

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,

Complainant,

v.

CASCADE NATURAL GAS  
CORPORATION,

Respondent.

DOCKET UG-240008

**CASCADE NATURAL GAS CORPORATION**  
**DIRECT TESTIMONY OF ERIC P. MARTUSCELLI**

**March 29, 2024**

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## I. INTRODUCTION

1 **Q. Please state your name and business address.**

2 A. My name is Eric P. Martuscelli and my business address is 8113 West Grandridge  
3 Blvd., Kennewick, WA 99336.

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

5 A. I am employed by Cascade Natural Gas Corporation (“Cascade” or “Company”), a  
6 wholly-owned subsidiary of MDU Resources Group, Inc. (“MDU Resources”), as  
7 Vice President of Field Operations for Cascade Natural Gas Corporation (“Cascade”  
8 or “Company”), Montana-Dakota Utilities Co. (“Montana-Dakota”), Great Plains  
9 Natural Gas Co. (“Great Plains”), and Intermountain Gas Company  
10 (“Intermountain”). Collectively, “MDU Utilities Group”.

11 **Q. What are your duties as Vice President of Field Operations?**

12 A. As Vice President of Field Operations, I provide executive leadership, direct, and  
13 coordinate activities for the entire gas and electric distribution field operations in the  
14 MDU Utilities Group service territory. I oversee delivery of regulated products and  
15 services and provide strategic direction to my leadership team in implementing our  
16 organization’s programs, policies, and procedures.

17 **Q. Please describe your educational background and professional experience.**

18 A. I hold a bachelor’s degree in Organizational Management, in the Forbes School of  
19 Business, from Ashford University. I have been in the utility industry for 31 years; 12  
20 years in the field and 19 years in increasing levels of supervisory, managing, and

1 leadership positions. Prior to advancing into my current role, I provided similar,  
2 executive oversight as Vice President, Operations for Cascade.

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

4 A. Yes. I have presented testimony before the North Dakota Public Service Commission.

## II. SCOPE AND SUMMARY OF TESTIMONY

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

6 A. My testimony will address Cascade’s project selection and budgeting process. I will  
7 then discuss major project additions to plant in service overseen by Field Operations  
8 that have been placed in service since the test year in Cascade’s last general rate case  
9 (Docket UG-210755). I will then address the request for provisional plant in service  
10 that is planned to be placed in service in 2024 and 2025 under my responsibility area.

11 **Q. Are you sponsoring any exhibits in this proceeding?**

12 A. Yes, I sponsor the following exhibits:

13	Exh. EPM-2	2021 – 2023 Plant Additions - Major
14	Exh. EPM-3	Provisional Plant Additions Major – 2024 and 2025
15	Exh. EPM-4	Provisional Plant Additions Minor – 2024 and 2025
16	Exh. EPM-5	FP-307044 New Aberdeen Office
17	Exh. EPM-6	WUTC Rule 8, Extension of Distribution Facilities
18	Exh. EPM-7	CNGC 2023 IRP Chapter 3
19	Exh. EPM-8	Meter Sampling Policy

1 **Q. Please explain Cascade’s Field Operations organization.**

2 A. Field Operations is composed of approximately 150 employees that live and work in  
3 Washington. Cascade’s employees are the “boots on the ground” in Washington.  
4 Their purpose is to provide safe, reliable natural gas service to the communities  
5 Cascade serves. They do this with an expectation of providing excellent customer  
6 service with each interaction. The philosophy of Field Operations is to execute the  
7 “playbooks” and seek continuous improvement. The “playbooks” consist of  
8 Cascade’s organizational integrity guide and our operations policies and procedures,  
9 the latter incorporating federal regulatory and state administrative codes applicable to  
10 the safe operation of the natural gas distribution system.

11 **Q. Please provide a high level description of Cascade’s distribution system.**

12 A. The Company delivers natural gas to over 232,000 Washington customers  
13 encompassing 67 communities with diverse demographic, historic, economic,  
14 climatological, and geographic backgrounds. Cascade’s noncontiguous service  
15 territory covers about 32,000 square miles and extends over 700 highway miles from  
16 end to end. The western Washington portion of Cascade’s service territory along the  
17 I-5 corridor operates in a generally mild marine climate, while the eastern portion has  
18 a semi-arid climate with periods of arctic cold in the winter and extreme heat in  
19 summer. Cascade delivers natural gas through approximately 11,096 miles of pipeline  
20 (mains and services) — 8,290 of which are in Washington and 2,806 are in Oregon.

### III. OVERVIEW OF PROJECT SELECTION AND BUDGETING PROCESS

1 Q. Please explain the plant in service projects you will discuss.

2 A. The majority of the projects managed by the Field Operations department are  
3 Programmatic, as defined by the Commission’s Policy Statement on Property that  
4 Becomes Used and Useful After Rate Effective Date (“Used and Useful Policy”).<sup>1</sup>  
5 Programmatic projects are made according to a schedule, plan, or method and are  
6 generally investments that are necessary to provide safe, reliable service to  
7 Washington customers.

