

Exhibit No. (EM-1T)
Docket No. UG-17
Witness: Eric Martuscelli

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,
Complainant,

v.

CASCADE NATURAL GAS
CORPORATION,
Respondent.

DOCKET UG-17

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

July 31, 2017

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I. INTRODUCTION

1 **Q. Please state your name, business address, and present position with Cascade**
2 **Natural Gas Corporation (“Cascade” or the “Company”).**

3 A. My name is Eric Martuscelli and my business address is 8113 W. Grandridge Blvd.,
4 Kennewick, WA 99336. I am the Vice President, Operations for Cascade, a wholly-
5 owned subsidiary of Montana Dakota Utilities Resources Group, Inc. (“MDU
6 Resources”).

7 **Q. Would you briefly describe your duties?**

8 A. Yes. My primary role is to provide executive leadership, direction, and coordination for
9 both gas distribution operations and gas distribution engineering.

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

11 A. I have a B.A. in Organizational Management from Ashford University. I have been an
12 employee of Cascade Natural Gas for 25 years including 20 years in field operations,
13 with increasing responsibility in both field and management roles, and the remainder in
14 my current role.

15 **Q. Have you previously written or presented testimony before the Washington Utilities**
16 **and Transportation Commission (“Commission”) or any other commission?**

17 A. Yes. In conjunction with the settlement proceedings of Docket No. PG-150120, I
18 presented testimony before the Commission on January 31, 2017.

19 **Q. What is the purpose of your testimony?**

20 A. The purpose of my testimony is to provide a high-level description of the Settlement
21 Agreement in Docket No. PG-150120 relating to documentation of maximum allowable
22 operating pressure (“MAOP”) validation for high pressure pipeline segments operating
23 above 60 psig (“MAOP Settlement Agreement”). I will discuss the benefits customers
24 will receive as a result of the work performed pursuant to the MAOP Settlement

1 Agreement, and I will demonstrate that it is appropriate to recover the costs for this
2 accelerated work in rates in this proceeding. Cascade witness Mr. Michael P. Parvinen
3 will provide a more detailed description of the rate recovery, including the accounting
4 petition approved by the Commission, which allows Cascade to defer certain costs related
5 to MAOP validation for consideration in rates. Finally, I will provide an overview of the
6 work that is currently underway. Cascade witness Mr. Ryan Privratsky will provide a
7 more detailed description of the work relating to the MAOP validation in his prefiled
8 direct testimony.

9 **Q. Please summarize why it is appropriate for Cascade’s customers to pay for the cost**
10 **of work undertaken pursuant to the MAOP Settlement Agreement.**

11 A. Customers are obtaining benefits from the work Cascade is currently undertaking, in
12 terms of enhanced safety and assurance that Cascade’s natural gas delivery system is
13 safe. These benefits significantly exceed the benefits that customers would experience
14 through Cascade’s compliance with the current code. As I discuss in more detail in this
15 testimony, the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) has
16 proposed new, more stringent rules regarding the documentation required to validate
17 MAOP.¹ Although the rules have not yet been adopted, Cascade has been moving
18 towards compliance with this new standard for the past year, consistent with the terms of
19 the MAOP Settlement Agreement. The steps Cascade has agreed to take will place
20 Cascade ahead of other pipeline operators who will ultimately need to take similar steps
21 to comply with the proposed rules. Cascade’s customers will benefit from the work
22 Cascade is performing pursuant to the MAOP Settlement Agreement in the following
23 ways:

¹ *Pipeline Safety: Safety of Gas Transmission and Gathering Pipelines*, Docket No. PHMSA-2011-0023 Notice of Proposed Rulemaking, 49 C.F.R. Parts 191 and 192 (Apr. 8, 2016) (hereinafter “PHMSA NPRM”).

