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September 13, 2016

VIA ELECTRONIC FILING

PUC Filing Center
Public Utility Commission of Oregon
PO Box 1088
Salem, OR 97308-1088

Re: UG 305 - In the Matter of CASCADE NATURAL GAS CORPORATION, Request for a General Rate Revision

Attention Filing Center:

Attached for filing in docket UG 305 is an electronic copy of Cascade Natural Gas Corporation's Reply Testimony of Michael Parvinen, Anne M. Jones, Donna Genora, Tammy Nygard, Mark Chiles, Richard Amen, and Jennifer F. Gross. Since this is a document over 100+ pages, a copy is being sent via Federal Express.

Please contact this office with any questions.

Very truly yours,

Sharon Cooper

Sharon Cooper
Legal Assistant

Attachments

CERTIFICATE OF SERVICE

I hereby certify that I served a true and correct copy of the foregoing document in Docket UG 305 on the following named person(s) on the date indicated below by email addressed to said person(s) at his or her last-known address(es) indicated below.

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DATED: September 13, 2016

Sharon Cooper
Sharon Cooper
Administrative Assistant

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Reply Testimony of Michael Parvinen

REVENUE REQUIREMENT
EXHIBIT CNGC/500

September 2016

EXHIBIT CNGC/500– REPLY TESTIMONY – REVENUE REQUIREMENT

Table of Contents

Regulatory Affairs
Cascade Natural Gas Corporation
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I. INTRODUCTION AND SUMMARY

Q. Are you the same Michael Parvinen who filed direct testimony in this proceeding on behalf of Cascade Natural Gas Corporation (Cascade or Company)?

A. Yes, as Exhibit CNGC/200.

Q. What is the purpose of your reply testimony?

A. First, I will describe the partial settlement reached by all parties on a number of issues in this case, and describe the revenue requirement impact of that partial settlement. Second, I will provide a revised revenue requirement calculation based on the partial settlement, corrections, updated information, and accepted adjustments proposed by other parties. I will also respond to specific adjustments proposed by several Staff and intervenor witnesses that are not addressed in the partial settlement. The following is a list of issues I will be addressing, along with the names of the witnesses raising the issue:

Issue 1	Wage and Salaries	Marianne Gardner (Staff)
		Bob Jenks (CUB)
Issue 2	MDU Cross-Charge Labor	Marianne Gardner (Staff)
Issue 3	Rate Case Costs	Marianne Gardner (Staff)
Issue 4	Plant Additions	Mitch Moore (Staff)
Issue 5	Environmental Remed. Amort	Judy Johnson (Staff)
Issue 6	ADIT	Michael Gorman (NWIGU)
Issue 7	Basic Charges	Scott Gibbens (Staff)
Issue 8	WACOG Reallocation	Scott Gibbens (Staff)

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Q. Are any other Cascade witnesses providing reply testimony?

A. Yes. Anne Jones responds to Staff of the Public Utilities Commission (Staff) witness Marianne Gardner and Citizens Utility Board of Oregon (CUB) witness Bob Jenks regarding wages and salaries. Specifically, Ms. Jones discusses the Company's approach to establishing base wages and wage increases to support the Company's proposed level of wages and salaries. Donna Genora will address Ms. Gardner's proposed Accumulated Deferred Income Tax (ADIT) adjustment, particularly as it relates to bonus depreciation. This is identified as Issue 11 in the chart below. Tammy Nygard and Mark Chiles respond to Staff witness Lance Kaufman's adjustments regarding inter-company cost allocations. This is identified as Issue 12 in the chart below. Ron Amen will address the cost of service/rate spread/rate design alternatives and recommendations sponsored by Staff witness George Compton, CUB witness Bob Jenks, and NWIGU witness Michael Gorman. Finally, Jennifer Gross will address the Housekeeping Tariff testimony sponsored by Staff witness Scott Shearer.

Q. Please summarize your testimony.

A. In my testimony I support a revised revenue requirement increase of $988,093, as compared to our originally-proposed increase of $1,906,285.[1] The revised revenue requirement is shown in the chart below.

