Exh. KG-1TC Docket UG-240008 Witness: Konstantine Geranios REDACTED

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

DOCKET UG-240008

Complainant,

v.

CASCADE NATURAL GAS CORPORATION,

Respondent

RESPONSE TESTIMONY OF

KONSTANTINE GERANIOS

STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Analysis of South Kennewick Gate and North Kitsap Lateral

September 25, 2024

CONFIDENTIAL PER PROTECTIVE ORDER - REDACTED VERSION

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LIST OF EXHIBITS

Exh. KG-2	Adjusted Values in 24-25 Plant Additions for Revenue Requirement
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- Exh. KG-3 CNGC Response to UTC Staff Data Request No. 8
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- Exh. KG-5 CNGC Response to UTC Staff Data Request No. 102
- Exh. KG-6 CNGC Response to UTC Staff Data Request No. 91, Attachment A
- Exh. KG-7 CNGC Response to UTC Staff Data Request No. 46 Attach A, First Supp. Resp.
- Exh. KG-8 CNGC Response to UTC Staff Data Request No. 90
- Exh. KG-9C CNGC Response to UTC Staff Data Request No. 90, Attachment A Confidential

1		I. INTRODUCTION
2		
3	Q.	Please state your name and business address.
4	A.	My name is Konstantine Geranios, and my business address is 621 Woodland Square
5		Loop SE, Lacey, Washington, 98503. My business mailing address is P.O. Box
6		47250, Olympia, Washington, 98504-7250. My email address is
7		konstantine.geranios@utc.wa.gov.
8		
9	Q.	By whom are you employed and in what capacity?
10	A.	I am employed by the Washington Utilities and Transportation Commission
11		(Commission) as a regulatory analyst in the Energy Regulation section of the
12		Regulatory Services Division.
13		
14	Q.	Would you please state your educational and professional background?
15	A.	Prior to joining the Commission in January of 2024, I earned a B.S. in Chemistry
16		from Eastern Washington University and an M.S. in Chemical Engineering from the
17		University of Idaho.
18		
19	Q.	Have you previously testified before the Commission?
20	A.	No.
21		

1		II. SCOPE AND SUMMARY OF TESTIMONY
2		
3	Q.	What is the scope of your testimony?
4	A.	I analyzed Cascade Natural Gas's (Cascade or Company) plant additions
5		FP-319057, FP-319061 and FP-320034 (the South Kennewick Gate and
6		Reinforcement Project), and FP-302595 (the Kitsap Phase V Reinforcement Project).
7		
8	Q.	Please summarize your recommendations.
9	A.	I recommend the Commission partially disallow project numbers FP-319057, FP-
10		319061, and FP-320034, which together will be referred to as South Kennewick
11		Gate, because Cascade has failed to establish the prudency of this investment. I also
12		recommend the Commission fully disallow FP-302595, the Kitsap Phase V
13		Reinforcement Project because it is no longer part of this rate case.
14		
15	Q.	Does this recommendation affect the revenue requirement?
16	A.	Yes. As a result of these disallowances, Staff made adjustments to Cascade's 2024
17		and 2025 plant additions. ¹ The effects of these adjustments on the Company's rate
18		base and revenue requirement are reflected in Staff witness Huang's testimony. ² For
19		questions involving revenue requirement see witness Huang's testimony.
20		
21		
22		

¹ *See* Geranios, Exh. KG-2, line 5, 89, 90 column E and line 32, column I. 2 *See* Huang, Exh. JH-1T at 20:4-16.

1	Q.	Please summarize the other evidence Staff will introduce.
2	A.	I analyzed natural gas usage in the area served by the South Kennewick Gate and
3		discuss changes in building codes in the state of Washington and federal appliance
4		regulation. I also explain Staff's understanding that Cascade is moving the Kitsap
5		Phase V Reinforcement out of this general rate case.
6		
7	Q.	Have you prepared any exhibits in support of your testimony?
8	A.	Yes. I prepared Exhibits KG-2 through KG-9C, described above in my List of
9		Exhibits.
10		
11		III. REMOVAL OF THE KITSAP PHASE V
12		REINFORCEMENT PROJECT
13		
14	Q.	What is Staff's recommendation regarding FP-302595 the Kitsap Phase V
15		Reinforcement Project?
16	A.	Staff's recommendation is to disallow the full amount. Staff understands the Kitsap
17		Phase V Reinforcement Project is no longer being considered in this rate case. The
18		Company stated that the Kitsap Phase V Reinforcement Project would be delayed
19		due to adjustments in the 2025 capital budgeting process. ³ The Company has also
20		provided Staff updates to provisional plant additions that removed the Kitsap Phase
21		V Reinforcement Project from collection in this rate case. ⁴

³ Geranios, Exh. KG-5. ⁴ Geranios, Exh. KG-7.