8 I will also be addressing several Specific projects as defined by the Used and  
9 Useful Policy that fall under my responsibility area.<sup>2</sup> Specific projects are clearly  
10 defined, identifiable, or discrete investments. I will first discuss Specific projects and  
11 then Programmatic investments placed in service since the Company’s last test year.  
12 A complete list of the 2021 through 2023 projects discussed in my testimony is  
13 included as Exh. EPM-2. I will next discuss Specific projects and Programmatic  
14 investments that will be placed in service in each of Cascade’s provisional periods. A  
15 complete list of Provisional Year Major Projects is included as Exh. EPM-3, while  
16 Provisional Year Minor Projects are included as Exh. EPM-4. Table 1 below  
17 illustrates a summary of the Company’s request included in my testimony.

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<sup>1</sup> *In the Matter of the Commission Inquiry into the Valuation of Public Service Company Property that Becomes Used and Useful after Rate Effective Date*, Docket U-190531, Policy Statement on Property that Becomes used and Useful After Rate Effective Date at ¶ 11 (Jan. 31, 2020).

<sup>2</sup> See Used and Useful Policy at ¶ 11.

**Table 1: Specific and Programmatic Investments**

<b>Description</b>	<b>Specific Projects</b>	<b>Programmatic Projects</b>	<b>Total</b>
2021 - 2023 Major Projects	\$3,903,621	\$55,837,670	\$59,741,291
2024 Major Projects	\$0	\$23,888,949	\$23,888,949
2025 Major Projects	\$0	\$23,472,157	\$23,472,157
Provisional Period Minor Projects	\$3,226,091	\$2,411,562	\$5,637,653
<b>Total Additions to Plant In-Service</b>	\$7,129,712	\$105,610,337	\$112,740,049

1 **Q. How are Specific projects forecast?**

2 A. Specific projects generally fall into two categories: known (budgeted) and unknown  
3 (unbudgeted). Known projects are forecast during the annual capital budgeting  
4 process and assigned to a year in the five-year plan. An example of a known project  
5 would be working with a municipality on a road improvement project scheduled for  
6 construction in a future year. The road improvement project would require relocation  
7 of Cascade’s infrastructure to accommodate the project. This type of project can be  
8 budgeted in advance.

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

1 unbudgeted. In either case, the approval process follows the established Company  
2 authorization policy.

3 **Q. How are Programmatic project costs forecast?**

4 A. Funding projects that fall into the Programmatic category include things like main  
5 and service growth and replacement, gas regulators, and vehicles and work  
6 equipment. Growth related funding project forecasts are based on the Base-Case  
7 Growth forecast included in Cascade's Integrated Resource Plan.

8 Replacement projects are difficult to forecast prospectively. In any year,  
9 replacements of Cascade facilities will be required due to requests from jurisdictional  
10 authorities in the communities Cascade serves or for safety or reliability reasons.  
11 Because replacement projects cannot be anticipated with specificity, the estimated  
12 expense is based on historical costs and updated for any known requirements.

13 Vehicles and work equipment forecasts are based on an assessment of  
14 Company need coupled with an analysis of existing vehicles and work equipment.

15 **Q. Are projects ever re-prioritized?**

16 A. Yes. There are two primary stages of re-prioritization. During the annual capital  
17 budgeting process, the Company goes through several versions of the five-year  
18 capital budget each year. Every version is a re-prioritization of projects based on  
19 available capital and the project's rank within the Company. The second stage, or re-  
20 prioritization, is after the capital budget is approved. As previously outlined in my  
21 testimony, the Company must regularly adjust to unknown projects that arise due to

1 requests from jurisdictions served by Cascade, safety, and reliability. In this case, the  
2 unknown project would push a budgeted project down the priority list.

#### IV. MAJOR PROJECT ADDITIONS TO PLANT IN SERVICE 2021 – 2023

##### 3 **A. Specific projects**

##### 4 **1. New Aberdeen Office (FP-307044)**

5 **Q. Please describe the New Aberdeen District Office project.**

6 A. This project consisted of building a new district office on previously purchased land  
7 in Elma, Washington, in the Aberdeen, Washington district.

8 **Q. Why did the Company undertake the New Aberdeen District Office project?**

9 A. The condition of the previous office and shop were not suitable for continued  
10 operations. See Exh. EPM-5. According to the Gray's Harbor County assessor's  
11 office, the original structure was built in 1925 and Cascade operated out of this  
12 building for nearly 60 years. The structures at this location were designed for the  
13 work of yester-year, but not for the needs of business today. Operations functionality  
14 was increasingly limited at this location. Vehicles and equipment are bigger,  
15 inventory has grown and cannot be properly stored and protected, and technology  
16 enhancements are limited due to the age of the structures. The structures had reached  
17 the end of their useful life for the Company's business.

1 **Q. How will Cascade customers benefit from the New Aberdeen District Office**  
2 **Project?**

3 A. The new building at the new location has enhanced productivity and efficiency. One  
4 of the greatest benefits is the new office is now centrally located within the district  
5 service territory in Elma, Washington. Cascade serves the greater area from Aberdeen  
6 to Shelton and being centrally located positions Cascade to plan work and respond to  
7 emergencies in a more universal manner.

8 **Q. Did the Company consider alternative ways to meet the need for the New**  
9 **Aberdeen District Office?**

10 A. Yes. The Company considered renovation of the existing office. The two primary  
11 issues that made that impractical were the age of the building and location/size of lot.

12 **Q. Are there any offsetting operations and maintenance (“O&M”) cost savings**  
13 **associated with this project?**

14 A. Yes. Maintenance that would have been undertaken on the previous facility is no  
15 longer needed.

16 **Q. What is the current status of the project?**

17 A. This project was completed and placed in service in 2021.

18 **Q. What was the cost for the New Aberdeen District Office?**

19 A. The total cost for the project was \$3,903,621. Land acquisition and architecture costs  
20 were allocated to 2019 and 2020, and all remaining costs were incurred in 2021.