[1] CNGC/200, Parvinen/3.

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Company's Original Revenue Requirement Proposal (000s)		$1,906
Partial Settlement		($660)
Issue 1	Wage and Salaries	$0
Issue 2	MDU Cross-Charge Labor	($132)
Issue 3	Rate Case Costs	$0
Issue 4	Plant Additions	($224)
Issue 5	Environmental Remed Amort	$54
Issue 6	Accum Deferred Income Tax (ADIT) (NWIGU's Adjustment)	$80
Issue 11	ADIT (Staff's Adjustment)	$0
Issue 12	Cost Allocations	($36)
Revised Revenue Requirement Increase		**$988**

Q. Did you prepare any exhibits in support of your testimony?

A. Yes, I prepared the following exhibits:

Confidential Exhibit CNGC/501	Settled Adjustments
Exhibit CNGC/502	Wage & Salary Model (employee count fix)
Exhibit CNGC/503	Wage & Salary Model (employee count fix plus band)
Exhibit CNGC/504	Wage & Salary Model (employee count fix plus band plus US Wage CPI)
Exhibit CNGC/505	Cross Charge Labor & Incentives
Exhibit CNGC/506	2016 Updated Plant Projections
Exhibit CNGC/507	Environmental Remediation Amortization
Exhibit CNGC/508	2016 Accum Def Tax on 2015 Total Plant
Exhibit CNGC/509	Historical NYMEX prices

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II. DESCRIPTION OF PARTIAL SETTLEMENT BY ALL PARTIES

Q. Have the parties agreed to settle any of the issues in this case?

A. Yes. On August 17, 2016, the parties held the first settlement conference in this docket. At that time, the parties agreed to settle many of the issues raised by Staff and Intervenor testimony, filed on August 11, 2016.

Q. Did the parties prepare a term sheet memorializing the issues they agreed to settle?

A. No. At this time, the parties have a settlement in principle only. A term sheet will be filed at a later date.

Q. What is the revenue requirement impact of the partial settlement?

A. The partial settlement reduces the Company's proposed revenue requirement by $660,000. A table further describing the settled issues and amounts in terms of impact on revenue requirement is included as Confidential Exhibit CNGC/501.

III. RESPONSE TO PARTIES' TESTIMONY ON THE ISSUES

Issue 1 – Wage and Salaries

Q. Please briefly describe the wage and salary costs included in Cascade's case.

A. To calculate the wage and salary costs for its rate request, the Company started with its actual wage and salary costs for the base year 2015. The Company then adjusted the 2015 base year amounts by including: (1) ***actual wage increases granted for 2016***; (2) an annualizing adjustment for 2015; and (3) two additional budgeted full-time equivalent employees (system), which will be added during 2016 to work on resource planning.

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Thus, the wage and salary costs included in the Company's case reflects the ***actual wages granted to union and non-union employees in the 2016 test year.***[2]

Q. Does Staff propose an adjustment to the Company's proposed wages and salaries amounts?

A. Yes. Staff proposes a decrease to operations and maintenance expense (O&M) of $228,750 and $59,192 to rate base.[3]

Q. How does Staff calculate its adjustments?

A. Staff's adjustment is based on the application of its three-year wage and salary model (Three-Year Model or Staff's Model). Staff's Model starts with actual historical wages for non-union employees going back three years (in this case, 2013). This historical amount is then escalated for inflation each year for three years by the All-Urban CPI, to arrive at the 2016 test year level.[4] Staff then allows the Company to share 50/50 with customers the lesser of the difference between the Company's and Staff's calculated projections, or a 10 percent band around Staff's calculated projection.[5] In this way, Staff's Model allows the Company to recover a maximum of 5 percent over Staff's wage and salary number, as calculated assuming CPI wage increases from the 2013 "base year."

2 CNGC/200, Parvinen/6:12-17.
3 Staff/100, Gardner/10.
4 Staff/100, Gardner/8-9.
5 Staff's electronic workpaper entitled UG 287 S-2 Wages and 9 Salaries.xlsx., S-4.4 PUC 3-year OT.

