BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

CASCADE NATURAL GAS CORPORATION,

Respondent.

TESTIMONY OF

Aimee N. Higby

STAFF OF
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Rate Design, Rate Spread, Load Study and Cost of Service

November 19, 2020
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I. INTRODUCTION

Q. Please state your name and business address.
A. My name is Aimee N. Higby, and my business address is 621 Woodland Square Loop SE, Lacey, Washington, 98503. My business mailing address is P.O. Box 47250, Olympia, Washington, 98504-7250. My business email address is aimee.higby@utc.wa.gov.

Q. By whom are you employed and in what capacity?
A. I am employed by the Washington Utilities and Transportation Commission (Commission) as a Regulatory Analyst in the Energy Regulation Section of the Regulatory Services Division.

Q. How long have you been employed by the Commission?
A. I have been employed by the Commission since October 2018.

Q. Please state your qualifications to provide testimony in this proceeding.
A. I earned a Bachelor of Arts degree in History from Columbia University in 2007. I earned a Master of Public Administration degree from Portland State University in 2013. Prior to my employment with the Commission, I spent six years at Bonneville Power Administration (BPA), a federal power marketing agency within the U.S. Department of Energy. While at BPA, I managed multiple projects across the power and transmission business lines, participated in the execution of power purchase
agreements, developed new contract templates for BPA’s Power Services, and
analyzed the California Independent System Operator’s stakeholder and policy
initiatives. While at BPA, I attended the National Association of Regulatory Utility
Commissioners Annual Regulatory Studies Program.

Q. Have you testified previously before the Commission?
A. Yes. I previously testified on pro forma policy and capital additions in Avista
Corporation’s 2019 general rate case (GRC) Dockets UE-190334, UG-190335 and
UE-190222 (consolidated) and Puget Sound Energy’s (PSE) 2019 GRC Dockets UE-
190529, UG-190530, UE-190274 and UG-190275 (consolidated). I also testified on
the Commission’s policy on petitions for deferred accounting in PSE’s 2019 GRC.

II. SCOPE AND SUMMARY OF TESTIMONY

Q. What is the scope and purpose of your testimony?
A. The purpose of my testimony is to present the rate spread, rate design, and bill
impact analysis for Staff’s recommended revenue requirement. I respond to the rate
spread and rate design analysis and the 2020 end-of-period (EOP) customer
adjustment sponsored by Cascade Natural Gas Corporation (Cascade or Company)
witness Isaac Myhrum, and I address Cascade’s update on its lack of progress toward
initiating a load study.
Q. **Please summarize your recommendations.**

A. I recommend the Commission accept the Company’s proposed rate spread and rate design, which remains mostly unchanged from the approved methodologies in the Company’s 2019 GRC, Docket UG-190210. Staff recommends the Commission order the Company to spread rates using 2019 EOP customer count and class therm usage, instead of using projected 2020 EOP customer count and class therm usage as currently proposed by the Company. This change is consistent with the 2019 GRC methodology.

Regarding the load study, the Commission should not allow Cascade to continue to ignore previous orders and require the Company to complete a load study and a cost of service study (COSS) prior to the filing of its next rate case. Cascade was ordered by the Commission to initiate a load study four and a half years ago\(^1\), and the Company has yet to begin collecting data. Furthermore, a load study is a requirement for a utility that does not have AMR/AMI under the newly adopted cost of service rules.\(^2\) Although these rules became effective after the filing of this case, they will apply to any future rate cases Cascade files.

Q. **Have you prepared any exhibits in support of your testimony?**

A. Yes. I prepared Exhibits ANH-2 to ANH-6.

- Exh. ANH-2 shows the rate spread and resulting margin rates based on Staff’s revenue requirement from Exh. KMH-2.

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\(^2\) WAC 480-07-510(6); WAC 480-85-050(1).
Exh. ANH-3 shows the summary of revenues by rate schedule based on Staff’s proposed revenue requirement.

Exh. ANH-4 is the bill impact analysis using Staff’s proposed revenue change.

Exh. ANH-5 is the updated decoupling baselines using Staff’s proposed revenue requirement, which uses the 2019 EOP customer count and therm usage amounts.