1 **B. Programmatic projects**

2 **1. 2021-2023 Growth Mains Project**

3 **Q. Please describe the Growth Mains project.**

4 A. Growth Mains are distribution system expansion projects to serve natural gas to new  
5 customers, throughout Cascade's service territory. As determined by the Company's  
6 design and engineering department, some Growth Mains projects require a  
7 supplemental system reinforcement to provide system reliability for core customers.  
8 Consideration for all Growth Mains requests follows the requirements of WUTC Rule  
9 8, Extension of Distribution Facilities included as Exh. EPM-6.

10 **Q. Why did the Company undertake the Growth Mains project?**

11 A. Growth Mains are required by Cascade's Certificate of Convenience and Necessity,  
12 and its duty to serve pursuant to RCW 80.28.110:

13 Every gas company, electrical company, wastewater company, or  
14 water company, engaged in the sale and distribution of gas,  
15 electricity or water or the provision of wastewater company  
16 services, shall, upon reasonable notice, furnish to all persons and  
17 corporations who may apply therefor and be reasonably entitled  
18 thereto, suitable facilities for furnishing and furnish all available  
19 gas, electricity, wastewater company services, and water as  
20 demanded [...].

21 **Q. How will Cascade customers benefit from the Growth Mains project?**

22 A. Cascade's obligation to serve requires that Cascade serve new customers utilizing  
23 WUTC Rule 8, Extension of Distribution Facilities.

1 **Q. Did the Company consider alternative ways to meet the need for the Growth**  
2 **Mains project?**

3 A. No, there are no alternatives to Growth Main installations. Cascade's obligation to  
4 serve requires that the Company serve new customers utilizing WUTC Rule 8,  
5 Extension of Distribution Facilities.

6 **Q. Are there any offsetting factors associated with this project?**

7 A. Yes. As described in the direct testimony of Jacob Darrington, the Company has  
8 included end of period revenues and depreciation in this case.

9 **Q. What is the status of the Grown Main projects considered in this filing?**

10 A. Individual projects were placed in service throughout 2021 and 2023.

11 **Q. What were the actual costs for the Growth Mains project for 2021-2023?**

12 A. The actual costs for Growth Mains included in this case are \$8,376,497.

13 **2. 2021-2023 Grow Services Project**

14 **Q. Please describe the Growth Services project.**

15 A. Growth Services are distribution system expansion projects to serve natural gas to  
16 new customers, throughout Cascade's service territory. Growth Services are installed  
17 in conjunction with Growth Mains or as a stand-alone installation from existing

1 infrastructure. Consideration for all Growth Services requests follows the  
2 requirements of WUTC Rule 8, Extension of Distribution Facilities.

3 **Q. Why did the Company undertake the Growth Services project?**

4 A. Cascade's Growth Services project responds to customer requests and the projects are  
5 installed pursuant to Cascade's Certificate of Convenience and Necessity and its duty  
6 to serve under RCW 80.28.110.

7 **Q. How will Cascade customers benefit from the Growth Services project?**

8 A. In addition to being statutorily required, Cascade's Growth Services projects will  
9 benefit customers by providing them with new or expanded natural gas service.  
10 Because installation of such projects must comply with WUTC Rule 8, Extension of  
11 Distribution Facilities, new and existing customers can be assured that the installation  
12 and service is safe and reliable.

13 **Q. Did the Company consider alternative ways to meet the need for the Growth  
14 Services project?**

15 A. No; there are no alternatives to installing Growth Services. Cascade's obligation to  
16 serve requires that the Cascade serve new customers utilizing WUTC Rule 8,  
17 Extension of Distribution Facilities.

18 **Q. Are there any offsetting factors associated with this project?**

19 A. Yes. As described in the direct testimony of Jacob Darrington, the Company has  
20 included end of period revenues and depreciation in this case.

21 **Q. What is the status of the Growth Services project considered in this filing?**

1 A. Individual projects were placed in service throughout 2021 and 2023.

2 **Q. What were the actual costs for the Growth Services project for 2021-2023?**

3 A. The actual costs for Growth Services projects included in this case are \$20,888,446.

4 **3. 2021-2023 Main Replace Project**

5 **Q. Please describe the Main Replace project.**

6 A. Most of Cascade's infrastructure is within public rights-of-way ("ROW"), and  
7 permission to occupy the space is granted through various franchise agreements with  
8 respective, governing jurisdictions. When conflicts arise between jurisdictional  
9 projects and Cascade's infrastructure within the franchise area, the franchise  
10 agreements require Cascade to mitigate the conflict at Cascade's expense, and Main  
11 Replace projects are often a result of such requirements.

12 Other Main Replace projects that fall within this category but are not due to  
13 conflict with a franchise project can originate from isolated circumstances such as  
14 leaks, corrosion, and inoperable valves and/or equipment not associated with the  
15 Company's formal distribution integrity management program. Main Replace of this  
16 nature is generally identified through leak investigations or scheduled compliance  
17 survey programs and are managed by local representatives.