- 1 • Cascade is documenting the basis for validation of MAOP on all its transmission and
2 high pressure pipelines, following the new “traceable, verifiable, and complete”
3 standard that PHMSA has proposed, which provides increased transparency.
- 4 • Cascade will not be relying solely on the “grandfather clause” to support its
5 validation of MAOP, as many operators currently do. The “grandfather clause”
6 allows operators to rely on past operations from the period of 1965-1970 to document
7 the basis for the MAOP validation.
- 8 • Cascade has agreed to accelerate its MAOP validation work and will complete
9 validation of the 116 pipeline segments over approximately seven years. This
10 schedule for validation compares favorably to the 15-year time frame PHMSA has
11 proposed and the ten-year time frame originally proposed by Cascade.
- 12 • Cascade has committed to follow Recommended Practice 1173 of the American
13 Petroleum Institute (“API”) relating to Pipeline Safety Management Systems, which
14 is not mandated by code but will provide enhanced competence, awareness and
15 training for Cascade’s management and workforce.

16 Through these steps, Cascade enhances the safety of its system and provides additional
17 assurance to its customers and the public in general that Cascade’s system is safe.

18 **II. DESCRIPTION OF THE MAOP SETTLEMENT AGREEMENT**

19 **Q. Please provide a brief history of events leading up to execution of the MAOP
20 Settlement Agreement.**

21 A. In February 2015, Cascade and the Commission’s Pipeline Safety Staff entered into a
22 Stipulated Agreement intended to resolve issues arising from Staff inspections that took
23 place in 2013 relating to Cascade’s records regarding MAOP verification on high
24 pressure distribution lines. The Stipulated Agreement recognized that Cascade was
missing some form of essential data necessary for Pipeline Safety Staff to judge whether

1 the MAOP on certain of Cascade’s high pressure pipelines could be validated.² Under
2 the terms of the Stipulated Agreement, Cascade agreed to submit to the Commission a
3 written plan for validating MAOP (“MAOP Plan”) that Cascade would implement to
4 determine the MAOP of all its high pressure pipelines in Washington for which there is
5 insufficient documentation to confirm the current MAOP.³ There were no recommended
6 or associated penalties tied to the Stipulated Agreement. Rather, it was intended to
7 provide a systematic process by which Cascade would document the basis for the MAOP
8 validation, over time, and take steps to decrease risk during the process of documenting
9 the MAOP validation. As I discuss later in my testimony, it is not uncommon for
10 pipeline operators to lack this type of documentation, due to the evolving nature of the
11 pipeline safety rules over the past fifty years. The Stipulated Agreement was consistent
12 with the direction PHMSA had signaled it would take in 2011, when for the first time, in
13 an advisory bulletin, it articulated the goal that pipeline operators should retain records
14 that are “traceable, verifiable, and complete.”⁴ The Commission approved the Stipulated
15 Agreement on February 12, 2015, and Cascade’s MAOP Plan was required to be
16 submitted to the Commission six months later, by August 2015.⁵

17 Due to a delay, Cascade did not submit its written MAOP Plan by August 12,
18 2015. Cascade submitted its initial MAOP Plan on January 29, 2016, and a revised
19 MAOP Plan on April 29, 2016. In the revised version of the MAOP Plan, Cascade
20 committed to complete the MAOP validation in a ten-year time frame. However, the
21 Commission filed a complaint against Cascade in July 2016 (“Complaint”) alleging

² See *Wash. Utils. & Transp. Comm’n v. Cascade Natural Gas Corp.*, Docket PG-150120, Stipulated Agreement at ¶5 (Feb. 2, 2015).

³ *Id.* at ¶7.1.

⁴ See *Pipeline Safety: Establishing Maximum Allowable Operating Pressure or Maximum Operating Pressure Using Record Evidence, and Integrity Management Risk Identification, Assessment, Prevention, and Mitigation*, PHMSA ADB-2011-01 (Jan. 10, 2011) (hereinafter “ADB-2011-01”).

⁵ *Wash. Utils. & Transp. Comm’n v. Cascade Natural Gas Corp.*, Docket PG-150120, Order 01 (Feb. 12, 2015)

1 (i) violation of the Commission Order approving the Stipulated Agreement due to
2 Cascade's failure to file its MAOP Plan by August 12, 2015, and (ii) the failure to
3 document MAOP validation, which was the underlying basis for the 2015 Stipulated
4 Agreement. After several months of discovery and negotiations, Cascade and the
5 Commission's Pipeline Safety Staff entered into the MAOP Settlement Agreement,
6 which was filed with the Commission on December 15, 2016.⁶

7 **Q. Did the Commission approve the MAOP Settlement Agreement?**

8 A. Yes. The Settlement Agreement was approved by the Commission, with five conditions,
9 in March 2017.⁷ Both Commission Pipeline Safety Staff and Cascade accepted the
10 Commission's conditions.

