined tariff sheets are included in Exhibit CNGC/1105. Table 3 below provides an overview of the proposed tariff changes.

Table 3 – Summary of Proposed Tariff Changes

Tariff Sheet	Schedule or Rule	Title
Eighth Revision of Sheet No. ii	Index	Index
Thirteenth Revision of Sheet No. iii	Index	Index
First Revision of Sheet No. 9.1	Rule 9	Line Extension Allowance Policy
Third Revision of Sheet No. 9.2	Rule 9	Line Extension Allowance Policy
Original Sheet No. 9.3	Rule 9	Line Extension Allowance Policy
Second Revision of Sheet No. 17.1	Rule 17	Order of Priority for Gas Service
First Revision of Sheet No. 18.1	Rule 18	Limitation of Firm Service
Third Revision of Sheet No. 19.1	Rule 19	Conservation Alliance Plan Mechanism
Original Sheet No. 22.1	Rule 22	General Transportation Service Terms and Conditions
Original Sheet No. 22.2	Rule 22	General Transportation Service Terms and Conditions
Original Sheet No. 22.3	Rule 22	General Transportation Service Terms and Conditions
Original Sheet No. 22.4	Rule 22	General Transportation Service Terms and Conditions
Original Sheet No. 22.5	Rule 22	General Transportation Service Terms and Conditions
Original Sheet No. 22.6	Rule 22	General Transportation Service Terms and Conditions
Second Revision of Sheet No. 37.1	Schedule 37	Energy Discount Program Cost Recovery
Fifth Revision of Sheet No. 99.1	Schedule 99	Rate Summary Sheet
Fifth Revision of Sheet No. 99.2	Schedule 99	Rate Summary Sheet
Fifth Revision of Sheet No. 99.3	Schedule 99	Rate Summary Sheet
Fifth Revision of Sheet No. 99.4	Schedule 99	Rate Summary Sheet
Original Sheet No. 99.5	Schedule 99	Rate Summary Sheet
Thirteenth Revision of Sheet No. 101.1	Schedule 101	General Residential Service Rate
Thirteenth Revision of Sheet No. 104.1	Schedule 104	General Commercial Service Rate
Thirteenth Revision of Sheet No. 105.1	Schedule 105	General Industrial Service Rate
Fourteenth Revision of Sheet No. 111.1	Schedule 111	Large Volume General Service Rate

Original Sheet No. 161.1	Schedule 161	General Distribution System Firm Transportation Service – Non-EITE
Original Sheet No. 161.2	Schedule 161	General Distribution System Firm Transportation Service – Non-EITE
Original Sheet No. 162.1	Schedule 162	General Distribution System Firm Transportation Service – EITE
Original Sheet No. 162.2	Schedule 162	General Distribution System Firm Transportation Service – EITE
Fourteenth Revision of Sheet No. 163.1	Schedule 163	General Distribution System Interruptible Transportation Service – Non-EITE
Original Sheet No. 164.1	Schedule 164	General Distribution System Interruptible Transportation Service – EITE
Thirteenth Revision of Sheet No. 170.1	Schedule 170	Interruptible Service
Eleventh Revision of Sheet No. 192.1	Schedule 192	Intervenor Funding Adjustment
First Revision of Sheet No. 196.1	Schedule 196	UM 903 Oregon Earnings Sharing
Fifth Revision of Sheet No. 197.1	Schedule 197	Environmental Remediation Cost Adjustment
Second Revision of Sheet No. 220.1	Schedule 220	Climate Protection Program (CPP) Cost Recovery Adjustment
Original Sheet No. 225.1	Schedule 225	Renewable Natural Gas Cost Recovery Adjustment
Fifth Revision of Sheet No. 800.2	Schedule 800	Biomethane Receipt Services
First Revision of Sheet No. 805.1	Schedule 805	Voluntary Renewable Natural Gas Program

Q. Please provide a summary of the changes made to each tariff sheet.

A. Below is a list of the proposed revised tariff sheets followed by a brief explanation of the proposed revisions:

- Sheet No. ii, Index, is revised to remove reference to Rule 10, Main Extensions, which is removed due to the proposed consolidation of Rule 10 with Rule 9, Service Line Installations. For an explanation of the line extension policy changes resulting in the removal of Rule 10, Main Extensions, please see Section VIII of my testimony.

- Sheet No. iii, Index, is revised to add new proposed Rate Schedule 161, General Distribution System Firm Transportation Service – Non-EITE, Schedule 162, General Distribution System Firm Transportation Service – EITE, and Schedule 164, General Distribution System Interruptible Transportation Service – EITE. Also, the title to Schedule 163, General Distribution System Interruptible Transportation Service, is revised to include "Non-EITE" in its title, consistent with the added new schedules. This index sheet is also revised to add reference to proposed Schedule 225, Renewable Natural Gas Cost Recovery Adjustment.
- Sheet Nos. 9.1 and 9.2, Line Extension Allowance, are revised as described in my testimony on this topic found in Section VII above.
- Sheet No. 9.3, Line Extension Allowance, is added to carry over terms and conditions previously found in Rule 10 for main extensions, including the partial refund of a customer payment for main extension costs exceeding the allowance when one or more customers connect to the main extension with five years of the first customer's payment.
- Sheet No. 17.1, Order of Priority of Gas Service, is revised to add the proposed customer classes that will receive service under Schedules 161, 162, and 164 to the list defining how customer classes will be prioritized for service should the Company experience system constraints or outages.
- Sheet 18.1, Limitation of Firm Service, is revised so that it is applicable to the proposed rate schedules for firm transportation service (Schedules 161 and 162).
- Sheet No. 19.1, Conservation Alliance Plan, is revised to state that the baseline weather normalized average commodity margin per customer for Rate

Schedule 101 and Rate Schedule 104 will be as determined in this proceeding, docket UG 525.

- Sheet Nos. 22.1, 22.2, 22.3, 22.4, 22.4, 22.6, 22.7, 22.8, and 22.9 are added under new Rule 22, General Transportation Service Terms and Conditions, which is applicable to firm and interruptible transportation service under Schedules 161, 162, 163, and 164. Rule 22 contains the unchanged terms and conditions currently approved for transportation service in Schedule 163.
- Sheet Nos. 37.1, 192.1, 196.1, 220.1, and 805.1 are cost adjustment rate schedules that are revised to add references to the proposed new rates Schedules 161, 162, and 164, and 800, as appropriate.
- Sheet Nos. 99.1. 99.2. 99.3, 99.4, and 99.5 are the Rate Summary Sheets for each customer class. These sheets are updated to add the proposed new rate schedules (161, 162, and 164) and to reflect the proposed new basic service charges and delivery charges.
- Sheet Nos. 101.1, 104.1, 105.1, 111.1, 170.1, and 800.2 are existing rate schedules that are updated to include the proposed rates.
- Sheet Nos. 161.1, 161.2, 162.1, 162.2, 163.1, and 164.1, are modified or added in accordance with the discussion above about dividing approved Schedule 163, General Distribution System Interruptible Transportation Service, into the following four rate schedules:
    - Schedule 161, General Distribution System Firm Transportation Service – Non-EITE
    - Schedule 162, General Distribution System Firm Transportation Service – EITE

- Schedule 163, General Distribution System Interruptible Transportation Service – Non-EITE
- Schedule 164, General Distribution System Interruptible Transportation Service – EITE

- Sheet No. 197.1 is revised to amortize the Company's final environmental remediation cost for the Eugene site. Costs will be amortized to all customer classes.
- Sheet No. 220.1, Climate Protection Program (CPP) Cost Recovery Adjustment, is revised to add Schedule 161 to the applicability section and to clarify that only non-EITE customers pay the Schedule 220 charge.
- Sheet No. 225.1 is added to collect renewable natural gas infrastructure costs.

Q. Is Cascade withdrawing any tariff sheets as part of this rate case?

A. Yes, Cascade seeks to withdraw the following tariff sheets:

Tariff Sheet	Schedule or Rule	Title
Second Revision of Sheet No. 10.1	Rule 10	Main Installations
Original Sheet No. 10.2	Rule 10	Main Installations
First Revision of Sheet No. 163.2	Schedule 163	General Distribution System Interruptible Transportation Service
First Revision of Sheet No. 163.3	Schedule 163	General Distribution System Interruptible Transportation Service
Original Sheet No. 163.4	Schedule 163	General Distribution System Interruptible Transportation Service
Original Sheet No. 163.5	Schedule 163	General Distribution System Interruptible Transportation Service
First Revision of Sheet No. 163.6	Schedule 163	General Distribution System Interruptible Transportation Service
Fourth Revision of Sheet No. 163.7	Schedule 163	General Distribution System Interruptible Transportation Service

Second Revision of Sheet No. 163.8	Schedule 163	General Distribution System Interruptible Transportation Service
Original Sheet No. 163.9	Schedule 163	General Distribution System Interruptible Transportation Service

Cascade is seeking to withdraw Rule 10, Sheets 10.1 and 10.2, as part of its request to revise its LEA policy, as described in Section VIII of my testimony. The policy for both service and main line extensions is now combined in Rule 9, Line Extension Allowance Policy.

Cascade is also asking to withdraw Sheets 163.1 through 163.9 as the terms and conditions for transportation service are now placed in proposed Rule 22, General Transportation Service Terms and Conditions, which is applicable to firm and interruptible transportation service under Schedules 161, 162, 163, and 164.

Q. Is Cascade proposing any changes to its decoupling mechanism?

A. No, Cascade is not proposing any changes to its decoupling mechanism, established in Schedule 19, Conservation Alliance Plan. Rule 19 includes a term provision that requires the Company to review the decoupling mechanism to determine if modifications are appropriate. The Company initiates a review of the mechanism every five years. The most recent review occurred in September 2024, resulting in no changes to the mechanism. While Cascade is not seeking to change its decoupling mechanism at this time, the Company does plan to update the baseline margin used in the decoupling mechanism as reflected in the proposed language change to Sheet No. 19.2.

IX. CONCLUSION

Q. What Commission action are you seeking from your testimony?

A. Cascade is asking the Commission to approve the following as described in my testimony:

1. Cascade's proposed rate changes;
2. The proposed Schedule 225, Renewable Natural Gas Cost Recovery Adjustment;
3. The proposal to amortize environmental remediation costs in Schedule 197;
4. The addition of three new rates schedules (Schedules 161, 162, and 164) and modification of Schedule 163 in order to offer firm and interruptible transportation service separately to EITE and Non-EITE customers;
5. The Company's proposed LEA policy as established in Rule 9, Line Extension Allowance Policy; and
6. Cascade's proposed additions, modifications, and withdrawals from its Tariff as put forth above in my testimony.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

PEER UTILITIES' BASIC SERVICE CHARGES

EXHIBIT 1101

November 2025

AVISTA CORPORATION
dba Avista Utilities

SCHEDULE 410

SINGLE-FAMILY RESIDENTIAL NATURAL GAS SERVICE - OREGON

APPLICABILITY:

Applicable to single-family residential natural gas service for all purposes.

TERRITORY:

This schedule is applicable to the entire territory in the State of Oregon served by the Company.

THERM:

The word "therm" means one hundred thousand British Thermal Units (100,000 B.T.U.).

RATES:	Per Meter Per Month	
Customer Charge:	**$11.25**	
Commodity Charge Per Therm:		
Base Rate	$0.81650	(I)

OTHER CHARGES:

The above Monthly Rates are subject to increases or decreases as set forth in Schedule 461 – Purchased Gas Cost Adjustment, Schedule 462 – Gas Cost Rate Adjustment, Schedule 469 – Public Purpose Funding, Schedule 475 – Decoupling Mechanism, Schedule 476 – Intervenor Funding, Schedule 477 – Residual Deferral Account, Schedule 482 – Regulatory Fee Adjustment, Schedule 486 – Tax Customer Credit, Schedule 487 – Deferred Tax Credit, Schedule 493 – Low Income Rate Assistance Program, and any other charges approved by the Commission.

MINIMUM CHARGE:

The Customer Charge constitutes the Minimum Charge.

(Continued)

SCHEDULE 410 (continued)

GENERAL RESIDENTIAL NATURAL GAS SERVICE - OREGON

SPECIAL CONDITIONS:

1. The above Commodity Charge Per Therm is subject to the provisions of "Other Charges" listed above. (T)(D) (T)(D)
2. A reconnection charge shall be made for restoration of service where service has been turned off for seasonal turnoff, or for other reasons arising through the action or for the convenience of the customer. (See Rule No. 20)
3. Service under this schedule may be subject to other applicable adjustments approved by the Public Utility Commission.
4. When service has been discontinued at the Customer's request and then reestablished within a twelve-month period, the Customer shall be required to pay the monthly minimum charges that would have been billed had service not been discontinued.

Avista Corporation

OREGON - NATURAL GAS RATE (Price) HISTORY

For Schedules 410, 420, 424, 430, 440 & 456

** The Most Recent Changes Are At The Top of Each Section*

Date of Change	Customer Charge (Min.)	USAGE	Base Rates	Adder for Schedule 493	Adder for Schedule 408	Adder for Schedule 461	Adder for Schedule 462	Adder for Schedule 467	Adder for Schedule 469	Adder for Schedule 474	Adder for Schedule 475	Adder for Schedule 476	Adder for Schedule 477	Adder for Schedule 478	Adder for Schedule 479	Adder for Schedule 482	Adder for Schedule 484	Adder for Schedule 486	Adder for Schedule 487	Adder for Schedule 488	Adder for Schedule 495	Adder for Schedule 496	Adder for Schedule 497	Adder for Schedule 498	Adder for Schedule 499	Total As Billed
Schedule 410																										
9/1/2025	$11.25	All	$0.81650	0.05669		0.43280	-0.10401	-0.00379	0.12443		-0.02657	0.00174				0.00038		($0.03306)		($0.02215)						**$1.24296**
1/1/2025	$11.25	All	$0.76603	0.05669	0.00000	0.43280	-0.10401	-0.00379	0.12443	0.00000	-0.02657	0.00174	0.00000	0.00000	0.00000	0.00038	$0.00000	($0.03306)			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.21464**
11/1/2024	$11.25	All	$0.76603	0.05669	0.00000	0.43280	-0.10401	-0.00379	0.04012	0.00000	-0.02657	0.00174	0.00000	0.00000	0.00000	0.00038	$0.00000	($0.03306)			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.13033**
8/22/2024	$11.25	All	$0.76603	0.03320	0.00000	0.49573	-0.05489		0.04012	0.00000	0.01166	0.00150	0.00000	0.00000	0.00000	0.00098	$0.00000	($0.03306)			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.26127**
1/1/2024	$11.25	All	$0.76603	0.03320	0.00000	0.49573	-0.05489		0.04012	0.00000	0.01166	0.00150	0.00000	0.00000	0.00000	0.00098	$0.00000	($0.03306)	($0.00902)		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.25225**
11/1/2023	$10.50	All	$0.69549	0.03320	0.00000	0.49573	-0.05489		0.04012	0.00000	0.01166	0.00150	0.00000	0.00000	0.00000	0.00098	$0.00000	($0.03007)	($0.00902)		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.18470**
11/1/2022	$10.50	All	$0.69549	0.00451	0.00000	0.60498	0.05233	0.01435	0.06765	0.00000	0.04002	0.00113	0.00000	0.00000	0.00000	0.00116	$0.00000	($0.03007)	($0.00902)		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.44253**
8/22/2022	$10.50	All	$0.69549	0.00451	0.00000	0.45748	-0.00571		0.06765	0.00000	-0.00061	0.00143	0.00000	0.00000	0.00000	0.00031	$0.00000	($0.03007)	($0.00902)		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.18146**
1/1/2022	$10.50	All	$0.67642	0.00451	0.00000	0.45748	-0.00571		0.06765	0.00000	-0.00061	0.00143	0.00000	0.00000	0.00000	0.00031	$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.20148**
11/1/2021	$10.50	All	$0.67642	0.00451	0.00000	0.45748	-0.00571		0.04256	0.00000	-0.00061	0.00143	0.00000	0.00000	0.00000	0.00031	$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.17639**
3/1/2021	$10.50	All	$0.67642	0.00451	0.00000	0.36442	-0.01549		0.04256	0.00000	-0.00573	0.00143	0.00000	-0.00058	0.00000	0.00079	$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.06833**
1/16/2021	$10.50	All	$0.67642	0.00451	0.00000	0.36442	-0.01549		0.04256	-0.04807	-0.00573	0.00143	0.00000	-0.00058	0.00000	0.00079	$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.02026**
11/1/2020	$10.00	All	$0.63943	0.00451	0.00000	0.36442	-0.01549		0.04256	-0.04807	-0.00573	0.00143	0.00000	-0.00058	0.00000	0.00079	$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.98327**
1/15/2020	$10.00	All	$0.63943	0.00451	0.00000	0.33043	-0.00995		0.04256	-0.04807	0.02730	0.00103	0.00000	0.00000	0.00000		$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.98724**
11/1/2019	$10.00	All	$0.58399	0.00451	0.00000	0.33043	-0.00995		0.04256	-0.04807	0.02730	0.00103	0.00000	0.00000	0.00000		$0.00000				$0.00876	$0.00000	$0.00000	$0.00000	$0.00000	**$0.94056**
3/1/2019	$10.00	All	$0.58399	0.00451	0.00000	0.37046	-0.09404		0.04256	-0.04807	-0.04098	0.00172	0.00000	-0.00190	0.00000		$0.00150				$0.00876	$0.00000	$0.00000	$0.00000	$0.00000	**$0.82851**
1/1/2019	$10.00	All	$0.58399	0.00451	0.00000	0.37046	-0.09404		0.04256		-0.04098	0.00172	0.00000	-0.00190	0.00000		$0.00150				$0.00876	$0.00000	$0.00000	$0.00000	$0.00000	**$0.87658**
11/1/2018	$10.00	All	$0.58399	0.00451	0.00000	0.37046	-0.09404		0.02404		-0.04098	0.00172	0.00000	-0.00190	0.00000		$0.00150				$0.00876	$0.00000	$0.00000	$0.00000	$0.00000	**$0.85806**
2/1/2018	$10.00	All	$0.58399	0.00451	0.00000	0.38611	-0.07858		0.02404		0.02456	0.00165	0.00000	0.00000	0.00000						$0.00876	$0.00000	$0.00000	$0.00000	$0.00000	**$0.95504**
11/1/2017	$10.00	All	$0.58399	0.00451	0.00000	0.42575	-0.07858		0.02404		0.02456	0.00165	0.00000	0.00000	0.00000						$0.00876	$0.00000	$0.00000	$0.00000	$0.00000	**$0.99468**
10/1/2017	$10.00	All	$0.58399	0.00451	0.00000	0.44288	-0.07022		0.02404			0.00193	-0.00010	0.01908	0.00107						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.00718**
1/1/2017	$9.00	All	$0.58062	0.00451	0.00000	0.44288	-0.07022		0.02404			0.00193	-0.00010	0.01908	0.00107						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.00381**
11/1/2016	$9.00	All	$0.58062	0.00451	0.00000	0.44288	-0.07022		0.04304			0.00193	-0.00010	0.01908	0.00107						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.02281**
5/1/2016	$9.00	All	$0.58062	0.00451	0.00000	0.47248	-0.02849		0.04304			0.00183	0.00000	0.02212							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.09611**
3/1/2016	$9.00	All	$0.58062	0.00451	0.00000	0.47248	-0.02849					0.00183	0.00000	0.02212							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.05307**
11/1/2015	$8.00	All	$0.54073	0.00451	0.00000	0.47248	-0.02849					0.00183	0.00000	0.02212							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.01318**
4/16/2015	$8.00	All	$0.54073	0.00451	0.00000	0.62069	-0.00127					0.00150	0.00000	0.01789							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.18405**
11/1/2014	$8.00	All	$0.46998	0.00451	0.00000	0.62069	-0.00127					0.00150	0.00000	0.01789							$0.00000	$0.00000	$0.00372	$0.00000	$0.00000	**$1.11702**
2/1/2014	$8.00	All	$0.46998	0.00451	0.00000	0.61069	-0.08465					0.00101	0.00000	0.01919							$0.00000	$0.00000		$0.00000	$0.00000	**$1.02073**
11/1/2013	$7.00	All	$0.42993	0.00438	0.00000	0.61069	-0.08465					0.00101	0.00000	0.01919							$0.00000	$0.00000		$0.00585	$0.00000	**$0.98640**
6/1/2013	$7.00	All	$0.42993	0.00438	0.00000	0.70831	-0.08595					0.00066	0.00000	0.01588							$0.00000	$0.00000		($0.01076)	$0.00000	**$1.06245**
1/1/2013	$7.00	All	$0.42993	0.00438	0.00000	0.70831	-0.08595					0.00066	0.00000	0.01588							$0.00000	$0.00000		($0.01076)	$0.00654	**$1.06899**
11/1/2012	$7.00	All	$0.42993	0.00438	0.00000	0.70831	-0.08595					0.00066	0.00000	0.01588							$0.00000	$0.00000			$0.00654	**$1.07975**
6/1/2012	$7.00	All	$0.42993	0.00438	0.00000	0.76855	-0.05237					0.00126	0.00000	0.02431							$0.00000	$0.00003			$0.00654	**$1.18263**
11/1/2011	$7.00	All	$0.42229	0.00438	-0.01749	0.76855	-0.05237					0.00126	0.00000	0.02431							$0.00000	$0.00003				**$1.15096**
6/1/2011	$7.00	All	$0.42229	0.00438	-0.01749	0.79038	-0.07414					0.00101	-0.00191	0.02433							$0.00000	$0.00027				**$1.14912**
5/2/2011	$7.00	All	$0.40865	0.00438	-0.01274	0.79038	-0.07414					0.00101	-0.00191	0.02433							$0.00000	$0.00027				**$1.14023**
3/15/2011	$7.00	All	$1.18561	Included in 410	-0.01274	-0.03513						0.00028	-0.00191	0.00385							$0.00000	$0.00027				**$1.14023**
11/1/2010	$6.50	All	$1.16804	Included in 410	-0.01274	-0.03513						0.00028	-0.00191	0.00385							$0.00000	$0.00027				**$1.12266**
6/1/2010	$6.50	All	$1.16804	Included in 410	-0.01274																$0.00000	$0.00272				**$1.15802**
1/1/2010	$6.50	All	$1.16804	Included in 410	0.00000																$0.00000	$0.00272				**$1.17076**
11/1/2009	$6.50	All	$1.16804	Included in 410	-0.11479																$0.00000	$0.00272				**$1.05597**
6/1/2009	$6.00	All	$1.36785	Included in 410	0.00000																$0.00000	$0.00580				**$1.37365**
11/1/2008	$6.00	All	$1.36785	Included in 410	-0.01985																$0.00000	$0.00580				**$1.35380**
6/1/2008	$5.50	All	$1.39183	Included in 410	-0.01985																$0.00000	$0.03494				**$1.40692**
4/1/2008	$5.50	All	$1.39183	Included in 410																	$0.00000	$0.03494				**$1.42677**
11/1/2007	$5.00	All	$1.39283	Included in 410																	$0.00137	$0.03494				**$1.42914**
11/1/2006	$5.00	All	$1.44931	Included in 410																						**$1.44931**
11/9/2005	$5.00	All	$1.34729	Included in 410																						**$1.34729**
10/1/2005	$5.00	All	$1.34531	Included in 410																						**$1.34531**
10/1/2004	$5.00	All	$1.08689	Included in 410																						**$1.08689**
4/1/2004	$5.00	All	$0.95764	Included in 410																						**$0.95764**
10/1/2003	$5.00	All	$0.88787	Included in 410																						**$0.88787**
10/1/2002	$4.00	All	$0.70640	$0.00438																						**$0.71078**
4/2/2002	$4.00	All	$0.76535	$0.00438																						**$0.76973**
1/24/2001	$4.00	All	$0.91367																							**$0.91367**
10/1/2000	$4.00	All	$0.69013																							**$0.69013**
12/1/1999	$4.00	All	$0.56962																							**$0.56962**
5/19/1999	$4.00	All	$0.51375																							**$0.51375**
12/1/1998	$4.00	All	$0.51375																							**$0.51375**
12/1/1997	$4.00	All	$0.52651																							**$0.52651**
12/1/1996	$4.00	All	$0.47478																							**$0.47478**
12/1/1995	$4.00	All	$0.52685																							**$0.52685**
12/1/1994	$3.50	All	$0.57187																							**$0.57187**
4/15/1994	$3.50	All	$0.53644																							**$0.53644**
12/1/1993	$3.50	All	$0.54393																							**$0.54393**
5/1/1993	$3.50	All	$0.49279																							**$0.49279**
12/1/1992	$3.00	All	$0.43977																							**$0.43977**

Avista Corporation

OREGON - NATURAL GAS RATE (Price) HISTORY

For Schedules 410, 420, 424, 430, 440 & 456

* The Most Recent Changes Are At The Top of Each Section

1/26/1992	$3.00	All	$0.42535	**$0.42535**
9/30/1991	$3.00	All	$0.43122	**$0.43122**
11/1/1990	$3.00	All	$0.43384	**$0.43384**
11/1/1989	$3.00	All	$0.45603	**$0.45603**
1/1/1989	$3.00	All	$0.47802	**$0.47802**
4/1/1988	$3.00	All	$0.55142	**$0.55142**
10/1/1987	$3.00	All	$0.53759	**$0.53759**
7/1/1987	$3.00	All	$0.52085	**$0.52085**
5/1/1987	$3.00	All	$0.52865	**$0.52865**
12/1/1986	$3.00	All	$0.51727	**$0.51727**
8/1/1986	$3.00	All	$0.51180	**$0.51180**
4/1/1986	$3.00	All	$0.55028	**$0.55028**
12/1/1985	$3.00	All	$0.60405	**$0.60405**
11/1/1985	$3.00	All	$0.59887	**$0.59887**
8/1/1985	$3.00	All	$0.61693	**$0.61693**
4/1/1985	$3.00	All	$0.63880	**$0.63880**
11/1/1984	$3.00	All	$0.65733	**$0.65733**
7/1/1984	$3.00	All	$0.67985	**$0.67985**
4/1/1984	$3.00	All	$0.68723	**$0.68723**
10/1/1983	$3.00	All	$0.67167	**$0.67167**
4/1/1983	$3.00	All	$0.69512	**$0.69512**
12/1/1982	$3.00	All	$0.71813	**$0.71813**
10/1/1982	$3.00	All	$0.73019	**$0.73019**
4/1/1982	$3.00	All	$0.67350	**$0.67350**
4/1/1981	$3.00	All	$0.52934	**$0.52934**
10/1/1980	$3.00	All	$0.53450	**$0.53450**
4/1/1980	$3.00	All	$0.56257	**$0.56257**

Date of Change	Customer Charge (Min.)	USAGE	Base Rates	Adder for Schedule 493	Adder for Schedule 408	Adder for Schedule 461	Adder for Schedule 462	Adder for Schedule 467	Adder for Schedule 469	Adder for Schedule 474	Adder for Schedule 475	Adder for Schedule 476	Adder for Schedule 477	Adder for Schedule 478	Adder for Schedule 479	Adder for Schedule 482	Adder for Schedule 484	Adder for Schedule 486	Adder for Schedule 487	Adder for Schedule 488	Adder for Schedule 495	Adder for Schedule 496	Adder for Schedule 497	Adder for Schedule 498	Adder for Schedule 499	Total As Billed
Schedule 411																										
9/1/2025	$9.75	All	$0.78494	$0.05669		$0.43280	($0.10401)	($0.00379)	$0.12443		($0.02657)	$0.00174				$0.00038		($0.03306)		($0.02900)						**$1.20455**
1/1/2025	$9.75	All	$0.76603	$0.05669		$0.43280	($0.10401)	($0.00379)	$0.12443		($0.02657)	$0.00174				$0.00038		($0.03306)								**$1.21464**
11/1/2024	$9.75	All	$0.76603	$0.05669		$0.43280	($0.10401)	($0.00379)	$0.04012		($0.02657)	$0.00174				$0.00038		($0.03306)								**$1.13033**
8/22/2024	$9.75	All	$0.76603	$0.03320		$0.49573	($0.05489)		$0.04012		$0.01166	$0.00150				$0.00098		($0.03306)								**$1.26127**
4/1/2024	$9.75	All	$0.76603	$0.03320		$0.49573	($0.05489)		$0.04012		$0.01166	$0.00150				$0.00098		($0.03306)	($0.00902)							**$1.25225**