18 **Q. Why did the Company undertake the Main Replace program?**

19 A. As stated above, when conflicts arise between jurisdictional projects and Cascade's  
20 infrastructure within the franchise area, the franchise agreements require Cascade to  
21 mitigate the conflict at Cascade's expense. For projects outside the franchise scope,

1 Main Replacements are generally the result of safety or compliance needs. In such  
2 cases, mitigation is more immediate and not always able to be planned.

3 **Q. How will Cascade customers benefit from the Main Replace project?**

4 A. Customers benefit when Cascade fosters good relations with its jurisdictional  
5 partners. Fulfilling contractual obligations pursuant to franchise agreements helps  
6 maintain these healthy relationships. Jurisdictional projects can be disruptive to  
7 communities, and it is Cascade's intention to facilitate agreeable conflict resolution so  
8 as not to delay these projects.

9 **Q. Did the Company consider alternative ways to meet the need for the Main  
10 Replace project?**

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

15 **Q. Are there any offsetting O&M cost savings associated with this project?**

16 A. In the case of franchise conflicts, fostering good relations with local jurisdictions and  
17 fulfilling the contractual requirements of the Company's franchise agreements avoid  
18 monetary penalties that could be imposed if Cascade did not meet these  
19 expectations. For non-franchise projects, continuing O&M expense can be eliminated  
20 if a decision to replace is made.

1 **Q. What is the status of the Main Replace project considered in this filing?**

2 A. These projects were completed in 2021-2023.

3 **Q. What were the actual costs for the Main Replace project?**

4 A. The actual costs for the Main Replace project included in this case are \$3,578,701.

5 **4. 2021-2023 Service Replace**

6 **Q. Please describe the Service Replace project.**

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

13 Other Service Replace projects that fall within this category but are not due to  
14 conflict with a franchise project can originate from isolated circumstances such as  
15 leaks, corrosion, and inoperable valves and/or equipment not associated with the  
16 Company's formal distribution integrity management program. Service Replace of  
17 this nature is generally identified through leak investigations and/or scheduled  
18 compliance survey programs and managed by local representatives.

19 **Q. Why did the Company undertake the Service Replace program?**

20 A. When conflicts arise between jurisdictional projects and Cascade's infrastructure,  
21 within the franchise area, the franchise agreements require Cascade to mitigate the

1 conflict at Cascade's expense. For projects outside the franchise scope, the issues  
2 identified a generally safety or compliance related. As such, mitigation is more  
3 immediate and not always able to be planned.

4 **Q. How will Cascade customers benefit from the Service Replace project?**

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

10 **Q. Did the Company consider alternative ways to meet the need for the Service**  
11 **Replace project?**

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

16 **Q. Are there any offsetting O&M cost savings associated with this project?**

17 A. In the case of franchise conflicts, fostering good relations with local jurisdictions and  
18 fulfilling contractual obligations avoid monetary penalties that could be levied if  
19 Cascade were to not meet these expectations. For non-franchise projects, continuing  
20 O&M expense can be eliminated if a decision to replace is made.

1 **Q. What is the status of the Service Replace projects presented in this filing?**

2 A. These projects were completed in 2021-2023.

3 **Q. What were the actual costs for the Service Replace project?**

4 A. The actual costs for the Service Replace project included in this case are \$1,633,574.

5 **5. 2021-2023 Vehicles Work Equipment**

6 **Q. Please describe the Gas Vehicles and Gas Work Equipment project 2021-2023.**

7 A. The Gas Vehicles and Gas Work Equipment project is the annual purchase (additions)  
8 and replacement (existing) of Company fleet assets. Planning for vehicle and work  
9 equipment purchases and replacements is done in conjunction with preparation of the  
10 annual capital budget and takes into consideration vehicle and work equipment needs  
11 for the ensuing year compared to the existing fleet vehicles, their age, and operating  
12 condition. The fleet department meets annually with operations leadership to  
13 understand operational needs prior to preparing the annual budget.

14 **Q. Why did the Company undertake the Gas Vehicles and Gas Work Equipment**  
15 **project 2021-2023?**

16 A. Vehicles and work equipment are essential to Cascade's business. This is an annual  
17 process designed to proactively identify where additions are necessary and to  
18 minimize downtime of existing fleet assets due to age and/or general condition.

19 **Q. How will Cascade customers benefit from the Gas Vehicles and Gas Work**  
20 **Equipment project 2021-2023?**

1 A. Having a coordinated purchase and replacement philosophy ensures Cascade has the  
2 vehicles and work equipment needed to provide safe and reliable service to our  
3 customers. As stated earlier in my testimony, Cascade Field Operations employees  
4 are the “boots on the ground” in Washington, and the Gas Vehicles and Gas Work  
5 Equipment project enables Cascade employees to meet customer needs in a safe and  
6 timely manner.

7 **Q. Did the Company consider alternative ways to meet the need for the Gas**  
8 **Vehicles and Gas Work Equipment project 2021-2023?**

9 A. Yes. The Company’s philosophy emphasizes the high utilization of Company  
10 vehicles and work equipment. If a vehicle or piece of work equipment is needed in a  
11 specific department or operating area and is available and underutilized in another  
12 department or area, Cascade will consider relocating the existing asset first.

13 **Q. Are there any offsetting O&M cost savings associated with this project?**

14 A. Yes. When a vehicle or piece of work equipment nears the end of its useful life, the  
15 maintenance costs are generally higher and no longer warrantied. The Company  
16 philosophy to replace these end-of-life vehicles eliminates any recurring maintenance  
17 expenses.