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Q. Does Staff provide any rationale for using the Three-Year Model to estimate wages, when in fact the Company's case includes the *actual* wages paid to non-union employees in the test year?

A. Staff does not provide any specific rationale, other than to note that the Public Utility Commission of Oregon (Commission) typically relies on Staff's Model to estimate non-union wages.[6]

Q. Do you agree that the wage and salary level included in Cascade's rates should be calculated based on Staff's Model?

A. No, I do not, for several reasons. ***First,*** typically, Staff uses the Three-Year Model to estimate wages for a future test year when the actual wages paid to employees for that year are not known. However, in this case, we know the actual wages paid by the Company for the test year. Therefore, unless the evidence shows that the actual wages were imprudently set, there is no reason to reduce the Company's request.

Second, the testimony of Anne Jones establishes that the Company's processes for setting wages is reasonable and prudent. As explained by Ms. Jones, the Company follows an established method for determining wages that ensures that they are set at the minimum level required to attract and retain a qualified workforce. That method has been reviewed and found to be conservative by a third-party review.

Third, Staff's assumption that annual wage increases provided to employees should be limited to the CPI is unreasonable. As explained by Ms. Jones, the businesses with which Cascade competes for labor all provide merit increases that are

[6] Staff/100, Gardner/8.

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set at a level above the CPI. If Cascade were to limit its wage increases to CPI, it would be unable to recruit and retain employees.

Q. Has Staff made any errors in applying its Three-Year Model?

A. Yes. The model is intended to incorporate full time equivalent (FTE) employee counts for the test year—2016. Instead, Staff relies on 2015 FTE employee counts.[7]

Q. Does it appear that Staff used 2015 FTE employee counts intentionally?

A. No. Staff's use of 2015 employee counts appears to be the result of an error made by Cascade in responding to a data request. Specifically, Staff states that in determining FTE counts, it relied on Cascade's Response to Staff Data Request No. 254—which is included as an exhibit to Ms. Gardner's testimony as Staff/103.[8] In that response, the Company provided unadjusted 2015 FTE employee counts, which is what is reflected in the Company's test year presentation not actual 2016 FTEs.[9]

Q. What would be the impact to the Staff adjustment if Staff were to instead have used the 2016 employee count?

A. Rerunning the Staff calculation using actual employees as of August 1, 2016 would reduce Staff's adjustment to O&M to ($101,116), as opposed to Staff's original proposal, ($205,554). The rate base adjustment would decrease to ($29,116), as opposed to Staff's original proposal, ($59,192). The revised calculation is shown in Exhibit CNGC/502, Parvinen/1. The text highlighted in yellow identifies the changes to the calculation from Staff's Model.

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[8] Staff/100, Gardner/10.
[9] Staff/103, Gardner/8.

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Q. Does the Company accept these revised adjustments?

A. No. As discussed above, we believe that the Commission should rely on the Company's ***actual*** wages and salaries for the test year. Staff's own model shows that with just the employee count update described above, the total projected payroll is actually greater than the total payroll amount the Company is seeking to recover in this case. Therefore, the Company's proposed wages and salaries amounts are reasonable.

Q. Do you have other concerns with the Staff model?

A. Yes. It appears that Staff may have misapplied the 10 percent band. The Staff work paper describing the Three-Year Model states that the model calculates a 10 percent band around Staff's calculation which is described as "allowable."[10] However, instead of allowing the 10 percent amount in the band and sharing 50/50 any amounts beyond the 10 percent band, Staff instead shares 50/50 the lower of either the band or the difference between actual versus the projected payroll. Thus, it appears that Staff is treating the 10 percent "band" as if it were a 5 percent "cap." This makes no sense, and appears to contradict Staff's characterization of the 10 percent band amount being "allowable."

Q. If Staff's Model is adjusted to include a true 10 percent band, what is the result?

A. Cascade considered the application of the 10 percent band to officer, exempt and non-exempt employees. All officer and exempt employee wages would fit within the 10

[10] In Staff's workpapers, the 10 percent band is described as follows: "staff . . . allows the company to share 50/50 the lesser of the difference between the company's & staff's calculated projections, or a 10% band around staff's calculated projection." *See* Excel spreadsheet, Gardner Wage_Salary Model, tab I-2.1 PUC 3-year W&S (explanation at cell A5). Additionally, Line No. 9 of Staff's workpapers describe the 10 percent band as "allowable". *See* Excel spreadsheet, Gardner Wage_Salary Model, tab I-2.1 PUC 3-year W&S, cell E21.