Avista Corporation

OREGON - NATURAL GAS RATE (Price) HISTORY

For Schedules 410, 420, 424, 430, 440 & 456

** The Most Recent Changes Are At The Top of Each Section*

Date of Change	Customer Charge (Min.)	USAGE	Base Rates	Adder for Schedule 493	Adder for Schedule 408	Adder for Schedule 461	Adder for Schedule 462	Adder for Schedule 467	Adder for Schedule 469	Adder for Schedule 474	Adder for Schedule 475	Adder for Schedule 476	Adder for Schedule 477	Adder for Schedule 478	Adder for Schedule 479	Adder for Schedule 482	Adder for Schedule 484	Adder for Schedule 486	Adder for Schedule 487	Adder for Schedule 488	Adder for Schedule 495	Adder for Schedule 496	Adder for Schedule 497	Adder for Schedule 498	Adder for Schedule 499	Total As Billed
Schedule 420																										
9/1/2025	$22.00	All	$0.75386	0.04597		0.43280	($0.10401)		$0.10491		($0.05223)					$0.00038		($0.01848)		($0.01258)						**$1.15062**
1/1/2025	$19.00	All	$0.72455	0.04597	$0.00000	0.43280	($0.10401)		$0.10491	$0.00000	($0.05223)	$0.00000	$0.00000	$0.00000	$0.00000	$0.00038	$0.00000	($0.01848)			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.13389**
11/1/2024	$19.00	All	$0.72455	0.04597	$0.00000	0.43280	($0.10401)		$0.03498	$0.00000	($0.05223)	$0.00000	$0.00000	$0.00000	$0.00000	$0.00038	$0.00000	($0.01848)			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.06396**
8/22/2024	$19.00	All	$0.72455	0.03002	$0.00000	0.49573	($0.05489)		$0.03498	$0.00000	($0.01039)	$0.00000	$0.00000	$0.00000	$0.00000	$0.00098	$0.00000	($0.01848)			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.20250**
1/1/2024	$19.00	All	$0.72455	0.03002	$0.00000	0.49573	($0.05489)		$0.03498	$0.00000	($0.01039)	$0.00000	$0.00000	$0.00000	$0.00000	$0.00098	$0.00000	($0.01848)	($0.00720)		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.19530**
11/1/2023	$17.00	All	$0.65014	0.03002	$0.00000	0.49573	($0.05489)		$0.03498	$0.00000	($0.01039)	$0.00000	$0.00000	$0.00000	$0.00000	$0.00098	$0.00000	($0.01685)	($0.00720)		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.12252**
11/1/2022	$17.00	All	$0.65014		$0.00000	0.60498	0.05233		$0.05823	$0.00000	$0.02535	$0.00000	$0.00000	$0.00000	$0.00000	$0.00116	$0.00000	($0.01685)	($0.00720)		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.36814**
8/22/2022	$17.00	All	$0.65014		$0.00000	0.45748	-0.00571		$0.05823	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00031	$0.00000	($0.01685)	($0.00720)		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.13640**
1/1/2022	$17.00	All	$0.63115		$0.00000	0.45748	-0.00571		$0.05823	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00031	$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.14146**
11/1/2021	$17.00	All	$0.63115		$0.00000	0.45748	-0.00571		$0.03601	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00031	$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.11924**
3/1/2021	$17.00	All	$0.63115		$0.00000	0.36442	-0.01549		$0.03601	$0.00000	($0.03468)	$0.00000	$0.00000	($0.00058)	$0.00000	$0.00079	$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.98162**
1/16/2021	$17.00	All	$0.63115		$0.00000	0.36442	-0.01549		$0.03601	($0.03785)	($0.03468)	$0.00000	$0.00000	($0.00058)	$0.00000	$0.00079	$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.94377**
11/1/2020	$17.00	All	$0.58382		$0.00000	0.36442	-0.01549		$0.03601	($0.03785)	($0.03468)	$0.00000	$0.00000	($0.00058)	$0.00000	$0.00079	$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.89644**
1/15/2020	$17.00	All	$0.58382		$0.00000	$0.33043	($0.00995)		$0.03601	($0.03785)	($0.00062)	$0.00000	$0.00000	$0.00000	$0.00000		$0.00000				$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.90184**
11/1/2019	$17.00	All	$0.53005		$0.00000	$0.33043	($0.00995)		$0.03601	($0.03785)	($0.00062)	$0.00000	$0.00000	$0.00000	$0.00000		$0.00000				$0.01720	$0.00000	$0.00000	$0.00000	$0.00000	**$0.86527**
3/1/2019	$17.00	All	$0.53005		$0.00000	$0.37046	($0.09404)		$0.03601	($0.03785)	($0.02220)	$0.00000	$0.00000	($0.00190)	$0.00000		$0.00000				$0.01720	$0.00000	$0.00000	$0.00000	$0.00000	**$0.79773**
1/1/2019	$17.00	All	$0.53005		$0.00000	$0.37046	($0.09404)		$0.03601		($0.02220)	$0.00000	$0.00000	($0.00190)	$0.00000		$0.00000				$0.01720	$0.00000	$0.00000	$0.00000	$0.00000	**$0.83558**
11/1/2018	$17.00	All	$0.53005		$0.00000	$0.37046	($0.09404)		$0.01965		($0.02220)	$0.00000	$0.00000	($0.00190)	$0.00000		$0.00000				$0.01720	$0.00000	$0.00000	$0.00000	$0.00000	**$0.81922**
2/1/2018	$17.00	All	$0.53005		$0.00000	$0.38611	($0.07858)		$0.01965		$0.02439	$0.00000	$0.00000	$0.00000	$0.00000						$0.01720	$0.00000	$0.00000	$0.00000	$0.00000	**$0.89882**
11/1/2017	$17.00	All	$0.53005		$0.00000	$0.42575	($0.07858)		$0.01965		$0.02439	$0.00000	$0.00000	$0.00000	$0.00000						$0.01720	$0.00000	$0.00000	$0.00000	$0.00000	**$0.93846**
10/1/2017	$17.00	All	$0.53005		$0.00000	$0.44288	($0.07022)		$0.01965			$0.00000	($0.00007)	$0.01908	$0.00079						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.94216**
1/1/2017	$17.00	All	$0.48015		$0.00000	$0.44288	($0.07022)		$0.01965			$0.00000	($0.00007)	$0.01908	$0.00079						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.89226**
11/1/2016	$17.00	All	$0.48015		$0.00000	$0.44288	($0.07022)		$0.03401			$0.00000	($0.00007)	$0.01908	$0.00079						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.90662**
5/1/2016	$17.00	All	$0.48015		$0.00000	$0.47248	($0.02849)		$0.03401			$0.00000	$0.00000	$0.02212							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.98027**
3/1/2016	$17.00	All	$0.48015		$0.00000	$0.47248	($0.02849)					$0.00000	$0.00000	$0.02212							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.94626**
11/1/2015	$14.00	All	$0.43901		$0.00000	$0.47248	($0.02849)					$0.00000	$0.00000	$0.02212							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.90512**
4/16/2015	$14.00	All	$0.43901		$0.00000	$0.62069	($0.00127)					$0.00000	$0.00000	$0.01789							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$1.07632**
11/1/2014	$12.00	All	$0.38147		$0.00000	$0.62069	($0.00127)					$0.00000	$0.00000	$0.01789							$0.00000	$0.00000	$0.00323	$0.00000	$0.00000	**$1.02201**
2/1/2014	$12.00	All	$0.38147		$0.00000	$0.61069	($0.08465)					$0.00000	$0.00000	$0.01919							$0.00000	$0.00000		$0.00000	$0.00000	**$0.92670**
11/1/2013	$9.00	All	$0.34376		$0.00000	$0.61069	($0.08465)					$0.00000	$0.00000	$0.01919							$0.00000	$0.00000		$0.00585	$0.00000	**$0.89484**
6/1/2013	$9.00	All	$0.34376		$0.00000	$0.70831	($0.08595)					$0.00000	$0.00000	$0.01588							$0.00000	$0.00000		($0.01076)	$0.00000	**$0.97124**
1/1/2013	$9.00	All	$0.34376		$0.00000	$0.70831	($0.08595)					$0.00000	$0.00000	$0.01588							$0.00000	$0.00000		($0.01076)	$0.00561	**$0.97685**
11/1/2012	$9.00	All	$0.34376		$0.00000	$0.70831	($0.08595)					$0.00000	$0.00000	$0.01588							$0.00000	$0.00000			$0.00561	**$0.98761**
6/1/2012	$9.00	All	$0.34376		$0.00000	$0.76855	($0.05237)					$0.00000	$0.00000	$0.02431							$0.00000	$0.00003			$0.00561	**$1.08989**
11/1/2011	$9.00	All	$0.33721		($0.01179)	$0.76855	($0.05237)					$0.00000	$0.00000	$0.02431							$0.00000	$0.00003				**$1.06594**
6/1/2011	$9.00	All	$0.33721		($0.01179)	$0.79038	($0.07414)					$0.00000	($0.00191)	$0.02433							$0.00000	$0.00027				**$1.06435**
5/2/2011	$9.00	All	$0.32551		($0.00825)	$0.79038	($0.07414)					$0.00000	($0.00191)	$0.02433							$0.00000	$0.00027				**$1.05619**
3/15/2011	$9.00	All	$1.09736		($0.00825)	($0.03513)						$0.00000	($0.00191)	$0.00385							$0.00000	$0.00027				**$1.05619**
11/1/2010	$8.50	All	$1.07584		($0.00825)	($0.03513)						$0.00000	($0.00191)	$0.00385							$0.00000	$0.00027				**$1.03467**
6/1/2010	$8.50	All	$1.07584		($0.00825)																$0.00000	$0.00272				**$1.07031**
1/1/2010	$8.50	All	$1.07584		$0.00000																$0.00000	$0.00272				**$1.07856**
11/1/2009	$8.50	All	$1.07584		($0.07359)																$0.00000	$0.00272				**$1.00497**
6/1/2009	$8.00	All	$1.29272		$0.00000																$0.00000	$0.00580				**$1.29852**
11/1/2008	$8.00	All	$1.29272		($0.01260)																$0.00000	$0.00580				**$1.28592**
6/1/2008	$7.00	All	$1.31370		($0.01260)																$0.00000	$0.03494				**$1.33604**
4/1/2008	$7.00	All	$1.31370																		$0.00000	$0.03494				**$1.34864**
11/1/2007	$6.00	All	$1.30907																		$0.00137	$0.03494				**$1.34538**
11/1/2006	$6.00	All	$1.36555																							**$1.36555**
11/9/2005	$6.00	All	$1.26353																							**$1.26353**
10/1/2005	$6.00	All	$1.26155																							**$1.26155**
10/1/2004	$6.00	All	$1.00313																							**$1.00313**
4/1/2004	$6.00	All	$0.87388																							**$0.87388**
10/1/2003	$6.00	All	$0.80411																							**$0.80411**
10/1/2002	$4.00	All	$0.66346																							**$0.66346**
4/2/2002	$4.00	All	$0.72241																							**$0.72241**
1/24/2001	$4.00	All	$0.87073																							**$0.87073**
10/1/2000	$4.00	All	$0.64719																							**$0.64719**
12/1/1999	$4.00	All	$0.52668																							**$0.52668**
5/19/1999	$4.00	All	$0.47081																							**$0.47081**
12/1/1998	$4.00	All	$0.47081																							**$0.47081**
12/1/1997	$4.00	All	$0.48404																							**$0.48404**
12/1/1996	$4.00	All	$0.43067																							**$0.43067**
12/1/1995	$4.00	All	$0.48274																							**$0.48274**
12/1/1994	$3.50	All	$0.52137																							**$0.52137**
4/15/1994	$3.50	All	$0.48594																							**$0.48594**
12/1/1993	$3.50	All	$0.49272																							**$0.49272**
5/1/1993	$3.50	All	$0.44158																							**$0.44158**
12/1/1992	$3.00	All	$0.39290																							**$0.39290**
1/26/1992	$3.00	All	$0.37848																							**$0.37848**
9/30/1991	$3.00	All	$0.38435																							**$0.38435**
11/1/1990	$3.00	All	$0.38654																							**$0.38654**
11/1/1989	$3.00	All	$0.41001																							**$0.41001**
1/1/1989	$3.00	All	$0.43200																							**$0.43200**
4/1/1988	$3.00	All	$0.50540																							**$0.50540**
10/1/1987	$3.00	All	$0.49157																							**$0.49157**
7/1/1987	$3.00	All	$0.47483																							**$0.47483**
5/1/1987	$3.00	All	$0.48263																							**$0.48263**
12/1/1986	$3.00	All	$0.47125																							**$0.47125**
8/1/1986	$3.00	All	$0.46578																							**$0.46578**

Avista Corporation

OREGON - NATURAL GAS RATE (Price) HISTORY

For Schedules 410, 420, 424, 430, 440 & 456

** The Most Recent Changes Are At The Top of Each Section*

4/1/1986	$3.00	All	$0.50426	**$0.50426**
12/1/1985	$3.00	All	$0.55803	**$0.55803**
11/1/1985	$3.00	All	$0.55285	**$0.55285**
8/1/1985	$3.00	All	$0.57091	**$0.57091**
4/1/1985	$3.00	All	$0.59278	**$0.59278**
11/1/1984	$3.00	All	$0.61131	**$0.61131**
7/1/1984	$3.00	All	$0.63383	**$0.63383**
4/1/1984	$3.00	All	$0.64121	**$0.64121**
10/1/1983	$3.00	All	$0.62565	**$0.62565**
4/1/1983	$3.00	All	$0.64910	**$0.64910**
12/1/1982	$3.00	All	$0.67211	**$0.67211**
10/1/1982	$3.00	All	$0.68417	**$0.68417**
4/1/1982	$3.00	All	$0.62748	**$0.62748**
4/1/1981	$3.00	All	$0.49978	**$0.49978**
10/1/1980	$3.00	All	$0.50494	**$0.50494**
4/1/1980	$3.00	All	$0.53491	**$0.53491**

Avista Corporation

OREGON - NATURAL GAS RATE (Price) HISTORY

For Schedules 410, 420, 424, 430, 440 & 456

****The Most Recent Changes Are At The Top of Each Section***

Date of Change	Customer Charge (Min.)	USAGE	Base Rates	Adder for Schedule 493	Adder for Schedule 408	Adder for Schedule 461	Adder for Schedule 462	Adder for Schedule 467	Adder for Schedule 469	Adder for Schedule 474	Adder for Schedule 475	Adder for Schedule 476	Adder for Schedule 477	Adder for Schedule 478	Adder for Schedule 479	Adder for Schedule 482	Adder for Schedule 484	Adder for Schedule 486	Adder for Schedule 487	Adder for Schedule 488	Adder for Schedule 495	Adder for Schedule 496	Adder for Schedule 497	Adder for Schedule 498	Adder for Schedule 499	Total As Billed
Schedule 424																										
9/1/2025	$75.00	All	$0.14614	$0.00953		0.43280	-0.10401		$0.04176		-$0.05223					$0.00038		-$0.00341		-$0.00208						**$0.46888**
1/1/2025	$60.00	All	$0.14174	$0.00953	$0.00000	0.43280	-0.10401		$0.04176	$0.00000	-$0.05223	$0.00000	$0.00000	$0.00000	$0.00000	$0.00038		-$0.00341			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.46656**
11/1/2024	$60.00	All	$0.14174	$0.00953	$0.00000	0.43280	-0.10401		$0.02084	$0.00000	-$0.05223	$0.00000	$0.00000	$0.00000	$0.00000	$0.00038		-$0.00341			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.44564**
8/22/2024	$60.00	All	$0.14174	$0.00633	$0.00000	0.49573	-0.05489		$0.02084	$0.00000	-$0.01039	$0.00000	$0.00000	$0.00000	$0.00000	$0.00098		-$0.00341			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.59693**
1/1/2024	$60.00	All	$0.14174	$0.00633	$0.00000	0.49573	-0.05489		$0.02084	$0.00000	-$0.01039	$0.00000	$0.00000	$0.00000	$0.00000	$0.00098		-$0.00341	-$0.00153		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.59540**
11/1/2023	$55.00	All	$0.14158	$0.00633	$0.00000	0.49573	-0.05489		$0.02084	$0.00000	-$0.01039	$0.00000	$0.00000	$0.00000	$0.00000	$0.00098		-$0.00309	-$0.00153		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.59556**
11/1/2022	$55.00	All	$0.14158		$0.00000	0.60498	0.05233		$0.03003	$0.00000	$0.02535	$0.00000	$0.00000	$0.00000	$0.00000	$0.00116		-$0.00309	-$0.00153		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.85081**
8/22/2022	$55.00	All	$0.14158		$0.00000	0.45748	-0.00571		$0.03003	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00031		-$0.00309	-$0.00153		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.61907**
1/1/2022	$55.00	All	$0.13832		$0.00000	0.45748	-0.00571		$0.03003	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00031					$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.62043**
11/1/2021	$55.00	All	$0.13832		$0.00000	0.45748	-0.00571		$0.01648	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	$0.00031					$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.60688**
3/1/2021	$55.00	All	$0.13832		$0.00000	0.36442	-0.01549		$0.01648	$0.00000	-$0.03468	$0.00000	$0.00000	-$0.00058	$0.00000	$0.00079					$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.46926**
1/16/2021	$55.00	All	$0.13832		$0.00000	0.36442	-0.01549		$0.01648	-$0.00903	-$0.03468	$0.00000	$0.00000	-$0.00058	$0.00000	$0.00079					$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.46023**
11/1/2020	$50.00	All	$0.13887		$0.00000	0.36442	-0.01549		$0.01648	-$0.00903	-$0.03468	$0.00000	$0.00000	-$0.00058	$0.00000	$0.00079					$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.46078**
11/1/2019	$50.00	All	$0.13887		$0.00000	$0.33043	-$0.00995		$0.01648	-$0.00903	-$0.00062	$0.00000	$0.00000	$0.00000	$0.00000						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.46618**
3/1/2019	$50.00	All	$0.13887		$0.00000	$0.37046	-$0.09404		$0.01648	-$0.00903	-$0.02220	$0.00000	$0.00000	-$0.00190	$0.00000						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.39864**
1/1/2019	$50.00	All	$0.13887		$0.00000	$0.37046	-$0.09404		$0.01648		-$0.02220	$0.00000	$0.00000	-$0.00190	$0.00000						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.40767**
11/1/2018	$50.00	All	$0.13887		$0.00000	$0.37046	-$0.09404		$0.01105		-$0.02220	$0.00000	$0.00000	-$0.00190	$0.00000						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.40224**
2/1/2018	$50.00	All	$0.13887		$0.00000	$0.38611	-$0.07858		$0.01105		$0.02439	$0.00000	$0.00000	$0.00000	$0.00000						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.48184**
11/1/2017	$50.00	All	$0.13887		$0.00000	$0.42575	-$0.07858		$0.01105		$0.02439	$0.00000	$0.00000	$0.00000	$0.00000						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.52148**
1/1/2017	$50.00	All	$0.13887		$0.00000	$0.44288	-$0.07022		$0.01105			$0.00000	$0.00000	$0.01908	$0.00024						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.54190**
11/1/2016	$50.00	All	$0.13887		$0.00000	$0.44288	-$0.07022		$0.01628			$0.00000	$0.00000	$0.01908	$0.00024						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.54713**
5/1/2016	$50.00	All	$0.13887		$0.00000	$0.47248	-$0.02849		$0.01628			$0.00000	$0.00000	$0.02212							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.62126**
11/1/2015	$50.00	All	$0.13887		$0.00000	$0.47248	-$0.02849					$0.00000	$0.00000	$0.02212							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.60498**
4/16/2015	$50.00	All	$0.13887		$0.00000	$0.62069	-$0.00127					$0.00000	$0.00000	$0.01789							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.77618**
11/1/2014	$50.00	All	$0.13908		$0.00000	$0.62069	-$0.00127					$0.00000	$0.00000	$0.01789							$0.00000	$0.00000	-$0.00021	$0.00000	$0.00000	**$0.77618**
2/1/2014	$50.00	All	$0.13908		$0.00000	$0.61069	-$0.08465					$0.00000	$0.00000	$0.01919							$0.00000	$0.00000		$0.00000	$0.00000	**$0.68431**
11/1/2013	$50.00	All	$0.14259		$0.00000	$0.61069	-$0.08465					$0.00000	$0.00000	$0.01919							$0.00000	$0.00000		$0.00585	$0.00000	**$0.69367**
6/1/2013	$50.00	All	$0.14259		$0.00000	$0.70831	-$0.08595					$0.00000	$0.00000	$0.01588							$0.00000	$0.00000		-$0.01076	$0.00000	**$0.77007**
1/1/2013	$50.00	All	$0.14259		$0.00000	$0.70831	-$0.08595					$0.00000	$0.00000	$0.01588							$0.00000	$0.00000		-$0.01076	$0.00082	**$0.77089**
11/1/2012	$50.00	All	$0.14259		$0.00000	$0.70831	-$0.08595					$0.00000	$0.00000	$0.01588							$0.00000	$0.00000			$0.00082	**$0.78165**
6/1/2012	$50.00	All	$0.14259		$0.00000	$0.76855	-$0.05237					$0.00000	$0.00000	$0.02431							$0.00000	$0.00000			$0.00082	**$0.88390**
11/1/2011	$50.00	All	$0.14163		-$0.00471	$0.76855	-$0.05237					$0.00000	$0.00000	$0.02431							$0.00000	$0.00000				**$0.87741**
6/1/2011	$50.00	All	$0.14163		-$0.00471	$0.79038	-$0.07414					$0.00000	-$0.00191	$0.02433							$0.00000	$0.00000				**$0.87558**
3/15/2011	$50.00	All	$0.13991		-$0.00388	$0.79038	-$0.07414					$0.00000	-$0.00191	$0.02433							$0.00000	$0.00000				**$0.87469**
3/15/2011	$50.00	All	$0.91176		-$0.00388	-$0.03513						$0.00000	-$0.00191	$0.00385							$0.00000	$0.00000				**$0.87469**
11/1/2010	$48.00	All	$0.90868		-$0.00388	-$0.03513						$0.00000	-$0.00191	$0.00385							$0.00000	$0.00000				**$0.87161**
6/1/2010	$48.00	All	$0.90868		-$0.00388																$0.00000	$0.00000				**$0.90480**
1/1/2010	$48.00	All	$0.90868		$0.00000																$0.00000	$0.00000				**$0.90868**
11/1/2009	$48.00	All	$0.90868		-$0.04483																$0.00000	$0.00000				**$0.86385**
6/1/2009	$46.00	All	$1.18131		$0.00000																$0.00000	$0.00000				**$1.18131**
11/1/2008	$46.00	All	$1.18131		-$0.00801																$0.00000	$0.00000				**$1.17330**
6/1/2008	$55.50	All	$1.23017		-$0.00801																$0.00000	$0.00000				**$1.22216**
4/1/2008	$55.50	All	$1.23017																		$0.00000	$0.00000				**$1.23017**
11/01/07	$65.00	All	$1.25265																		$0.00137	$0.00000				**$1.25402**
11/01/06	$65.00	All	$1.30913																							**$1.30913**
11/09/05	$65.00	All	$1.20711																							**$1.20711**
10/01/05	$65.00	All	$1.20513																							**$1.20513**
10/01/04	$65.00	All	$0.94671																							**$0.94671**
04/01/04	$65.00	All	$0.81746																							**$0.81746**
10/01/03	$65.00	All	$0.74769																							**$0.74769**
10/01/02	$65.00	All	$0.62379																							**$0.62379**
04/02/02	$65.00	All	$0.68274																							**$0.68274**
01/24/01	$65.00	All	$0.83106																							**$0.83106**
10/01/00	$65.00	All	$0.60752																							**$0.60752**
12/01/99	$65.00	All	$0.48701																							**$0.48701**
05/19/99	$65.00	All	$0.43114																							**$0.43114**
12/01/98	$65.00	All	$0.43114																							**$0.43114**
12/01/97	$65.00	All	$0.44463																							**$0.44463**
12/01/96	$65.00	All	$0.39053																							**$0.39053**
12/01/95	$65.00	All	$0.44260																							**$0.44260**
12/01/94	$57.00	All	$0.47957																							**$0.47957**
04/15/94	$57.00	All	$0.44414																							**$0.44414**
12/01/93	$57.00	All	$0.45034																							**$0.45034**
05/01/93	$57.00	All	$0.39920																							**$0.39920**
01/26/92	$50.41	All	$0.34034																							**$0.34034**
09/30/91	$50.41	All	$0.34621																							**$0.34621**

Date of Change	Customer Charge (Min.)	USAGE	Base Rates	Adder for Schedule 493	Adder for Schedule 408	Adder for Schedule 461	Adder for Schedule 462	Adder for Schedule 467	Adder for Schedule 469	Adder for Schedule 474	Adder for Schedule 475	Adder for Schedule 476	Adder for Schedule 477	Adder for Schedule 478	Adder for Schedule 479	Adder for Schedule 482	Adder for Schedule 484	Adder for Schedule 486	Adder for Schedule 487	Adder for Schedule 488	Adder for Schedule 495	Adder for Schedule 496	Adder for Schedule 497	Adder for Schedule 498	Adder for Schedule 499	Total As Billed
Schedule 425																										
9/1/2025	$75.00	All	$0.14614	$0.00953					$0.04176		-$0.05223					$0.00038		-$0.00341		-$0.00208						**$0.14009**
1/1/2025	$60.00	All	$0.14174	$0.00953					$0.04176		-$0.05223					$0.00038		-$0.00341								**$0.13777**
11/1/2024	$60.00	All	$0.14174	$0.00953					$0.02084		-$0.05223					$0.00038		-$0.00341								**$0.11685**
8/22/2024	$60.00	All	$0.14174	$0.00633					$0.02084		-$0.01039					$0.00098		-$0.00341								**$0.15609**
1/1/2024	$60.00	All	$0.14174	$0.00633					$0.02084		-$0.01039					$0.00098		-$0.00341	-$0.00153							**$0.15456**
11/1/2023	$55.00	All	$0.14158	$0.00633					$0.02084		-$0.01039					$0.00098		-$0.00309	-$0.00153							**$0.15472**
11/1/2022	$55.00	All	$0.14158						$0.03003	$0.00000	$0.02535			$0.00000		$0.00116		-$0.00309	-$0.00153							**$0.19350**
8/22/2022	$55.00	All	$0.14158						$0.03003	$0.00000	$0.00000			$0.00000		$0.00031		-$0.00309	-$0.00153							**$0.16730**
1/1/2022	$55.00	All	$0.13832						$0.03003	$0.00000	$0.00000			$0.00000		$0.00031										**$0.16866**
11/1/2021	$55.00	All	$0.13832						$0.01648	$0.00000	$0.00000			$0.00000		$0.00031										**$0.15511**
3/1/2021	$55.00	All	$0.13832						$0.01648	$0.00000	-$0.03468			-$0.00058		$0.00079										**$0.12033**
1/16/2021	$55.00	All	$0.13832						$0.01648	-$0.00903	-$0.03468			-$0.00058		$0.00079										**$0.11130**

Avista Corporation

OREGON - NATURAL GAS RATE (Price) HISTORY

For Schedules 410, 420, 424, 430, 440 & 456

** The Most Recent Changes Are At The Top of Each Section*

Date of Change	Customer Charge (Min.)	USAGE	Base Rates	Adder for Schedule 408	Adder for Schedule 482	Adder for Schedule 484	Adder for Schedule 495	Adder for Schedule 496	Adder for Schedule 498	Total As Billed
Schedule 430										
September 2009 - DISCONTINUED TARIFF										
04/01/08	$0.00	All	$1.27491	$0.00000			$0.00000	$0.00000		**$1.27491**
11/01/07	$0.00	All	$1.30877				$0.00137	$0.00000		**$1.31014**
11/01/06	$0.00	All	$1.36525							**$1.36525**
11/09/05	$0.00	All	$1.26323							**$1.26323**
10/01/05	$0.00	All	$1.26125							**$1.26125**
10/01/04	$0.00	All	$1.00283							**$1.00283**
04/01/04	$0.00	All	$0.87358							**$0.87358**
10/01/03	$0.00	All	$0.80381							**$0.80381**
10/01/02	$0.00	All	$0.70787							**$0.70787**
04/02/02	$0.00	All	$0.76682							**$0.76682**
01/24/01	$0.00	All	$0.91514							**$0.91514**
10/01/00	$0.00	All	$0.69160							**$0.69160**
12/01/99	$0.00	All	$0.57109							**$0.57109**
05/19/99	$0.00	All	$0.51522							**$0.51522**
12/01/98	$0.00	All	$0.51522							**$0.51522**
12/01/97	$0.00	All	$0.53066							**$0.53066**
12/01/96	$0.00	All	$0.47302							**$0.47302**
12/01/95	$0.00	All	$0.52509							**$0.52509**
12/01/94	$0.00	All	$0.56168							**$0.56168**
12/01/93	$0.00	All	$0.52625							**$0.52625**
05/01/93	$0.00	All	$0.47511							**$0.47511**
01/26/92	$0.00	All	$0.40779							**$0.40779**
09/30/91	$0.00	All	$0.41366							**$0.41366**

Date of Change	Basic and Minimun Charge	USAGE	Base Rates	Adder for Schedule 493	Adder for Schedule 408	Adder for Schedule 461	Adder for Schedule 462	Adder for Schedule 467	Adder for Schedule 469	Adder for Schedule 474	Adder for Schedule 475	Adder for Schedule 476	Adder for Schedule 477	Adder for Schedule 478	Adder for Schedule 479	Adder for Schedule 482	Adder for Schedule 484	Adder for Schedule 486	Adder for Schedule 487	Adder for Schedule 488	Adder for Schedule 495	Adder for Schedule 496	Adder for Schedule 497	Adder for Schedule 498	Adder for Schedule 499	Total As Billed
Schedule 439																										
9/1/2025	Monthly Basic Charge = $125.00 Annual Min. Charge = 50,000 therms X $0.11807	All	$0.11807	$0.00685					$0.06496		-$0.05223	$0.00111				$0.00038		-$0.00244		-$0.00152					$0.00000	**$0.13518**
1/1/2025	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11578	All	$0.11578	$0.00685					$0.06496	$0.00000	-$0.05223	$0.00111				$0.00038		-$0.00244							$0.00000	**$0.13441**
11/1/2024	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11578	All	$0.11578	$0.00685						$0.00000	-$0.05223	$0.00111				$0.00038		-$0.00244							$0.00000	**$0.06945**
8/22/2024	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11578	All	$0.11578	$0.00513						$0.00000	-$0.01039	$0.00095				$0.00098		-$0.00244							$0.00000	**$0.11001**
1/1/2024	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11578	All	$0.11578	$0.00513						$0.00000	-$0.01039	$0.00095				$0.00098		-$0.00244	-$0.00118						$0.00000	**$0.10883**
11/1/2023	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468	$0.00513						$0.00000	-$0.01039	$0.00095				$0.00098		-$0.00228	-$0.00118						$0.00000	**$0.10789**
11/1/2022	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468							$0.00000	$0.02535	$0.00030				$0.00116		-$0.00228	-$0.00118						$0.00000	**$0.13803**
11/1/2021	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468							$0.00000	$0.00000	$0.00033				$0.00031		-$0.00228	-$0.00118						$0.00000	**$0.11186**
11/1/2021	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468							$0.00000	$0.00000	$0.00033				$0.00031									$0.00000	**$0.11532**
3/1/2021	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468							$0.00000	-$0.03468	$0.00126				$0.00079									$0.00000	**$0.08205**
1/16/2021	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468							-$0.00696	-$0.03468	$0.00126				$0.00079									$0.00000	**$0.07509**