18 **Q. What is the status of the Gas Vehicles and Gas Work Equipment project**  
19 **presented in this filing?**

20 A. These plant additions were placed in service in 2021, 2022, and 2023.

1 **Q. What were the costs for the Gas Vehicles and Gas Work Equipment project**  
2 **2021-2023?**

3 A. The total cost for the three years of Gas Vehicle and Gas Work Equipment project is  
4 \$9,199,019.92. In 2021, the cost was \$1,756,012.04 (FP-101163, FP-101215, and FP-  
5 101204); in 2022, the cost was \$2,438,666.94 (FP-101163 and FP-101215), and in  
6 2023, the cost was \$5,004,340.94 (FP-101163, FP-101215, and FP-323506).

7 **6. FP-101210 - Gas Meters-Total Company CNGC**

8 **Q. Please describe the Gas Meters-Total Company CNGC costs for 2021-2023.**

9 A. The Gas Meters-Total Company CNGC are actual costs for purchasing meters, meter  
10 bars, automated meter reading devices, electronic volume correctors, and meter  
11 guards/protection. Plant additions in this project are a combination of New Revenue –  
12 Growth and the Meter Sampling Program.

13 **Q. Why did the Company undertake the Gas Meters-Total Company CNGC costs**  
14 **for 2021-2023?**

15 A. The Company invests in these plant additions under our Obligation to Serve New  
16 Revenue – Growth projects and to comply with WAC 480-090-338 (3) – Frequency  
17 of Periodic Meter Tests.

18 **Q. How will Cascade customers benefit from the Gas Meters-Total Company**  
19 **CNGC costs for 2021-2023?**

20 A. Customers benefit from the Company's investment in meters, meter bars, automated  
21 meter reading devices, electronic volume correctors, and meter guards through

1 reliable and accurate gas measurements, which translates to accurate monthly gas  
2 bills.

3 **Q. Did the Company consider alternative ways to meet the need for the Gas Meters-**  
4 **Total Company CNGC costs for 2021-2023 costs?**

5 A. No. Accurate gas measurement equipment is essential for accurate customer billing.

6 **Q. Are there any offsetting O&M cost savings associated with this project?**

7 A. In the case of New Growth – Revenue, by proactively installing meter  
8 guards/protection, required by WAC 480-90-323 Meter set assembly location (4),  
9 meter set assemblies are protected from vehicular damage, limiting O&M repair labor  
10 associated with vehicular damage. For the Meter Sampling Program, if Cascade did  
11 not have a sampling program the Company would be out of compliance with the  
12 associated WAC, resulting in violations and fines.

13 **Q. What is the status of the Gas Meters-Total Company CNGC project?**

14 A. These plant additions were placed in service in 2021-2023.

15 **Q. What were the annual costs for the Gas Meters-Total Company CNGC costs for**  
16 **2021-2023?**

17 A. The total cost for the three years of Gas Meters-Total Company CNGC is  
18 \$10,648,297. In 2021, the cost was \$3,615,728; in 2022, the cost was \$4,962,564, and  
19 in 2023, the cost was \$2,070,005.

1           **7.       FP-101259 - Gas Regulators-Total Company CNGC**

2   **Q.     Please describe the Gas Regulators-Total Company costs.**

3   A.     The Gas Regulators-Total Company are annual costs for purchasing gas regulators.  
4           Gas regulators are used at regulator stations, and on high pressure service sets and  
5           meter sets.

6   **Q.     Why did the Company undertake the Gas Regulators-Total Company costs?**

7   A.     Gas regulators play a crucial role in maintaining the safe and efficient flow of gas.  
8           Regulators reduce and maintain consistent pressure in the gas delivery system. Too  
9           much gas pressure can lead to expositions, whereas low pressure can prevent gas-  
10          fired equipment from functioning properly. The Company incurs Gas Regulator –  
11          Total Company costs in order to provide accurate and safe gas delivery and  
12          measurement for customers, and to comply with all regulatory rules and regulations,  
13          including WAC 480-093-130 and 480-093-140.

14 **Q.     How will Cascade customers benefit from the Gas Regulators-Total Company**  
15 **costs project?**

16 A.     Customers benefit from the Company’s investment in regulators through reliable,  
17          safe, and accurate gas service. As mentioned, consistent gas pressure is needed to  
18          prevent combustible high pressures and to maintain the proper functioning of  
19          customer’s gas-fired equipment.

20 **Q.     Did the Company consider alternative ways to meet the need for the Gas**  
21 **Regulators-Total Company costs?**

1 A. No. There are no other means to accurately and safely regulate gas pressure  
2 throughout the service territory.

3 **Q. Are there any offsetting O&M cost savings associated with these costs?**

4 A. Yes, using and maintaining the Company's regulator equipment prevents the  
5 additional labor that would be incurred with deferred maintenance.

6 **Q. What is the status of the Gas Regulators-Total Company project?**

7 A. The Company's investment in Gas Regulators-Total Company is ongoing each year  
8 to accommodate new regulator needs for gas system growth and the changing  
9 regulator needs of the existing gas system. New regulators are also needed to repair  
10 and replace existing gas regulator equipment either as maintenance is required or at  
11 the end of the equipment's useful life.