1		IV. SOUTH KENNEWICK GATE PROJECT
2		
3		A. The Commission's Prudency Standard
4		
5	Q.	What legal standard applies to proposed plant additions?
6	A.	Staff analyzed whether the proposed investments are prudent. To meet this standard,
7		the Company needs to:
8		1. Demonstrate need for the project,
9		2. Perform a cost-benefit analysis,
10		3. Evaluate alternatives, and
11		4. Involve the Board of Directors in the decision process. ⁵
12		Because the South Kennewick Gate project is not yet in service at the time of this
13		rate case proceeding, Staff assessed the prudence of the Company's decision to
14		initiate the project.
15		
16	Q.	Please summarize your prudency analysis of the South Kennewick Gate
17		Project?
18	A.	The Company failed to meet the first element of prudency, a demonstrated need, and
19		thus has not met its burden in establishing the prudency of this investment. As I
20		explain more fully in Section IV below, Cascade selected this project over a less
21		costly alternative that would have met the Company's current need. The Company's

⁵ Wash. Utils. & Transp. Comm'n v. Puget Sound Energy, Dockets UE-111048 & UG0111949 (Consolidated), Order 08, at 148 ¶ 409 (May 7, 2012); Wash. Utils. & Transp. Comm'n v. Pacific Power & Light Co., Docket UE-152253, Order 12, ¶ 94 (Sept. 1, 2016).

1		chosen option reflects its projected future needs and Staff contends that actual
2		projected system growth is much lower than the Company's projections. For these
3		reasons, I conclude that the difference in cost between the alternative and chosen
4		projects was not a prudent investment.
5		
6		B. Background on the South Kennewick Gate Project
7		
8	Q.	Briefly describe the South Kennewick Gate Project.
9	A.	This project consists of installing 2,500 feet of 8-inch plastic pipe, relocating the
10		South Kennewick Gate and regulator station, and future retirement of the current
11		Kennewick Gate.
12		
13	Q.	What is the Company's stated need for this project?
14	A.	Cascade states that the installation of the pipe and relocation of the South Kennewick
15		Gate are necessary to support core growth in the area. The Company asserts a
16		projected growth rate of 2.38 percent annually on the Kennewick loop. ⁶
17		
18	Q.	Does Staff expect an increase in natural gas use on the system serving the South
19		Kennewick Gate Project?
20	A.	The Company did submit evidence of some growth, as shown in my Exh-6. ⁷
21		However, Staff does not expect gas usage to increase as much as the Company

 ⁶ In re Cascade Natural Gas Corp. 's 2023 Integrated Resource Plan, Docket UG-220131, Integrated Resource Plan at 3-10 (Feb. 24, 2023) (2023 IRP).
 ⁷ Geranios, Exh. KG-6.

projects in the area served by the South Kennewick Gate, due principally to changes
 in Washington State building codes⁸ and federal appliance efficiency standards.⁹ As
 a reminder, this project was not proposed to accommodate any current growth
 whatsoever, but rather to accommodate the Company's specific growth projections.

- 5
- 6 0. Please describe the effect of Washington building codes on natural gas use. 7 A. Staff does not expect residential customer growth for natural gas after the year 2031, 8 owing to Washington state building code. The State Legislature has mandated that 9 the Washington state energy code must be designed to "[c]onstruct increasingly 10 energy efficient homes and buildings that help achieve the broader goal of building 11 zero fossil-fuel greenhouse gas emission homes and buildings by the year 2031."¹⁰ 12 Based on this legislative directive, Staff contends that future residential customer 13 growth will stop, and eventually residential customer counts will decrease, along 14 with decreased residential use of natural gas. Cascade's long-term projections on 15 natural gas usage growth in Washington are problematic for this reason, as a lack of 16 new residential customers is unlikely to lead to an increase in natural gas usage. This is in-line with Staff's comments on Cascade's last Integrated Resource Plan (IRP).¹¹ 17 18
- 19

⁸ See RCW 19.27A.020(2)(a).

⁹Announcement from Department of Energy available at: <u>https://www.energy.gov/articles/doe-finalizes-</u><u>energy-efficiency-standards-residential-furnaces-save-americans-15-billion</u>. Standards codified at 10 CFR § 430.32(e)(1)(iii).

¹⁰ RCW 19.27A.020(2)(a).