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percent band, and only the non-exempt employee class would fall outside the 10 percent band. ***Taking the officer, exempt, non-exempt, and union employee wages together, however, the total allowed wages is greater than the Company's requested level.***

Q. Have you prepared an exhibit showing the calculation?

A. Yes. Exhibit CNGC/503 uses Staff's wage and salary adjustment corrected to include 2016 FTE (as shown in Exhibit CNGC/502) and adjusts the formula in line 10 to reflect an actual band and compared the calculated adjustment to the band to determine if allowable. Again, changes from the Staff's Model are highlighted in yellow.

Q. Do you have an alternative recommendation that relies on the Three-Year Model?

A. Yes. If the amount by which rates are escalated each year is adjusted to a more realistic reflection of actual market demands, Staff's Model will produce a reasonable result. In particular, if the Oregon Average Wage Rate value, or even the U.S. Average Wage Rate value, is substituted for Staff's All Urban CPI, Staff's Model will produce a wage calculation much more in line with the Company's actual wages.

Q. What is the impact to the impact to Staff's wage and salary adjustment from reflecting the U.S. Average Wage Rate value and using actual 2016 FTEs?

A. The values used are found in Exhibit Staff/110, Gardner/1 and would reduce the Staff's adjustment to O&M to ($6,938), and rate base to ($1,998). The calculation is provided in Exhibit CNGC/504, which uses the values from Exhibit CNGC/503.

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Q. In summary, based on Exhibits CNGC/502 – 504 and the Staff original calculation, do you have a concluding comment?

A. Yes. It is important to note that each of the corrections and alternatives by itself results in a total allowed salary for all employee classes combined that is greater than the original Company proposed level. Therefore, no adjustment is necessary to the Company's original proposal.

Q. Does CUB also propose a wage and salary adjustment?

A. Yes. CUB witness Jenks recommends allowing only 1.5 times the current CPI of 1.0 percent for non-union employees.[11]

Q. Do you agree with this adjustment?

A. No. The CUB recommendation does not reflect the current economic conditions built into the Company's wage and salary analysis as described by Company witness Anne Jones. CUB also misrepresents the components built into the authorized salary increases for non-union employees. Company witness Anne Jones describes these components.

Issue 2 – MDU Cross-Charge Labor

Q. Please summarize the Staff proposed MDU Cross-Charge Labor adjustment.

A. Staff applied its Three-Year Model to labor expenses that were cross-charged by the MDU Utilities Group and MDU Resources to Cascade. Staff also identified incentive payments to MDU Utilities Group and MDU Resources employees that were allocated to Cascade. Staff then applied its historical approach of disallowing 100 percent of

[11] CUB/100, Jenks/4.

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incentive payments to officers, 75 percent of incentives tied to earnings, and 50 percent of incentives associated with customer service.

Q. Do you accept the Staff adjustment?

A. The Company accepts Staff's application of the Commission's policy for determining the amount for cross-charged incentives that should be included in rates. However, the Company does not accept the application of the Three-Year Model for the same reason as described in the Wage and Salary adjustment above.

Q. Is there another adjustment to cross charged wages and salaries that needs to be made in this case?

A. Yes. In its original filing, the Company mistakenly omitted the increase to bring test year charges for cross-charged labor to a test year amount. MDU Utilities Group and MDU Resources employees who were cross charged to Cascade received the same average four percent increase for 2016 as were provided to the Cascade employees. This increase should have been applied to the Customer Service Center and Information Technology employees, and all other employees of the MDU Utilities Group and MDU Resources that were cross-charged to Cascade.

Q. What impact would that have on the results?

A. Increasing the total Oregon assigned cross-charged labor would increase expenses by $47,690 ($1,192,254 from Exhibit CNGC/505, Parvinen/ 1 times 4%).