12 **Q. What were the actual costs for the Gas Regulators-Total Company project 2021-**  
13 **2023?**

14 A. The total cost for the three years of Gas Regulators – Total Company included in this  
15 filing is \$1,513,134.09. In 2021, the cost was \$461,660.45; in 2022 the cost was  
16 \$522,341.95, and in 2023, the cost was \$529,131.69.

**V. MAJOR PROJECT PROVISIONAL ADDITIONS TO PLANT IN SERVICE  
– 2024 AND 2025**

1 **A. Programmatic projects**

2 **1. 2024-2025 Growth Mains**

3 **Q. Please describe the Growth Mains project.**

4 A. Growth Mains are distribution system expansion projects to serve natural gas to new  
5 customers throughout Cascade’s service territory. As determined by Cascade’s design  
6 and engineering department, some Growth Mains projects require a supplemental  
7 system reinforcement to ensure system reliability for core customers. Consideration  
8 for all Growth Mains requests follows the requirements of WUTC Rule 8, Extension  
9 of Distribution Facilities. The investment forecasted for 2024-2025 customer growth  
10 is based on the IRP Base-Case Growth Forecast (see Exh. EPM-7, pg. 3-18) and a  
11 comparison of the actual new service points activated versus the IRP Base-Case  
12 Growth Forecast.

13 As of September 2023, when the 2024 forecast was completed, the number of  
14 new service points activated, year to date, was approximately 70 percent of the IRP  
15 Base-Case Forecast. The 2024 investment forecast is therefore based on the  
16 assumption that Cascade will extend service to several new customers equivalent to  
17 70 percent of the number in the IRP Medium Growth Forecast. The estimate is further  
18 based on the historical average footage of main installed per new service point added  
19 and the historical average cost per foot to install the main increased by expected cost

1 of construction increases. The 2025 investment forecast is based on a 3 percent  
2 increase over 2024.

3 **Q. Why did the Company undertake the Forecasted Growth Mains project?**

4 A. As determined by Cascade's Certificate of Convenience and Necessity, and its  
5 obligation to serve pursuant to RCW 80.28.110.

6 **Q. How will Cascade customers benefit from the Forecasted Growth Mains  
7 project?**

8 A. Cascade's obligation to serve requires that Cascade serve new customers utilizing  
9 WUTC Rule 8, Extension of Distribution Facilities.

10 **Q. Did the Company consider alternative ways to meet the need for the Growth  
11 Mains project?**

12 A. No; there are no alternatives to installing distribution system expansion projects a  
13 upon customer request. Cascade's obligation to serve requires that the Company serve  
14 new customers utilizing WUTC Rule 8, Extension of Distribution Facilities.

15 **Q. Are there any offsetting factors associated with this project?**

16 A. Yes. As described in the direct testimony of Jacob Darrington, Exh. JAD-1T, the  
17 Company has included end of period revenues and depreciation in this case.

18 **Q. When is this project expected to be placed in service?**

19 A. Growth main projects are expected to be placed in service as requested throughout  
20 2024 and 2025.

1 **Q. What are the estimated costs for the Forecasted Growth Mains project?**

2 A. The estimated costs in 2024 are \$3,821,900 and \$3,929,993 in 2025.

3 **2. 2024-2025 Growth Service**

4 **Q. Please describe the Growth Services project.**

5 A. Growth Services are distribution system expansion projects to serve natural gas to  
6 new customers, throughout our service territory. Growth Services are installed in  
7 conjunction with Growth Mains or as a stand-alone installation from existing  
8 infrastructure. Consideration for all Growth Services requests follows the  
9 requirements of WUTC Rule 8, Extension of Distribution Facilities.

10 The investment forecasted for 2024-2025 customer growth is based on the  
11 IRP Base-Case Growth Forecast (see Exh. EPM-7, pg. 3-18) and a comparison of the  
12 actual new service points activated vs. the IRP Base-Case Growth Forecast. As of  
13 September 2023, when the 2024 forecast was completed, the number of new service  
14 points activated, year to date, was approximately 70 percent of the IRP Base-Case  
15 Forecast. The 2024 investment forecast is therefore based on the assumption that  
16 Cascade will extend service to several new customers equivalent to 70 percent of the  
17 number in the IRP Medium Growth Forecast. The estimate is further based on the  
18 historical average footage of main installed per new service point added and the  
19 historical average cost per foot to install the main increased by expected cost of  
20 construction increases. The 2025 investment forecast is based on a 3 percent increase  
21 over 2024.

1 **Q. Why did the Company undertake the Forecasted Growth Services project?**

2 A. It is prudent to assume and prepare for distribution system expansions as determined  
3 by Cascade's Certificate of Convenience and Necessity, and the Company's statutory  
4 obligation to serve.

5 **Q. How will Cascade customers benefit from the Forecasted Growth Services**  
6 **project?**

7 A. Customers benefit when Cascade fulfills its obligation to serve new customers  
8 utilizing WUTC Rule 8, Extension of Distribution Facilities.

9 **Q. Did the Company consider alternative ways to meet the need for the Growth**  
10 **Services project?**

11 A. There are no alternatives. Cascade's obligation to serve requires that we serve new  
12 customers utilizing WUTC Rule 8, Extension of Distribution Facilities.

13 **Q. Are there any offsetting factors associated with this project?**

14 A. Yes. As described in the direct testimony of Jacob Darrington, Exh. JAD-1T, the  
15 Company has included end of period revenues and depreciation in this case.