11 **Q. Would you please describe the MAOP Settlement Agreement?**

12 A. Yes. As part of the MAOP Settlement Agreement, Cascade agreed to a compliance
13 program that sets forth steps Cascade will take to document the basis for validation of
14 MAOP for high pressure lines, addresses the prioritization of work, and implements
15 certain risk reduction measures. The MAOP Settlement Agreement incorporated much of
16 the MAOP Plan that Cascade had submitted in 2016, but in the MAOP Settlement
17 Agreement Cascade agreed to accelerate the work so that the 116 segments missing
18 documentation of MAOP validation would be completed in seven years rather than ten
19 years. Cascade also agreed to a third-party records review of all remaining pipeline
20 operating above 60 psig, with follow-up based on the findings. Additionally, in the
21 MAOP Settlement Agreement Cascade agreed to undertake a best practices audit to
22 measure Cascade's performance with the API Recommended Practice 1173. The MAOP
23 Settlement Agreement also included a significant upfront penalty of \$1,000,000, which

⁶ *Wash. Utils. & Transp. Comm'n v. Cascade Natural Gas Corp.*, Docket PG-150120, Settlement Agreement (Dec. 15, 2016) (hereinafter "MAOP Settlement Agreement").

⁷ *Wash. Utils. & Transp. Comm'n v. Cascade Natural Gas Corp.*, Docket PG-150120, Order 03 (Mar. 20, 2017).

(continued...)

1 Pipeline Safety Staff attribute to Cascade’s violation of the Commission Order by failing
2 to file its MAOP Plan in August 2015.⁸ The MAOP Settlement Agreement also included
3 suspended penalties of \$1,500,000. Cascade must comply with the timelines set forth in
4 the MAOP Settlement Agreement in order to avoid the suspended penalties.

5 **Q. Do any of the conditions imposed by the Commission in its order approving the**
6 **MAOP Settlement Agreement impact Cascade’s fulfillment of the terms of the**
7 **MAOP Settlement Agreement?**

8 A. Yes. The third condition modified the term providing for Cascade to provide updates
9 every six months, and the Commission instead required the Company to consult with
10 Staff more frequently than every six months in the event of significant changes or
11 developments in Cascade’s progress in validating its MAOP.⁹ The other four conditions
12 primarily address suspended penalties,¹⁰ forbearance from imposing additional penalties
13 for similar violations,¹¹ and force majeure events.¹²

14 **Q. Is Cascade seeking recovery of the penalties in this case?**

15 A. No, as agreed to in the MAOP Settlement Agreement, Cascade will not seek recovery of
16 the monetary penalties.

17 **Q. Did the MAOP Settlement Agreement address recovery of costs?**

⁸ See *Wash. Utils. & Transp. Comm’n v. Cascade Natural Gas Corp.*, Docket PG-150120, Narrative Supporting Settlement Agreement at ¶60 (Dec. 15, 2016).

⁹ *Wash. Utils. & Transp. Comm’n v. Cascade Natural Gas Corp.*, Docket PG-150120, Order 03 at ¶46.

¹⁰ *Id.* at ¶¶42, 47 (The Commission clarified that suspended penalties could be imposed for failure to comply with any provision of the settlement and revised language stating that suspended penalties would become due when Cascade fails to “substantially comply” with the MAOP Settlement Agreement, eliminating the qualifier “substantially.”).

¹¹ *Id.* at ¶45 (The Commission expressed concern regarding the MAOP Settlement Agreement’s forbearance provision, and conditioned its approval on the ability of both Staff and the Commission to pursue penalties and other remedies for intentional violations of any statute, rule, or provision in Cascade’s gas safety standards manual, or for unintentional violations of any statute, rule, or provision in Cascade’s gas safety standards manual that lead to personal injury, death, or property damage.).

¹² *Id.* at ¶49 (The Commission clarified that force majeure provisions of the MAOP Settlement Agreement would be narrowly construed.).