Exh. ANH-6 is Cascade’s Response to UTC Staff Data Request No. 88.

III. RATE SPREAD AND RATE DESIGN

Q. Do you support the Company’s proposal on rate spread and rate design?

A. In general, yes, but with one significant exception. Specifically, I do not support Cascade’s use of projected 2020 customer count and class therm usage as the basis for spreading rates. Actual, verifiable test year (2019) customer count and class therm usage provide a more defensible basis for spreading rates. Also, I should note that Staff’s support for Cascade’s proposal to spread rates on an equal percent of margin basis is somewhat passive; Cascade’s proposed rate spread merely adheres to the terms of the Settlement Stipulation from the Company’s 2019 GRC.\(^3\)

Implementing a different rate spread methodology requires Cascade to complete a load study (and accompanying COSS) which, as Cascade witness Kivisto explains, the Company has not yet done or begun.

Q. What is Cascade’s proposed rate spread and rate design?

A. Cascade proposes to apply any revenue change on an equal percentage of margin basis,\(^4\) which is consistent with the rate spread and rate design methodologies approved by the Commission in Order 05 of Docket UG-190210.\(^5\)

As first stipulated in Order 06 of Cascade’s 2017 GRC Docket UG-170929\(^6\) and reiterated in Order 05 of the 2019 GRC,\(^7\) until the Company completes a load study, there will be no changes in the basic charges to each customer class.

Q. Are there any changes Staff is recommending to the rate spread?

A. Yes. The Company’s filed case uses forecasted customer counts and class therm usage to December 31, 2020, or 2020 end of period (EOP). Staff recommends the Company’s rates be spread using 2019 EOP customer counts and class therm usage. This change is to spread revenues using actual verifiable billing determinants and to maintain consistency throughout Staff’s case. I discuss why Staff recommends the use of 2019 EOP in the following section.

Q. What revenue requirement do you use for your rate spread calculation?

A. As presented by Staff witness Kristen Hillstead, Staff recommends an overall revenue requirement decrease of $508,968. This results in a rate decrease of -0.61 percent to each customer class.

\(^4\) Myhrum, Exh. IDM-1T at 19:5-6.
\(^5\) 2019 Cascade GRC Order at 5-7, ¶ 16.
\(^7\) 2019 Cascade GRC Order at 5-7, ¶ 16.
Q. **What are the resulting margin rates?**

A. Please see the table below for the margin rate changes.

Table 1: Margin Rate Comparison

<table>
<thead>
<tr>
<th>Rate Schedule</th>
<th>Block Descriptions (therms/month)</th>
<th>Current Rate</th>
<th>Proposed Rate</th>
<th>Rate Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>503 - Residential</td>
<td>All</td>
<td>0.31073</td>
<td>0.30883</td>
<td>-0.00190</td>
</tr>
<tr>
<td>504 - Commercial</td>
<td>All</td>
<td>0.26180</td>
<td>0.26020</td>
<td>-0.00160</td>
</tr>
<tr>
<td>505 - Industrial</td>
<td>First 500</td>
<td>0.20176</td>
<td>0.20053</td>
<td>-0.00123</td>
</tr>
<tr>
<td></td>
<td>Next 3,500</td>
<td>0.16481</td>
<td>0.16380</td>
<td>-0.00101</td>
</tr>
<tr>
<td></td>
<td>All over 4,000</td>
<td>0.15923</td>
<td>0.15826</td>
<td>-0.00097</td>
</tr>
<tr>
<td>511 - Large Volume</td>
<td>First 20,000</td>
<td>0.16113</td>
<td>0.16015</td>
<td>-0.00098</td>
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<tr>
<td></td>
<td>Next 80,000</td>
<td>0.12471</td>
<td>0.12395</td>
<td>-0.00076</td>
</tr>
<tr>
<td></td>
<td>All over 100,000</td>
<td>0.03464</td>
<td>0.03443</td>
<td>-0.00021</td>
</tr>
<tr>
<td>570 - Interruptible</td>
<td>First 30,000</td>
<td>0.08964</td>
<td>0.08909</td>
<td>-0.00055</td>
</tr>
<tr>
<td></td>
<td>All over 30,000</td>
<td>0.02817</td>
<td>0.02800</td>
<td>-0.00017</td>
</tr>
<tr>
<td>663 - Distribution</td>
<td>First 100,000</td>
<td>0.05989</td>
<td>0.05952</td>
<td>-0.00037</td>
</tr>
<tr>
<td>System Transportation</td>
<td>Next 200,000</td>
<td>0.02303</td>
<td>0.02289</td>
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<tr>
<td></td>
<td>Next 200,000</td>
<td>0.01473</td>
<td>0.01464</td>
<td>-0.00009</td>
</tr>
<tr>
<td></td>
<td>Over 500,000</td>
<td>0.00798</td>
<td>0.00793</td>
<td>-0.00005</td>
</tr>
</tbody>
</table>