16 **Q. When is this project expected to be placed in service?**

17 A. Growth Services projects are expected to be placed in service as requested throughout  
18 2024 and 2025.

19 **Q. What are the estimated costs for the Forecasted Growth Services project?**

20 A. The estimated costs in 2024 are \$7,027,704 and in 2025, \$7,216,644.

1           **3.       2024-2025 Main Replace**

2           **Q.       Please describe the Service Replace project.**

3           A.       As stated earlier in my testimony, most of Cascade’s infrastructure is within public  
4           ROW, and permission to occupy the space is granted through various franchise  
5           agreements with respective, governing jurisdictions. When conflicts arise between  
6           jurisdictional projects and Cascade’s infrastructure within the franchise area, the  
7           franchise agreements require Cascade to mitigate the conflict at Cascade’s  
8           expense. Main Replace projects are often a result of such requirements.

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

17          **Q.       Why did the Company undertake the Main Replace program?**

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

1 **Q. How will Cascade customers benefit from the Main Replace project?**

2 A. Customers benefit when the Company fosters good relations with jurisdictional  
3 partners. Fulfilling contractual obligations to Cascade's franchise agreements helps  
4 maintain these healthy relationships. Jurisdictional projects can be disruptive to  
5 communities, and it is Cascade's intention to facilitate agreeable conflict resolution so  
6 as not to delay these projects.

7 **Q. Did the Company consider alternative ways to meet the need for the Main**  
8 **Replace project?**

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

13 **Q. Are there any offsetting O&M cost savings associated with this project?**

14 A. Yes. In the case of franchise conflicts, fostering good relations with local jurisdictions  
15 and fulfilling the contractual requirements of the Company's franchise agreements  
16 avoid monetary penalties that could be imposed if Cascade did not meet these  
17 expectations. For non-franchise projects, continuing O&M expense can be eliminated  
18 if a decision to replace is made.

19 **Q. When is this project expected to be placed in service?**

20 A. These projects will be placed in service, as necessary, in 2024 and 2025.

1 **Q. What are the costs for the Main Replace project?**

2 A. The costs estimated for 2024 are \$1,798,420 and for 2025, \$1,631,416.

3 **4. 2024-2025 Service Replace**

4 **Q. Please describe the Service Replace project.**

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

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

19 **Q. Why did the Company undertake the Service Replace program?**

20 A. When conflicts arise between jurisdictional projects and Cascade's infrastructure  
21 within the franchise area, the franchise agreements require Cascade to mitigate the  
22 conflict at Cascade's expense. For projects outside the franchise scope, the issues

1 identified a generally safety or compliance related. As such, mitigation is more  
2 immediate and not always able to be planned.

3 **Q. How will Cascade customers benefit from the Service Replace project?**

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

9 **Q. Did the Company consider alternative ways to meet the need for the Service  
10 Replace project?**

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

15 **Q. Are there any offsetting O&M cost savings associated with this project?**

16 A. Yes, potentially. In the case of franchise conflicts, fostering good relations with our  
17 jurisdiction and meeting the requirements of our agreement avoids monetary penalties  
18 that could be levied if we did not meet these expectations. For non-franchise projects,  
19 continuing O&M expense can be eliminated if a decision to replace is made.

20 **Q. When is this project expected to be placed in service?**

21 A. These projects will be placed in service, as necessary, in 2024 and 2025.

1 **Q. What are the costs for the Service Replace project?**

2 A. The estimated costs for Service Replace in 2024 are \$1,778,368 and \$1,528,094 in  
3 2025.

4 **5. 2024-2025 Vehicles and Work Equipment**

5 **Q. Please describe the 2024-2025 Gas Vehicles and Gas Work Equipment project.**

6 A. The Gas Vehicles and Gas Work Equipment project is the annual purchase (additions)  
7 and replacement (existing) of Company fleet assets. Planning for vehicle and work  
8 equipment purchases and replacements is done in conjunction with preparation of the  
9 annual capital budget and takes into consideration vehicle and work equipment needs  
10 for the ensuing year compared to the existing fleet vehicles, their age, and operating  
11 condition. The fleet department meets annually with operations leadership to  
12 understand operational needs prior to preparing the annual budget.

13 **Q. Why did the Company undertake the Gas Vehicles and Gas Work Equipment**  
14 **project 2024-2025?**

15 A. Vehicles and work equipment are essential to Cascade's business. This is an annual  
16 process designed to proactively identify where additions are necessary and to  
17 minimize downtime of existing fleet assets due to age and/or general condition. The  
18 vehicles and work equipment included are all replacements of existing vehicles and  
19 work equipment. There are no planned additions for years 2024-2025.

1 **Q. How will Cascade customers benefit from the Gas Vehicles and Gas Work**  
2 **Equipment project 2024-2025?**

3 A. Having a coordinated purchase and replacement philosophy ensures Cascade has the  
4 vehicles and work equipment needed to provide safe and reliable service to  
5 customers. As stated earlier in my testimony, Cascade Field Operations employees  
6 are the “boots on the ground” in Washington, and the Gas Vehicles and Gas Work  
7 Equipment project enables Cascade employees to meet customer needs in a safe and  
8 timely manner.

9 **Q. Did the Company consider alternative ways to meet the need for the Gas**  
10 **Vehicles and Gas Work Equipment project 2024-2025?**

11 A. Yes. The Company’s philosophy emphasizes the high utilization of Company  
12 vehicles and work equipment. If a vehicle or piece of work equipment is needed in a  
13 specific department or operating area and is available and underutilized in another  
14 department or area, Cascade will consider relocating the existing asset first.