Avista Corporation

OREGON - NATURAL GAS RATE (Price) HISTORY

For Schedules 410, 420, 424, 430, 440 & 456

* The Most Recent Changes Are At The Top of Each Section

Date of Change	Basic and Minimun Charge	USAGE	Base Rates	Adder for Schedule 493	Adder for Schedule 408	Adder for Schedule 461	Adder for Schedule 462	Adder for Schedule 467	Adder for Schedule 469	Adder for Schedule 474	Adder for Schedule 475	Adder for Schedule 476	Adder for Schedule 477	Adder for Schedule 478	Adder for Schedule 479	Adder for Schedule 482	Adder for Schedule 484	Adder for Schedule 486	Adder for Schedule 487	Adder for Schedule 488	Adder for Schedule 495	Adder for Schedule 496	Adder for Schedule 497	Adder for Schedule 498	Adder for Schedule 499	Total As Billed
Schedule 440																										
9/1/2025	Monthly Basic Charge = $125.00 Annual Min. Charge = 50,000 therms X $0.11807	All	$0.11807	$0.00685		$0.27787	-$0.12110		$0.06496		-$0.05223	$0.00111				$0.00038		-$0.00244		-$0.00152						**$0.29195**
1/1/2025	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11578	All	$0.11578	$0.00685	$0.00000	$0.27787	-$0.12110		$0.06496		-$0.05223	$0.00111	$0.00000	$0.00000	$0.00000	$0.00038	$0.00000	-$0.00244			$0.00000	$0.00000	$0.00000		$0.00000	**$0.29118**
11/1/2024	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11578	All	$0.11578	$0.00685	$0.00000	$0.27787	-$0.12110				-$0.05223	$0.00111	$0.00000	$0.00000	$0.00000	$0.00038	$0.00000	-$0.00244			$0.00000	$0.00000	$0.00000		$0.00000	**$0.22622**
8/22/2024	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11578	All	$0.11578	$0.00513	$0.00000	$0.33928	-$0.03504				-$0.01039	$0.00095	$0.00000	$0.00000	$0.00000	$0.00098	$0.00000	-$0.00244			$0.00000	$0.00000	$0.00000		$0.00000	**$0.41425**
1/1/2024	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11578	All	$0.11578	$0.00513	$0.00000	$0.33928	-$0.03504				-$0.01039	$0.00095	$0.00000	$0.00000	$0.00000	$0.00098	$0.00000	-$0.00244	-$0.00118		$0.00000	$0.00000	$0.00000		$0.00000	**$0.41307**
11/1/2023	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468	$0.00513	$0.00000	$0.33928	-$0.03504				-$0.01039	$0.00095	$0.00000	$0.00000	$0.00000	$0.00098	$0.00000	-$0.00228	-$0.00118		$0.00000	$0.00000	$0.00000		$0.00000	**$0.41213**
11/1/2022	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468		$0.00000	$0.44416	$0.04133			$0.00000	$0.02535	$0.00030	$0.00000	$0.00000	$0.00000	$0.00116	$0.00000	-$0.00228	-$0.00118		$0.00000	$0.00000	$0.00000		$0.00000	**$0.62352**
8/22/2022	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468		$0.00000	$0.30132	-$0.01610			$0.00000	$0.00000	$0.00033	$0.00000	$0.00000	$0.00000	$0.00031	$0.00000	-$0.00228	-$0.00118		$0.00000	$0.00000	$0.00000		$0.00000	**$0.39708**
11/1/2021	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468		$0.00000	$0.30132	-$0.01610			$0.00000	$0.00000	$0.00033	$0.00000	$0.00000	$0.00000	$0.00031	$0.00000				$0.00000	$0.00000	$0.00000		$0.00000	**$0.40054**
3/1/2021	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468		$0.00000	$0.20655	-$0.02026			$0.00000	-$0.03468	$0.00126	$0.00000	$0.00000	$0.00000	$0.00079	$0.00000				$0.00000	$0.00000	$0.00000		$0.00000	**$0.26834**
1/16/2021	Monthly Basic Charge = $75.00 Annual Min. Charge = 50,000 therms X $0.11468	All	$0.11468		$0.00000	$0.20655	-$0.02026			-$0.00696	-$0.03468	$0.00126	$0.00000	$0.00000	$0.00000	$0.00079	$0.00000				$0.00000	$0.00000	$0.00000		$0.00000	**$0.26138**
11/1/2020	Annual Min. Charge = 50,000 therms X $0.11652	All	$0.11652		$0.00000	$0.20655	-$0.02026			-$0.00696	-$0.03468	$0.00126	$0.00000	$0.00000	$0.00000	$0.00079	$0.00000				$0.00000	$0.00000	$0.00000		$0.00000	**$0.26322**
11/1/2019	Annual Min. Charge = 50,000 therms X $0.11652	All	$0.11652		$0.00000	$0.16806	-$0.01004			-$0.00696	-$0.00062	$0.00175	$0.00000	$0.00000	$0.00000		$0.00000				$0.00000	$0.00000	$0.00000		$0.00000	**$0.26871**
3/1/2019	Annual Min. Charge = 50,000 therms X $0.11652	All	$0.11652		$0.00000	$0.20323	-$0.08021			-$0.00696	-$0.02220	$0.00077	$0.00000	$0.00000	$0.00000		$0.00000				$0.00000	$0.00000	$0.00000		$0.00000	**$0.21115**
11/1/2018	Annual Min. Charge = 50,000 therms X $0.11652	All	$0.11652		$0.00000	$0.20323	-$0.08021				-$0.02220	$0.00077	$0.00000	$0.00000	$0.00000		$0.00000				$0.00000	$0.00000	$0.00000		$0.00000	**$0.21811**
2/1/2018	Annual Min. Charge = 50,000 therms X $0.11652	All	$0.11652		$0.00000	$0.20072	-$0.05278				$0.02439	$0.00022	$0.00000		$0.00000						$0.00000	$0.00000	$0.00000		$0.00000	**$0.28907**
11/1/2017	Annual Min. Charge = 50,000 therms X $0.11652	All	$0.11652		$0.00000	$0.24036	-$0.05278				$0.02439	$0.00022	$0.00000		$0.00000						$0.00000	$0.00000	$0.00000		$0.00000	**$0.32871**
11/1/2016	Annual Min. Charge = 50,000 therms X $0.11652	All	$0.11652		$0.00000	$0.24529	-$0.08273					$0.00114	$0.00001		$0.00015						$0.00000	$0.00000	$0.00000		$0.00000	**$0.28038**
11/1/2015	Annual Min. Charge = 50,000 therms X $0.11652	All	$0.11652		$0.00000	$0.27342	-$0.04927					-$0.00022	$0.00000								$0.00000	$0.00000	$0.00000		$0.00000	**$0.34045**
4/16/2015	Annual Min. Charge = 50,000 therms X $0.11652	All	$0.11652		$0.00000	$0.41155	$0.05099					$0.00135	$0.00000								$0.00000	$0.00000	$0.00000		$0.00000	**$0.58041**
11/1/2014	Annual Min. Charge = 50,000 therms X $0.10377	All	$0.11584		$0.00000	$0.41155	$0.05099					$0.00135	$0.00000								$0.00000	$0.00000	$0.00068		$0.00000	**$0.58041**
2/1/2014	Annual Min. Charge = 50,000 therms X $0.10377	All	$0.11584		$0.00000	$0.39869	-$0.00728					$0.00043	$0.00000								$0.00000	$0.00000			$0.00000	**$0.50768**
11/1/2013	Annual Min. Charge = 50,000 therms X $0.10377	All	$0.10462		$0.00000	$0.39869	-$0.00728					$0.00043	$0.00000								$0.00000	$0.00000			$0.00000	**$0.49646**
6/1/2013	Annual Min. Charge = 50,000 therms X $0.10377	All	$0.10462		$0.00000	$0.37688	-$0.08134					$0.00006	$0.00000								$0.00000	$0.00000			$0.00000	**$0.40022**
11/1/2012	Annual Min. Charge = 50,000 therms X $0.10377	All	$0.10462		$0.00000	$0.37688	-$0.08134					$0.00006	$0.00000								$0.00000	$0.00000			$0.00052	**$0.40074**
6/1/2012	Annual Min. Charge = 50,000 therms X $0.10377	All	$0.10462		$0.00000	$0.45092	-$0.07403					$0.00092	$0.00000								$0.00000	$0.00000			$0.00052	**$0.48295**
11/1/2011	Annual Min. Charge = 50,000 therms X $0.10377	All	$0.10401		-$0.00319	$0.45092	-$0.07403					$0.00092	$0.00000								$0.00000	$0.00000				**$0.47863**
6/1/2011	Annual Min. Charge = 50,000 therms X $0.10377	All	$0.10401		-$0.00319	$0.50628	-$0.08983					$0.00062	-$0.00191								$0.00000	$0.00000				**$0.51598**
5/2/2011	Annual Min. Charge = 50,000 therms X $0.10377	All	$0.10293		-$0.00276	$0.50628	-$0.08983					$0.00062	-$0.00191								$0.00000	$0.00000				**$0.51533**
3/15/2011	Annual Min. Charge = 50,000 therms X $0.10377	All	$0.59295		-$0.00276	-$0.07336						$0.00041	-$0.00191								$0.00000	$0.00000				**$0.51533**
11/1/2010	Annual Min. Charge = 50,000 therms X $0.14312	All	$0.59070		-$0.00276	-$0.07336						$0.00041	-$0.00191								$0.00000	$0.00000				**$0.51308**

Avista Corporation

OREGON - NATURAL GAS RATE (Price) HISTORY

For Schedules 410, 420, 424, 430, 440 & 456

** The Most Recent Changes Are At The Top of Each Section*

6/1/2010	Annual Min. Charge = 50,000 therms X $0.14312	All	$0.59070	-$0.00276	$0.00000	$0.00000	**$0.58794**
1/1/2010	Annual Min. Charge = 50,000 therms X $0.14312	All	$0.59070	$0.00000	$0.00000	$0.00000	**$0.59070**
11/1/2009	Annual Min. Charge = 50,000 therms X $0.14312	All	$0.59070	-$0.04481	$0.00000	$0.00000	**$0.54589**
6/1/2009	Annual Min. Charge = 225,000 therms X $0.11285	All	$0.89041	$0.00000	$0.00000	$0.00000	**$0.89041**
11/01/08	Annual Min. Charge = 225,000 therms X $0.11285	All	$0.89041	-$0.00569	$0.00000	$0.00000	**$0.88472**
06/01/08	Annual Min. Charge = 225,000 therms X $0.11285	All	$0.93100	-$0.00569	$0.00000	$0.00000	**$0.92531**
04/01/08	Annual Min. Charge = 225,000 therms X $0.11285	All	$0.93100		$0.00000	$0.00000	**$0.93100**
11/01/07	Annual Min. Charge = 225,000 therms X $0.11285	All	$0.94761		$0.00137	$0.00000	**$0.94898**
11/01/06	Annual Min. Charge = 225,000 therms X $0.11285	All	$1.02031				**$1.02031**
11/09/05	Annual Min. Charge = 225,000 therms X $0.11285	All	$1.01565				**$1.01565**
10/01/05	Annual Min. Charge = 225,000 therms X $0.11285	All	$1.01367				**$1.01367**
10/01/04	Annual Min. Charge = 225,000 therms X $0.12319	All	$0.77083				**$0.77083**
04/01/04	Annual Min. Charge = 225,000 therms X $0.13353	All	$0.64082				**$0.64082**
03/01/04	Annual Min. Charge = 225,000 therms X $0.14144	All	$0.57105				**$0.57105**
10/01/03	Annual Min. Charge = 225,000 therms X $0.14144	All	$0.57622				**$0.57622**
10/01/02	Annual Min. Charge = 225,000 therms X $0.14144	All	$0.46835				**$0.46835**
04/02/04	Annual Min. Charge = 225,000 therms X $0.14144	All	$0.53697				**$0.53697**
10/01/01	Annual Min. Charge = 225,000 therms X $0.14144	All	$0.69234				**$0.69234**
01/24/01	**Annual Min. Charge =** 225,000 therms X $0.14144	All	$0.71274				**$0.71274**
10/01/00	Monthly Min. Charge = $1855.52 **Per Meter**	All	$0.48920				**$0.48920**
12/01/99	Monthly Min. Charge = $1,392.86 Per Meter	All	$0.36722				**$0.36722**
05/19/99	Monthly Min. Charge = $1,206.17 Per Meter	All	$0.31800				**$0.31800**
12/01/98	Monthly Min. Charge = $1,206.17 Per Meter	All	$0.31800				**$0.31800**
12/01/97	Monthly Min. Charge = $1,241.01 Per Meter	All	$0.32791				**$0.32791**
12/01/96	Monthly Min. Charge = $951.77 Per Meter	All	$0.25093				**$0.25093**
12/01/95	Monthly Min. Charge = $1,212.85 Per Meter	All	$0.31976				**$0.31976**
12/01/94	Monthly Min. Charge = $1,514.43 Per Meter	All	$0.39927				**$0.39927**
04/15/94	Monthly Min. Charge = $1,415.36 Per Meter	All	$0.37315				**$0.37315**
12/01/93	Monthly Min. Charge = $1,435.21 Per Meter	All	$0.37836				**$0.37836**
01/26/92	Monthly Min. Charge = $1,234.81 Per Meter	All	$0.32553				**$0.32553**
009-30-912	Monthly Min. Charge = $1,260.00 Per Meter	All	$0.33217				**$0.33217**

Avista Corporation

OREGON - NATURAL GAS RATE (Price) HISTORY

For Schedules 410, 420, 424, 430, 440 & 456

** The Most Recent Changes Are At The Top of Each Section*

Change	Charge	USAGE	Base Rates	Adder for Schedule 493	Adder for Schedule 408	Adder for Schedule 461	Adder for Schedule 462	Adder for Schedule 467	Adder for Schedule 469	Adder for Schedule 474	Adder for Schedule 475	Adder for Schedule 476	Adder for Schedule 477	Adder for Schedule 478	Adder for Schedule 479	Adder for Schedule 482	Adder for Schedule 484	Adder for Schedule 486	Adder for Schedule 487	Adder for Schedule 488	Adder for Schedule 495	Adder for Schedule 496	Adder for Schedule 497	Adder for Schedule 498	Adder for Schedule 499	As Billed
Schedule 444																										
9/1/2025	$6,113.74	All	$0.18049	0.01029		0.43280	-0.10401		0.0435		-0.05223					0.00038		-0.00368		-0.00228						**$0.50526**
1/1/2025	$5,894.92	All	$0.17403	0.01029	0	0.43280	-0.10401		0.0435	0	-0.05223	0	0	0.00000	0	0.00038		-0.00368			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.50108**
11/1/2024	$5,894.92	All	$0.17403	0.01029	0	0.43280	-0.10401		0.02125	0	-0.05223	0	0	0.00000	0	0.00038		-0.00368			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.47883**
8/22/2024	$5,894.92	All	$0.17403	0.00763	0	0.49573	-0.05489		0.02125	0	-0.01039	0	0	0.00000	0	0.00098		-0.00368			$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.63066**
1/1/2024	$5,894.92	All	$0.17403	0.00763	0	0.49573	-0.05489		0.02125	0	-0.01039	0	0	0.00000	0	0.00098		-0.00368	-0.00174		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.62892**
11/1/2023	$5,840.04	All	$0.17241	0.00763	0	0.49573	-0.05489		0.02125	0	-0.01039	0	0	0.00000	0	0.00098		-0.00353	-0.00174		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.62745**
11/1/2022	$5,840.04	All	$0.17241		0	0.60498	0.05233		0.03106	0	0.02535	0	0	0.00000	0	0.00116		-0.00353	-0.00174		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.88202**
8/22/2022	$5,840.04	All	$0.17241		0	0.45748	-0.00571		0.03106	0	0	0	0	0.00000	0	0.00031		-0.00353	-0.00174		$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.65028**
1/1/2022	$5,840.04	All	$0.17241		0	0.45748	-0.00571		0.03106	0	0	0	0	0.00000	0	0.00031					$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.65555**
11/1/2021	$5,840.04	All	$0.17241		0	0.45748	-0.00571		0.01731	0	0	0	0	0.00000	0	0.00031					$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.64180**
3/1/2021	$5,840.04	All	$0.17241		0	0.36442	-0.01549		0.01731	0	-0.03468	0	0	-0.00058	0	0.00079					$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.50418**
1/16/2021	$5,840.04	All	$0.17241		0	0.36442	-0.01549		0.01731	-0.01025	-0.03468	0	0	-0.00058	0	0.00079					$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.49393**
11/1/2020	$5,810.92	All	$0.17155		0	0.36442	-0.01549		0.01731	-0.01025	-0.03468	0	0	-0.00058	0	0.00079					$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.49307**
11/1/2019	$5,810.92	All	$0.17155		0	0.33043	-0.00995		0.01731	-0.01025	-0.00062	0	0	0.00000	0						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.49847**
3/1/2019	$5,810.92	All	$0.17155		0	0.37046	-0.09404		0.01731	-0.01025	-0.0222	0	0	-0.00190	0						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.43093**
1/1/2019	$5,810.92	All	$0.17155		0	0.37046	-0.09404		0.01731		-0.0222	0	0	-0.00190	0						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.44118**
11/1/2018	$5,810.92	All	$0.17155		0	0.37046	-0.09404		0.01135		-0.0222	0	0	-0.00190	0						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.43522**
2/1/2018	$5,810.92	All	$0.17155		0	0.38611	-0.07858		0.01135		0.02439	0	0	0	0						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.51482**
11/1/2017	$5,810.92	All	$0.17155		0	0.42575	-0.07858		0.01135		0.02439	0	0	0	0						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.55446**
1/1/2017	$5,810.92	All	$0.17155		0	0.44288	-0.07022		0.01135			0	0	0.01908	0.00024						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.57488**
11/1/2016	$5,810.92	All	$0.17155		0	0.44288	-0.07022		0.01109			0	0	0.01908	0.00024						$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.57462**
5/1/2016	$5,810.92	All	$0.17155		0	0.47248	-0.02849		0.01109			0	0	0.02212							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.64875**
11/1/2015	$5,810.92	All	$0.17155		0	0.47248	-0.02849					0	0	0.02212							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.63766**
4/16/2015	$5,810.92	All	$0.17155		0	0.62069	-0.00127					0	0	0.01789							$0.00000	$0.00000	$0.00000	$0.00000	$0.00000	**$0.80886**
11/1/2014	$5,810.92	All	$0.17082		0	0.62069	-0.00127					0	0	0.01789							$0.00000	$0.00000	$0.00073	$0.00000	$0.00000	**$0.80886**
2/1/2014	$5,810.92	All	$0.17082		0	0.61069	-0.08465					0	0	0.01919							$0.00000	$0.00000		$0.00000	$0.00000	**$0.71605**
11/1/2013	$5,810.92	All	$0.15877		0	0.61069	-0.08465					0	0	0.01919							$0.00000	$0.00000		$0.00585	$0.00000	**$0.70985**
6/1/2013	$5,810.92	All	$0.15877		0	0.70831	-0.08595					0	0	0.01588							$0.00000	$0.00000		-$0.01076	$0.00000	**$0.78625**
1/1/2013	$5,810.92	All	$0.15877		0	0.70831	-0.08595					0	0	0.01588							$0.00000	$0.00000		-$0.01076	$0.00289	**$0.78914**
11/1/2012	$5,810.92	All	$0.15877		0	0.70831	-0.08595					0	0	0.01588							$0.00000	$0.00000			$0.00289	**$0.79990**
6/1/2012	$5,810.92	All	$0.15877		0	0.76855	-0.05237					0	0	0.02431							$0.00000	$0.00000			$0.00289	**$0.90215**
11/1/2011	$5,810.92	All	$0.15539		-0.00466	0.76855	-0.05237					0	0	0.02431							$0.00000	$0.00000				**$0.89122**
6/1/2011	$5,810.92	All	$0.15539		-0.00466	0.79038	-0.07414					0	-0.00191	0.02433							$0.00000	$0.00000				**$0.88939**
5/2/2011	$5,810.92	All	$0.14936		-0.00343	0.79038	-0.07414					0	-0.00191	0.02433							$0.00000	$0.00000				**$0.88459**
3/15/2011	$5,810.92	All	$0.92121		-0.00343	-0.03513						0	-0.00191	0.00385							$0.00000	$0.00000				**$0.88459**
11/1/2010	$5,810.92	All	$0.90877		-0.00343	-0.03513						0	-0.00191	0.00385							$0.00000	$0.00000				**$0.87215**
6/1/2010	$5,810.92	All	$0.90877		-0.00343																$0.00000	$0.00000				**$0.90534**
11/1/2009	$5,810.92	All	$0.90877		0																$0.00000	$0.00000				**$0.90877**
6/1/2009	$7,836.80	All	$1.17586		0																$0.00000	$0.00000				**$1.17586**
11/1/2008	$7,836.80	All	$1.17586		-0.00705																$0.00000	$0.00000				**$1.16881**
6/1/2008	$8,060.46	All	$1.22731		-0.00705																$0.00000	$0.00000				**$1.22026**
04/01/08	$8,060.46	All	$1.22731																		$0.00000	$0.00000				**$1.22731**
11/01/07	$8,060.46	All	$1.25239																		$0.00137	$0.00000				**$1.25376**
11/01/06	$8,620.20	All	$1.30887																							**$1.30887**
11/09/05	$7,948.30	All	$1.20685																							**$1.20685**
10/01/05	$7,935.26	All	$1.20487																							**$1.20487**
10/01/04	$6,233.37	All	$0.94646																							**$0.94646**
04/01/04	$5,382.13	All	$0.81721																							**$0.81721**
10/01/03	$4,922.63	All	$0.74744																							**$0.74744**
10/01/02	$4,099.18	All	$0.62241																							**$0.62241**
04/02/02	$4,487.42	All	$0.68136																							**$0.68136**
01/24/01	$5,464.25	All	$0.82968																							**$0.82968**
10/01/00	$3,802.36	All	$0.60613																							**$0.60613**
12/01/99	$3,046.37	All	$0.48562																							**$0.48562**
05/19/99	$2,695.82	All	$0.42974																							**$0.42974**
12/01/98	$2,695.82	All	$0.42974																							**$0.42974**
12/01/97	$2,780.61	All	$0.44326																							**$0.44326**
12/01/96	$2,440.61	All	$0.38906																							**$0.38906**
12/01/95	$2,767.24	All	$0.44113																							**$0.44113**
12/01/94	$2,996.76	All	$0.47772																							**$0.47772**
04/15/04	$2,774.42	All	$0.44228																							**$0.44228**
12/01/93	$2,813.22	All	$0.44846																							**$0.44846**
05/01/93	$2,492.41	All	$0.39732																							**$0.39732**
01/26/92	$2,124.48	All	$0.33866																							**$0.33866**
09/30/91	$2,161.30	All	$0.34453																							**$0.34453**

Date of Change	Customer Charge (Min.)	USAGE	Base Rates	Adder for Schedule 493	Adder for Schedule 408	Adder for Schedule 461	Adder for Schedule 462	Adder for Schedule 462	Adder for Schedule 469	Adder for Schedule 474	Adder for Schedule 475	Adder for Schedule 476	Adder for Schedule 477	Adder for Schedule 478	Adder for Schedule 479	Adder for Schedule 482	Adder for Schedule 484	Adder for Schedule 486	Adder for Schedule 487	Adder for Schedule 488	Adder for Schedule 495	Adder for Schedule 496	Adder for Schedule 497	Adder for Schedule 498	Adder for Schedule 499	As Billed
Schedule 456																										
9/1/2025	$380.00	First 10,000	$0.16372						$0.02278			$0.00111				$0.00003		-$0.00346		-$0.00219						**$0.18199**
		10,001-30,000	$0.09853						$0.02278			$0.00111				$0.00003		-$0.00208		-$0.00132						**$0.11905**
		30,001-50,000	$0.08098						$0.02278			$0.00111				$0.00003		-$0.00171		-$0.00108						**$0.10211**
		50,001-250,000	$0.06339						$0.00000			$0.00111				$0.00003		-$0.00134		-$0.00085						**$0.06234**
		Over 250,000	$0.03216						$0.00000			$0.00111				$0.00003		-$0.00068		-$0.00041						**$0.03221**
1/1/2025	$325.00	First 10,000	$0.15980						$0.02278	$0.00000		$0.00111				$0.00003		-$0.00346								**$0.18026**
		10,001-30,000	$0.09617						$0.02278	$0.00000		$0.00111				$0.00003		-$0.00208								**$0.11801**
		30,001-50,000	$0.07904						$0.02278	$0.00000		$0.00111				$0.00003		-$0.00171								**$0.10125**
		50,001-250,000	$0.06187						$0.00000	$0.00000		$0.00111				$0.00003		-$0.00134								**$0.06167**
		Over 250,000	$0.03139						$0.00000	$0.00000		$0.00111				$0.00003		-$0.00068								**$0.03185**
11/1/2024	$325.00	First 10,000	$0.15980							$0.00000		$0.00111				$0.00003		-$0.00346								**$0.15748**
		10,001-30,000	$0.09617							$0.00000		$0.00111				$0.00003		-$0.00208								**$0.09523**
		30,001-50,000	$0.07904							$0.00000		$0.00111				$0.00003		-$0.00171								**$0.07847**
		50,001-250,000	$0.06187							$0.00000		$0.00111				$0.00003		-$0.00134								**$0.06167**
		Over 250,000	$0.03139							$0.00000		$0.00111				$0.00003		-$0.00068								**$0.03185**
8/22/2024	$325.00	First 10,000	$0.15980							$0.00000		$0.00095				$0.00010		-$0.00346								**$0.15739**
		10,001-30,000	$0.09617							$0.00000		$0.00095				$0.00010		-$0.00208								**$0.09514**
		30,001-50,000	$0.07904							$0.00000		$0.00095				$0.00010		-$0.00171								**$0.07838**
		50,001-250,000	$0.06187							$0.00000		$0.00095				$0.00010		-$0.00134								**$0.06158**
		Over 250,000	$0.03139							$0.00000		$0.00095				$0.00010		-$0.00068								**$0.03176**

Avista Corporation

OREGON - NATURAL GAS RATE (Price) HISTORY

For Schedules 410, 420, 424, 430, 440 & 456

** The Most Recent Changes Are At The Top of Each Section*

1/1/2024	$325.00	First 10,000	$0.15980	$0.00000	$0.00095	$0.00010	-$0.00346	-$0.00166	**$0.15573**
		10,001-30,000	$0.09617	$0.00000	$0.00095	$0.00010	-$0.00208	-$0.00100	**$0.09414**
		30,001-50,000	$0.07904	$0.00000	$0.00095	$0.00010	-$0.00171	-$0.00082	**$0.07756**
		50,001-250,000	$0.06187	$0.00000	$0.00095	$0.00010	-$0.00134	-$0.00064	**$0.06094**
		Over 250,000	$0.03139	$0.00000	$0.00095	$0.00010	-$0.00068	-$0.00033	**$0.03143**
11/1/2023	$300.00	First 10,000	$0.15890	$0.00000	$0.00095	$0.00010	-$0.00320	-$0.00166	**$0.15509**
		10,001-30,000	$0.09563	$0.00000	$0.00095	$0.00010	-$0.00192	-$0.00100	**$0.09376**
		30,001-50,000	$0.07860	$0.00000	$0.00095	$0.00010	-$0.00158	-$0.00082	**$0.07725**
		50,001-250,000	$0.06152	$0.00000	$0.00095	$0.00010	-$0.00124	-$0.00064	**$0.06069**
		Over 250,000	$0.03121	$0.00000	$0.00095	$0.00010	-$0.00063	-$0.00033	**$0.03130**
11/1/2022	$300.00	First 10,000	$0.15890	$0.00000	$0.00030	$0.00011	-$0.00320	-$0.00166	**$0.15445**
		10,001-30,000	$0.09563	$0.00000	$0.00030	$0.00011	-$0.00192	-$0.00100	**$0.09312**
		30,001-50,000	$0.07860	$0.00000	$0.00030	$0.00011	-$0.00158	-$0.00082	**$0.07661**
		50,001-250,000	$0.06152	$0.00000	$0.00030	$0.00011	-$0.00124	-$0.00064	**$0.06005**
		Over 250,000	$0.03121	$0.00000	$0.00030	$0.00011	-$0.00063	-$0.00033	**$0.03066**
8/22/2022	$300.00	First 10,000	$0.15890	$0.00000	$0.00033	$0.00002	-$0.00320	-$0.00166	**$0.15439**
		10,001-30,000	$0.09563	$0.00000	$0.00033	$0.00002	-$0.00192	-$0.00100	**$0.09306**
		30,001-50,000	$0.07860	$0.00000	$0.00033	$0.00002	-$0.00158	-$0.00082	**$0.07655**
		50,001-250,000	$0.06152	$0.00000	$0.00033	$0.00002	-$0.00124	-$0.00064	**$0.05999**
		Over 250,000	$0.03121	$0.00000	$0.00033	$0.00002	-$0.00063	-$0.00033	**$0.03060**
11/1/2021	$300.00	First 10,000	$0.15890	$0.00000	$0.00033	$0.00002			**$0.15925**
		10,001-30,000	$0.09563	$0.00000	$0.00033	$0.00002			**$0.09598**
		30,001-50,000	$0.07860	$0.00000	$0.00033	$0.00002			**$0.07895**
		50,001-250,000	$0.06152	$0.00000	$0.00033	$0.00002			**$0.06187**
		Over 250,000	$0.03121	$0.00000	$0.00033	$0.00002			**$0.03156**
3/1/2021	$300.00	First 10,000	$0.15890	$0.00000	$0.00126	$0.00008			**$0.16024**
		10,001-30,000	$0.09563	$0.00000	$0.00126	$0.00008			**$0.09697**
		30,001-50,000	$0.07860	$0.00000	$0.00126	$0.00008			**$0.07994**
		50,001-250,000	$0.06152	$0.00000	$0.00126	$0.00008			**$0.06286**
		Over 250,000	$0.03121	$0.00000	$0.00126	$0.00008			**$0.03255**
1/16/2021	$300.00	First 10,000	$0.15890	-$0.00474	$0.00126	$0.00008			**$0.15550**
		10,001-30,000	$0.09563	-$0.00474	$0.00126	$0.00008			**$0.09223**
		30,001-50,000	$0.07860	-$0.00474	$0.00126	$0.00008			**$0.07520**
		50,001-250,000	$0.06152	-$0.00474	$0.00126	$0.00008			**$0.05812**
		Over 250,000	$0.03121	-$0.00474	$0.00126	$0.00008			**$0.02781**
11/1/2020	$275.00	First 10,000	$0.15876	-$0.00474	$0.00126	$0.00008			**$0.15536**
		10,001-30,000	$0.09555	-$0.00474	$0.00126	$0.00008			**$0.09215**
		30,001-50,000	$0.07853	-$0.00474	$0.00126	$0.00008			**$0.07513**
		50,001-250,000	$0.06147	-$0.00474	$0.00126	$0.00008			**$0.05807**
		Over 250,000	$0.03118	-$0.00474	$0.00126	$0.00008			**$0.02778**
1/15/2020	$275.00	First 10,000	$0.15876	-$0.00474	$0.00175				**$0.15577**
		10,001-30,000	$0.09555	-$0.00474	$0.00175				**$0.09256**
		30,001-50,000	$0.07853	-$0.00474	$0.00175				**$0.07554**
		50,001-250,000	$0.06147	-$0.00474	$0.00175				**$0.05848**
		Over 250,000	$0.03118	-$0.00474	$0.00175				**$0.02819**
11/1/2019	$275.00	First 10,000	$0.14978	-$0.00474	$0.00175				**$0.14679**
		10,001-30,000	$0.09014	-$0.00474	$0.00175				**$0.08715**
		30,001-50,000	$0.07409	-$0.00474	$0.00175				**$0.07110**
		50,001-250,000	$0.05799	-$0.00474	$0.00175				**$0.05500**
		Over 250,000	$0.02942	-$0.00474	$0.00175				**$0.02643**
3/1/2019	$275.00	First 10,000	$0.14978	-$0.00474	$0.00077				**$0.14581**
		10,001-30,000	$0.09014	-$0.00474	$0.00077				**$0.08617**
		30,001-50,000	$0.07409	-$0.00474	$0.00077				**$0.07012**
		50,001-250,000	$0.05799	-$0.00474	$0.00077				**$0.05402**
		Over 250,000	$0.02942	-$0.00474	$0.00077				**$0.02545**

NW Natural® 250 SW Taylor Street
Portland, OR 97204
503-226-4211
nwnatural.com

OREGON SCHEDULE 2: RESIDENTIAL SALES SERVICE:
(Monthly Billing Rates, 2002 to Present)

Effective Date	Customer Charge	Per Therm Usage Charge [1]
10/02/02	$5.00	$0.87016
09/01/03	$6.00	$0.87870
10/01/03	$6.00	$0.92213
10/01/04	$6.00	$1.10784
10/01/05	$6.00	$1.29167
11/01/06	$6.00	$1.34052
11/01/07	$6.00	$1.22449
11/01/08	$6.00	$1.41502
01/01/09	$6.00	$1.39384
11/01/09	$6.00	$1.12187
06/01/10	$6.00	$1.12251
11/01/10	$6.00	$1.10644
06/01/11	$6.00	$1.11756
11/01/11	$6.00	$1.08786
06/01/12	$6.00	$1.07610
11/01/12	$8.00	$0.97604
11/01/13	$8.00	$0.99317
11/01/14	$8.00	$1.01330
11/01/15	$8.00	$0.93513
11/01/16	$8.00	$0.90723
11/01/17	$8.00	$0.83850
11/01/18	$8.00	$0.81780
04/01/19	$8.00	$0.82281
11/01/19	$8.00	$0.86564
11/01/20	$8.00	$0.90732
11/01/21	$8.00	$1.04637
11/01/22	$8.00	$1.10342
03/15/23	$8.00	$1.43686
11/01/23	$8.00	$1.29519
11/1/2024 [2]	$9.78	$1.33108

[1] For metered usage for CNG Vehicle Fueling, remove the Sch 195 temp. adjust. See Schedule 100.
[2] Customer charge represents a weighted average between single and multi family rate.