Q. **What is the impact of an average residential customer’s bill under Staff’s proposal?**

A. The average residential customer using 56 therms a month will see a bill of $56.61, which is a decrease of $0.11 or -0.19 percent.

**IV. END OF PERIOD CUSTOMER ADJUSTMENT**

Q. **Please explain what the 2020 EOP customer adjustment is, found in Exh. IDM-7.**

A. The 2020 EOP customer adjustment is the Company’s forecasted expected revenues as of December 31, 2020 (2020 EOP), which is prior to new rates going into effect.
The Company has forecasted the number of customers they expect to have and the therm usage expected to occur by the end of 2020. Cascade then multiplies these forecasted amounts by the current rates (both the basic charge and the per therm rate) to get the additional revenue anticipated from use of 2020 EOP customer count.

Q. What is the revenue impact of the use of 2020 EOP customer adjustment?
A. The Company forecasted an additional $1,281,027 in revenue.

Q. Has Staff removed the 2020 EOP customer adjustment from the revenue requirement calculation?
A. Yes.

Q. Why did Staff remove this adjustment?
A. Staff is skeptical of the Company’s ability to accurately forecast expected revenues based on a forecasted customer count and forecasted therm usage. This skepticism of the Company’s ability to forecast stems from two components. First, Staff witness David Panco demonstrates how the Company has not accurately projected final plant-in-service dollar amounts (or in-service dates for that matter). This undercuts the Company’s assumption that it can forecast other accounting items with any degree of certainty, like revenues. The forecasts the Company uses are just that, forecasts. They are not known and measurable with any degree of certainty.

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8 Panco, Exh. DIP-1T at 13-15.
Second, if the Company were able to estimate their revenues with any sort of accuracy, they would have not filed a case since they would have realized they were over-earning. This is a principle reason Staff’s overall case recommends a revenue decrease.9

Q. Are there any other adjustments Staff had to make to remove the 2020 EOP customer adjustment?

A. Yes. The Company spread their revenue requirement increase and reset the decoupling baseline using the forecasted 2020 EOP numbers. To remain consistent with Staff’s recommendation to remove the $1.28 million, Staff has changed the customer count and therm usage to reflect 2019 EOP numbers to spread the revenue requirement decrease and update the decoupling baseline.

V. LOAD STUDY AND COST OF SERVICE STUDY

Q. What is a load study?

A. A load study is “a statistical analysis of load data collected from sampled customers to estimate the load profiles of customer classes over a minimum twelve-month period. Load profile estimates of customer classes shall be…daily for natural gas. A load forecast or load projection model is not a substitute of a load study.”10

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9 McGuire, Exh. CRM-1T at 12.
10 WAC 480-85-030(5).
Q. **Does the Company have daily therm usage information?**

A. Yes and no. The Company has daily therm usage information for the non-core class (distribution transportation), which have daily metering capabilities. However, for the core classes (residential, commercial, firm industrial, commercial-industrial dual service, and interruptible), the Company does not have daily therm usage information. The core class customers have meters that report monthly reads.