(continued...)

1 A. Yes, the MAOP Settlement Agreement stated that Cascade “may seek recovery of its
2 costs to comply with the terms of this Agreement including but not limited to recovery
3 through deferral and amortization, general rates and a tracker.”¹³

4 **Q. Has the Commission authorized deferral of costs related to Cascade’s work**
5 **undertaken pursuant to the MAOP Settlement Agreement?**

6 A. Yes. In 2016, Cascade filed an accounting petition in Docket No. UG-160787 seeking to
7 defer certain costs it was incurring related to MAOP validation. Commission Staff
8 supported the petition, noting that Cascade had agreed to accelerate the work required
9 under the MAOP Plan from ten years to seven years and that deferral of the third-party
10 costs will incent the Company to achieve this goal sooner, providing a benefit to
11 customers.¹⁴ On November 10, 2016, the Commission entered an accounting order
12 allowing Cascade to defer amounts paid to outside vendors, contractors, and consultants
13 related to the MAOP Plan.¹⁵ The Commission required that these costs be recorded in
14 FERC Account 186, Miscellaneous Deferred Debits.¹⁶ The Commission required
15 Cascade to address the prudence of the deferred costs in a future rate proceeding.¹⁷

16 **Q. Is Cascade seeking recovery of the deferred costs in this case?**

17 A. Yes. Cascade is requesting to amortize and recover the costs it has deferred for
18 consultants and contractors related to work performed pursuant to the MAOP Settlement
19 Agreement, as authorized by the Commission’s accounting order in Docket No. UG-
20 160787. As I mentioned previously, Mr. Privratsky will describe this work in more detail

¹³ MAOP Settlement Agreement at Section V.B.9.

¹⁴ *In re Petition of Cascade Natural Gas. Corp. for an Accounting Order Authorizing Deferred Accounting Treatment of Expenses Related to the MAOP Determination & Validation Plan*, Docket UG-160787, Open Meeting Memo (Nov. 10, 2016).

¹⁵ *In re Petition of Cascade Natural Gas. Corp. for an Accounting Order Authorizing Deferred Accounting Treatment of Expenses Related to the MAOP Determination & Validation Plan*, Docket UG-160787, Order 01 (Nov. 10, 2016).

¹⁶ *Id.* at ¶6.

¹⁷ *Id.* at ¶7.

1 in his prefiled direct testimony, and Mr. Parvinen will address the details of Cascade’s
2 cost recovery request in his prefiled direct testimony.

III. BENEFITS OF THE MAOP SETTLEMENT AGREEMENT

3 **Q. Please address the benefit that the MAOP Settlement Agreement provides.**

4 A. The MAOP Settlement Agreement provides several benefits to customers and the public
5 in general. First, it enhances public safety and provides customers and the general public
6 additional assurance that Cascade’s system is safe. Second, the MAOP Settlement
7 Agreement accelerates the time line for completing validation of MAOP as compared to
8 the time line for compliance that PHMSA has proposed in its Notice of Proposed
9 Rulemaking (“NPRM”) as well as the time line set forth in Cascade’s initial and revised
10 MAOP Plan. Third, the MAOP Settlement Agreement incorporates best practices that go
11 beyond the specific violations cited in the Complaint that led to the MAOP Settlement
12 Agreement.

13 **Q. Please explain how the MAOP Settlement Agreement enhances public safety and
14 provides assurances that Cascade’s system is safe.**

15 A. The MAOP Settlement Agreement incorporates several aspects of recommended
16 practices and proposed rules that go beyond the standards in the current code, thereby
17 enhancing public safety and providing additional assurances to the public and Cascade’s
18 customers that Cascade’s system is safe. For example, it follows the approach recently
19 proposed by PHMSA in its proposed rulemaking that MAOP validation be “traceable,
20 verifiable, and complete.”¹⁸ While this proposed standard is not currently included in the
21 federal or state code, the MAOP Settlement Agreement will result in Cascade and the
22 State of Washington being a leader in the efforts to maintain “traceable, verifiable, and
23 complete” records documenting MAOP validation. This increased transparency with

¹⁸ PHMSA NPRM 49 C.F.R. 192.624(f).