NW Natural® 250 SW Taylor Street
Portland, OR 97204
503-226-4211
nwnatural.com

EFFECTIVE: November 1, 2024

OREGON

SUMMARY OF MONTHLY SALES SERVICE BILLING RATES [1]

SCHEDULE 2
RESIDENTIAL SALES SERVICE

Customer Charge Single Family:	$10.00
Customer Charge Multi-Family:	$8.00
Usage Charge (per therm): [1]	$1.33108
Minimum Monthly Bill Single Family:	$10.00
Minimum Monthly Bill Multi-Family:	$8.00

[1] For metered usage for CNG Vehicle Fueling, remove the Sch 195 temp. adjust. See Schedule 100.

SCHEDULE 3
BASIC FIRM SALES SERVICE

Customer Charge:	$15.00
Com'l Usage Charge (per therm): [1]	$1.18176
Ind'l Usage Charge (per therm):	$1.05417
Minimum Monthly Bill:	$15.00
Standby Charge: (x MHDV of standby/freeze protection equip.)	$10.00

[1] For metered usage for CNG Vehicle Fueling, remove the Sch 195 temp. adjust. See Schedule 100.

SCHEDULE 27
RESIDENTIAL HEATING DRY OUT *

Customer Charge:	$8.00
Usage Charge (per therm)	$1.17668

*** For Residential New Construction Builders**

SCHEDULE 31
NON-RESIDENTIAL FIRM SALES SERVICE

Customer Charge:	$325.00
Volumetric Charges:	
COMMERCIAL:	
1st 2,000 therms:	$0.74499
All additional therms:	$0.71467
INDUSTRIAL:	
1st 2,000 therms:	$0.72950
All additional therms:	$0.70365
Plus:	
Pipeline Capacity Charges*:	
Firm per MDDV	$1.52
Firm Volumetric:	$0.10274

Minimum Monthly Bill:
Customer Charge, plus Volumetric Charges, plus applicable Pipeline Capacity Charge

[1] For Coos County customers only, billing rates for these schedules will be increased by $0.02000/therm.

*** Select one.**

SCHEDULE 32
LARGE VOLUME NON-RESIDENTIAL FIRM SALES SERVICE

Customer Charge:	$675.00
Commercial Volumetric Charges:	
1st 10,000 therms:	$0.65293
Next 20,000 therms:	$0.62396
Next 20,000 therms:	$0.57579
Next 100,000 therms:	$0.52745
Next 600,000 therms:	$0.49273
All additional therms:	$0.47626
Industrial Volumetric Charges:	
1st 10,000 therms:	$0.60345
Next 20,000 therms:	$0.58223
Next 20,000 therms:	$0.54675
Next 100,000 therms:	$0.51141
Next 600,000 therms:	$0.48672
All additional therms:	$0.47429
Plus	
Firm Service:	
Storage Charge (per MDDV)	$0.20415
Distribution Capacity Chg. (MDDV)	$0.15748
Plus	
Pipeline Capacity Charges*:	
Firm per MDDV:	$1.52
Firm Volumetric:	$0.10274

Minimum Monthly Bill:
Customer Charge, plus Volumetric Charges, plus applicable Pipeline Capacity Charge, plus for Firm Service, the Storage and Distribution Charges

SCHEDULE 32
LARGE VOLUME NON-RESIDENTIAL INTERRUPTIBLE SALES SERVICE

Customer Charge:	$675.00
Commercial Volumetric Charges:	
1st 10,000 therms:	$0.61838
Next 20,000 therms:	$0.59472
Next 20,000 therms:	$0.55521
Next 100,000 therms:	$0.51568
Next 600,000 therms:	$0.49198
All additional therms:	$0.47465
Industrial Volumetric Charges:	
1st 10,000 therms:	$0.59896
Next 20,000 therms:	$0.57835
Next 20,000 therms:	$0.54400
Next 100,000 therms:	$0.50962
Next 600,000 therms:	$0.48899
All additional therms:	$0.47389
Plus	
Pipeline Capacity Charge:	
Interruptible Volumetric:	$0.01222

Rates & Regulatory Affairs
Revised 11/01/24

NW Natural® 250 SW Taylor Street, Portland, OR 97204 | 503-226-4211 | nwnatural.com

EFFECTIVE: November 1, 2024

OREGON

SUMMARY OF MONTHLY TRANSPORTATION SERVICE BILLING RATES

SCHEDULE 31 — NON-RESIDENTIAL — FIRM TRANSPORTATION SERVICE

Customer Charge:	$325.00
Transportation Charge:	$250.00
Volumetric Charges:	
COMMERCIAL:	
1st 2,000 therms:	$0.31490
All additional therms:	$0.28781
INDUSTRIAL:	
1st 2,000 therms:	$0.26830
All additional therms:	$0.24243
Minimum Monthly Bill:	$575.00

SCHEDULE 32 — LARGE VOLUME NON-RESIDENTIAL — FIRM TRANSPORTATION SERVICE

Customer Charge:	$675.00
Transportation Charge:	$250.00
Commercial Volumetric Charges:	
1st 10,000 therms:	$0.14137
Next 20,000 therms:	$0.11998
Next 20,000 therms:	$0.08442
Next 100,000 therms:	$0.04883
Next 600,000 therms:	$0.02745
All additional therms:	$0.01327
Industrial Volumetric Charges:	
1st 10,000 therms:	$0.13314
Next 20,000 therms:	$0.11308
Next 20,000 therms:	$0.07964
Next 100,000 therms:	$0.04622
Next 600,000 therms:	$0.02609
All additional therms:	$0.01279
Distribution Capacity Chg. (MDDV)	$0.15748
Minimum Monthly Bill:	$925.00

Plus for Firm Service: Distribution Capacity Charge

SCHEDULE 32 — LARGE VOLUME NON-RESIDENTIAL — INTERRUPTIBLE TRANSPORTATION SERVICE

Customer Charge:	$675.00
Transportation Charge:	$250.00
Commercial Volumetric Charges:	
1st 10,000 therms:	$0.12838
Next 20,000 therms:	$0.10895
Next 20,000 therms:	$0.07661
Next 100,000 therms:	$0.04425
Next 600,000 therms:	$0.02486
All additional therms:	$0.01194
Industrial Volumetric Charges:	
1st 10,000 therms:	$0.12678
Next 20,000 therms:	$0.10765
Next 20,000 therms:	$0.07583
Next 100,000 therms:	$0.04395
Next 600,000 therms:	$0.02486
All additional therms:	$0.01213
Minimum Monthly Bill:	$925.00

SCHEDULE 33 — HIGH-VOLUME NON-RESIDENTIAL — TRANSPORTATION SERVICE (Firm and Interruptible)

Customer Charge:	$38,000.00
Transportation Charge:	$250.00
Volumetric Charges:	
All therms:	$0.00862
If Firm Service, ADD:	
Distribution Capacity Chg. (MDDV)	$0.15748
Minimum Monthly Bill:	$38,250.00

Plus for Firm Service: Distribution Capacity Charge

SCHEDULE T — PENALTY CHARGES:

Balancing Charges:	$1.00/therm
Excess over 3% - August - February	
Excess over 5% - March - July	
Entitlement Overrun Charges:	$1.00/therm
Excess > threshold + 3%	
Excess > threshold + 5% (Gas Day)	
Excess > threshold + 8%	
Excess > threshold + 13%	
Entitlement Underrun Charges:	$1.00/therm
Pre-Emption Charges:	$10.00/therm

OTHER CHARGES:

Unauthorized Use - Violation of Curtailment Order:	$10.00/therm
Annual WACOG	$0.43366
Winter WACOG	$0.45252

Rates & Regulatory Affairs
Revised 11/01/24

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

ENVIRONMENTAL REMEDIATION COSTS

EXHIBIT 1102

November 2025

Cascade Natural Gas Corp
Environmental Remediation
Schedule 197

Balance		
MGP 1860.20472 Balance at 9/30/2025	$	602,919.45
Interest Estimate Through 10/30/2026	$	47,926.82
Interest During Amortization	$	14,989.50
Total to be Amortized	$	665,835.77
Revenue Sensitive Factor		1.0309
RSF Applied Total to Be Amortized	$	686,408.96
Three Year Amortization - Annual Value		$228,802.99
Total Total Therm Usage Over Recovery Period, Nov. 26 - Oct. 27		151,264,086
Schedule 197 Environmental Remediation Rate		$0.00151

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

LINE EXTENSION ALLOWANCE SCENARIOS

EXHIBIT 1103

November 2025

Scenario 1: A new Residential home (Schedule 101) is being built on a standalone lot and requests service.

Example 1:

The infrastructure required to provide service to the home includes 110’ of 2” polyethylene (PE) main and 80’ of 1” PE service line. The home will have gas heating and water heating.

Estimated Cost of Mains (MNs):	$2,000
Estimated Cost of Service Line (SL):	$4,049
Total Estimated Cost:	$6,049
Estimated Annual Therms:	710
Estimated Annual Margin:[1]	$352

Line Extension Allowance (LEA) and Costs under Current Policy:

Mains Installation:

Maximum allowance for Main Installation = $1,584 (4.5 X $352)

Customer Cost for the Main Installation = $416 ($2,000 - $1,584)

Service Line Installation: [2]

Maximum allowance for Service Line Installation = $4,049 (80’ X $50.61)[3]

Customer Cost for the Line Installation = $0 (Allowance of $4,049 is equal to the cost of $4,049)

Customer Impact:

Customer would pay a total of $416 ($416 Main Installation Cost + $0 Service Line)

Cascade Impact:

Cascade would invest $5,633 ($1,584 Main Installation + $4,049 Service Line)

Line Extension Allowance (LEA) and Costs under Proposed Policy:

Maximum Allowance = $1,408 (4.0 X $352)

Customer Impact:

Customer would pay a total of $4,641 ($2,000 MNs + $4,049 SL- $1,408 allowance)

Cascade Impact:

Cascade would invest $1,408

Overall LEA Difference: -$4,225 or -75% ($1,408 Proposed LEA - $5,633 Current LEA)

[1] Estimated annual margin is based on current margin rates.

[2] Service Line Installations receive free footage for 40 feet, plus an extra 40 feet if the home has both space heating and water heating.

[3] $50.61 is the current price per foot for service lines.

Scenario 1, Example 2:

Same scenario as Example 1, except the infrastructure required to provide service to the home includes 110' of 2" polyethylene (PE) main and 44'[4] of 1" PE service line. The home will have gas heating and water heating.

Estimated Cost of Mains (MNs):	$2,000
Estimated Cost of Service Line (SL):	$2,227
Total Estimated Cost:	$4,227
Estimated Annual Therms:	710
Estimated Annual Margin:[5]	$352

Line Extension Allowance (LEA) and Costs under Current Policy:

Mains Installation:

Maximum allowance for Main Installation = $1,584 (4.5 X $352)

Customer Cost for the Main Installation = $416 ($2,000 - $1,584)

Service Line Installation: [6]

Maximum allowance for Service Line Installation = $2,227 (44 X $50.61)[7]

Customer Cost for the Line Installation = $0 (Allowance of $2,227 is equal to the cost of $2,227)

Customer Impact:

Customer would pay a total of $416 ($416 Main Installation Cost + $0 Service Line)

Cascade Impact:

Cascade would invest $3,811 ($1,584 Main Installation + $2,227 Service Line)

Line Extension Allowance (LEA) and Costs under Proposed Policy:

Maximum Allowance = $1,408 (4.0 X $352)

Customer Impact:

Customer would pay a total of $2,819 ($2,000 MNs + $2,227 SL- $1,408 allowance)

Cascade Impact:

Cascade would invest $1,408

Overall LEA Difference: -$2,403 or -63% ($1,408 Proposed LEA - $3,811 Current LEA)

[4] The current average service line length is 44'.

[5] Estimated annual margin is based on current margin rates.

[6] Service Line Installations receive free footage for 40 feet, plus an extra 40 feet if the home has both space heating and water heating.

[7] $50.61 is the current price per foot for service lines.

Scenario 1, Example 3:

There is an existing main line in the street. The infrastructure required to provide gas service to the home includes only 80’ of 1” PE service line. The home will have gas heating and water heating.

Est. Cost of Mains (MNs):	$0
Est. Cost of Service Line (SL):	$4,049
Total Estimated Cost:	$4,049
Est. Annual Therms:	710
Est. Annual Margin:	$352

Line Extension Allowance (LEA) and Costs under Current Tariff:

Mains Installation:

Not applicable.

Service Line Installation: [8]

Maximum allowance for Service Line Installation = $4,049 (80’ X $50.61)[9]

Customer Cost for the Line Installation = $0 (Allowance of $4,049 is equal to the cost of $4,049)

Customer Impact:

Customer would pay a total of $0 ($0 Service Line)

Cascade Impact:

Cascade would invest $4,049 ($4,049 Service Line)

Line Extension Allowance (LEA) and Costs under Proposed Policy:

Maximum Allowance = $1,408 (4.0 X $352)

Customer Impact:

Customer would pay a total of $2,641 ($4,049 SL- $1,408 allowance)

Cascade Impact:

Cascade would invest $1,408

Overall LEA Difference: -$2,641, or -65% ($1,408 Proposed LEA - $4,049 Current LEA)

---

[8] Service Line Installations receive free footage for 40 feet, plus an extra 40 feet if the home has both space heating and water heating.

[9] $50.61 is the current price per foot for service lines.

Scenario 2: New residential, commercial, or light industrial development for which the developer has requested gas mains be installed in the development as it's being developed (roads, etc being constructed). Service lines will be requested at a later date as service lines are required by the entity constructing or owning the building requiring service.

Example 1:

Residential development with 53 lots for SFRs. The development will require 1,400' of 4" PE main and 2,000' of 2" PE main installed in development road Right of Way in open/joint utility trench provided by developer. Each home will have gas heating and water heating. Average future service length estimated at 44 feet long.

Est. Cost of Mains (MNs):	$107,064
Est. Cost of Avg. Future Service Line (SL):	$2,227 per SL ($118,031 total estimated cost)
Est. Annual Therms:	710 per customer (37,630 total annual therms)
Est. Annual Margin:	$352 per customer ($18,656 total annual margin)

Line Extension Allowance (LEA) and Costs under Current Policy:

Mains Installation:

Maximum allowance for Main Installation = $83,952 ($18,656 X 4.5)

Developer Cost for the Main Installation = $23,112 ($107,064 – $83,952)

Service Line Installation: [10]

Maximum allowance for Service Line Installation = $118,023[11]

(44' X 53 lots X $50.61)

Developer Cost for the Line Installation = $0 (Allowance of $118,023 is almost the same cost of $118,031)[12]

Developer Impact:

Developer would pay a total of $23,112

($23,112 Main Installation Cost + $0 Service Line)

Cascade Impact:

Cascade would invest $201,983

($83,952 Main Installation + $118,031 Service Line)

[10] Service Line Installations receive free footage for 40 feet, plus an extra 40 feet if the home has both space heating and water heating.

[11] $50.61 is the current price per foot for small diameter service lines.

[12] For example purposes, the total cost of the service line installation is $0, the actual cost would be $9.

<u>Line Extension Allowance (LEA) and Costs under Proposed Policy:</u>

Maximum Allowance = $74,624 (4.0 X $352 * 53)

Developer Impact:

Developer would pay a total of $150,471

($107,064 MNs + $118,031 SL- $74,624 allowance)

Cascade Impact:

Cascade would invest $74,624

Overall LEA Difference: -$127,359 or -63% ($74,624 Proposed LEA - $201,983 Current LEA)

Scenario 2, Example 2:

Same scenario as Example 1, except at the time the main needs to be installed the future customers loads, service lengths, and lot occupants are unknown.

Est. Cost of Mains (MNs):	$107,064
Est. Cost of Avg. Future Service Line (SL):	Unknown at time development is built
Est. Annual Therms:	Unknown at time development is built
Est. Annual Margin:	Unknown at time development is built

Line Extension Allowance (LEA) and Costs under Current Policy:

Mains Installation:

Maximum allowance for Main Installation = $0

Estimated Annual Margin unknown, allowance not applicable.

Developer Cost for the Main Installation = $107,064

Service Line Installation: [13]

Maximum allowance for Service Line Installation = Unknown. Allowance will be provided as lots are developed and service line lengths are known.

Developer/Customer Cost for the Line Installation = Unknown until lots are developed.

Developer Impact:

Developer would pay a total of $107,064 at the time the main needs to be installed.

Cascade Impact:

Cascade would invest $0 at the time the main needs to be installed.

Future Considerations:

Each lot would receive an allowance between $2,024 and $4,049 depending on length when the lot is developed.

$2,024 = 40’ X $50.61 ➔ Total SL Allowance for 53 lot development = $107,293
$2,227 = 44’[14] X 50.61 ➔ Total SL Allowance for 53 lot development = $118,023
$4,049 = 80’ X 50.61 ➔ Total SL Allowance for 53 lot development = $214,586

[13] Service Line Installations receive free footage for 40 feet, plus an extra 40 feet if the home has both space heating and water heating.

[14] The current average service line length is 44 feet.

Line Extension Allowance (LEA) and Costs under Proposed Policy:

Maximum Allowance = Up to $1,408 per lot. Allowance will be provided as lots are developed.

Developer Impact:
Developer would pay a total of $107,064

Cascade Impact:
Cascade would invest $0

Future Considerations:
Each lot would receive an allowance of $1,408 (4.0 X $352) when the lot is developed.
Assuming all lots are developed, the total allowance for all lots would be $74,624.
($1,408 X 53 lots)

Overall LEA Difference: -$43,399, or -37% ($74,624 Proposed LEA - $ 118,023 Current LEA[15])

[15] The current LEA is based on 44 feet average service length.

Scenario 3: A new restaurant (Schedule 104) is being built and requests gas service.

Example 1:

The infrastructure required to provide gas service to the restaurant includes 800’ of 2” PE MN and a 95’ of 1” PE SL. The restaurant requires gas for heating, water heating, and cooking.

Est. Cost of Mains (MNs):	$17,500
Est. Cost of Service Line (SL):	$4,808
Est. Annual Therms:	3,188
Est. Annual Margin:	$4,562

Line Extension Allowance (LEA) and Costs under Current Policy:

Mains Installation:

Maximum allowance for Main Installation = $17,500

Potential allowance of $20,529 (4.5 X $4,562) is greater than estimated cost of mains, so the maximum allowance is the cost of mains.

Customer Cost for the Main Installation = $0 ($17,500 cost - $17,500 allowance)

Service Line Installation: [16]

Maximum allowance for Service Line Installation = $4,049 (80’ X $50.61)[17]

Customer Cost for the Line Installation = $759 ($4,808 cost - $4,049 allowance)

Customer Impact:

Customer would pay a total of $759 ($0 Main Installation Cost + $759 Service Line)

Cascade Impact:

Cascade would invest $21,549 ($17,500 Main Installation + $4,049 Service Line)

Line Extension Allowance (LEA) and Costs under Proposed Policy:

Maximum Allowance = $18,248 (4.0 X $4,562)

Customer Impact:

Customer would pay a total of $4,060 ($17,500 MNs + $4,808 SL- $18,248 allowance)

Cascade Impact:

Cascade would invest $18,248

Overall LEA Difference: -$3,301 or -15% ($18,248 Proposed LEA - $21,549 Current LEA)

---

[16] Service Line Installations receive free footage for 40 feet, plus an extra 40 feet if the home has both space heating and water heating.

[17] $50.61 is the current price per foot for service lines.

Scenario 4: A new food processing plant (Schedule 163) is being built and requests gas service.

Example 1:

The infrastructure required to provide gas service to the plant includes 5,000' of 4" steel main, a regulator station, and 710' of 6" PE service line. The plant requires gas for processing.

Est. Cost of Mains (MNs):	$700,000
Est. Cost of Service Line (SL):	$48,000
Est. Annual Therms:	1,750,000
Est. Annual Margin:	$134,669

Line Extension Allowance (LEA) and Costs under Current Policy:

Mains Installation:

Maximum allowance for Main Installation = $606,011 (4.5 X $134,669)

Customer Cost for the Main Installation = $93,990 ($700,000 cost - $606,011 allowance)

Service Line Installation: [18]

Maximum allowance for Service Line Installation = $5,409 (80' X $67.61)[19]

Customer Cost for the Line Installation = $42,591 ($48,000 cost - $5,409 allowance)

Customer Impact:

Customer would pay a total of $136,581

$93,990 Main Installation Cost + $42,591 Service Line

Cascade Impact:

Cascade would invest $611,420

$606,011 Main Installation + $5,409 Service Line

Line Extension Allowance (LEA) and Costs under Proposed Policy:

Maximum Allowance = $606,011 (4.5 X $134,669)

Customer Impact:

Customer would pay a total of $141,990

$700,000 MNs + $48,000 SL- $606,011 allowance

Cascade Impact:

Cascade would invest $606,011

Overall LEA Difference: -$5,409 or -1% ($606,011 Proposed LEA - $611,420 Current LEA)

[18] Service Line Installations receive free footage for 40 feet, plus an extra 40 feet if the home has both space heating and water heating.

[19] $67.61 is the current price per foot for 6 inch service lines.

NOTE: For all examples above, actual customer (customer, developer, homeowner, builder, etc) costs are marked up to account for Federal Income Tax and paid prior to the installation of the mains or services.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

CASCADE'S CLEAN REVISED TARIFF SHEETS

EXHIBIT 1104

November 2025

INDEX

RULES

COMMUNITY SUPPORT PROGRAMS

RATE SCHEDULES

(continued)

INDEX

RATE SCHEDULES (continued)

RATE ADJUSTMENTS

OTHER CHARGES

OPTIONAL SERVICES

RULE 9
LINE EXTENSION ALLOWANCE POLICY (C)

PURPOSE (N)
This rule applies to all requests for new or additional natural gas service requiring the installation, alteration, relocation, removal, or attachment of Company-owned distribution facilities.

DEFINITIONS

Line Extension Allowance is the non-transferrable financial credit applied to an applicant or customer's Line Extension Costs.

Line Extension Costs are the sum of estimated expenses to install or modify a service line and, if necessary, install or modify a main line extension to connect and provide natural gas service to a customer's premise. Main line extension costs may include other non-service line infrastructure required to provide gas service. Line Extension Costs must be comprehensive of costs necessary to enable gas to flow to the customer meter. (N)

LINE EXTENSION ALLOWANCE POLICY (N)
The Company will provide an applicant or customer one Line Extension Allowance per billing meter. The Line Extension Allowance will be credited towards the Line Extension Costs. The customer will be responsible for paying all Line Extension Costs in excess of the Line Extension Allowance plus an amount to account for federal income tax, and a customer will never receive a value or credit that exceeds the Line Extension Costs. For new customers, the Line Extension Allowance will be based on the estimated annual margin for each meter and the customer class on which the meter will be serviced. For existing customers seeking an increase in natural gas service, the Line Extension Allowance will be based on the estimated increase in annual margin. See Table 1 below for the Line Extension Allowance per customer class: (C)(T)(T)(C)

Table 1 – Line Extension Allowance Per Customer Class (N)

Customer Class	Line Extension Allowance
Residential (Sch. 101) Commercial (Sch. 104) Industrial (Sch. 105)	4.0 x Margin
Large Volume (Sch 111) Interruptible (Sch.170) Transportation (Schs. 161, 162, 163, 164)	4.5 x Margin

(C)
(C)
(M)(T)
(M)

(M) refers to text that was previously found on Sheet 9.2 (N)
(continued)

RULE 9
LINE EXTENSION ALLOWANCE POLICY (C)

TERMS AND CONDITIONS (N)(D)

1. The Company reserves the right to designate the location of service and main lines, meters and regulators, and select the amount of space which must be left unobstructed for the installation. (M)(T)
2. The Company will commence construction as soon as is reasonably practical, but the Company is not liable for delays or the inability to provide service due weather conditions, the Company's ability to obtain all necessary easements, permits, and government approvals, other delays out of the Company's control, or delay in receiving all necessary commitments from the customer. (T)
3. The Company shall not be required to relocate an existing service line at no cost to customer where such relocation is to be made for the convenience of the customer.
4. The customer will indemnify and hold the Company harmless from claim, etc., for trespassing or injury to building and property crossed by the installation of a line extension except upon negligence of Company personnel. (M)
5. The Company will only provide a Line Extension Allowance toward the cost of the Line Extension Costs if the requested line extension includes all infrastructure required to provide gas service up to the meter. (N) (N)
6. The Company may not provide a Line Extension Allowance if conditions relative to the extension indicate that such service will not be of such permanence as to warrant the Line Extension Allowance. (M)(C)
7. The customer is expected to pay all Line Extension Costs exceeding the applicable service and, or main line allowance

EXCESS FLOW VALVES

An excess flow valve is available as an added safety feature in the event that the service line is suddenly severed. At the customer's request, the Company will install an excess flow valve for the fees established in Schedule 200.

CUSTOMER COMMITMENT CONTRACT

If the Company provides a Line Extension Allowance, the Company may require a customer to sign a Customer Commitment Contract prior to the installation of a line extension. If the Company installs a line extension and the customer fails to commence gas usage within 12 (twelve) months for single-service customers or 5 (five) years for developments from the date of the Customer Commitment Contract, the Company shall bill the customer for the costs and expenses associated with the Line Extension Allowance provided plus compensation for federal income taxes. If, subsequent to paying for such costs, the customer commences gas usage within five years from the date of the Customer Commitment Contract, the costs of the Line Extension Allowance paid to the Company by the customer shall be refunded without interest. (C) (M)(C)

(M) refers to text previously found on Sheet Nos. 9.1, 9.2 and 10.1. (N)

(continued)

RULE 9 (N)
LINE EXTENSION ALLOWANCE POLICY (N)

LINE EXTENSION PAYMENT REFUNDS (N)

If (i) a Line Extension Allowance is provided to the Customer and (ii) the Line Extension Costs exceed the Line Extension Allowance, then a customer's payment for Line Extension Costs that exceeded the Line Extension Allowance may be subject to refund without interest on the following basis:

1. If additional customers, in excess of the number of customers on which the payment was predicated, connect directly to the Line Extension, and the Line Extension Allowance provided to such additional customers exceeded the Line Extension Costs for the infrastructure to provide service to such additional customers, an amount equal to the difference between the Line Extension Allowance and the Line Extension Costs of the additional customers will be provided to the initial customer. Such refund shall be granted within one (1) year of setting of a meter for such additional customer or customers. (N)

2. Company and Customer execute a main refunding contract covering the terms of reimbursement. (N)

3. Company may not provide Customer a main refunding contract if Company determines there is limited potential for additional customers beyond the initial customers on which the payment was predicated to connect directly to the main extension for which the payment was made. (N)(N)

4. Refund or refunds in total shall not exceed the total amount paid. If the total paid has not been fully refunded within five (5) years of the date the payment was received by the Company, any remaining unrefunded amount shall become the property of the Company. (M)(T) (T)

5. When two (2) or more parties make a joint payment on the same extension, refund amounts which become payable will be allocated to such parties in proportion to the amounts paid by the party. (T) (T)

All facilities installed under this rule shall be the property of and under the control of the Company at all times and may be extended to serve other customers at the option of the Company.

(M)

(M) refers to text previously found on Sheet Nos. 10.2.

RULE 17
ORDER OF PRIORITY FOR GAS SERVICE

GENERAL
The Company will exercise reasonable diligence to supply and deliver continuous natural gas service to all customers receiving firm service, as defined in Rule 2.

Should the Company's supply of gas or capacity be insufficient at any time or any location, for reasons other than force majeure (as defined in Company's Rule 16) to meet the full requirements of all customers, the Company will curtail service to customers in the inverse order of order of priority listed hereinafter. Such curtailment, when required, will be imposed to protect continuity of service first, to firm service customers, and more generally, to customers having a higher service priority.

ORDER OF PRIORITY
1. Residential customers (Schedule 101)
2. Commercial customers (Schedule 104)
3. General Industrial customers (Schedule 105)
4. Large Volume customers (Schedule 111)
5. General Distribution System Firm Transportation Service customers (Schedules 161 and 162) (N)
5. Special contracts customers (Schedule 201)
6. General Distribution System Interruptible Transportation Service customers (Schedules 163 and 164) (C)
7. Interruptible natural gas service customers (Schedule 170) (C)

ADMINISTRATION OF CURTAILMENT
When the Company requires a curtailment due to either gas supply or capacity failures, the curtailment shall be imposed first on customers in the lowest order of priority category at the rate of 100% of each customer's requirements (excepting minor requirements for essential services as approved by Company) on a customer-by-customer basis and will then proceed to customers in the next lowest order of priority category, and so on, until sufficient volumes have been curtailed to bring remaining requirements into balance with available system supply.