Q. **Why are load studies important?**

A. Load studies are one way for a company to gather data about how customer classes use the system in the absence of daily read meters. A load study is an alternative to any company installing metering infrastructure that records daily (or more granular) usage. These data are then used as an input into a COSS. At a high level, a COSS is an integral component in being able to properly assess and set rates for individual customer classes.\(^{11}\)

Q. **Do load studies have other uses besides being an input into a COSS?**

A. Yes. A load study gives a company insight into how its customers are using the system, this can aid in developing better planning documents, as well as daily operations. Load study data are also useful when calculating weather normalized therm usage. In fact, in this case, the Company admitted that without a load study it could not update its weather normalization methodology.\(^{12}\)

\(^{11}\) A COSS is not the only component the Commission uses when setting rates. The Commission also takes into account fairness, perceptions of equity, economic conditions in the service territory, gradualism, and rate stability. WAC 480-85-010(2).

\(^{12}\) Higby, Exh. ANH-6.
Q. **Why are load studies specifically addressed by the Company?**

A. The Company discusses load studies because its failure to complete a load study is the reason Cascade proposes spreading revenues on an equal percent of margin in this case. In each of the three rate cases the Company has filed since 2015, the Commission has acknowledged the need for Cascade to complete a load study.\(^\text{13}\) In the 2019 GRC the Commission noted, “reserving this issue (cost of service study) until the conclusion of the rulemaking docket is reasonable because the rulemaking will provide significant guidance for all regulated utilities that will impact how they will perform cost of service studies.”\(^\text{14}\) In the same order, the Commission reiterated that applying revenue changes on an equal percentage margin “is a reasonable compromise that maintains the status quo during the pendency of the cost of service rulemaking”\(^\text{15}\) as well as maintaining the current basic charge “until such time the Company performs a load study or detailed load analysis is a reasonable and equitable solution in light of the pending cost of service rulemaking.”\(^\text{16}\)

Q. **Please summarize the purpose of the cost of service rulemaking.**

A. The purpose of Dockets UE-170002 and UG-170003 was to establish clarity and uniformity about cost of service studies for the electric and gas utilities regulated by the Commission. Namely, the extent to which rules should define cost of service

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\(^\text{13}\) 2015 Cascade GRC Order at 7, ¶ 19; 2017 Cascade GRC Order at 21, ¶ 72; 2019 Cascade GRC Order at 6, ¶ 19.

\(^\text{14}\) 2019 Cascade GRC Order at 5-6, ¶ 17.

\(^\text{15}\) *Id.* at 6, ¶ 18.

\(^\text{16}\) *Id.* at 6, ¶ 20.
studies and address policy issues around the methods and practices on the calculation
and presentation of COSS.

Q. Please summarize the outcome of the cost of service rulemaking.
A. The cost of service rulemaking concluded with WAC 480-07-510(6) being amended
and the adoption of chapter 480-85 WAC. WAC 480-07-510(6) states a company
cannot file a general rate case without a compliant cost of service study. 480-85
WAC details how any party to a rate case must conduct a COSS, including the
acceptable data inputs, the approved functionalization, classification, and allocation
methodologies, and how the results are to be presented.

Q. Should the new cost of service rules apply to this GRC?
A. No. The cost of service rules went into effect August 7, 2020, 31 days after they
were filed with the Code Reviser on July 7, 2020. Cascade’s initial filing was
submitted on June 19, 2020. Therefore, the Company is not bound by the cost of
service rules in this rate case, however it is required to adhere to the new rules in any
future rate case.

Q. Is Staff concerned the Company has not made significant progress on initiating
a load study?

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\(^{17}\text{See In re Amending WAC 480-07-510 and Adopting Chapter 480-85 WAC Relating to Cost of Service Studies for Electric and Natural Gas Investor-Owned Utilities, Dockets UE-170002 and UG-170003, General Order R-599 (July 7, 2020).}\)
A. Yes. The Company agreed to a settlement term in their 2015 GRC to initiate a load study prior to filing its next rate case.\(^{18}\) However, the Company filed a rate case in 2017 sans initiating said load study, thus failing to comply with the terms of 2015 GRC Settlement Stipulation. A settlement was reached in the 2017 GRC. Since the conclusion of the 2017 GRC, the Company has been ordered to spread any rate increase or decrease on an equal percent of margin basis until a COSS informed by a load study is completed. In the 2019 case, Company witness Kivisto stated the Company hoped to begin collecting data in the 2019 heating season.\(^{19}\) However, in the current case Company witness Kivisto stated the Company now hopes to begin to collect data in the 2020 heating season.\(^{20}\)

It has been four and a half years now since Cascade was first required to initiate a load study, and the Company has yet to begin even collecting data. Staff is concerned that the Company seems to display wanton disregard for the terms it agreed to and for the Commission’s three previous orders.\(^{21}\) Cascade appears to have made no tangible progress whatsoever, nor has it given sufficient reason for continuing to delay the initiation of a load study as originally ordered in the 2015 rate case.