1 respect to the documentation of the basis of MAOP validation for high pressure lines will
2 further enhance public safety and provide additional assurance to the public and
3 Cascade’s customers that Cascade’s high pressure lines are safe.

4 **Q. Are there other ways in which the MAOP Settlement Agreement exceeds the**
5 **current or proposed code?**

6 A. Yes. The MAOP Settlement Agreement will distinguish Cascade from other operators
7 who rely on the “grandfather clause” to establish MAOP. Prior to 1970, operators had no
8 obligation under federal code to maintain MAOP records. As such, PHMSA adopted a
9 “grandfather clause” which allowed operators of pipeline segments constructed before
10 1970 (pre-code) to establish MAOP using the highest actual operating pressure to which
11 the segment was subjected between 1965 and 1970.¹⁹ Although PHMSA has proposed to
12 eliminate the “grandfather clause” for lines located in high consequence areas and
13 moderate consequence areas, the “grandfather clause” will still be permitted for pipe
14 segments outside of these areas. Even so, Cascade will not be relying solely on the
15 “grandfather clause” to document the basis for MAOP validation for any of its high
16 pressure lines. Cascade has committed to document the basis for validation of the MAOP
17 of every pipeline segment operating above 60 psig.

18 Additionally, Cascade has implemented an accelerated leak survey action plan on
19 all segments operating at 20 percent specified minimum yield strength (SMYS), or
20 greater, until these segments are validated.

21 **Q. How does this relate to safety on Cascade’s system?**

22 A. Many pipeline operators are currently relying on the highest actual operating pressure to
23 which the segment was subjected during the five years prior to 1970 to validate MAOP.

24 In contrast, the pressure testing, in situ testing and other means Cascade will use to

¹⁹ *Wash. Utils. & Transp. Comm’n v. Cascade Natural Gas Corp.*, Docket PG-150120, Staff Investigation Report at 5, Section II.B., ¶2.

1 document the basis of the MAOP on its high pressure lines will provide for a safer
2 system, based on more accurate and current data, and give customers a higher level of
3 assurance that Cascade's system is safe.

4 **Q. Please explain how the MAOP Settlement Agreement accelerates compliance.**

5 A. The MAOP Settlement Agreement requires Cascade to document the MAOP validation
6 on all high pressure pipeline segments at an accelerated pace both as compared to the
7 time frame set forth by PHMSA in its NPRM and as compared to the time frame
8 previously established by Cascade in its MAOP Plan. With respect to the proposed rules,
9 PHMSA would require operators to complete testing of 50 percent of the affected
10 mileage within eight years of the effective date of the new rules and would set a 15-year
11 time frame for operators to complete testing on the remaining 50 percent.²⁰ In contrast,
12 Cascade has agreed to complete the MAOP validation of the identified 116 pipeline
13 segments in seven years. With respect to the MAOP Plan, the MAOP Settlement
14 Agreement accelerates the MAOP validation of the 116 identified segments from a ten-
15 year time frame for completion to a seven-year time frame.

16 **Q. Please explain how the MAOP Settlement Agreement incorporates best practices
17 that go beyond the specific violations alleged in the Complaint.**

18 A. As part of the MAOP Settlement Agreement, Cascade has agreed to take steps to
19 implement recommended practices of the API even though these recommended practices
20 are not required by the federal pipeline safety code and are not tied to specific violations
21 in the Complaint. Specifically, Cascade has agreed to undergo a third-party audit which
22 will measure Cascade's baseline performance against API Recommended Practice 1173,
23 Pipeline Safety Management Systems. The audit will focus on elements such as
24 leadership and management commitment, risk management, operational controls,

²⁰ See PHMSA NPRM 49 C. F. R. § 192.624(b).

1 management review and continuous improvement, and several other elements. Cascade
2 has also agreed to align its operations with the standards of API Recommended Practice
3 1173 and has further agreed that Pipeline Safety Staff may audit Cascade’s performance
4 in implementing these operational changes. Although the API standards are
5 “recommended practices” Cascade has committed to measure itself against these
6 standards and to strive to meet these standards. Customers and the public in general will
7 benefit from the enhanced competence, awareness and training that is expected to result
8 from Cascade’s adoption of these pipeline safety management recommended practices.