The Company shall have the right to inspect the customer's gas consuming facilities and to review operating schedules for such facilities to determine customer's requirements and proper position in the order of priority. If the customer refuses such inspection, the customer will be assigned the lowest priority consistent with otherwise verifiable information.

Customer classifications referenced in the order of priority are defined in Company's Rule 2.

(continued)

RULE 18
LIMITATION OF FIRM SERVICE

GENERAL

Firm service will be available to a customer if the Company determines, in its sole judgment, that adequate capacity and, if applicable, adequate supply are available to accommodate a Customer's service requirements. If the Company determines firm service is not available to a customer, interruptible service may be an option. (C)

RULE 19
CONSERVATION ALLIANCE PLAN MECHANISM

APPLICABLE
The Conservation Alliance Plan (CAP) mechanism described in this rule applies to customers served on Residential General Service Rate Schedule 101 and Commercial General Service Rate Schedule 104.

TERM
The Company shall initiate a review of this mechanism on September 20, 2029, with any proposed changes to be effective January 1, 2030.

PURPOSE
The purpose of this provision is to (a) define the procedures for the annual tracking revisions in rates due to changes in the weather-normalized use per customer associated with Rate Schedule 101 & Rate Schedule 104; and (b) to define the procedures for the deferral of differences experienced between the actual average use per customer and the amount estimated at the time the Margin Rates were established.

REVISIONS TO COMMODITY MARGIN RATES DUE TO CHANGES IN THE WEATHER-NORMALIZED USE/CUSTOMER

1. The Company shall use the baseline weather normalized average commodity margin per customer for Rate Schedule 101 and Rate Schedule 104 as reflected in its General Rate Case, docketed as UG 525. That application was based upon the weather-normalized, twelve months ending December 31, (C)
2025. (C)

2. For each subsequent year for the term of this provision, the Company shall file annually (CAP Filing) with the Commission to update the Commodity Margin Rate for Rate Schedule 101 and Rate Schedule 104 based upon the weather normalized usage for the twelve months ending June 30th divided into the margin requirement of each rate schedule.

3. Weather-normalized usage is calculated using the approach to weather normalization adopted in the Company's Spring Earnings Review filings, PGA Applications and other weather normalized report submittals.

4. The Total Commodity Margin Requirement of Rate Schedule 101 and Rate Schedule 104 shall be calculated by multiplying the baseline average commodity margin per customer per Rate Schedule, excluding any margin collected through the monthly Basic Service Charge, by the current twelve months ended June 30 average customer count based upon the average of the monthly bills issued.

5. The Margin Commodity Rate is calculated by dividing the Total Commodity Margin Requirement by the Total Weather Normalized Usage.

(Continued)

RULE 22 (N)
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS (N)

PURPOSE (N)
This rule establishes the rules for general transportation service provided on Schedules 161, 162, 163, and 164. (N)

APPLICABILTY (N)
To receive transportation service on Schedule 161, 162, 163, or 164, the customer must have an executed service agreement with the Company. The customer must also have secured the purchase and delivery of gas supplies, which may include purchases from a third-party agent authorized by the customer served on this schedule. Such agent, otherwise known as a marketer or supplier and hereafter referred to as supplier, nominates and transports natural gas to the Company's system on a customer's behalf in the manner established herein. (M)(C)

GAS SUPPLY
The customer served under Schedule 161, 162, 163, or 164 must secure the purchase and delivery of gas supplies from a supplier. (C)

WAIVER OF FIRM GAS SUPPLY
Customers electing to secure the purchase and delivery of under Schedule 161, 162, 163, or 164 in lieu of firm natural gas service waive protection from natural gas supply-failure curtailment of all of their requirements. The Company has no obligation to purchase or reserve gas supply or interstate pipeline capacity for customers electing to provide their own gas supplies and/or their own interstate pipeline capacity. Customers electing to provide their own natural gas supplies in lieu of firm natural gas system supply waive any right to automatically purchase firm natural gas supplies at some future date. Transportation service is subject to curtailment per Rule 17 or entitlement as defined in this rule. (C)

SERVICE AGREEMENT
Service under Schedule 161, 162, 163, or 164 requires an executed service agreement between the Company and the customer. The service agreement shall define the annual minimum quantity of gas to be delivered. The service agreement term shall be for a period not less than the period covered under the customer's natural gas purchase contract with the customer's supplier. However, in no event shall the service agreement be for less than one year and the termination date of the service agreement in any year shall be September 30th. A customer may not switch service types between interruptible transportation service and firm transportation service during the primary term of a service agreement. Switching service types requires a minimum of 60 days' notice prior to the expiration of the service agreement and is subject to availability of sufficient capacity. (C) (N) (N)

SUPPLIER AND RELATED RESPONSIBILITIES
The customer must provide in writing to the Company the name and telephone number of its supplier who will have authority to nominate natural gas supplies on Company's distribution system for delivery on customer's behalf. (M)

(M) refers to text previously on Sheet Nos. 163.1, 163.2, and 163.3 (N)

(continued) (N)

RULE 22 (N)
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS (N)

SUPPLIER AND RELATED RESPONSIBILITIES (continued) (N)
The supplier is the customer's designated representative who satisfies or undertakes the following transportation duties and obligations: (M)

1. Submitting and/or receiving notices on behalf of a customer;
2. Making nominations on behalf of a customer. A nomination is a request to have a physical quantity of customer-owned gas delivered to a specific Company receipt point(s) for a specific gas day. Nominations are not considered final until confirmed by the Pipeline;
3. Arranging for trades of imbalances on behalf of a customer as permitted under the terms and conditions herein established. An imbalance is the difference between a confirmed nominations and the volume of gas actually used by or delivered to a customer served under this schedule for a defined period of time;
   a. A positive imbalance exists when the volume of transportation gas confirmed for a Customer's account is greater than the volume of gas used.
   b. A negative imbalance exists when the volume of Transportation gas confirmed for Customer's account is less than the volume of gas used; and,
4. Performing operational and transportation-related administrative tasks on behalf of a customer as the Company permits.

Unless the Company and customer otherwise agree, a customer shall select one supplier for each account at any given time.

Under no circumstances will the appointment of a supplier relieve a customer of the responsibility to make full and timely payments to the Company for all distribution service.

Each supplier must meet any applicable registration and licensing requirements established by law or regulation. The Company shall have the right to establish reasonable financial and non- discriminatory credit standards for qualifying suppliers. Accordingly, in order to serve customers on the Company's system, the supplier shall provide the Company, on a confidential basis, with audited balance sheet and other financial statements, such as annual reports to shareholders and 10-K reports, for the previous three years, as well as two trade and two banking references. To the extent that such annual reports and 10-K reports are not publicly available, the supplier shall provide the Company with a comparable list of all corporate affiliates, parent companies and subsidiaries. The supplier shall also provide its most recent reports from credit reporting and bond rating agencies. The supplier shall be subject to a credit investigation by the Company. The Company will review the supplier's financial position periodically.

If the supplier fails to comply with or perform any of the obligations on its part established in this schedule including but not limited to failure to deliver gas, pay bills in a timely manner, execute an upstream transportation capacity assignment, or, in general, act in good faith on behalf of the customer, the Company maintains the right to terminate the supplier's eligibility to act as a supplier on the Company's system. (M)

(M) refers to text previously found on Sheet Nos. 163.3 and 163.4. (N)
(continued) (N)

RULE 22 (N)
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS (N)

NOMINATIONS (M)

A Transportation customer served on Schedule 161, 162, 163, or 164 is required to report estimated gas supply requirements for the upcoming month at least by the 15th day of the current month, in order to provide the Company with information for gas supply acquisition purposes. Such estimate shall include any scheduled down time or increased production time. (C)

A Transportation customer is required to report estimated gas requirements daily to the Company's gas scheduling department at least thirty-two hours prior to the beginning of each gas day, as defined in Rule 2, unless other arrangements are agreed upon in writing with the Company. Such estimated requirement shall be considered as customer's daily nomination. Such daily nomination will separately identify gas quantities, if any, pursuant to obligations established below, as well as the customer's current estimated gas requirement at customer's facility (excluding gas provided to the transporting pipeline for compression and line losses). In the event Company's supplier determines that the customer's actual consumption is out of balance with the customer's nomination, the supplier shall inform the customer of the adjustments necessary to get back in balance. Changes to a customer's daily nomination are allowed during the gas day provided the change is communicated to the Company one hour prior to the upstream pipeline's re-nomination deadline (C)

The Company shall have the right to adjust a customer's daily nominations when, in the Company's sole judgment, such action is necessary to bring into balance its system nominations as a receiving party on a pipeline system, or otherwise to maintain operational control or maintain the integrity of the Company's distribution system. The Company accepts customer purchased gas at the receipt point subject to customer's warranty that at the time of the Company's receipt, customer has good title to all gas received, free and clear from all liens, encumbrances and claims. Customer shall indemnify and hold Company harmless should a third party make any claims regarding customer's title to gas transported under this schedule. The supplier shall warrant that it has or will have entered into the necessary arrangements for the purchase of gas supplies which it desires the Company to transport to its customers, and that it has or will have entered into the necessary upstream transportation arrangements for the delivery of these gas supplies to the designated receipt point. The supplier shall warrant to the Company that it has good title to or lawful possession of all gas delivered to the Company at the designated receipt point on behalf of the supplier or the supplier's customers. The supplier shall indemnify the Company and hold it harmless from all suits, actions, debts, accounts, damage, costs, losses, taxes, and expenses arising from or out of any adverse legal claims of third parties to or against said gas supply.

The supplier shall be responsible for making all necessary arrangements and securing all required regulatory or governmental approvals, certificates or permits to enable gas to be delivered to the Company's system. (M)

(M) refers to text previously found on Sheet Nos. 163.4 and 163.5 (N)

(continued) (N)

RULE 22 (N)
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS (N)

NOMINATIONS (continued) (N)
The customer shall be deemed to be in control and possession of the customer purchased gas until the Company has accepted it at the receipt point. The Company shall be deemed to be in control or possession of the customer purchased gas until the equivalent therms are delivered to the customer at the delivery point. (M)

Failure to report estimated gas transportation requirements or comply with the written arrangements may be considered as a zero nomination for such gas day and may result in the penalties as described below.

A Transportation customer is required to notify the Company's gas scheduling department in advance of operating changes that would cause actual gas day consumption to vary either up or down by 10% or more from the reported gas day estimate. Such notification may mitigate potential penalties but will not indemnify customer from the responsibility for penalties described in the section below entitled Imbalances.

IMBALANCES
Each customer served on this rate schedule shall be required to satisfy any monthly imbalance condition in the manner established below.

Upon notification by the Company that the customer has an imbalance greater than 5%, the customer will have 45 non-entitlement days to eliminate any such imbalance. The Company will bill the customer an imbalance penalty if the customer has not completely satisfied such imbalance condition. These non-entitlement penalties are $10.00 per MMBtu on the imbalance over -the allowed tolerance on a monthly basis.

Under any agency established hereunder, the Company shall rely upon information concerning the applicable customer's distribution service which is provided by the designated representative. All such information shall be deemed to have been provided by the customer. Similarly, any notice or other information provided by the Company to the supplier concerning the provision of distribution service to such customer shall be deemed to have been provided to the customer. The customer shall rely upon any information concerning distribution service that is provided to the supplier as if that information had been provided directly to the customer.

The Company shall determine the customer's daily gas supply entitlement based upon customer's gas requirements forecast and resulting nomination after Company has considered any curtailment of pipeline or distribution system capacity constraints and gas supply constraints. Such daily gas supply entitlements shall include the summation of all gas supply options and optional balancing service daily volumetric level contracted for by the customer. The Company shall notify the supplier and/or customer in the event that the gas supply entitlement is less than the customer's gas nomination(s). (M)

(M) refers to text previously found on Sheet Nos. 163.5 and 163.6 (N)

(continued) (N)

RULE 22 (N)
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS (N)

NOMINATIONS (continued) (N)

Penalties from upstream pipeline transporter and/or other costs incurred by Company as a result of a nomination imbalance or an unauthorized overrun will be passed on directly to those customer(s) or groups of customers whose take levels contribute to the imposition of the penalty. Such penalty shall be allocated among such customers, including Company's system supply customers, in proportion to the nomination imbalance or unauthorized overrun associated with each customer or group of customers. (M)

AUTOMATIC ASSIGNMENT OF GAS SUPPLY DURING A CURTAILMENT

In the event of a curtailment, the Company may automatically take assignment of customer-owned gas supplies in order to protect the service to higher priority customers as defined in Rule 17, Order of Priority for Gas Service. If the Company takes assignment of the customer-owned gas, the Company will compensate the customer with a credit equal to the Gas Daily-midpoint price at the source of the supply for all volumes assigned plus a credit of $0.60 per therm on all but the first 5 percent of the customer's daily curtailment under the rate schedule on which the customer receives service (Schedule 161, 162, (C)
163, or 164). (C)

UNAUTHORIZED USE OF GAS DURING ENTITLEMENT PERIODS

The Company may declare an entitlement period on any day the Company, in its sole discretion, reasonably determines a critical operational condition warrants the need. During a curtailment or an entitlement period, the total physical quantity of gas taken by customers served under this rate schedule exceeds or is less than the total quantity of gas which the customer is entitled to take on such day, as defined below, then all gas taken in excess of such entitlement or not taken within said entitlement shall constitute unauthorized overrun or underrun volume. Each general system or customer-specific declared overrun entitlement period shall be specified as either an overrun or an underrun entitlement for customers such that only one penalty condition may exist at one time, whereas:

- **Underrun Entitlement** – A period of time in which delivered natural gas volumes to a transportation customer may not exceed the customer's confirmed nomination for that day.
- **Overrun Entitlement** – A period of time in which delivered natural gas volumes to a transportation customer must be equal to or more than that customer's confirmed nomination for that day. (M)

(M) refers to text previously found on Sheet Nos. 163.6 and 163.7. (N)

(continued) (N)

(N)
(N)

RULE 22
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS

(M)

UNAUTHORIZED USE OF GAS DURING CUTRAILMENTS OR ENTITLEMENT PERIODS (continued)
Customers served under this schedule shall pay Company for all unauthorized overrun or underrun quantities that exceed the percentage specified by the Company in its declared entitlement. For a general system or customer-specific declared entitlement period, such percentage will be: (i) in the Company's sole discretion 5 percent, or, in the case of a declared overrun entitlement period announced on the day it is to be in effect, 3 percent for that day (Stage I), 8 percent (Stage II) or 13 percent (Stage III) of a customer's entitlement as set forth above.

A customer's usage of gas that exceeds the amount authorized by the Company during an entitlement period shall be considered an unauthorized overrun volume. The overrun charge that will be applied during any overrun entitlement period will equal the greater of $1.00 per therm or 150% of the highest midpoint price for the day at NW Wyoming Pool, NW south of Green River, Stanfield Oregon, NW Canadian Border (Sumas), Kern River Opal, or El Paso Bondad supply pricing points (as published in Gas Daily), converted from dollars per dekatherms to dollars per therm by dividing by ten. The overrun charge will be in addition to the incremental costs of any supplemental gas supplies the Company may have had to purchase to cover such unauthorized use, in addition to the regular charges incurred in the Rate section of this Schedule and any other charges incurred per the terms and conditions established in this Schedule. The payment of an overrun penalty shall not under any circumstances be considered as giving customer the right to take unauthorized overrun gas or to exclude any other remedies which may be available to the Company to prevent such overrun. The charge that will apply during any underrun entitlement period will be $1.00 per therm for any underrun imbalances.

NOTICE OF ENTITLEMENT
The Company shall give as much advance notice as possible for each entitlement. The Company's entitlement periods as well as restoration notices shall be given by telephonic communications, electronic communication, or personal contact by Company personnel to the customer's responsible representative. A notice of entitlement period will include the parameters for gas consumption during said entitlement period.

(M)

(M) refers to text previously found on Sheet No. 163.8.

SCHEDULE 37
ENERGY DISCOUNT PROGRAM COST RECOVERY

TERMS AND CONDITIONS:
Recovery is effective on and after October 1, 2022.

The purpose of this schedule is to recover costs associated with the Company's Energy Discount Program (EDP) billing assistance to qualifying residential Cascade customers.

Service under this adjustment schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this adjustment schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

APPLICABILITY:
This adjustment applies to the following rate schedules: 101, 104, 105, 111, 161, 162, 163, 164, 170, and 800. (C)

ADJUSTMENT TO RATE:
The Company will file to change this adjustment schedule annually so that forecast collections under this schedule will be targeted to meet actual program expenses.

RATES:
The following charges will apply for each rate schedule as listed in the table below:

Rate Schedule	Rate		
101	$0.81	per month	
104	$0.00889	per therm	
105	$0.00727	per therm	
111	$0.00479	per therm	
161	$0.00207	per therm	(N)
162	$0.00207	per therm	(N)
163	$0.00207	per therm	
164	$0.00207	per therm	(N)
170	$0.00364	per therm	
800	$0.00207	per therm	

SCHEDULE 99
RATE SUMMARY SHEET

Purpose
This schedule itemizes and sums the charges applicable for gas service on each rate schedule. Charges below do not include the Public Purpose Charge (Schedule 31) or municipal taxes (Schedule 100).

Rate Summary – Core Customers

Rate Schedule 101, General Residential Service Rate

Basic Service Charge		$12.00	per month	(I)
Schedule 37	Energy Discount Program	$0.81	per month	
Delivery Charge		$0.47916	per therm	(I)
Schedule 177	Cost of Gas (WACOG)	$0.51315	per therm	
Schedule 191	Temporary Gas Cost Rate	($0.00462)	per therm	
Schedule 192	Intervenor Funding	$0.00168	per therm	
Schedule 193	Conservation Alliance Plan	$0.02604	per therm	
Schedule 196	Oregon Earnings Sharing	$0.00000	per therm	
Schedule 197	Environmental Remediation Cost	$0.00151	per therm	(I)
Schedule 220	Climate Protection Program	$0.03210	per therm	
	Total	$1.04902	per therm	(I)

Rate Schedule 104, General Commercial Service

Basic Service Charge		$24.00	per month	(I)
Delivery Charge		$0.35485	per therm	(I)
Schedule 37	Energy Discount Program	$0.00889	per therm	
Schedule 177	Cost of Gas (WACOG)	$0.51315	per therm	
Schedule 191	Temporary Gas Cost Rate	($0.00462)	per therm	
Schedule 192	Intervenor Funding	$0.00000	per therm	
Schedule 193	Conservation Alliance Plan	($0.00351)	per therm	
Schedule 196	Oregon Earnings Sharing	$0.00000	per therm	
Schedule 197	Environmental Remediation Cost	$0.00151	per therm	(I)
Schedule 220	Climate Protection Program	$0.03210	per therm	
	Total	$0.90237	per therm	(I)

(continued)

SCHEDULE 99
RATE SUMMARY SHEET

Rate Summary – Core Customers (continued)

Rate Schedule 105, General Industrial Service Rate

Basic Service Charge		$70.00	per month	(I)
Delivery Charge		$0.31602	per therm	(I)
Schedule 37	Energy Discount Program	$0.00727	per therm	
Schedule 177	Cost of Gas (WACOG)	$0.51315	per therm	
Schedule 191	Temporary Gas Cost Rate	($0.00462)	per therm	
Schedule 192	Intervenor Funding	$0.00036	per therm	
Schedule 196	Oregon Earnings Sharing	$0.00000	per therm	
Schedule 197	Environmental Remediation Cost	$0.00151	per therm	(I)
Schedule 220	Climate Protection Program	$0.03210	per therm	
	Total	$0.86579	per therm	(I)

Rate Schedule 111, General Commercial Service

Basic Service Charge		$288.00	per month	(I)
Delivery Charge		$0.23492	per therm	(I)
Schedule 37	Energy Discount Program	$0.00479	per therm	
Schedule 177	Cost of Gas (WACOG)	$0.51315	per therm	
Schedule 191	Temporary Gas Cost Rate	($0.00462)	per therm	
Schedule 192	Intervenor Funding	$0.00036	per therm	
Schedule 196	Oregon Earnings Sharing	$0.00000	per therm	
Schedule 197	Environmental Remediation Cost	$0.00151	per therm	(I)
Schedule 220	Climate Protection Program	$0.03210	per therm	
	Total	$0.78221	per therm	(I)

(continued)

SCHEDULE 99
RATE SUMMARY SHEET

Rate Summary – Core Customers (continued)

Schedule 170, Interruptible Services

Basic Service Charge		$600.00	per month	(I)
Delivery Charge		$0.18957	per therm	(I)
Schedule 37	Energy Discount Program	$0.00364	per therm	
Schedule 177	Cost of Gas (WACOG)	$0.51315	per therm	
Schedule 191	Gas Cost Rate Adjustment	($0.00462)	per therm	
Schedule 192	Intervenor Funding Adjustment	$0.00036	per therm	
Schedule 196	Oregon Earnings Sharing	$0.00000	per therm	
Schedule 197	Environmental Remediation Costs	$0.00151	per therm	(I)
Schedule 220	Climate Protection Program	$0.03210	per therm	
	Total	$0.73571	per therm	(I)

Rate Summary – Non-Core Customers
Below are the charges for non-core customers served on Schedule 163 and Schedule 800. A gross revenue fee of 3.01% is applied to the total charges for gas service for all non-core customers.

Schedule 161, General Distribution System Firm Transportation Service – Non-EITE**

(N)

Basic Service Charge (per month)							**$900**
Contract Demand (CD) Charge						**$0.12000 per therm of CD per day**	
		Base Rate	**Sch. 37 Energy Discount Program**	**Sch. 192 Intervenor Funding**	**Sch. 197 Enviro. Remediation**	**Sch. 220 Climate Protection Program**	**Total Per Therm Rate**
First	10,000	$0.15993	0.00207	0.00036	0.00151	0.03210	**$0.19597**
Next	10,000	$0.14450	0.00207	0.00036	0.00151	0.03210	**$0.18054**
Next	30,000	$0.13590	0.00207	0.00036	0.00151	0.03210	**$0.17194**
Next	50,000	$0.08433	0.00207	0.00036	0.00151	0.03210	**$0.12037**
Next	400,000	$0.04389	0.00207	0.00036	0.00151	0.03210	**$0.07993**
Next	500,000	$0.02456	0.00207	0.00036	0.00151	0.03210	**$0.06060**
Over	1,000,000	$0.00457	0.00207	0.00036	0.00151	0.03210	**$0.04061**

** Schedule 196 charges is $0.00000.

(N)

(continued)

SCHEDULE 99
RATE SUMMARY SHEET

Rate Summary – Non-Core Customers (continued)

Schedule 162, General Distribution System Firm Transportation Service – EITE** (N)

Basic Service Charge (per month)						$900
Contract Demand (CD) Charge						**$0.12000 per therm of CD per day**
		Base Rate	**Sch. 37 Energy Discount Program**	**Sch. 192 Intervenor Funding**	**Sch. 197 Enviro. Remediation**	**Total Per Therm Rate**
First	10,000	$0.15769	0.00207	0.00036	0.00151	**$0.16163**
Next	10,000	$0.14225	0.00207	0.00036	0.00151	**$0.14619**
Next	30,000	$0.13366	0.00207	0.00036	0.00151	**$0.13760**
Next	50,000	$0.08209	0.00207	0.00036	0.00151	**$0.08603**
Next	400,000	$0.04164	0.00207	0.00036	0.00151	**$0.04558**
Next	500,000	$0.02231	0.00207	0.00036	0.00151	**$0.02625**
Over	1,000,000	$0.00232	0.00207	0.00036	0.00151	**$0.00626**

** Schedule 196 charges is $0.00000. (N)

Schedule 163, General Distribution System Interruptible Transportation Service – Non-EITE** (C)

Basic Service Charge (per month)							$900 (I)
		Base Rate	**Sch. 37 Energy Discount Program**	**Sch. 192 Intervenor Funding**	**Sch. 197 Enviro. Remediation**	**Sch. 220 Climate Protection Program**	**Total Per Therm Rate**
First	10,000	$0.15993	$0.00207	$0.00036	$0.00151	$0.03210	**$0.19597**
Next	10,000	$0.14450	$0.00207	$0.00036	$0.00151	$0.03210	**$0.18054**
Next	30,000	$0.13590	$0.00207	$0.00036	$0.00151	$0.03210	**$0.17194**
Next	50,000	$0.08433	$0.00207	$0.00036	$0.00151	$0.03210	**$0.12037**
Next	400,000	$0.04389	$0.00207	$0.00036	$0.00151	$0.03210	**$0.07993**
Next	500,000	$0.02456	$0.00207	$0.00036	$0.00151	$0.03210	**$0.06060**
Over	1,000,000	$0.00457	$0.00207	$0.00036	$0.00151	$0.03210	**$0.04061** (I)

** Schedule 196 charges is $0.00000.

CASCADE NATURAL GAS CORPORATION **Original Sheet No. 99.5**

P.U.C. OR. No. 10

SCHEDULE 99
RATE SUMMARY SHEET (N)

Rate Summary – Non-Core Customers (continued)

Schedule 164, General Distribution System Interruptible Transportation Service – EITE**

Basic Service Charge (per month)						**$900**
		Base Rate	**Sch. 37 Energy Discount Program**	**Sch. 192 Intervenor Funding**	**Sch. 197 Enviro. Remediation**	**Total Per Therm Rate**
First	10,000	$0.15769	$0.00207	$0.00036	$0.00151	**$0.16163**
Next	10,000	$0.14225	$0.00207	$0.00036	$0.00151	**$0.14619**
Next	30,000	$0.13366	$0.00207	$0.00036	$0.00151	**$0.13760**
Next	50,000	$0.08209	$0.00207	$0.00036	$0.00151	**$0.08603**
Next	400,000	$0.04164	$0.00207	$0.00036	$0.00151	**$0.04558**
Next	500,000	$0.02231	$0.00207	$0.00036	$0.00151	**$0.02625**
Over	1,000,000	$0.00232	$0.00207	$0.00036	$0.00151	**$0.00626**

** Schedule 196 charges is $0.00000. (N)

Schedule 800, Biomethane Receipt Services

Basic Service Charge (per month)								**$2500.00**
		Base Rate	**Sch. 37 Energy Discount Program**	**Sch. 192 Intervenor Funding**	**Sch. 197 Enviro. Remediation**	**Sch. 220 Climate Protection Program**	**Odorant**	**Total Per Therm Rate**
First	10,000	$0.15993	0.00207	0.00036	0.00151	0.03210	0.00021	**$0.19618**
Next	10,000	$0.14450	0.00207	0.00036	0.00151	0.03210	0.00021	**$0.18075**
Next	30,000	$0.13590	0.00207	0.00036	0.00151	0.03210	0.00021	**$0.17215**
Next	50,000	$0.08433	0.00207	0.00036	0.00151	0.03210	0.00021	**$0.12058**
Next	400,000	$0.04389	0.00207	0.00036	0.00151	0.03210	0.00021	**$0.08014**
Next	500,000	$0.02456	0.00207	0.00036	0.00151	0.03210	0.00021	**$0.06081**
Over	1,000,000	$0.00457	0.00207	0.00036	0.00151	0.03210	0.00021	**$0.04082**

(M)(I)
(M)(I)

(M) refers to content previously on Sheet No. 99.4 (N)

SCHEDULE 101
GENERAL RESIDENTIAL SERVICE RATE

APPLICABILITY
This schedule is available to residential customers.

RATE
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

MINIMUM CHARGE
Basic Service Charge $12.00 per month (I)

DELIVERY CHARGE
Delivery Charge $0.47916 per therm (I)

TERMS OF PAYMENT
Each monthly bill shall be due and payable within twenty-two days from the date of rendition.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 104
GENERAL COMMERCIAL SERVICE RATE

APPLICABILITY
This schedule is available to commercial customers.

RATE
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

MINIMUM CHARGE
Basic Service Charge $24.00 per month (I)

DELIVERY CHARGE
Delivery Charge $0.35485 per therm (I)

TERMS OF PAYMENT
Each monthly bill shall be due and payable within twenty-two days from the date of rendition.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 105
GENERAL INDUSTRIAL SERVICE RATE

APPLICABILITY
This schedule is available to industrial customers.

RATE
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

MINIMUM CHARGE
Basic Service Charge $70.00 per month (I)

DELIVERY CHARGE
Delivery Charge $0.31602 per therm (I)

TERMS OF PAYMENT
Each monthly bill shall be due and payable within twenty-two days from the date of rendition.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 111
LARGE VOLUME GENERAL SERVICE RATE

APPLICABILITY
Service under this schedule shall be for natural gas supplied for all purposes to customers having an annual fuel requirement of not less than 50,000 therms and where the customer's major fuel requirement is for process use.

RATE
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

MINIMUM CHARGE
Basic Service Charge $288.00 per month (I)

DELIVERY CHARGE
Delivery Charge $0.23492 per therm (I)

SERVICE AGREEMENT
Customers receiving service under this rate schedule shall execute a service agreement for a minimum period of twelve consecutive months' use. The service agreement term shall be for a period not less than one year and the termination date of the service agreement in any year shall be September 30th.

ANNUAL DEFICIENCY BILL
In the event the customer purchases less than the Annual Minimum Quantity of 50,000 therms as stated in the service agreement, the customer shall be charged an Annual Deficiency Bill. The Annual Deficiency Bill shall be calculated as the difference between the Annual Minimum Quantity and the actual purchase of transport therms times the difference between the per therm rates effective in this schedule and any modifying schedules less WACOG.

TERMS OF PAYMENT
Each monthly bill shall be due and payable within twenty-two days from the date of rendition.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

(N)

SCHEDULE 161
GENERAL DISTRIBUTION SYSTEM FIRM
TRANSPORTATION SERVICE
NON-EITE

PURPOSE

This schedule provides non-Emissions-Intensive and Trade Exposed (Non-EITE) customers with firm transportation service of customer-supplied natural gas on the Company's distribution system. The Non-EITE designation is as put forth and for the applicability as established in Oregon Administrative Rules Chapter 340, Division 273, Oregon Climate Protection Plan.

RATE

A. Basic Service Charge $900.00 per month

B. Distribution Charge

	Therms	Base Rate
First	10,000	$0.15993
Next	10,000	$0.14450
Next	30,000	$0.13590
Next	50,000	$0.08433
Next	400,000	$0.04389
Next	500,000	$0.02456
Over	1,000,000	$0.00457

C. Contract Demand (CD) Charge $0.12000 per therm of CD per day

The CD Charge is the number of therms per day of distribution capacity the customer reserves on the Company's distribution system for delivery of the customer supplied natural gas. The Company will determine each customer's CD which will be stated in the service agreement required per Rule 22. Each monthly bill will include a charge that will be no less than the CD times the CD charge. A customer may be forced to curtail more gas than its CD rate if a curtailment per Rule 17 or entitlement as defined in Rule 22 is necessary, or Force Majeure circumstances per Rule 16 are experienced.