\(^{18}\) 2015 Cascade GRC Order at 2, ¶ 17.
\(^{19}\) Wash. Utils. & Transp. Comm’n v. Cascade Nat’l Gas Corp., Docket UG-190210, Kivisto, Exh. NAK-1T at 11:17. (“Cascade hopes to begin data collection over the next heating season, assuming the final study design and anticipated equipment modifications can be completed over the summer.”).
\(^{20}\) Kivisto, Exh. NAK-1T at 11:9-12.
\(^{21}\) 2015 Cascade GRC Order at 7, ¶ 19 (“We are concerned, however, that Cascade will only be conducting that (load) study prior to its next rate case but will not complete it before making its next rate filing.”); 2017 Cascade GRC Order at 21, ¶ 71-72 (“The settlement agreement in Cascade’s 2015 GRC required Cascade, before filing its next rate case, to initiate a load study…Although the Company did not perform a load study as required in the Commission’s final order in the 2015 GRC.”); 2019 Cascade GRC Order at 6, ¶ 19 (“As part of the Settlement approved and adopted in Cascade’s 2017 general rate case, the Company agreed to perform a load study or, in the alternative, to determine actual core class usage tied to the Company’s future Advanced Metering Infrastructure program.”).
Q. Does it make sense for the Company to have waited until the completion of the cost of service rulemaking to initiate a load study?

A. Theoretically it might make sense and the Company may argue that they were waiting for the cost of service rulemaking to conclude to understand what compliance under the new WACs would entail. However, the Commission released draft rules for comment on April 25, 2019. In that draft and every subsequent draft, the Commission released, there was language specifying the need for data from a load study. While Cascade argued that data from load studies are superfluous, the Commission was not persuaded by those arguments and included the load study requirement in the final rules that became 480-85 WAC. Cascade knew for 16 months before the rules went into effect that a load study would be a requirement.

In Staff’s opinion, 16 months is more than enough time to get a load study plan in place and at a minimum start collecting data. However, this is all moot as the Company was ordered to initiate a load study well before the generic rulemaking was even conceptualized.

Q. Besides demonstrating disregard for Commission orders, why is the Company’s lack of tangible progress a problem?

A. As I discuss in greater detail above, without a completed load study and resulting COSS, rates will continue to be spread on an equal percent of margin basis. The cost of service rulemaking dockets are closed and the rules are in effect, therefore the previous precedent of maintaining the status quo no longer holds. Continuing to spread rates on an equal percent of margin basis without any supporting data could
have cascading, disastrous consequences, as there is no basis for allocating costs. By 
the time a COSS is filed, rates could be so far out of parity that customers may 
become the victims of rate shock when parties attempt to bring rates back into parity. 
The Commission should not allow this to continue into the Company’s next rate 
case, it has gone on too long already.

Q. Does Staff have a suggestion as to how to mitigate any potential rate shock when 
a cost of service study is filed?

A. Unfortunately, no. Without the necessary data, all Staff can do is caution the 
Commission of continuing to spread any rate change on an equal percent of margin 
basis, without evidentiary support for doing so, after the conclusion of this current 
rate case.

Q. What do you recommend the Commission order in this case to help address this 
issue?

A. I recommend the Commission require Cascade to complete a load study and a COSS 
prior to filing its next rate case. This is keeping in line with the new cost of service 
rules and addresses the Company’s apparent reticence to initiate a load study in the 
absence of a strict deadline from the Commission. No exemption should be granted 
for a Company that agreed in 2016 to initiate a load study before its next GRC and 
has not even begun to collect the data in June 2020, three rate cases later.
Q. Does this conclude your testimony?
A. Yes.