9 **Q. Is it appropriate for Cascade to recover the costs for this work from customers?**

10 A. Yes. A \$1 million penalty has already been imposed, of which Cascade will not seek
11 recovery of any portion. Additionally, in the event that the suspended penalties of \$1.5
12 million become due, Cascade will not seek recovery of such penalties from its customers.
13 Cascade’s MAOP validation work enhances pipeline safety in Washington and the costs
14 for this work should be viewed no differently than other pipeline safety costs which are
15 recovered through the general rate case process or through special mechanisms such as
16 the CRM. As previously discussed, customers gain benefits from the work that Cascade
17 is doing pursuant to the MAOP Settlement Agreement. Additionally, the code is not clear
18 about the type of documentation required to validate MAOP for high pressure pipelines.
19 For example, in the context of the “grandfather clause,” a 1986 interpretation of 49 CFR
20 192.619 from PHMSA recognized that the code did not require “records” and that
21 enforcement personnel should use their judgment as to what they will accept to
22 substantiate the pressure.²¹ Moreover, as can be seen from the comments in the NPRM,
23 there is currently neither a statutory or regulatory requirement that records be “traceable,

²¹ See PHMSA Interpretation #PI-86-005, available at <https://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Interpretation%20Files/Pipeline/1986/PI86005.pdf> (Aug. 4, 1986) (last visited July 3, 2017).

1 verifiable, and complete” and a retroactive application of this newly articulated standard
2 is not appropriate. My understanding is that the standard that PHMSA is now proposing
3 for transmission and gathering lines, that records be “traceable, verifiable, and complete,”
4 first appeared in a PHMSA advisory bulletin in 2011.²² Many operators do not have the
5 type of “traceable, verifiable, and complete” documentation to support the MAOP
6 validation on high-pressure lines that PHMSA is now proposing in its NPRM. In light of
7 this history, Cascade is not alone in lacking “traceable, verifiable, and complete” records.
8 Nevertheless, the work Cascade is now doing to document the MAOP for all lines
9 operating above 60 psig – including both high pressure distribution and transmission –
10 will ultimately be a benefit to customers and the general public, as it will enhance safety
11 and transparency, as I have discussed. It will put Cascade in a better position than many
12 other companies operating around the country. We can expect that once the proposed
13 rules go into effect, operators in Washington and around the country will need to take
14 steps similar to what Cascade is now doing to meet this standard. The MAOP Settlement
15 Agreement will result in Cascade undertaking the work now and over the next several
16 years, and will position both Cascade and the State of Washington to be leaders in this
17 effort. Customers and the region will benefit from enhanced safety and assurance that
18 Cascade’s system is safe.

IV. STATUS OF WORK UNDER THE MAOP SETTLEMENT AGREEMENT

19 **Q. Please provide a high-level overview of the status of the work that is currently being**
20 **done as part of the MAOP Settlement Agreement.**

21 A. Cascade continues to work on the MAOP validation for the 116 pipeline segments
22 identified in the MAOP Settlement Agreement. Cascade retained a consultant in 2016 to
23 review the remaining high pressure pipeline segments not identified in the MAOP

²² See ADB-2011-01. A subsequent PHMSA advisory bulletin, PHMSA ADB-2012-06, attempted to provide guidance on how to interpret the new terminology.

1 Settlement Agreement to determine if documentation was needed to validate MAOP, and
2 that review was completed in the first quarter of 2017. Cascade will be working with
3 Pipeline Safety Staff to address the additional pipeline segments and determine whether
4 to amend the MAOP Settlement Agreement to address additional segments. Cascade
5 continues to conduct leak surveys as agreed to in the MAOP Settlement Agreement. All
6 of this work is described in more detail in the prefiled direct testimony of Ryan
7 Privratsky. Additionally, Cascade has selected a consultant to conduct the audit to
8 determine Cascade's baseline compliance with API Recommended Practice 1173. This
9 audit and a written report to the Commission on the audit will be completed by December
10 31, 2017.

V. CONCLUSION

11 **Q. Does this conclude your testimony?**

12 A. Yes.