15 **Q. Are there any offsetting O&M cost savings associated with this project?**

16 A. Yes. When a vehicle or piece of work equipment nears the end of its useful life, the  
17 O&M costs are generally higher and no longer warrantied. The Company philosophy  
18 to replace these end-of-life vehicles eliminates recurring maintenance expenses.  
19 Unfortunately, there is not a mechanism in place to detail the avoided O&M costs, but  
20 general history suggests that expensive replacements of engines, transmissions,  
21 transfer cases, and differentials are more common once vehicles reach 100,000  
22 miles. The Company does utilize trade programs allowing it to offset plant addition

1 capital for used vehicles and work equipment. The dollars from these programs offset  
2 the overall plant addition capital spend, reducing future depreciation expense. For  
3 vehicles, the three-year average trade recapture is 17 percent. For work equipment  
4 such as backhoes and mini excavators, the average trade recapture is 85 percent.

5 **Q. When is this project expected to be placed in service?**

6 A. These plant additions are projected to take place in 2024 and 2025.

7 **Q. What are the estimated costs for the Gas Vehicles and Gas Work Equipment**  
8 **project 2024-2025?**

9 A. The estimated cost for Gas Vehicles and Gas Work Equipment in 2024 is  
10 \$3,524,569.39 (FP-101163 and FP-101215) and in 2025, \$3,059,177.06 (FP-101163  
11 and FP-101215).

12 **6. Gas Meters – Total Company (FP-101210)**

13 **Q. Please describe the Gas Meters-Total Company CNGC costs for 2024-2025.**

14 A. The Gas Meters-Total Company CNGC are actual costs for purchasing meters, meter  
15 bars, automated meter reading devices, electronic volume correctors, and meter  
16 guards/protection. Plant additions in this project are a combination of New Revenue –  
17 Growth and the Meter Sampling Program. Costs are forecasted using a combination  
18 of previous years' plant additions, Integrated Resource Plan Demand Forecast -  
19 Customer Forecast Methodology (see Exh. EPM-7, pg. 3-8), and Meter Sampling  
20 projections based on the Meter Sampling Policy (see Exh. EPM-8).

1 **Q. Why did the Company undertake the Gas Meters-Total Company CNGC costs**  
2 **for 2024-2025?**

3 A. The Company invests in these plant additions under our Obligation to Serve New  
4 Revenue – Growth projects and to comply with Washington Administrative Code  
5 (“WAC”) 480-090-338 (3) – Frequency of Periodic Meter Tests.

6 **Q. How will Cascade customers benefit from the Gas Meters-Total Company**  
7 **CNGC costs for 2024-2025?**

8 A. Customers benefit from the Company’s investment in meters, meter bars, automated  
9 meter reading devices, electronic volume correctors, and meter guards through  
10 reliable and accurate gas measurements, which translates to accurate monthly gas  
11 bills.

12 **Q. Did the Company consider alternative ways to meet the need for the Gas Meters-**  
13 **Total Company CNGC costs for 2024-2025 costs?**

14 A. No. Gas metering equipment is essential to accurately measure a customer’s gas  
15 consumption.

16 **Q. Are there any offsetting O&M cost savings associated with this project?**

17 A. Yes. In the case of New Growth – Revenue, by proactively installing meter  
18 guards/protection as required by WAC 480-90-323(4), meter set assemblies are  
19 protected from vehicular damage, limiting O&M repair labor associated with  
20 vehicular damage.

1 For the Meter Sampling Program, if Cascade did not have a sampling program  
2 the Company would be out of compliance with the associated regulation, resulting in  
3 violations and potential fines.

4 **Q. When is this project expected to be placed in service?**

5 A. These plant additions are forecasted to be placed in service in 2024 and 2025.

6 **Q. What are the annual costs forecasted for the Gas Meters-Total Company CNGC  
7 costs for 2024-2025?**

8 A. The estimated cost in 2024 is \$5,937,987, and \$6,106,833 in 2025.

**VI. MINOR PROJECT PROVISIONAL ADDITIONS TO PLANT IN SERVICE  
– 2024 AND 2025**

9 **Q. Is Cascade also seeking recovery of additions to plant in service for projects less  
10 than \$1 Million?**

11 A. Yes. Included in the third exhibit to my direct testimony, Exhibit EPM-4, are  
12 summaries for projects of less than \$1 million that are planned to be placed in service  
13 in each of the Provisional years. The table below summarizes the request for both  
14 Specific and Programmatic projects discussed in Exhibit EPM-4.

**Table 2: Provisional Additions to Plant in Service 2024-2025 - Minor Projects**

<u>Description</u>	<u>WA 2024 Cascade Plant Additions</u>	<u>WA 2025 Cascade Plant Additions</u>
<u>Total Specific Projects</u>	<u>\$3,172,980</u>	<u>\$53,111</u>
<u>Total Programmatic Projects</u>	<u>\$1,266,503</u>	<u>\$1,145,059</u>
<b><u>Total Provisional Additions to Plant In-Service 2024-2025 - Minor Projects</u></b>	<b><u>\$4,439,483</u></b>	<b><u>\$1,198,170</u></b>

**VII. CONCLUSION**

- 1 Q. Does this conclude your direct testimony?
- 2 A. Yes.