D. Adjustment Charges

See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for service under this rate schedule.

E. Commodity Gas Supply Charge

The Company will pass through to the customer served on this schedule all costs, if any, incurred for securing the necessary supply at the city gate excluding pipeline transportation charges.

F. Gross Revenue Fee

The total of all charges invoiced by Company shall be subject to a Gross Revenue Fee as stated in Schedule 99 to cover state utility tax and other governmental levies imposed upon the Company, as those fees and levies may be in effect from time to time.

(N)

(continued)

SCHEDULE 161
GENERAL DISTRIBUTION SYSTEM FIRM
TRANSPORTATION SERVICE
NON-EITE (N)

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

TERMS AND CONDITIONS
1. Service on this schedule is subject to availability of sufficient capacity.
2. Service under this rate schedule is subject to the terms and conditions established under Rule 22, General Transportation Service Terms and Conditions.
3. Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time. (N)

(N)

SCHEDULE 162
GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE
TRANSPORTATION SERVICE
EITE

PURPOSE

This schedule provides Emissions-Intensive and Trade Exposed (EITE) customers with firm transportation service of customer-supplied natural gas on the Company's distribution system. The EITE designation is as put forth and for the applicability as established in Oregon Administrative Rules Chapter 340, Division 273, Oregon Climate Protection Plan.

RATE

A. Basic Service Charge $900.00 per month

B. Distribution Charge

	Therms	Base Rate
First	10,000	$0.15769
Next	10,000	$0.14225
Next	30,000	$0.13366
Next	50,000	$0.08209
Next	400,000	$0.04164
Next	500,000	$0.02231
Over	1,000,000	$0.00232

C. Contract Demand (CD) Charge $0.12000 per therm of CD per day

The CD Charge is the number of therms per day of distribution capacity the customer reserves on the Company's distribution system for delivery of the customer supplied natural gas. The Company will determine each customer's CD which will be stated in the service agreement required per Rule 22. Each monthly bill will include a charge that will be no less than the CD times the CD charge. A customer may be forced to curtail more gas than its CD rate if a curtailment per Rule 17 or entitlement as defined in Rule 22 is necessary, or Force Majeure circumstances per Rule 16 are experienced.

D. Adjustment Charges

See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for service under this rate schedule.

E. Commodity Gas Supply Charge

The Company will pass through to the customer served on this schedule all costs, if any, incurred for securing the necessary supply at the city gate excluding pipeline transportation charges.

F. Gross Revenue Fee

The total of all charges invoiced by Company shall be subject to a Gross Revenue Fee as stated in Schedule 99 to cover state utility tax and other governmental levies imposed upon the Company, as those fees and levies may be in effect from time to time.

(continued)

(N)

(N)

SCHEDULE 162
GENERAL DISTRIBUTION SYSTEM FIRM
TRANSPORTATION SERVICE
EITE

TAX ADDITIONS

The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions

TERMS AND CONDITIONS

1. Service on this schedule is subject to availability of sufficient capacity.
2. Service under this rate schedule is subject to the terms and conditions established under Rule 22, General Transportation Service Terms and Conditions.
3. Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

(N)

SCHEDULE 163
GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE
TRANSPORTATION SERVICE
NON-EITE

PURPOSE

This schedule provides non-Emissions-Intensive and Trade Exposed (Non-EITE) customers with interruptible transportation service of customer-supplied natural gas on the Company's distribution system. The Non-EITE designation is as put forth and for the applicability as established in Oregon Administrative Rules Chapter 340, Division 273, Oregon Climate Protection Plan.

RATE

A. Basic Service Charge $900.00 per month (I)

B. Distribution Charge

	Therms	Base Rate
First	10,000	$0.15993
Next	10,000	$0.14450
Next	30,000	$0.13590
Next	50,000	$0.08433
Next	400,000	$0.04389
Next	500,000	$0.02456
Over	1,000,000	$0.00457

(I)
(I)

C. Adjustment Charges
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

D. Commodity Gas Supply Charge
The Company will pass through to the customer served on this schedule all costs, if any, incurred for securing the necessary supply at the city gate excluding pipeline transportation charges.

E. Gross Revenue Fee
The total of all charges invoiced by Company shall be subject to a Gross Revenue Fee as stated in Schedule 99 to cover state utility tax and other governmental levies imposed upon the Company, as those fees and levies may be in effect from time to time.

TAX ADDITIONS

The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions

TERMS AND CONDITIONS

1. Service under this rate schedule is subject to the terms and conditions established under Rule 22, General Transportation Service Terms and Conditions.
2. Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

(N)

SCHEDULE 164
GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE
TRANSPORTATION SERVICE
EITE

PURPOSE
This schedule provides Emissions-Intensive and Trade Exposed (EITE) customers with firm transportation service of customer-supplied natural gas on the Company's distribution system. The EITE designation is as put forth and for the applicability as established in Oregon Administrative Rules Chapter 340, Division 273, Oregon Climate Protection Plan.

RATE
A. Basic Service Charge $900.00 per month

B. Distribution Charge

	Therms	Base Rate
First	10,000	$0.15928
Next	10,000	$0.14368
Next	30,000	$0.13500
Next	50,000	$0.08291
Next	400,000	$0.04206
Next	500,000	$0.02254
Over	1,000,000	$0.00235

C. Adjustment Charges
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

D. Commodity Gas Supply Charge
The Company will pass through to the customer served on this schedule all costs, if any, incurred for securing the necessary supply at the city gate excluding pipeline transportation charges.

E. Gross Revenue Fee
The total of all charges invoiced by Company shall be subject to a Gross Revenue Fee as stated in Schedule 99 to cover state utility tax and other governmental levies imposed upon the Company, as those fees and levies may be in effect from time to time.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions

TERMS AND CONDITIONS
1. Service under this rate schedule is subject to the terms and conditions established under Rule 22, General Transportation Service Terms and Conditions.
2. Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

(N)

SCHEDULE 170
INTERRUPTIBLE SERVICE

AVAILABILITY
This schedule is available for natural gas delivered for all purposes to customers having an annual fuel requirement of not less than 180,000 therms per year and where customer agrees to maintain standby fuel burning facilities and an adequate supply of standby fuel to replace the entire supply of natural gas delivered hereunder.

SERVICE
Service under this schedule shall be subject to curtailment by the Company when in the judgment of the Company such curtailment or interruption of service is necessary. Company shall not be liable for damages for or because of any curtailment of natural gas deliveries hereunder.

RATE
See Schedule 99, Rate Summary Sheet for a summation of charges applicable for gas service under this rate schedule.

MINIMUM CHARGE
Basic Service Charge $600.00 per month (I)

DELIVERY CHARGE
Delivery Charge $0.18957per therm (I)

TERMS OF PAYMENT
Each monthly bill shall be due and payable twenty-two days from the date of rendition.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

SERVICE AGREEMENT
Service under this schedule requires an executed service agreement between the Company and the customer. The service agreement term shall be for a period not less than the period covered under the customer's gas purchase contract with the customer's supplier. However, in no event shall the service agreement be for less than one year and the termination date of the service agreement in any year shall be September 30th.

(D)

SCHEDULE NO. 192
INTERVENOR FUNDING ADJUSTMENT

APPLICABLE
Applicable to customers served on Schedules 101, 104, 105, 111, 161, 162, 163, 164, 170, and 800.

PURPOSE
The purpose of this schedule is to recover the cost of Intervenor Funding Grants provided to various entities to cover their costs of advocating on behalf of customers. The awarding of such grants is governed by Section 7.3 of the First Amended and Restated Intervenor Funding agreement adopted by the Public Utility Commission of Oregon in Order No. 07-564.

MONTHLY RATES, MINIMUM BILLS AND OTHER CHARGES
Each of the charges specified in the schedules for gas service hereinafter listed shall be adjusted by the following per therm increase or (decrease) or appropriate multiple thereof:

Rate Schedule	Amount	
101	$0.00168	
104	$0.00000	
105	$0.00036	
111	$0.00036	
161*	$0.00036	(N)
162*	$0.00036	(N)
163*	$0.00036	
164*	$0.00036	(N)
170	$0.00036	
800*	$0.00036	
*all rate blocks		

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 196
UM 903 OREGON EARNINGS SHARING

APPLICABLE
This temporary rate addition applies to gas service rendered by the Company under the tariff of which this schedule is a part for service on and after the effective date hereof and shall be in addition to all rates and charges specified in this tariff.

PURPOSE
This schedule refunds a portion of the Company's overearnings in accordance with the Commission's annual order issued in Docket No. UM 903.

RATES
Each of the charges specified in the schedules for gas service hereinafter listed shall be adjusted by the following per therm increase or (decrease) or appropriate multiple thereof in determining annual minimum bill, if any:

Rate Schedule	Rate	
101	$0.000	
104	$0.000	
105	$0.000	
111	$0.000	
161	$0.000	(N)
162	$0.000	(N)
163	$0.000	
164	$0.000	(N)
170	$0.000	
800	$0.000	(N)

LIMITATION
This temporary rate addition shall remain in effect until cancelled pursuant to order of the Oregon Public Utility Commission.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

CASCADE NATURAL GAS CORPORATION **Fifth Revision of Sheet No. 197.1**
Canceling
P.U.C. OR. No. 10 **Fourth Revision of Sheet No. 197.1**

SCHEDULE 197
ENVIRONMENTAL REMEDIATION COST ADJUSTMENT

APPLICABLE
This adjustment is applicable to customers served on Schedule 101, 104, 105, 111, 161, 162, 163, 164, 170, and 800. (C)

PURPOSE
This schedule recovers environmental remediation costs for a former manufactured gas plant in Eugene, Oregon. The Company is authorized per Order No. 16-477 to recover $162,000 over a three-year period of time.

RATE
The following rate shall be applied to all applicable customers on an equal cents per therm basis:

$0.0.00151	per therm

(I)
(D)

TERM (N)
This adjustment shall terminate on and after October 30, 2029. (N)
(D)

GENERAL TERMS
1. The rates named herein are subject to increases as set forth in Schedule No. 100 Municipal Exactions. (T)
2. Any over- or under-collection of the amortized balance at the end of the collection term will be rolled into a deferral of like customer applicability. (N) (N)
3. Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time. (T)

SCHEDULE 220
CLIMATE PROTECTION PROGRAM (CPP) COST RECOVERY ADJUSTMENT

PURPOSE
The purpose of this schedule is to recover the historic costs Cascade incurred to comply with greenhouse gas (GHG) emissions reduction requirements established by the Oregon Department of Environmental Quality in Oregon Administrative Rule (OAR) 340-271, Oregon Climate Protection Program.

APPLICABLE
This adjustment schedule is applicable to non-Emissions-Intensive and Trade Exposed (EITE) customers (C)
served on Schedules 101, 104, 105, 111, 161, 163, 170, and 800. (C)

RATE
The following rate shall be applied to customer bills on a per therm basis:

Rate Schedule	Rate Adjustment
101, 104, 105, 111, 161, 163, 170, and 800	$0.03210

(N)

LIMITATION
This rate will be in effect until October 30, 2026.

SPECIAL TERMS AND CONDITIONS
The rates named herein are subject to increases as set forth in Schedule No. 100, Adjustment For Municipal Exactions.

GENERAL TERMS
Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

CASCADE NATURAL GAS CORPORATION

SCHEDULE 225
RENEWABLE NATURAL GAS COST RECOVERY ADJUSTMENT

(N)

PURPOSE
The purpose of this schedule is to recover renewable natural gas infrastructure costs in which the Company invested in for the purpose of complying with Climate Protection Program requirements as established in Oregon Administrative Rule Chapter 320, Division 271.

APPLICABLE
This adjustment applicable to customers served on Schedules 101, 104, 105, 111, 161, 163, 170 and 800.

RATE
The following rate shall be applied to all applicable customer bills on a per therm basis:

$0.00000 per therm

RNG INFRASTRUCTURE COSTS
The RNG infrastructure subject to recovery under this schedule includes associated depreciation expense, property and other taxes, return-on-investment, income taxes, operating and maintenance costs, and other costs relating to the Company's investment.. Cascade will use the Commission-authorized capital structure and cost of capital in its calculation of return on rate base.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

TERMS AND CONDITIONS
1. Cascade will file to update rates in this schedule by August 1 of each year. Updating charges will include updating the vintage of the revenue requirement for the previously included investments and a true-up of actual costs and volumes of previously included costs. This updating of charges will be supported by a deferral application that will apply to costs recovered through this schedule, as applicable.
2. Cascade will change rates under this schedule concurrently with its annual Purchased Gas Adjustment Filing effective October 31 each year.
3. Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

(N)

SCHEDULE 800
BIOMETHANE RECEIPT SERVICES

MONTHLY CHARGES
A Producer receiving service under this Schedule shall receive the following monthly charges:

Basic Service Charge and Minimum Monthly Bill: $2,500.00.

	Therms	Base Rate
First	10,000	$0.15993
Next	10,000	$0.14450
Next	30,000	$0.13590
Next	50,000	$0.08433
Next	400,000	$0.04389
Next	500,000	$0.02456
Over	1,000,000	$0.00457

(I)
(I)

A charge of $0.00021 per therm is applied to the Base Rate charges to cover odorant costs. (T)

See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

Charges for service on this schedule are not subject to increases as set forth in Schedule No. 31, Public Purpose Charge, but are subject to a Gross Revenue Fee as stated in Schedule 99 and taxes per Schedule 100, Municipal Exactions, as applicable.

PREREQUISITES TO BIOMETHANE RECEIPT SERVICES
Preceding the receipt of biomethane, service under this Schedule requires an interconnection capacity study and an Engineering Study, as needed; An Interconnect Agreement between the Company and the Producer must be executed prior to the construction of any Project Facilities or receipt of Biomethane.

RECEIPT SERVICES PROVIDED
The Company will provide a qualifying Producer with a Company-owned, operated, and maintained point of interconnection to enable receipt of qualifying biomethane into the Company's distribution system.

MINIMUM BIOMETHANE QUALITY STANDARDS
Service under this Schedule requires continual compliance with Biomethane quality standards and reporting requirement described in the Interconnect Agreement.

MONITORING AND REPORTING REQUIREMENTS
Service under this Schedule requires continual compliance with monitoring and reporting requirements as described in the Interconnect Agreement.

(continued)

SCHEDULE 805
VOLUNTARY RENEWABLE NATURAL GAS PROGRAM

AVAILABILITY
This Voluntary Renewable Natural Gas Program (Program) is available to qualifying customers receiving gas service on Schedules 101, 104, 105, 111, 161, 162, 163, 164, and 170 who choose service under this schedule. (C)

PROGRAM DESCRIPTION
Subject to availability, customers seeking to reduce their carbon emissions may choose to purchase one or more Program blocks, where each block is equivalent to four (4) therms of renewable thermal credits (RTCs) derived from renewable natural gas (RNG) and retired on the customer's behalf.

ELIGIBILITY
To qualify for service under this Program, a customer must complete the Company's enrollment process and must have good credit standing, defined for the purposes of this schedule as not having received two or more notices of pending service disconnection for nonpayment within the past twelve months and/or not currently on a time payment arrangement for the payment of a past due balance.

RATES
Customers participating in this Program will select the number of Program blocks they wish to purchase. The monthly billing will reflect the following monthly charges multiplied by the number of blocks the customer has designated for service under this Program. The monthly billing under this schedule shall be applied to the customer's bill regardless of actual energy consumption.

RNG/RTC Block Monthly Charge*	$7.22 per block

* One block is the equivalent of four therms.

SERVICE LIMITATIONS
Service under this Program is subject to the availability of RNG or RNG derived RTCs at a cost-effective price. When the RNG or RNG derived RTCs inventory is insufficient, service under this rider will be temporarily unavailable to new applicants. In the event service under this schedule is suspended, the Company will create a waitlist for new participants who will be served on a first-come first-served basis upon the availability of cost effective RNG or RNG derived RTCs.

VERIFYING AND TRACKING
All environmental attributes sold under this schedule will be transferred, tracked, and retired as RTCs in the Mid-west Renewable Energy Tracking System (M-RETS). RTCs sold under this schedule are non-transferrable.

(continued)

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 525

Cascade Natural Gas Corporation

CASCADE'S REVISED REDLINED TARIFF SHEETS

EXHIBIT 1105

November 2025

INDEX

RULES

COMMUNITY SUPPORT PROGRAMS

RATE SCHEDULES

(continued)

INDEX

RULE 9
~~SERVICE LINE INSTALLATIONS~~LINE EXTENSION ALLOWANCE POLICY

PURPOSE
This rule applies to all requests for new or additional natural gas service requiring the installation, alteration, relocation, removal, or attachment of Company-owned distribution facilities.

DEFINITIONS

Line Extension Allowance is the non-transferrable financial credit applied to an applicant or customer's Line Extension Costs.

Line Extension Costs are the sum of estimated expenses to install or modify a service line and, if necessary, install or modify a main line extension to connect and provide natural gas service to a customer's premise. Main line extension costs may include other non-service line infrastructure required to provide gas service. Line Extension Costs must be comprehensive of costs necessary to enable gas to flow to the customer meter.

~~SERVICE INSTALLATIONS~~LINE EXTENSION ALLOWANCE POLICY
The Company will provide an ~~custome~~ applicant or customer one Line Extension Allowance per billing meter. The Line Extension Allowance will be credited towards the Line Extension Costs. The customer will be responsible for paying all Line Extension Costs in excess of the Line Extension Allowance plus an amount to account for federal income tax, and a customer will never receive a value or credit that exceeds the Line Extension Costs. For new customers, the Line Extension Allowance will be based on the estimated annual margin for each meter and the customer class on which the meter will be serviced. For existing customers seeking an increase in natural gas service, the Line Extension Allowance will be based on the estimated increase in annual margin. See Table 1 below for the Line Extension Allowance per customer class:~~r's service line, from the service connection at the main in the alley, street or right-of-way abutting the customer's premise, to and including the meter, but the customer shall pay for the installed cost of any length of service line in excess of forty (40) feet inside the customer's property line abutting the alley, street or right-of-way in which the main is situated, except that:~~

Table 1 – Line Extension Allowance Per Customer Class

~~Customers who install gas fired appliances as the primary means to perform the following requirements shall receive free footage in excess of the forty (40) feet minimum up to the amounts listed below:~~

~~Requirement~~
~~Space heating only[1]~~
~~Space heating and water heating[1]~~

~~Commercial and Industrial with over 150,000 Btu connected load (in lieu of space and water heating)~~	
Customer Class	Line Extension Allowance
Residential (Sch. 101) Commercial (Sch. 104) Industrial (Sch. 105)	4.0 x Margin
Large Volume (Sch 111) Interruptible (Sch.170) Transportation (Schs. 161, 162, 163, 164)	4.5 x Margin

TERMS AND CONDITIONS

~~1.~~ The Company reserves the right to designate the location of service and main lines, meters and regulators, and select the amount of space which must be left unobstructed for the installation.

1.

2. The Company will commence construction as soon as is reasonably practical, but the Company is not liable for delays due weather conditions, the Company's ability to obtain all necessary easements, permits, and government approvals, or delay in receiving all necessary commitments from the customer.

3. The Company shall not be required to relocate an existing service line at no cost to customer where such relocation is to be made for the convenience of the customer.

~~In the event that the constructed service line footage on customer's premise exceeds the appropriate free footage allowance by 10% or less, there will be no charge. When the service line is rerouted from the originally designated location for the convenience of the Company and constructed service line footage exceeds the appropriate free allowance or any previously agreed excess, no charge will be made for such rerouting excess. Free footage allowances for projects of multiple single family structures shall be the appropriate free allowance multiplied by the number of structures to be served. Free footage allowance for a split service shall be the sum of the appropriate free footage for each structure to be served.~~

(continued)

RULE 9
~~SERVICE LINE INSTALLATIONS~~
LINE EXTENSION ALLOWANCE POLICY

~~SERVICE INSTALLATIONS~~TERMS AND CONDITIONS (continued)

~~If the Company provides additional free footage of service line, beyond the initial 40 feet, based upon gas appliances identified above, Customer shall be required to sign a Customer Commitment Contract. If the customer fails to install any or all of the gas appliances which provided additional free footage and fails to commence gas usage within 60 days from the date that the service line is installed, the Company shall bill the customer for the cost per foot of such additional footage, including 11.7% to compensate for the cost resulting from customer provided construction funds. If requested by the Company, the customer shall provide the Company with a copy of the installation invoice to verify the installation of the gas appliances. In the absence of installation documentation, the customer shall allow reasonable access to customer's premises for the verification of the installation of those appliances, upon the Company's request. If, subsequent to paying for such costs, the customer installs the agreed upon appliances and commences gas usage within five years from the date the extended facilities were installed, the costs paid to the Company by the customer associated with each installed agreed upon appliance shall be refunded without interest.~~

1. The Company reserves the right to designate the location of service and main lines, meters and regulators, and select the amount of space which must be left unobstructed for the installation.
2.
3. The Company will commence construction as soon as is reasonably practical, but the Company is not liable for delays due weather conditions, the Company's ability to obtain all necessary easements, permits, and government approvals, or delay in receiving all necessary commitments from the customer.

4. The Company shall not be required to relocate an existing service line at no cost to customer where such relocation is to be made for the convenience of the customer.

5. The customer will indemnify and hold the Company harmless from claim, etc., for trespassing or injury to building and property crossed by the installation of the service line except upon negligence of Company personnel.

6. The Company may not provide a Line Extension Allowance if conditions relative to the extension indicate that such service will not be of such permanence as to warrant the Line Extension Allowance.

7. The customer is expected to pay all Line Extension Costs exceeding the applicable service and, or main line allowance

EXCESS FLOW VALVES

An e~~E~~xcess f~~F~~low v~~V~~alve is available as an added safety feature in the event that the service line is suddenly severed. ~~-~~At the customer's request, the Company will install an e~~E~~xcess f~~F~~low v~~V~~alve for the fees established in Schedule 200.

CUSTOMER COMMITMENT CONTRACT

If the Company provides a Line Extension Allowance, the Company may require a customer to sign a Customer Commitment Contract prior to the installation of a line extension. If the Company installs a line extension and the customer fails to commence gas usage within 12 (twelve) months for single-service customers or 5 (five) years for developments from the date of the Customer Commitment Contract, the Company shall bill the customer for the costs and expenses associated with the Line Extension Allowance provided plus compensation for federal income taxes. If, subsequent to paying for such costs, the customer commences gas usage within five years from the date of the Customer Commitment Contract, the costs of the Line Extension Allowance paid to the Company by the customer shall be refunded without interest.

(M) refers to text previously found on Sheet Nos. 9.1, 9.2 and 10.1.

(continued)

~~**EXCESS FLOW VALVES**~~

~~An Excess Flow Valve is available as an added safety feature in the event that the service line is suddenly severed. At the customer's request, the Company will install an Excess Flow Valve for the fees established in Schedule 200.~~

RULE 9
LINE EXTENSION ALLOWANCE POLICY

LINE EXTENSION PAYMENT REFUNDS

If (i) a Line Extension Allowance is provided to the Customer and (ii) the Line Extension Costs exceed the Line Extension Allowance, then a customer's payment for Line Extension Costs that exceeded the Line Extension Allowance may be subject to refund without interest on the following basis:

1. If additional customers, in excess of the number of customers on which the payment was predicated, connect directly to the Line Extension, and the Line Extension Allowance provided to such additional customers exceeded the Line Extension Costs for the infrastructure to provide service to such additional customers, an amount equal to the difference between the Line Extension Allowance and the Line Extension Costs of the additional customers will be provided to the initial customer. Such refund shall be granted within one (1) year of setting of a meter for such additional customer or customers.

2. Company and Customer execute a main refunding contract covering the terms of reimbursement.

3. Company may not provide Customer a main refunding contract if Company determines there is limited potential for additional customers beyond the initial customers on which the payment was predicated to connect directly to the main extension for which the payment was made.

4. Refund or refunds in total shall not exceed the total amount paid. If the total paid has not been fully refunded within five (5) years of the date the payment was received by the Company, any remaining unrefunded amount shall become the property of the Company.

5. When two (2) or more parties make a joint payment on the same extension, refund amounts which become payable will be allocated to such parties in proportion to the amounts paid by the party.

All facilities installed under this rule shall be the property of and under the control of the Company at all times and may be extended to serve other customers at the option of the Company.

(M) refers to text previously found on Sheet Nos. 10

RULE 10
MAIN INSTALLATIONS

MAIN EXTENSIONS
~~The Company will furnish an extension of its distribution main system free of charge to provide firm natural gas service to any applicant for such service located beyond the existing main system up to an estimated cost of construction to provide such service equal to four and one-half (4-1/2) times the estimated gross annual revenue less cost of gas to be derived therefrom.~~

~~The Company will commence construction as soon as is reasonably practical, but the Company is not liable for delays due weather conditions, the Company's ability to obtain all necessary easements, permits, and government approvals, or delay in receiving all necessary commitments from the customer.~~

~~The Company may require a customer to sign a Customer Commitment Contract prior to the installation of a main extension. If the Company provides a main extension and the customer fails to install any or all of the gas appliances which were included in the extension analysis and fails to commence gas usage within 6 (six) months from the date of the Customer Commitment Contract, the Company shall bill the customer for the costs and expenses associated with its extension of the distribution main, based upon the feasibility of the extension with the actually installed appliances, plus an additional 11.7% to compensate for federal income taxes. If requested by the Company, the customer shall provide the Company with a copy of the installation invoice to verify the installation of the gas appliances. In the absence of installation documentation, the customer shall allow reasonable access to customer's premise for the verification of installation of those appliances, upon the Company's request. If, subsequent to paying for such costs, the customer installs the agreed upon appliances and commences gas usage within five years from the date of the Customer Commitment Contract, the costs of the distribution facilities paid to the Company by the customer associated with each installed agreed upon appliance shall be refunded without interest.~~

~~The Company may deny any extension if conditions relative to the extension indicate that such service will not be of such permanence as to warrant the expenditure required.~~

~~The Company may require the applicant(s) pay all costs for the main installation that are in excess of the allowance plus 11.7% for federal income taxes. Customer contributions may be subject to refund without interest on the following basis:~~

1. ~~An amount equal to four and one-half (4-1/2) times the estimated annual gross margin (gross revenue less cost of gas) to be derived from each additional customer, in excess of the number of customers on which the advance was predicated, whose service line is connected directly to the main extension upon which the advance was made. Such refund shall be granted within thirty (30) days of setting of a meter for such additional customer or customers.~~

~~(continued)~~

RULE 10
MAIN INSTALLATIONS

MAIN EXTENSIONS (continued)

~~2. An additional amount determined at the end of the fifth year as follows:~~

~~(a) Actual therms billed for the five-year period to the customer or customers upon which the advance was predicated XXXX~~
~~(b) Less estimated annual therms used in calculating the advance times five (5) XXXX~~
~~(c) Difference XXXX~~

~~If (c) is a positive number, an additional refund shall be calculated by multiplying (c) by the gross margin per therm employed in determining the original free footage allowance.~~

~~1. Refund or refunds in total shall not exceed the total amount advanced. If the total advanced has not been fully refunded within five (5) years of the date the advance was received by the Company, any remaining unrefunded amount shall become the property of the Company.~~

~~3. When two (2) or more parties make a joint advance on the same extension, refund amounts which become payable will be allocated to such parties in proportion to the amounts advanced by the party.~~

~~All facilities installed under this rule shall be the property of and under the control of the Company at all times and may be extended to serve other customers at the option of the Company.~~

RULE 17
ORDER OF PRIORITY FOR GAS SERVICE

GENERAL

The Company will exercise reasonable diligence to supply and deliver continuous natural gas service to all customers receiving firm service, as defined in Rule 2.

Should the Company's supply of gas or capacity be insufficient at any time or any location, for reasons other than force majeure (as defined in Company's Rule 16) to meet the full requirements of all customers, the Company will curtail service to customers in the inverse order of order of priority listed hereinafter. Such curtailment, when required, will be imposed to protect continuity of service first, to firm service customers, and more generally, to customers having a higher service priority.

ORDER OF PRIORITY

1. Residential customers (Schedule 101)
2. Commercial customers (Schedule 104)
3. General Industrial customers (Schedule 105)
4. Large Volume customers (Schedule 111)
5. General Distribution System Firm transportation Service customers (Schedules 161 and 162) (N)
5. Special contracts customers (Schedule 201)
6. General D~~d~~istribution S~~s~~ystem Interruptible ~~t~~Transportation S~~s~~ervice customers (Schedules 163 and 164) (C) (C)
7. Interruptible natural gas service customers (Schedule 170)

ADMINISTRATION OF CURTAILMENT

When the Company requires a curtailment due to either gas supply or capacity failures, the curtailment shall be imposed first on customers in the lowest order of priority category at the rate of 100% of each customer's requirements (excepting minor requirements for essential services as approved by Company) on a customer-by-customer basis and will then proceed to customers in the next lowest order of priority category, and so on, until sufficient volumes have been curtailed to bring remaining requirements into balance with available system supply.

The Company shall have the right to inspect the customer's gas consuming facilities and to review operating schedules for such facilities to determine customer's requirements and proper position in the order of priority. If the customer refuses such inspection, the customer will be assigned the lowest priority consistent with otherwise verifiable information.

Customer classifications referenced in the order of priority are defined in Company's Rule 2.

(continued)

RULE 18
LIMITATION OF FIRM SERVICE

GENERAL

Firm service will be available to a customer if the Company determines, in its sole judgment, that adequate ~~supply and~~ capacity and, if applicable, adequate supply are available to accommodate a Customer's service requirements. If the Company determines firm service is not available to a customer, interruptible service may be an option.

RULE 19
CONSERVATION ALLIANCE PLAN MECHANISM

APPLICABLE
The Conservation Alliance Plan (CAP) mechanism described in this rule applies to customers served on Residential General Service Rate Schedule 101 and Commercial General Service Rate Schedule 104.

TERM
The Company shall initiate a review of this mechanism on September 20, 2029, with any proposed changes to be effective January 1, 2030.

PURPOSE
The purpose of this provision is to (a) define the procedures for the annual tracking revisions in rates due to changes in the weather-normalized use per customer associated with Rate Schedule 101 & Rate Schedule 104; and (b) to define the procedures for the deferral of differences experienced between the actual average use per customer and the amount estimated at the time the Margin Rates were established.

REVISIONS TO COMMODITY MARGIN RATES DUE TO CHANGES IN THE WEATHER-NORMALIZED USE/CUSTOMER

1. The Company shall use the baseline weather normalized average commodity margin per customer for Rate Schedule 101 and Rate Schedule 104 as reflected in its General Rate Case, docketed as UG ~~347~~525. ~~-~~That application was based upon the weather-normalized, twelve months ending December 31, 2025~~17~~. (C) (C)

2. For each subsequent year for the term of this provision, the Company shall file annually (CAP Filing) with the Commission to update the Commodity Margin Rate for Rate Schedule 101 and Rate Schedule 104 based upon the weather normalized usage for the twelve months ending June 30th divided into the margin requirement of each rate schedule.