¹¹ *In re Cascade Natural Gas Corp. 's 2023 Integrated Resource Plan*, Docket UG-220131, Staff Comments at 5, 7-9, 27 (April 28, 2023) (2023 IRP Comments).

1	Q.	Please describe the effect of federal efficiency standards on natural gas usage.
2	A.	Recently, the Department of Energy has instituted a new standard for natural gas
3		furnaces. This new standard requires that all natural gas furnaces sold have a 95%
4		efficiency rating starting in 2028. ¹² This federal standard further supports a likely
5		decrease in overall natural gas usage in the future. According to the Energy
6		Information Administration, home heating is the largest use source of residential
7		natural gas in the Western United States. Of all residential natural gas used in the
8		Western United States, an average of approximately two-thirds (66.6 percent) is used
9		for space heating. ¹³ The new efficiency requirements for natural gas furnaces will
10		result in a decrease in residential use of natural gas for space heating as these
11		appliances will require less fuel to operate.
12		
13		C. The South Kennewick Gate project is not a Prudent Investment
14		
15	Q.	On what basis is the project not prudent?
16	A.	Due to a lack of support for the projected area growth rate, Staff determined there is
17		not a demonstrated need for the project selected and there were other reasonable and
18		less costly alternatives that met the need properly identified. As such, the cost
19		difference between the reasonable alternative and the selected project should be

 ¹²Announcement from Department of Energy available at: <u>https://www.energy.gov/articles/doe-finalizes-energy-efficiency-standards-residential-furnaces-save-americans-15-billion</u>. Standards codified at 10 CFR § 430.32(e)(1)(iii).
 ¹³Energy Data for the term of term of terms of terms.

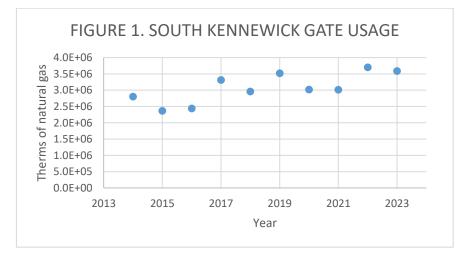
¹³Energy Data from Energy Information Administration Available at: https://www.eia.gov/consumption/residential/data/2020/index.php?view=consumption#by%20End%20uses%2 0by%20fuel table CE4.10.

disallowed. How it is disallowed is explained on page 11 of this testimony, and is
 illustrated in Staff's exhibits.¹⁴

3

4 Q. Does Staff believe the Company has justified the need for this project?

5 The Company forecasts 2.38 percent annual load growth on the Kennewick loop. A. 6 The load growth was largely increasing until around 2017, but Company data indicates that growth has slowed as can be seen in Figure 1 below.¹⁵ From 2019 to 7 2022, the overall growth in natural gas usage was 5.17 percent, significantly less 8 9 than the Company's projection of 7.31 percent over those three years, as can be seen 10 in Figure 1. The growth between 2019 and 2023 was even less, at 1.9 percent, much 11 less than the forecasted 9.87 percent. Staff asserts that state mandates, federal 12 incentives, and consumer choice will continue to reduce natural gas use below the Company's forecasts in the coming years. This does not support the need for more 13 14 capacity as stated by the Company.



¹⁴ Geranios, Exh. KG-2.

¹⁵ Geranios, Exh. KG-6.

1

Q. Why does future growth matter?

2	A.	The chosen project increases capacity by 200,000 cubic feet per hour (CFH), or 200
3		MCFH, at a cost of \$5,011,000, while the alternative increases capacity by 50 MCFH
4		at a cost of \$3,692,500, plus the cost of an additional future reinforcement. ¹⁶ The
5		lower cost option meets the Company's current need,17 which Staff deems sufficient.
6		
7	Q.	What is the current need?
8	A.	The current need is to address a pressure deficit, which is being monitored by the
9		Company. On a December 22, 2024, the pressure fell to 15.36 psig; ¹⁸ the high
10		pressure on the line is psig. ¹⁹ The current need is met by the alternative, not
11		selected, project. Because the Company failed to establish a demonstrated need for
12		the chosen, more expensive project, the difference in cost between these projects is
13		an imprudent investment. This is discussed further on page 11 of this testimony. ²⁰
14		
15	Q.	Did the Company evaluate alternative projects?
16	A.	Yes. The Company mentioned a viable alternative of installing 10,500 feet of 6-inch
17		plastic pipe and other reinforcements (not specified). This alternative project is
18		\$1,318,500 less expensive and would meet anticipated core growth, but would not
19		support the closure of the current Kennewick Gate. The Company states, "[t]he
20		\$3,692,500 alternative would have required an additional future reinforcement to

¹⁶ Geranios, Exh. KG-3.
¹⁷ 2023 IRP Appendix I at 11.

¹⁸ Geranios, Exh. KG-8

¹⁹ Geranios, Exh. KG-9C.

²⁰ Geranios, Exh. KG-2.

support the growth that is occurring in the area."²¹ Staff reviewed this assertion and
 still found the less expensive alternative to be the more prudent choice, as discussed
 below.

- 4
- 5

6

Q. Did Staff consider the cost of the "additional future reinforcement" discussed by Cascade?

Yes. The lower cost option meets the current deficit.²² Staff does not believe 7 A. 8 additional capacity expansion is needed in the area. With current growth being less 9 than projected, the need for further reinforcements in the area is speculative. Staff commented previously, "[d]espite significant changes in the policy landscape, 10 11 Cascade's demand forecast changed only mildly between the 2020 and 2023 IRP. In 12 2020, Cascade forecasted average load growth of 1.56 percent per year. In the 13 current IRP, Cascade estimates an average load growth of 1.1 percent per year. As 14 will be discussed in greater length, Staff finds this demand forecast is 15 unreasonable."²³ As noted earlier, the projected growth in the area serviced by this 16 project was projected to be 2.38 percent annually, which has not come to fruition. 17 Future growth being a driving component for a more expensive project is tenuous, as 18 growth projections in the area have already been lower than forecasted in the 2023 IRP.²⁴ Staff does believe some growth is likely, but Staff cannot support building for 19

- ²¹ Geranios, Exh. KG-3.
- ²² Darras, Exh. PCD-1T at 56: 3-4.

²³ 2023 IRP Comments at 7.

²⁴ See Geranios, Exh. KG-6; 2023 IRP at 3-10.

1		the long-term growth needs Cascade has asserted as evidence for the need for this
2		project.
3		
4	Q.	Why does the Company favor the more expensive option?
5	A.	The Company stated that they intend to retire the Kennewick gate, as it is in an
6		undesirable location. ²⁵ The specific issues raised by the Company (i.e. that
7		maintenance activities and truck deliveries are inconvenient at the current gate
8		location) do not justify the proposed project as a whole. The gate will continue to
9		function as necessary with the projected increase in load. For these reasons, the
10		Company has not justified its investment in this project as prudent.
11		
12	Q.	What is Staff's recommendation for FP-319057, FP-319061 and FP-320034,
	Q.	What is Staff's recommendation for FP-319057, FP-319061 and FP-320034, (South Kennewick Gate and Reinforcement)?
12	Q. A.	
12 13		(South Kennewick Gate and Reinforcement)?
12 13 14		(South Kennewick Gate and Reinforcement)? Staff recommends disallowing the difference between the more expensive chosen
12 13 14 15		(South Kennewick Gate and Reinforcement)? Staff recommends disallowing the difference between the more expensive chosen option and the alternative not chosen, meaning disallow \$1,318,500 from rate year 1
12 13 14 15 16		(South Kennewick Gate and Reinforcement)? Staff recommends disallowing the difference between the more expensive chosen option and the alternative not chosen, meaning disallow \$1,318,500 from rate year 1 and therefore from the entire rate case, as there is no demonstrated need for the
12 13 14 15 16 17		(South Kennewick Gate and Reinforcement)? Staff recommends disallowing the difference between the more expensive chosen option and the alternative not chosen, meaning disallow \$1,318,500 from rate year 1 and therefore from the entire rate case, as there is no demonstrated need for the chosen project. In Exh KG-2, Staff has divided this \$1,318,500 disallowance by
12 13 14 15 16 17 18		(South Kennewick Gate and Reinforcement)? Staff recommends disallowing the difference between the more expensive chosen option and the alternative not chosen, meaning disallow \$1,318,500 from rate year 1 and therefore from the entire rate case, as there is no demonstrated need for the chosen project. In Exh KG-2, Staff has divided this \$1,318,500 disallowance by three and subtracted that from each of the three project number totals, to arrive at
12 13 14 15 16 17 18 19		(South Kennewick Gate and Reinforcement)? Staff recommends disallowing the difference between the more expensive chosen option and the alternative not chosen, meaning disallow \$1,318,500 from rate year 1 and therefore from the entire rate case, as there is no demonstrated need for the chosen project. In Exh KG-2, Staff has divided this \$1,318,500 disallowance by three and subtracted that from each of the three project number totals, to arrive at three new allowable project number totals. Staff spread the disallowance over the

²⁵ Geranios, Exh. KG-4.

- 1 Q. Does this conclude your testimony?
- 2 A. Yes.
- 3