3. Weather-normalized usage is calculated using the approach to weather normalization adopted in the Company's Spring Earnings Review filings, PGA Applications and other weather normalized report submittals.

4. The Total Commodity Margin Requirement of Rate Schedule 101 and Rate Schedule 104 shall be calculated by multiplying the baseline average commodity margin per customer per Rate Schedule, excluding any margin collected through the monthly Basic Service Charge, by the current twelve months ended June 30 average customer count based upon the average of the monthly bills issued.

5. The Margin Commodity Rate is calculated by dividing the Total Commodity Margin Requirement by the Total Weather Normalized Usage.

(Continued)

RULE 22
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS

PURPOSE
This rule establishes the terms and conditions for general transportation service provided on Schedules 161, 162, 163, and 164.

APPLICABILTY
To receive transportation service on Schedule 161, 162, 163, or 164, the customer must have an executed service agreement with the Company. The customer must also have secured the purchase and delivery of gas supplies, which may include purchases from a third-party agent authorized by the customer served on this schedule. Such agent, otherwise known as a marketer or supplier and hereafter referred to as supplier, nominates and transports natural gas to the Company's system on a customer's behalf in the manner established herein.

GAS SUPPLY
The customer served under Schedule 161, 162, 163, or 164 must secure the purchase and delivery of gas supplies from a supplier

WAIVER OF CORE BUNDLED NATURAL GAS SERVICE
Customers electing to secure the purchase and delivery of their own gas supplies under Schedule 161, 162, 163, or 164 in lieu of core bundled natural gas service waive protection from natural gas supply-failure curtailment of all of their requirements. The Company has no obligation to purchase or reserve gas supply or interstate pipeline capacity for customers electing to provide their own gas supplies and/or their own interstate pipeline capacity. Customers electing to provide their own natural gas supplies in lieu of firm natural gas system supply waive any right to automatically purchase firm natural gas supplies at some future date. Transportation service is subject to curtailment per Rule 17 or entitlement as defined in this rule.

SERVICE AGREEMENT
Service under Schedule 161, 162, 163, or 164 requires an executed service agreement between the Company and the customer. The service agreement shall define the annual minimum quantity of gas to be delivered and the contract demand for Schedules 161 and 162. The service agreement term shall be for a period not less than the period covered under the customer's natural gas purchase contract with the customer's supplier. However, in no event shall the service agreement be for less than one year and the termination date of the service agreement in any year shall be September 30th. A customer may not switch service types between interruptible transportation service and firm transportation service during the primary term of a service agreement. Switching service types requires a minimum of 60 days' notice prior to the expiration of the service agreement and is subject to availability of sufficient capacity.

SUPPLIER AND RELATED RESPONSIBILITIES
The customer must provide in writing to the Company the name and telephone number of its supplier who will have authority to nominate natural gas supplies on Company's distribution system for delivery on customer's behalf.

(continued)

RULE 22
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS

SUPPLIER AND RELATED RESPONSIBILITIES (continued)
The supplier is the customer's designated representative who satisfies or undertakes the following transportation duties and obligations:

1. Submitting and/or receiving notices on behalf of a customer;
2. Making nominations on behalf of a customer. A nomination is a request to have a physical quantity of customer-owned gas delivered to a specific Company receipt point(s) for a specific gas day. Nominations are not considered final until confirmed by the Pipeline;
3. Arranging for trades of imbalances on behalf of a customer as permitted under the terms and conditions herein established. An imbalance is the difference between a confirmed nominations and the volume of gas actually used by or delivered to a customer served under this schedule for a defined period of time;
    a. A positive imbalance exists when the volume of transportation gas confirmed for a Customer's account is greater than the volume of gas used.
    b. A negative imbalance exists when the volume of Transportation gas confirmed for Customer's account is less than the volume of gas used; and,
4. Performing operational and transportation-related administrative tasks on behalf of a customer as the Company permits.

Unless the Company and customer otherwise agree, a customer shall select one supplier for each account at any given time.

Under no circumstances will the appointment of a supplier relieve a customer of the responsibility to make full and timely payments to the Company for all distribution service.

Each supplier must meet any applicable registration and licensing requirements established by law or regulation. The Company shall have the right to establish reasonable financial and non- discriminatory credit standards for qualifying suppliers. Accordingly, in order to serve customers on the Company's system, the supplier shall provide the Company, on a confidential basis, with audited balance sheet and other financial statements, such as annual reports to shareholders and 10-K reports, for the previous three years, as well as two trade and two banking references. To the extent that such annual reports and 10-K reports are not publicly available, the supplier shall provide the Company with a comparable list of all corporate affiliates, parent companies and subsidiaries. The supplier shall also provide its most recent reports from credit reporting and bond rating agencies. The supplier shall be subject to a credit investigation by the Company. The Company will review the supplier's financial position periodically.

If the supplier fails to comply with or perform any of the obligations on its part established in this schedule including but not limited to failure to deliver gas, pay bills in a timely manner, execute an upstream transportation capacity assignment, or, in general, act in good faith on behalf of the customer, the Company maintains the right to terminate the supplier's eligibility to act as a supplier on the Company's system.

(continued)

RULE 22
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS

NOMINATIONS
A Transportation customer served on Schedule 161, 162, 163, or 164 is required to report estimated gas supply requirements for the upcoming month at least by the 15th day of the current month, in order to provide the Company with information for gas supply acquisition purposes. Such estimate shall include any scheduled down time or increased production time.

A Transportation customer is required to report estimated gas requirements daily to the Company's gas scheduling department at least thirty-two hours prior to the beginning of each gas day, as defined in Rule 2, unless other arrangements are agreed upon in writing with the Company. Such estimated requirement shall be considered as customer's daily nomination. Such daily nomination will separately identify gas quantities, if any, pursuant to obligations established below, as well as the customer's current estimated gas requirement at customer's facility (excluding gas provided to the transporting pipeline for compression and line losses). In the event Company's supplier determines that the customer's actual consumption is out of balance with the customer's nomination, the supplier shall inform the customer of the adjustments necessary to get back in balance. Changes to a customer's daily nomination are allowed during the gas day provided the change is communicated to the Company one hour prior to the upstream pipeline's re-nomination deadline

The Company shall have the right to adjust a customer's daily nominations when, in the Company's sole judgment, such action is necessary to bring into balance its system nominations as a receiving party on a pipeline system, or otherwise to maintain operational control or maintain the integrity of the Company's distribution system. The Company accepts customer purchased gas at the receipt point subject to customer's warranty that at the time of the Company's receipt, customer has good title to all gas received, free and clear from all liens, encumbrances and claims. Customer shall indemnify and hold Company harmless should a third party make any claims regarding customer's title to gas transported under this schedule. The supplier shall warrant that it has or will have entered into the necessary arrangements for the purchase of gas supplies which it desires the Company to transport to its customers, and that it has or will have entered into the necessary upstream transportation arrangements for the delivery of these gas supplies to the designated receipt point. The supplier shall warrant to the Company that it has good title to or lawful possession of all gas delivered to the Company at the designated receipt point on behalf of the supplier or the supplier's customers. The supplier shall indemnify the Company and hold it harmless from all suits, actions, debts, accounts, damage, costs, losses, taxes, and expenses arising from or out of any adverse legal claims of third parties to or against said gas supply.

The supplier shall be responsible for making all necessary arrangements and securing all required regulatory or governmental approvals, certificates or permits to enable gas to be delivered to the Company's system.

(continued)

RULE 22
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS

NOMINATIONS (continued)
The customer shall be deemed to be in control and possession of the customer purchased gas until the Company has accepted it at the receipt point. The Company shall be deemed to be in control or possession of the customer purchased gas until the equivalent therms are delivered to the customer at the delivery point.

Failure to report estimated gas transportation requirements or comply with the written arrangements may be considered as a zero nomination for such gas day and may result in the penalties as described below.

A Transportation customer is required to notify the Company's gas scheduling department in advance of operating changes that would cause actual gas day consumption to vary either up or down by 10% or more from the reported gas day estimate. Such notification may mitigate potential penalties but will not indemnify customer from the responsibility for penalties described in the section below entitled Imbalances.

IMBALANCES
Each customer served on this rate schedule shall be required to satisfy any monthly imbalance condition in the manner established below.

Upon notification by the Company that the customer has an imbalance greater than 5%, the customer will have 45 non-entitlement days to eliminate any such imbalance. The Company will bill the customer an imbalance penalty if the customer has not completely satisfied such imbalance condition. These non-entitlement penalties are $10.00 per MMBtu on the imbalance over -the allowed tolerance on a monthly basis.

Under any agency established hereunder, the Company shall rely upon information concerning the applicable customer's distribution service which is provided by the designated representative. All such information shall be deemed to have been provided by the customer. Similarly, any notice or other information provided by the Company to the supplier concerning the provision of distribution service to such customer shall be deemed to have been provided to the customer. The customer shall rely upon any information concerning distribution service that is provided to the supplier as if that information had been provided directly to the customer.

The Company shall determine the customer's daily gas supply entitlement based upon customer's gas requirements forecast and resulting nomination after Company has considered any curtailment of pipeline or distribution system capacity constraints and gas supply constraints. Such daily gas supply entitlements shall include the summation of all gas supply options and optional balancing service daily volumetric level contracted for by the customer. The Company shall notify the supplier and/or customer in the event that the gas supply entitlement is less than the customer's gas nomination(s).

(continued)

RULE 22
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS

NOMINATIONS (continued)
Penalties from upstream pipeline transporter and/or other costs incurred by Company as a result of a nomination imbalance or an unauthorized overrun will be passed on directly to those customer(s) or groups of customers whose take levels contribute to the imposition of the penalty. Such penalty shall be allocated among such customers, including Company's system supply customers, in proportion to the nomination imbalance or unauthorized overrun associated with each customer or group of customers.

AUTOMATIC ASSIGNMENT OF GAS SUPPLY DURING A CURTAILMENT
In the event of a curtailment, the Company may automatically take assignment of customer-owned gas supplies in order to protect the service to higher priority customers as defined in Rule 17, Order of Priority for Gas Service. If the Company takes assignment of the customer-owned gas, the Company will compensate the customer with a credit equal to the Gas Daily-midpoint price at the source of the supply for all volumes assigned plus a credit of $0.60 per therm on all but the first 5 percent of the customer's daily curtailment under the rate schedule on which the customer receives service (Schedule 161, 162, 163, or 164).

UNAUTHORIZED USE OF GAS DURING ENTITLEMENT PERIODS
The Company may declare an entitlement period on any day the Company, in its sole discretion, reasonably determines a critical operational condition warrants the need. During a curtailment or an entitlement period, the total physical quantity of gas taken by customers served under this rate schedule exceeds or is less than the total quantity of gas which the customer is entitled to take on such day, as defined below, then all gas taken in excess of such entitlement or not taken within said entitlement shall constitute unauthorized overrun or underrun volume. Each general system or customer-specific declared overrun entitlement period shall be specified as either an overrun or an underrun entitlement for customers such that only one penalty condition may exist at one time, whereas:

- **Underrun Entitlement** – A period of time in which delivered natural gas volumes to a transportation customer may not exceed the customer's confirmed nomination for that day.
- **Overrun Entitlement** – A period of time in which delivered natural gas volumes to a transportation customer must be equal to or more than that customer's confirmed nomination for that day.

(continued)

RULE 22
GENERAL TRANSPORATION SERVICE TERMS AND CONDITIONS

UNAUTHORIZED USE OF GAS DURING CUTRAILMENTS OR ENTITLEMENT PERIODS (continued)
Customers served under this schedule shall pay Company for all unauthorized overrun or underrun quantities that exceed the percentage specified by the Company in its declared entitlement. For a general system or customer-specific declared entitlement period, such percentage will be: (i) in the Company's sole discretion 5 percent, or, in the case of a declared overrun entitlement period announced on the day it is to be in effect, 3 percent for that day (Stage I), 8 percent (Stage II) or 13 percent (Stage III) of a customer's entitlement as set forth above.

A customer's usage of gas that exceeds the amount authorized by the Company during an entitlement period shall be considered an unauthorized overrun volume. The overrun charge that will be applied during any overrun entitlement period will equal the greater of $1.00 per therm or 150% of the highest midpoint price for the day at NW Wyoming Pool, NW south of Green River, Stanfield Oregon, NW Canadian Border (Sumas), Kern River Opal, or El Paso Bondad supply pricing points (as published in Gas Daily), converted from dollars per dekatherms to dollars per therm by dividing by ten. The overrun charge will be in addition to the incremental costs of any supplemental gas supplies the Company may have had to purchase to cover such unauthorized use, in addition to the regular charges incurred in the Rate section of this Schedule and any other charges incurred per the terms and conditions established in this Schedule. The payment of an overrun penalty shall not under any circumstances be considered as giving customer the right to take unauthorized overrun gas or to exclude any other remedies which may be available to the Company to prevent such overrun. The charge that will apply during any underrun entitlement period will be $1.00 per therm for any underrun imbalances.

NOTICE OF ENTITLEMENT
The Company shall give as much advance notice as possible for each entitlement. The Company's entitlement periods as well as restoration notices shall be given by telephonic communications, electronic communication, or personal contact by Company personnel to the customer's responsible representative. A notice of entitlement period will include the parameters for gas consumption during said entitlement period.

SCHEDULE 37
ENERGY DISCOUNT PROGRAM COST RECOVERY

TERMS AND CONDITIONS:
Recovery is effective on and after October 1, 2022.

The purpose of this schedule is to recover costs associated with the Company's Energy Discount Program (EDP) billing assistance to qualifying residential Cascade customers.

Service under this adjustment schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this adjustment schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

APPLICABILITY:
This adjustment applies to the following rate schedules: 101, 104, 105, 111, 161, 162, 163, 164, 170, and 800. (C)

ADJUSTMENT TO RATE:
The Company will file to change this adjustment schedule annually so that forecast collections under this schedule will be targeted to meet actual program expenses.

RATES:
The following charges will apply for each rate schedule as listed in the table below:

Rate Schedule	Rate		
101	$0.81	per month	
104	$0.00889	per therm	
105	$0.00727	per therm	
111	$0.00479	per therm	
161	$0.00207	per therm	(N)
162	$0.00207	per therm	(N)
163	$0.00207	per therm	
164	$0.00207	per therm	(N)
170	$0.00364	per therm	
800	$0.00207	per therm	

CASCADE NATURAL GAS CORPORATION | **~~Fourth~~ Fifth Revision of Sheet No. 99.1**
Canceling
P.U.C. OR. No. 10 | **~~Third~~ Fourth Revision of Sheet No. 99.1**

SCHEDULE 99
RATE SUMMARY SHEET

Purpose

This schedule itemizes and sums the charges applicable for gas service on each rate schedule. Charges below do not include the Public Purpose Charge (Schedule 31) or municipal taxes (Schedule 100).

Rate Summary – Core Customers

Rate Schedule 101, General Residential Service Rate

Basic Service Charge		$12.00~~6.00~~	per month
Schedule 37	Energy Discount Program	$0.81	per month
Delivery Charge		$0.47916~~39467~~	per therm
Schedule 177	Cost of Gas (WACOG)	$0.51315	per therm
Schedule 191	Temporary Gas Cost Rate	($0.00462)	per therm
Schedule 192	Intervenor Funding	$0.00168	per therm
Schedule 193	Conservation Alliance Plan	$0.02604	per therm
Schedule 196	Oregon Earnings Sharing	$0.00000	per therm
Schedule 197	Environmental Remediation Cost	$0.00151~~0.00000~~	per therm
Schedule 220	Climate Protection Program	$0.03210	per therm
	Total	$1.04902~~0.96302~~	per therm

Rate Schedule 104, General Commercial Service

Basic Service Charge		$24.00~~12.00~~	per month
Delivery Charge		$0.35485~~0.27282~~	per therm
Schedule 37	Energy Discount Program	$0.00889	per therm
Schedule 177	Cost of Gas (WACOG)	$0.51315	per therm
Schedule 191	Temporary Gas Cost Rate	($0.00462)	per therm
Schedule 192	Intervenor Funding	$0.00000	per therm
Schedule 193	Conservation Alliance Plan	($0.00351)	per therm
Schedule 196	Oregon Earnings Sharing	$0.00000	per therm
Schedule 197	Environmental Remediation Cost	$0.00151~~0.00000~~	per therm
Schedule 220	Climate Protection Program	$0.03210	per therm
	Total	$0.90237~~0.81883~~	per therm

(continued)

CASCADE NATURAL GAS CORPORATION **~~Fourth~~ Fifth Revision of Sheet No. 99.2**
Canceling
P.U.C. OR. No. 10 **~~Third~~ Fourth Revision of Sheet No. 99.2**

SCHEDULE 99
RATE SUMMARY SHEET

Rate Summary – Core Customers (continued)

Rate Schedule 105, General Industrial Service Rate

Basic Service Charge		$70.00~~35.00~~	per month
Delivery Charge		$0.31602~~0.24226~~	per therm
Schedule 37	Energy Discount Program	$0.00727	per therm
Schedule 177	Cost of Gas (WACOG)	$0.51315	per therm
Schedule 191	Temporary Gas Cost Rate	($0.00462)	per therm
Schedule 192	Intervenor Funding	$0.00036	per therm
Schedule 196	Oregon Earnings Sharing	$0.00000	per therm
Schedule 197	Environmental Remediation Cost	$0.00151~~0.00000~~	per therm
Schedule 220	Climate Protection Program	$0.03210	per therm
	Total	$0.86579~~0.79052~~	per therm

Rate Schedule 111, General Commercial Service

Basic Service Charge		$288.00~~144.00~~	per month
Delivery Charge		$0.23492~~0.16113~~	per therm
Schedule 37	Energy Discount Program	$0.00479	per therm
Schedule 177	Cost of Gas (WACOG)	$0.51315	per therm
Schedule 191	Temporary Gas Cost Rate	($0.00462)	per therm
Schedule 192	Intervenor Funding	$0.00036	per therm
Schedule 196	Oregon Earnings Sharing	$0.00000	per therm
Schedule 197	Environmental Remediation Cost	$0.00151~~0.00000~~	per therm
Schedule 220	Climate Protection Program	$0.03210	per therm
	Total	$0.78221~~0.70691~~	per therm

(continued)

SCHEDULE 99
RATE SUMMARY SHEET

Rate Summary – Core Customers (continued)

Schedule 170, Interruptible Services

Basic Service Charge		$600.00~~300.00~~	per month
Delivery Charge		$0.18957~~0.12376~~	per therm
Schedule 37	Energy Discount Program	$0.00364	per therm
Schedule 177	Cost of Gas (WACOG)	$0.51315	per therm
Schedule 191	Gas Cost Rate Adjustment	($0.00462)	per therm
Schedule 192	Intervenor Funding Adjustment	$0.00036	per therm
Schedule 196	Oregon Earnings Sharing	$0.00000	per therm
Schedule 197	Environmental Remediation Costs	$0.00151~~0.00000~~	per therm
Schedule 220	Climate Protection Program	$0.03210	per therm
	Total	$0.73571~~0.66839~~	per therm

Rate Summary – Non-Core Customers

Below are the charges for non-core customers served on Schedule 163 and Schedule 800. A gross revenue fee of 3.01% is applied to the total charges for gas service for all non-core customers.

Schedule 161, General Distribution System Firm Transportation Service – Non-EITE**

Basic Service Charge (per month)							**$900**
Contract Demand (CD) Charge						**$0.12000 per therm of CD per day**	
		Base Rate	**Sch. 37 Energy Discount Program**	**Sch. 192 Intervenor Funding**	**Sch. 197 Enviro. Remediation**	**Sch. 220 Climate Protection Program**	**Total Per Therm Rate**
First	10,000	$0.15993	0.00207	0.00036	0.00151	0.03210	**$0.19597**
Next	10,000	$0.14450	0.00207	0.00036	0.00151	0.03210	**$0.18054**
Next	30,000	$0.13590	0.00207	0.00036	0.00151	0.03210	**$0.17194**
Next	50,000	$0.08433	0.00207	0.00036	0.00151	0.03210	**$0.12037**
Next	400,000	$0.04389	0.00207	0.00036	0.00151	0.03210	**$0.07993**
Next	500,000	$0.02456	0.00207	0.00036	0.00151	0.03210	**$0.06060**
Over	1,000,000	$0.00457	0.00207	0.00036	0.00151	0.03210	**$0.04061**

** Schedule 196 charges is $0.00000.

SCHEDULE 99
RATE SUMMARY SHEET

Rate Summary – Non-Core Customers (continued)

Schedule 162, General Distribution System Firm Transportation Service – EITE**

Basic Service Charge (per month)						**$900**
Contract Demand (CD) Charge						**$0.12000 per therm of CD per day**
		Base Rate	**Sch. 37 Energy Discount Program**	**Sch. 192 Intervenor Funding**	**Sch. 197 Enviro. Remediation**	**Total Per Therm Rate**
First	10,000	$0.15769	0.00207	0.00036	0.00151	**$0.16163**
Next	10,000	$0.14225	0.00207	0.00036	0.00151	**$0.14619**
Next	30,000	$0.13366	0.00207	0.00036	0.00151	**$0.13760**
Next	50,000	$0.08209	0.00207	0.00036	0.00151	**$0.08603**
Next	400,000	$0.04164	0.00207	0.00036	0.00151	**$0.04558**
Next	500,000	$0.02231	0.00207	0.00036	0.00151	**$0.02625**
Over	1,000,000	$0.00232	0.00207	0.00036	0.00151	**$0.00626**

** Schedule 196 charges is $0.00000.

SCHEDULE 99
RATE SUMMARY SHEET

Rate Summary – Non-Core Customers (continued)

Schedule 163, General Distribution System Interruptible Transportation Service – Non-EITE**

Basic Service Charge (per month)							$900~~625~~
		Base Rate	**Sch. 37 Energy Discount Program**	**Sch. 192 Intervenor Funding**	**Sch. 197 Enviro. Remediation**	**Sch. 220 Climate Protection Program**	**Total Per Therm Rate**
First	10,000	$0.15993~~$0.12833~~	0.00207~~0.00207~~	0.00036~~0.00036~~	0.00151~~0.00000~~	0.03210~~0.03210~~	**$0.19597~~$0.16286~~**
Next	10,000	$0.14450~~$0.11577~~	0.00207~~0.00207~~	0.00036~~0.00036~~	0.00151~~0.00000~~	0.03210~~0.03210~~	**$0.18054~~$0.15030~~**
Next	30,000	$0.13590~~$0.10877~~	0.00207~~0.00207~~	0.00036~~0.00036~~	0.00151~~0.00000~~	0.03210~~0.03210~~	**$0.17194~~$0.14330~~**
Next	50,000	$0.08433~~$0.06680~~	0.00207~~0.00207~~	0.00036~~0.00036~~	0.00151~~0.00000~~	0.03210~~0.03210~~	**$0.12037~~$0.10133~~**
Next	400,000	$0.04389~~$0.03389~~	0.00207~~0.00207~~	0.00036~~0.00036~~	0.00151~~0.00000~~	0.03210~~0.03210~~	**$0.07993~~$0.06842~~**
Next	500,000	$0.02456~~$0.01816~~	0.00207~~0.00207~~	0.00036~~0.00036~~	0.00151~~0.00000~~	0.03210~~0.03210~~	**$0.06060~~$0.05269~~**
Over	1,000,000	$0.00457~~$0.00189~~	0.00207~~0.00207~~	0.00036~~0.00036~~	0.00151~~0.00000~~	0.03210~~0.03210~~	**$0.04061~~$0.03642~~**

** Schedule 196 charges is $0.00000.

Schedule 164, General Distribution System Interruptible Transportation Service – EITE**

Basic Service Charge (per month)						$900
		Base Rate	**Sch. 37 Energy Discount Program**	**Sch. 192 Intervenor Funding**	**Sch. 197 Enviro. Remediation**	**Total Per Therm Rate**
First	10,000	$0.15769	0.00207	0.00036	0.00151	**$0.16163**
Next	10,000	$0.14225	0.00207	0.00036	0.00151	**$0.14619**
Next	30,000	$0.13366	0.00207	0.00036	0.00151	**$0.13760**
Next	50,000	$0.08209	0.00207	0.00036	0.00151	**$0.08603**
Next	400,000	$0.04164	0.00207	0.00036	0.00151	**$0.04558**
Next	500,000	$0.02231	0.00207	0.00036	0.00151	**$0.02625**
Over	1,000,000	$0.00232	0.00207	0.00036	0.00151	**$0.00626**

** Schedule 196 charges is $0.00000.

(continued)

Rate Summary – Non-Core Customers (continued)

Schedule 800, Biomethane Receipt Services

Basic Service Charge (per month)								**$2500.00**
		Base Rate	**Sch. 37 Energy Discount Program**	**Sch. 192 Intervenor Funding**	**Sch. 197 Enviro. Remediation**	**Sch. 220 Climate Protection Program**	**Odorant**	**Total Per Therm Rate**
First	10,000	$0.15993~~0.12833~~	0.00207	0.00036	0.00151~~0.00000~~	0.03210	0.00021	**$0.19618~~0.16307~~**
Next	10,000	$0.14450~~0.11577~~	0.00207	0.00036	0.00151~~0.00000~~	0.03210	0.00021	**$0.18075~~0.15051~~**
Next	30,000	$0.13590~~0.10877~~	0.00207	0.00036	0.00151~~0.00000~~	0.03210	0.00021	**$0.17215~~0.14351~~**
Next	50,000	$0.08433~~0.06680~~	0.00207	0.00036	0.00151~~0.00000~~	0.03210	0.00021	**$0.12058~~0.10154~~**
Next	400,000	$0.04389~~0.03389~~	0.00207	0.00036	0.00151~~0.00000~~	0.03210	0.00021	**$0.08014~~0.06863~~**
Next	500,000	$0.02456~~0.01816~~	0.00207	0.00036	0.00151~~0.00000~~	0.03210	0.00021	**$0.06081~~0.05290~~**
Next	1,000,000	$0.00457~~0.00189~~	0.00207	0.00036	0.00151~~0.00000~~	0.03210	0.00021	**$0.04082~~0.03663~~**

CASCADE NATURAL GAS CORPORATION ~~Twelfth~~ Thirteenth **Revision of Sheet No. 101.1**
Canceling
P.U.C. OR. No. 10 Twelfth~~Eleventh~~ **Revision of Sheet No. 101.1**

SCHEDULE 101
GENERAL RESIDENTIAL SERVICE RATE

APPLICABILITY
This schedule is available to residential customers.

RATE
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

MINIMUM CHARGE
Basic Service Charge $12.00~~6.00~~ per month (I)

DELIVERY CHARGE
Delivery Charge $0.47916~~0.39467~~ per therm (I)

TERMS OF PAYMENT
Each monthly bill shall be due and payable within twenty-two days from the date of rendition.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 104
GENERAL COMMERCIAL SERVICE RATE

APPLICABILITY
This schedule is available to commercial customers.

RATE
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

MINIMUM CHARGE
Basic Service Charge $24.00~~12.00~~ per month (I)

DELIVERY CHARGE
Delivery Charge $0.35485~~0.27282~~ per therm (I)

TERMS OF PAYMENT
Each monthly bill shall be due and payable within twenty-two days from the date of rendition.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 105
GENERAL INDUSTRIAL SERVICE RATE

APPLICABILITY
This schedule is available to industrial customers.

RATE
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

MINIMUM CHARGE
Basic Service Charge $70.00~~35.00~~ per month (I)

DELIVERY CHARGE
Delivery Charge $0.31602~~0.24226~~ per therm (I)

TERMS OF PAYMENT
Each monthly bill shall be due and payable within twenty-two days from the date of rendition.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 111
LARGE VOLUME GENERAL SERVICE RATE

APPLICABILITY
Service under this schedule shall be for natural gas supplied for all purposes to customers having an annual fuel requirement of not less than 50,000 therms and where the customer's major fuel requirement is for process use.

RATE
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

MINIMUM CHARGE
Basic Service Charge $288.00~~144.00~~ per month (I)

DELIVERY CHARGE
Delivery Charge $0.23492~~0.16113~~ per therm (I)

SERVICE AGREEMENT
Customers receiving service under this rate schedule shall execute a service agreement for a minimum period of twelve consecutive months' use. The service agreement term shall be for a period not less than one year and the termination date of the service agreement in any year shall be September 30th.

ANNUAL DEFICIENCY BILL
In the event the customer purchases less than the Annual Minimum Quantity of 50,000 therms as stated in the service agreement, the customer shall be charged an Annual Deficiency Bill. The Annual Deficiency Bill shall be calculated as the difference between the Annual Minimum Quantity and the actual purchase of transport therms times the difference between the per therm rates effective in this schedule and any modifying schedules less WACOG.

TERMS OF PAYMENT
Each monthly bill shall be due and payable within twenty-two days from the date of rendition.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

(M) Refers to content that was previously on Sheet 111.2

SCHEDULE 161
GENERAL DISTRIBUTION SYSTEM FIRM TRANSPORTATION SERVICE
NON-EITE

PURPOSE

This schedule provides non-Emissions-Intensive and Trade Exposed (Non-EITE) customers with firm transportation service of customer-supplied natural gas on the Company's distribution system. The Non-EITE designation is as put forth and for the applicability as established in Oregon Administrative Rules Chapter 340, Division 273, Oregon Climate Protection Plan.

RATE

A. Basic Service Charge $900~~625~~.00 per month

B. Distribution Charge

	Therms	Base Rate
First	10,000	$0.15993~~789~~
Next	10,000	$0.14450~~243~~
Next	30,000	$0.13590~~383~~
Next	50,000	$0.08433~~219~~
Next	400,000	$0.04389~~169~~
Next	500,000	$0.02456~~234~~
Over	1,000,000	$0.00457~~233~~

C. Contract Demand (CD) Charge $0.12000 per therm of CD per day

The CD Charge is the number of therms per day of distribution capacity the customer reserves on the Company's distribution system for delivery of the customer supplied natural gas. The Company will determine each customer's CD which will be stated in the service agreement required per Rule 22. Each monthly bill will include a charge that will be no less than the CD times the CD charge. A customer may be forced to curtail more gas than its CD rate if a curtailment per Rule 17 or entitlement as defined in Rule 22 is necessary, or Force Majeure circumstances per Rule 16 are experienced.

D. Adjustment Charges

See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for service under this rate schedule.

E. Commodity Gas Supply Charge

The Company will pass through to the customer served on this schedule all costs, if any, incurred for securing the necessary supply at the city gate excluding pipeline transportation charges.

F. Gross Revenue Fee

The total of all charges invoiced by Company shall be subject to a Gross Revenue Fee as stated in Schedule 99 to cover state utility tax and other governmental levies imposed upon the Company, as those fees and levies may be in effect from time to time.

(continued)

SCHEDULE 161
GENERAL DISTRIBUTION SYSTEM FIRM
TRANSPORTATION SERVICE
NON-EITE

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

TERMS AND CONDITIONS
1. Service on this schedule is subject to availability of sufficient capacity.
2. Service under this rate schedule is subject to the terms and conditions established under Rule 22, General Transportation Service Terms and Conditions.
3. Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 162
GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE
TRANSPORTATION SERVICE
EITE

PURPOSE
This schedule provides Emissions-Intensive and Trade Exposed (EITE) customers with firm transportation service of customer-supplied natural gas on the Company's distribution system. The EITE designation is as put forth and for the applicability as established in Oregon Administrative Rules Chapter 340, Division 273, Oregon Climate Protection Plan.

RATE
A. Basic Service Charge $900~~625~~.00 per month
~~A.~~B. Distribution Charge

	Therms	Base Rate
First	10,000	$0.157695~~928~~
Next	10,000	$0.144225~~368~~
Next	30,000	$0.13366~~500~~
Next	50,000	$0.08209~~291~~
Next	400,000	$0.04164~~206~~
Next	500,000	$0.0223~~154~~
Over	1,000,000	$0.0023~~235~~

C. Contract Demand (CD) Charge $0.12000 per therm of CD per day
The CD Charge is the number of therms per day of distribution capacity the customer reserves on the Company's distribution system for delivery of the customer supplied natural gas. The Company will determine each customer's CD which will be stated in the service agreement required per Rule 22. Each monthly bill will include a charge that will be no less than the CD times the CD charge. A customer may be forced to curtail more gas than its CD rate if a curtailment per Rule 17 or entitlement as defined in Rule 22 is necessary, or Force Majeure circumstances per Rule 16 are experienced.
-

D. Adjustment Charges
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for service under this rate schedule.

E. Commodity Gas Supply Charge
The Company will pass through to the customer served on this schedule all costs, if any, incurred for securing the necessary supply at the city gate excluding pipeline transportation charges.

F. Gross Revenue Fee
The total of all charges invoiced by Company shall be subject to a Gross Revenue Fee as stated in Schedule 99 to cover state utility tax and other governmental levies imposed upon the Company, as those fees and levies may be in effect from time to time.

(continued)

SCHEDULE 162
GENERAL DISTRIBUTION SYSTEM FIRM
TRANSPORTATION SERVICE
EITE

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions

TERMS AND CONDITIONS
1. Service on this schedule is subject to availability of sufficient capacity.
2. Service under this rate schedule is subject to the terms and conditions established under Rule 22, General Transportation Service Terms and Conditions.
3. Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

CASCADE NATURAL GAS CORPORATION ~~Thirteenth~~ Fourteenth Revision of Sheet No. 163.1

Canceling

P.U.C. OR. No. 10 ~~Twelfth~~ Thirteenth Revision of Sheet No. 163.1

SCHEDULE 163
GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE TRANSPORTATION SERVICE
NON-EITE

PURPOSE

This schedule provides non-Emissions-Intensive and Trade Exposed (Non-EITE) customers with interruptible transportation service of customer-supplied natural gas on the Company's distribution system. The Non-EITE designation is as put forth and for the applicability as established in Oregon Administrative Rules Chapter 340, Division 273, Oregon Climate Protection Plan.

~~This schedule provides interruptible transportation service on the Company's distribution system of customer- supplied natural gas. Service under this schedule is subject to entitlement and curtailment.~~

~~**APPLICABILTY**~~

~~To be served on this schedule, the customer must have a service agreement with the Company. The customer must also have secured the purchase and delivery of gas supplies, which may include purchases from a third-party agent authorized by the customer served on this schedule. Such agent, otherwise known as a marketer or supplier and hereafter referred to as supplier, nominates and transports natural gas to the Company's system on a Customer's behalf in the manner established herein.~~

RATE

A. Basic Service Charge $~~625~~900.00 per month (I)

B. Distribution Charge

	Therms	Base Rate
First	10,000	$0.~~12833~~159935789
Next	10,000	$0.1445024311577
Next	30,000	$0.1359038310877
Next	50,000	$0.0843321906680
Next	400,000	$0.0438916903389
Next	500,000	$0.0245623401816
Over	1,000,000	$0.0045723300189

(I)

(I)

C. Adjustment Charges
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

D. Commodity Gas Supply Charge
The Company will pass through to the customer served on this schedule all costs, if any, incurred for securing the necessary supply at the city gate excluding pipeline transportation charges.

E. Gross Revenue Fee
The total of all charges invoiced by Company shall be subject to a Gross Revenue Fee as stated in Schedule 99 to cover state utility tax and other governmental levies imposed upon the Company, as those fees and levies may be in effect from time to time.

TAX ADDITIONS

The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions

TERMS AND CONDITIONS

1. Service under this rate schedule is subject to the terms and conditions established under Rule 22, General Transportation Service Terms and Conditions.
2. Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

~~(continued)~~

~~SCHEDULE 163~~
~~GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE TRANSPORTATION SERVICE~~

~~WAIVER OF FIRM GAS SUPPLY~~
~~Customers electing to provide their own gas supplies under this schedule in lieu of firm service waive protection from supply-failure curtailment of all of their requirements. The Company has no obligation to purchase or reserve gas supply or interstate pipeline capacity for customers electing to provide their own gas supplies and/or their own interstate pipeline capacity.~~

~~Customers electing to provide their own gas supplies under this schedule in lieu of firm system supply waive any right to automatically purchase firm supplies at some future date~~

~~Service under this Schedule is subject to curtailment per Rule 17 or entitlement as defined in this schedule.~~

~~SERVICE AGREEMENT~~
~~Service under this schedule requires an executed service agreement between the Company and the customer. The service agreement shall define the annual minimum quantity of gas to be delivered. The service agreement term shall be for a period not less than the period covered under the customer's gas purchase contract with the customer's supplier. However, in no event shall the service agreement be for less than one year and the termination date of the service agreement in any year shall be September 30th.~~

~~(continued)~~

~~SCHEDULE 163~~
~~GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE TRANSPORTATION SERVICE~~

~~GAS SUPPLY~~

~~The customer served under this rate schedule must secure the purchase and delivery of gas supplies from a supplier.~~

~~SUPPLIER AND RELATED RESPONSIBILITIES~~

~~The customer must provide in writing to the Company the name and telephone number of its supplier who will have authority to nominate natural gas supplies on Company's distribution system for delivery on customer's behalf.~~

~~The supplier is the customer's designated representative who satisfies or undertakes the following transportation duties and obligations:~~

1. ~~Submitting and/or receiving notices on behalf of a customer;~~
2. ~~Making nominations on behalf of a customer. A nomination is a request to have a physical quantity of customer-owned gas delivered to a specific Company receipt point(s) for a specific gas day. Nominations are not considered final until confirmed by the Pipeline;~~
3. ~~Arranging for trades of imbalances on behalf of a customer as permitted under the terms and conditions herein established. An imbalance is the difference between a confirmed nominations and the volume of gas actually used by or delivered to a customer served under this schedule for a defined period of time;~~
   a. ~~A positive imbalance exists when the volume of transportation gas confirmed for a Customer's account is greater than the volume of gas used.~~
   b. ~~A negative imbalance exists when the volume of Transportation gas confirmed for Customer's account is less than the volume of gas used; and,~~
4. ~~Performing operational and transportation-related administrative tasks on behalf of a customer as the Company permits.~~

~~Unless the Company and customer otherwise agree, a customer shall select one supplier for each account at any given time.~~

~~Under no circumstances will the appointment of a supplier relieve a customer of the responsibility to make full and timely payments to the Company for all distribution service.~~

~~(continued)~~

~~SCHEDULE 163~~
~~GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE TRANSPORTATION SERVICE~~

~~SUPPLIER AND RELATED RESPONSIBILITIES (continued)~~
~~Under no circumstances will the appointment of a supplier relieve a customer of the responsibility to make full and timely payments to the Company for all distribution service.~~

~~Each supplier must meet any applicable registration and licensing requirements established by law or regulation. The Company shall have the right to establish reasonable financial and non- discriminatory credit standards for qualifying suppliers. Accordingly, in order to serve customers on the Company's system, the supplier shall provide the Company, on a confidential basis, with audited balance sheet and other financial statements, such as annual reports to shareholders and 10-K reports, for the previous three years, as well as two trade and two banking references. To the extent that such annual reports and 10-K reports are not publicly available, the supplier shall provide the Company with a comparable list of all corporate affiliates, parent companies and subsidiaries. The supplier shall also provide its most recent reports from credit reporting and bond rating agencies. The supplier shall be subject to a credit investigation by the Company. The Company will review the supplier's financial position periodically.~~

~~If the supplier fails to comply with or perform any of the obligations on its part established in this schedule including but not limited to failure to deliver gas, pay bills in a timely manner, execute an upstream transportation capacity assignment, or, in general, act in good faith on behalf of the customer, the Company maintains the right to terminate the supplier's eligibility to act as a supplier on the Company's system.~~

~~NOMINATIONS~~
~~A customer served on this schedule is required to report estimated gas supply requirements for the upcoming month at least by the 15th day of the current month, in order to provide the Company with information for gas supply acquisition purposes. Such estimate shall include any scheduled down time or increased production time.~~

~~A customer served on this schedule is required to report estimated gas requirements daily to the Company's gas scheduling department at least thirty-two hours prior to the beginning of each gas day, as defined in Rule 2, unless other arrangements are agreed upon in writing with the Company. Such estimated requirement shall be considered as customer's daily nomination. Such daily nomination will separately identify gas quantities, if any, pursuant to obligations established below, as well as the customer's current estimated gas requirement at customer's facility (excluding gas provided to the transporting pipeline for compression and line loss "fuel"). In the event Company's supplier determines that the customer's actual consumption is out of balance with the customer's nomination, the supplier shall inform the customer of the adjustments necessary to get back in balance. Changes to a customer's daily nomination are allowed during the gas day provided the change is communicated to the Company one hour prior to the upstream pipeline's re-nomination deadline.~~

~~(continued)~~

CASCADE NATURAL GAS CORPORATION

~~**SCHEDULE 163**~~
~~**GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE TRANSPORTATION SERVICE**~~

~~**NOMINATIONS (continued)**~~
~~The Company shall have the right to adjust a customer's daily nominations when, in the Company's sole judgment, such action is necessary to bring into balance its system nominations as a receiving party on a pipeline system, or otherwise to maintain operational control or maintain the integrity of the Company's distribution system. The Company accepts customer purchased gas at the receipt point subject to customer's warranty that at the time of the Company's receipt, customer has good title to all gas received, free and clear from all liens, encumbrances and claims. Customer shall indemnify and hold Company harmless should a third party make any claims regarding customer's title to gas transported under this schedule. The supplier shall warrant that it has or will have entered into the necessary arrangements for the purchase of gas supplies which it desires the Company to transport to its customers, and that it has or will have entered into the necessary upstream transportation arrangements for the delivery of these gas supplies to the designated receipt point. The supplier shall warrant to the Company that it has good title to or lawful possession of all gas delivered to the Company at the designated receipt point on behalf of the supplier or the supplier's customers. The supplier shall indemnify the Company and hold it harmless from all suits, actions, debts, accounts, damage, costs, losses, taxes, and expenses arising from or out of any adverse legal claims of third parties to or against said gas supply.~~

~~The supplier shall be responsible for making all necessary arrangements and securing all required regulatory or governmental approvals, certificates or permits to enable gas to be delivered to the Company's system.~~

~~The Customer shall be deemed to be in control and possession of the customer purchased gas until the Company has accepted it at the receipt point. The Company shall be deemed to be in control or possession of the customer purchased gas until the equivalent therms are delivered to the customer at the delivery point.~~

~~Failure to report estimated gas transportation requirements or comply with the written arrangements may be considered as a zero nomination for such gas day and may result in the penalties as described below.~~

~~A customer served on this schedule is required to notify the Company's gas scheduling department in advance of operating changes that would cause actual gas day consumption to vary either up or down by 10% or more from the reported gas day estimate. Such notification may mitigate potential penalties but will not indemnify customer from the responsibility for penalties described in the section below entitled Imbalances.~~

~~(continued)~~

~~SCHEDULE 163~~
~~GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE TRANSPORTATION SERVICE~~

~~IMBALANCES~~
~~Each customer served on this rate schedule shall be required to satisfy any monthly imbalance condition in the manner established below.~~

~~Upon notification by the Company that the customer has an imbalance greater than 5%, the customer will have 45 non-entitlement days to eliminate any such imbalance. The Company will bill the customer an imbalance penalty if the customer has not completely satisfied such imbalance condition. These non-entitlement penalties are $10.00 per MMBtu on the imbalance over the allowed tolerance on a monthly basis.~~

~~Under any agency established hereunder, the Company shall rely upon information concerning the applicable customer's distribution service which is provided by the designated representative. All such information shall be deemed to have been provided by the customer. Similarly, any notice or other information provided by the Company to the supplier concerning the provision of distribution service to such customer shall be deemed to have been provided to the customer. The customer shall rely upon any information concerning distribution service that is provided to the supplier as if that information had been provided directly to the customer.~~

~~The Company shall determine the customer's daily gas supply entitlement based upon customer's gas requirements forecast and resulting nomination after Company has considered any curtailment of pipeline or distribution system capacity constraints and gas supply constraints. Such daily gas supply entitlements shall include the summation of all gas supply options and optional balancing service daily volumetric level contracted for by the customer. The Company shall notify the supplier and/or customer in the event that the gas supply entitlement is less than the customer's gas nomination(s).~~

~~Penalties from upstream pipeline transporter and/or other costs incurred by Company as a result of a nomination imbalance or an unauthorized overrun will be passed on directly to those customer(s) or groups of customers whose take levels contribute to the imposition of the penalty. Such penalty shall be allocated among such customers, including Company's system supply customers, in proportion to the nomination imbalance or unauthorized overrun associated with each customer or group of customers.~~

~~(continued)~~

~~**SCHEDULE 163**~~
~~**GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE TRANSPORTATION SERVICE**~~

~~**AUTOMATIC ASSIGNMENT OF GAS SUPPLY DURING A CURTAILMENT**~~
~~In the event of a curtailment, the Company may automatically take assignment of customer-owned gas supplies in order to protect the service to higher priority customers as defined in Rule 17, Order of Priority for Gas Service. If the Company takes assignment of the customer-owned gas, the Company will compensate the customer with a credit equal to the Gas Daily-midpoint price at the source of the supply for all volumes assigned plus a credit of $0.60 per therm on all but the first 5 percent of the customer's daily curtailment under this Schedule.~~

~~**UNAUTHORIZED USE OF GAS DURING ENTITLEMENT PERIODS**~~
~~The Company may declare an entitlement period on any day the Company, in its sole discretion, reasonably determines a critical operational condition warrants the need. During a curtailment or an entitlement period, the total physical quantity of gas taken by customers served under this rate schedule exceeds or is less than the total quantity of gas which the customer is entitled to take on such day, as defined below, then all gas taken in excess of such entitlement or not taken within said entitlement shall constitute unauthorized overrun or underrun volume. Each general system or customer-specific declared overrun entitlement period shall be specified as either an overrun or an underrun entitlement for customers such that only one penalty condition may exist at one time, whereas:~~

- ~~**Underrun Entitlement** – A period of time in which delivered natural gas volumes to a transportation customer may not exceed the customer's confirmed nomination for that day.~~
- ~~**Overrun Entitlement** – A period of time in which delivered natural gas volumes to a transportation customer must be equal to or more than that customer's confirmed nomination for that day.~~

~~(continued)~~

CASCADE NATURAL GAS CORPORATION **Second Revision of Sheet No. 163.8**
Canceling
P.U.C. OR. No. 10 **First Revision of Sheet No. 163.8**

~~SCHEDULE 163~~
~~GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE TRANSPORTATION SERVICE~~

~~UNAUTHORIZED USE OF GAS DURING CUTRAILMENTS OR ENTITLEMENT PERIODS (continued)~~
~~Customers served under this schedule shall pay Company for all unauthorized overrun or underrun quantities that exceed the percentage specified by the Company in its declared entitlement. For a general system or customer-specific declared entitlement period, such percentage will be: (i) in the Company's sole discretion 5 percent, or, in the case of a declared overrun entitlement period announced on the day it is to be in effect, 3 percent for that day (Stage I), 8 percent (Stage II) or 13 percent (Stage III) of a customer's entitlement as set forth above.~~

~~A customer's usage of gas that exceeds the amount authorized by the Company during an entitlement period shall be considered an unauthorized overrun volume. The overrun charge that will be applied during any overrun entitlement period will equal the greater of $1.00 per therm or 150% of the highest midpoint price for the day at NW Wyoming Pool, NW south of Green River, Stanfield Oregon, NW Canadian Border (Sumas), Kern River Opal, or El Paso Bondad supply pricing points (as published in Gas Daily), converted from dollars per dekatherms to dollars per therm by dividing by ten. The overrun charge will be in addition to the incremental costs of any supplemental gas supplies the Company may have had to purchase to cover such unauthorized use, in addition to the regular charges incurred in the Rate section of this Schedule and any other charges incurred per the terms and conditions established in this Schedule. The payment of an overrun penalty shall not under any circumstances be considered as giving customer the right to take unauthorized overrun gas or to exclude any other remedies which may be available to the Company to prevent such overrun. The charge that will apply during any underrun entitlement period will be $1.00 per therm for any underrun imbalances.~~

~~NOTICE OF ENTITLEMENT~~
~~The Company shall give as much advance notice as possible for each entitlement. The Company's entitlement periods as well as restoration notices shall be given by telephonic communications, electronic communication, or personal contact by Company personnel to the customer's responsible representative. A notice of entitlement period will include the parameters for gas consumption during said entitlement period.~~

~~TAX ADDITIONS~~
~~The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.~~

~~(continued)~~

~~**SCHEDULE 163**~~
~~**GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE TRANSPORTATION SERVICE**~~

~~**GENERAL TERMS**~~
~~Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.~~

CASCADE NATURAL GAS CORPORATION **Original Sheet No. 164.1**

P.U.C. OR. No. 10

SCHEDULE 164
GENERAL DISTRIBUTION SYSTEM INTERRUPTIBLE TRANSPORTATION SERVICE
EITE

PURPOSE

This schedule provides Emissions-Intensive and Trade Exposed (EITE) customers with firm transportation service of customer-supplied natural gas on the Company's distribution system. The EITE designation is as put forth and for the applicability as established in Oregon Administrative Rules Chapter 340, Division 273, Oregon Climate Protection Plan.

RATE

A. Basic Service Charge $900.00 per month

B. Distribution Charge

	Therms	Base Rate
First	10,000	$0.15769~~5928~~
Next	10,000	$0.14225~~368~~
Next	30,000	$0.13366~~500~~
Next	50,000	$0.08209~~291~~
Next	400,000	$0.04164~~206~~
Next	500,000	$0.02231~~254~~
Over	1,000,000	$0.00232~~35~~

C. Adjustment Charges
See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

D. Commodity Gas Supply Charge
The Company will pass through to the customer served on this schedule all costs, if any, incurred for securing the necessary supply at the city gate excluding pipeline transportation charges.

E. Gross Revenue Fee
The total of all charges invoiced by Company shall be subject to a Gross Revenue Fee as stated in Schedule 99 to cover state utility tax and other governmental levies imposed upon the Company, as those fees and levies may be in effect from time to time.

TAX ADDITIONS

The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions

TERMS AND CONDITIONS

1. Service under this rate schedule is subject to the terms and conditions established under Rule 22, General Transportation Service Terms and Conditions.
2. Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 170
INTERRUPTIBLE SERVICE

AVAILABILITY
This schedule is available for natural gas delivered for all purposes to customers having an annual fuel requirement of not less than 180,000 therms per year and where customer agrees to maintain standby fuel burning facilities and an adequate supply of standby fuel to replace the entire supply of natural gas delivered hereunder.

SERVICE
Service under this schedule shall be subject to curtailment by the Company when in the judgment of the Company such curtailment or interruption of service is necessary. Company shall not be liable for damages for or because of any curtailment of natural gas deliveries hereunder.

RATE
See Schedule 99, Rate Summary Sheet for a summation of charges applicable for gas service under this rate schedule.

MINIMUM CHARGE
Basic Service Charge $~~300.00~~ 600.00 per month (I)

DELIVERY CHARGE
Delivery Charge $~~0.12376~~ 0.18957per therm (I)

TERMS OF PAYMENT
Each monthly bill shall be due and payable twenty-two days from the date of rendition.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

SERVICE AGREEMENT
Service under this schedule requires an executed service agreement between the Company and the customer. The service agreement term shall be for a period not less than the period covered under the customer's gas purchase contract with the customer's supplier. However, in no event shall the service agreement be for less than one year and the termination date of the service agreement in any year shall be September 30th.

(continued)

CASCADE NATURAL GAS CORPORATION **~~Tenth~~ Eleventh Revision of Sheet No. 192.1**
Canceling
P.U.C. OR. No. 10 **Tenth ~~Ninth~~ Revision of Sheet No. 192.1**

SCHEDULE NO. 192
INTERVENOR FUNDING ADJUSTMENT

APPLICABLE
Applicable to customers served on Schedules 101, 104, 105, 111, 161, 162, 163, 164, 170, and 800.

PURPOSE
The purpose of this schedule is to recover the cost of Intervenor Funding Grants provided to various entities to cover their costs of advocating on behalf of customers. The awarding of such grants is governed by Section 7.3 of the First Amended and Restated Intervenor Funding agreement adopted by the Public Utility Commission of Oregon in Order No. 07-564.

MONTHLY RATES, MINIMUM BILLS AND OTHER CHARGES
Each of the charges specified in the schedules for gas service hereinafter listed shall be adjusted by the following per therm increase or (decrease) or appropriate multiple thereof:

Rate Schedule	Amount
101	$0.00168
104	$0.00000
105	$0.00036
111	$0.00036
161*	$0.00036
162*	$0.00036
163*	$0.00036
164*	$0.00036
170	$0.00036
800*	$0.00036
*all rate blocks	

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 196
UM 903 OREGON EARNINGS SHARING

APPLICABLE
This temporary rate addition applies to gas service rendered by the Company under the tariff of which this schedule is a part for service on and after the effective date hereof and shall be in addition to all rates and charges specified in this tariff.

PURPOSE
This schedule refunds a portion of the Company's overearnings in accordance with the Commission's annual order issued in Docket No. UM 903.

RATES
Each of the charges specified in the schedules for gas service hereinafter listed shall be adjusted by the following per therm increase or (decrease) or appropriate multiple thereof in determining annual minimum bill, if any:

Rate Schedule	Rate
101	$0.000
104	$0.000
105	$0.000
111	$0.000
161	$0.000
162	$0.000
163	$0.000
164	$0.000
170	$0.000
800	$0.00

LIMITATION
This temporary rate addition shall remain in effect until cancelled pursuant to order of the Oregon Public Utility Commission.

TAX ADDITIONS
The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

GENERAL TERMS
Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

CASCADE NATURAL GAS CORPORATION **~~Fourth~~ Fifth Revision of Sheet No. 197.1**
Canceling
P.U.C. OR. No. 10 **~~Third~~ Fourth Revision of Sheet No. 197.1**

SCHEDULE 197
ENVIRONMENTAL REMEDIATION COST ADJUSTMENT

APPLICABLE
This adjustment is applicable to customers served on Schedule 101, 104, 105, 111, 161, 162, 163, 164, 170, and 800.

PURPOSE
This schedule recovers environmental remediation costs for a former manufactured gas plant in Eugene, Oregon. The Company is authorized per Order No. 16-477 to recover $162,000 over a three-year period of time.

RATE
The following rate shall be applied to all applicable customers on an equal cents per therm basis:

$0.0.00151~~00000~~	per therm

(I)

~~**LIMITATION**~~
~~This temporary rate addition shall remain in effect until cancelled pursuant to order of the Oregon Public Utility Commission.~~
TERM
This adjustment shall terminate on and after October 30, 2029.

~~SPECIAL~~ TERMS AND CONDITIONS
~~The rates named herein are subject to increases as set forth in Schedule No. 100 Municipal Exactions.~~

GENERAL TERMS
1. The rates named herein are subject to increases as set forth in Schedule No. 100 Municipal Exactions.
2. Any over- or under-collection of the amortized balance at the end of the collection term will be rolled into a deferral of like customer applicability.
3. Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 220
CLIMATE PROTECTION PROGRAM (CPP) COST RECOVERY ADJUSTMENT

PURPOSE
The purpose of this schedule is to recover the historic costs Cascade incurred to comply with greenhouse gas (GHG) emissions reduction requirements established by the Oregon Department of Environmental Quality in Oregon Administrative Rule (OAR) 340-271, Oregon Climate Protection Program.

APPLICABLE
This adjustment schedule is applicable to non- Emissions-Intensive and Trade Exposed (EITE) customers served on Schedules 101, 104, 105, 111, 161, 163, 170, and 800.

RATE
The following rate shall be applied to customer bills on a per therm basis:

Rate Schedule	Rate Adjustment
101, 104, 105, 111, 161, 163, 170, and 800	$0.03210

(N)

LIMITATION
This rate will be in effect until October 30, 2026.

SPECIAL TERMS AND CONDITIONS
The rates named herein are subject to increases as set forth in Schedule No. 100, Adjustment For Municipal Exactions.

GENERAL TERMS
Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

SCHEDULE 225
RENEWABLE NATURAL GAS COST RECOVERY ADJUSTMENT

PURPOSE

The purpose of this schedule is to recover renewable natural gas infrastructure costs in which the Company invested in for the purpose of complying with Climate Protection Program requirements as established in Oregon Administrative Rule Chapter 320, Division 271.

APPLICABLE

This adjustment applicable to customers served on Schedules 101, 104, 105, 111, 161, 163, 170 and 800.

RATE

The following rate shall be applied to all applicable customer bills on a per therm basis:

$0.00000 per therm

RNG INFRASTRUCTURE COSTS

The RNG infrastructure subject to recovery under this schedule includes associated depreciation expense, property and other taxes, return-on-investment, income taxes, operating and maintenance costs, and other costs relating to the Company's investment.. Cascade will use the Commission-authorized capital structure and cost of capital in its calculation of return on rate base.

TAX ADDITIONS

The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

TERMS AND CONDITIONS

1. Cascade will file to update rates in this schedule by August 1 of each year. Updating charges will include updating the vintage of the revenue requirement for the previously included investments and a true-up of actual costs and volumes of previously included costs. This updating of charges will be supported by a deferral application that will apply to costs recovered through this schedule, as applicable.
2. Cascade will change rates under this schedule concurrently with its annual Purchased Gas Adjustment Filing effective October 31 each year.
3. Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

CASCADE NATURAL GAS CORPORATION **Fifth ~~Fourth~~ Revision of Sheet No. 800.2**
Cancelling
P.U.C. OR. No. 10 **Fourth~~Third~~ Revision Sheet 800.2**

SCHEDULE 800
BIOMETHANE RECEIPT SERVICES

MONTHLY CHARGES
A Producer receiving service under this Schedule shall receive the following monthly charges:

Basic Service Charge and Minimum Monthly Bill: $2,500.00.

	Therms	Base Rate
First	10,000	$0.15993
Next	10,000	$0.14450
Next	30,000	$0.13590
Next	50,000	$0.08433
Next	400,000	$0.04389
Next	500,000	$0.02456
Over	1,000,000	$0.00457

(I)
(I)

A charge of $0.00021 per therm is applied to the Base Rate charges to cover odorant costs. (T)

See Schedule 99, Rate Summary Sheet for a summation of the charges applicable for gas service under this rate schedule.

Charges for service on this schedule are not subject to increases as set forth in Schedule No. 31, Public Purpose Charge, but are subject to a Gross Revenue Fee as stated in Schedule 99 and taxes per Schedule 100, Municipal Exactions, as applicable.

PREREQUISITES TO BIOMETHANE RECEIPT SERVICES
Preceding the receipt of biomethane, service under this Schedule requires an interconnection capacity study and an Engineering Study, as needed; An Interconnect Agreement between the Company and the Producer must be executed prior to the construction of any Project Facilities or receipt of Biomethane.

RECEIPT SERVICES PROVIDED
The Company will provide a qualifying Producer with a Company-owned, operated, and maintained point of interconnection to enable receipt of qualifying biomethane into the Company's distribution system.

MINIMUM BIOMETHANE QUALITY STANDARDS
Service under this Schedule requires continual compliance with Biomethane quality standards and reporting requirement described in the Interconnect Agreement.

MONITORING AND REPORTING REQUIREMENTS
Service under this Schedule requires continual compliance with monitoring and reporting requirements as described in the Interconnect Agreement.

(continued)

SCHEDULE 805
VOLUNTARY RENEWABLE NATURAL GAS PROGRAM

AVAILABILITY
This Voluntary Renewable Natural Gas Program (Program) is available to qualifying customers receiving gas service on Schedules 101, 104, 105, 111, 161, 162, 163, 164, and 170 who choose service under this schedule. (C)

PROGRAM DESCRIPTION
Subject to availability, customers seeking to reduce their carbon emissions may choose to purchase one or more Program blocks, where each block is equivalent to four (4) therms of renewable thermal credits (RTCs) derived from renewable natural gas (RNG) and retired on the customer's behalf.

ELIGIBILITY
To qualify for service under this Program, a customer must complete the Company's enrollment process and must have good credit standing, defined for the purposes of this schedule as not having received two or more notices of pending service disconnection for nonpayment within the past twelve months and/or not currently on a time payment arrangement for the payment of a past due balance.

RATES
Customers participating in this Program will select the number of Program blocks they wish to purchase. The monthly billing will reflect the following monthly charges multiplied by the number of blocks the customer has designated for service under this Program. The monthly billing under this schedule shall be applied to the customer's bill regardless of actual energy consumption.

RNG/RTC Block Monthly Charge*	$7.22 per block

* One block is the equivalent of four therms.

SERVICE LIMITATIONS
Service under this Program is subject to the availability of RNG or RNG derived RTCs at a cost-effective price. When the RNG or RNG derived RTCs inventory is insufficient, service under this rider will be temporarily unavailable to new applicants. In the event service under this schedule is suspended, the Company will create a waitlist for new participants who will be served on a first-come first-served basis upon the availability of cost effective RNG or RNG derived RTCs.

VERIFYING AND TRACKING
All environmental attributes sold under this schedule will be transferred, tracked, and retired as RTCs in the Mid-west Renewable Energy Tracking System (M-RETS). RTCs sold under this schedule are non-transferrable.

(continued)