Q. What is the overall adjustment for cross-charged labor, accepting Staff's incentive adjustment and adjusting salaries to reflect actual 2016 increases?

A. The adjustment would be ($121,649) for expense and a rate base reduction of $48,763. This amount is calculated in Exhibit CNGC/505.

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Issue 3 – Rate Case Costs

Q. Please briefly describe Cascade's proposal regarding rate case costs.

A. The rate case costs included in Cascade's case are set at the level incurred by Cascade in its 2015 base year, associated primarily with the 2015 general rate case. The Company expects that the costs incurred in the 2015 case are representative of those that will be incurred in this case. Because the Company plans to file annual rate cases, it believes that the level of costs included in the base year are reflective of the costs it will incur during the test year.

Q. Why does the Company assume it will be filing rate cases annually or at a minimum every two years?

A. The largest component of this case and the Company's last rate case (UG 287) is plant additions. The Company is incurring significant capital additions primarily focused on safety and reliability. In other words, the Company is incurring additional investment that will not result in additional customers or revenue. This situation will apply significant rate pressure.

Q. Why is the Staff approach of use of a three-year average inappropriate?

A. The Company has demonstrated that it is in a mode of filing rate cases more often than every three years. The Staff approach understates in rates the actual cost incurred to sponsor a rate case not only in this current case but the last rate case as well.

Q. If one were to assume two-year normalization, what would be the impact?

A. There would be no change to the company's presentation. The 2015 rate case costs and the expected 2016 rate case costs are essentially at the same level. A two year

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normalization calculation would allow half of each year thus equaling the amount included in the base year expenses.

Issue 4 – Plant Additions

Q. Please briefly describe Cascade's original plant addition request.

A. The Company originally requested recovery for $13.6 million in plant additions based on the expected capital spend reflected in its 2016 capital budget.

Q. Does Staff propose any adjustments to the Company's request?

A. Yes. Staff proposed adjustments based on three factors. First, relying on Company projections as provided in data requests, Staff determined that several projects will not go into service until after the rate-effective date, reducing the investment by $300,000. Second, for the Bend Pipe Replacement, the Company has decreased the amounts it estimates will be transferred to plant for the test year by $2.3 million. Third, Staff identifies planned reductions in spending for two information technology projects and one safety upgrade and accordingly reduces recovered investment by $663,000.

Q. **Do you agree with Staff's proposed reductions?**

A. Yes. However, it appears that Staff focused only on those projects where actual costs were less than the original projection. However, if we consider the actual costs—and actual updated estimates of costs-- for ***all*** projects that will be in service by the end of February 2017, the reduction to rate base is not as great as Staff projects.

Q. Please explain further.

A. Our records show that the costs associated with several of the projects included in the case show some variation from the originally estimated amount. Staff's approach was to review each project and propose reductions for those that showed a marked decrease

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from projections. However, Staff ignored entirely the many projects for which actual costs are coming out ***above*** projections. Any update to costs to reflect actuals for these plant additions must be even-handed—both increases *and* decreases must be reflected.

Q. Has the Company calculated the impact of including all updates for actual spend on projects?

A. Yes. The Company also verified that each project is or will be in service and used and useful by the effective date of this case.

Q. What is the impact of the analysis?

A. It is a decrease to rate base of $2,099,727 or a decrease in revenue requirement of $223,949. Exhibit CNGC/506 shows the changes from the Company's original projections. The cells highlighted in yellow are Staff's adjustments, which the Company accepts and agrees with, and the green highlights are the projects that have been updated based on the most recent information. Two projects highlighted in green are also lower than the original projections.

Issue 5 – Environmental Remediation Cost Amortization

Q. Did the Company originally propose an amortization of deferred environmental remediation costs?

A. No, not in this case. In the Company's last general rate case, the Company had proposed to amortize the total deferred remediation costs plus the expected remediation costs for the test year net of expected insurance proceeds. However, parties were concerned in part that the expected remediation costs were not firm enough and the remediation process had not yet begun. The proposal was ultimately withdrawn as part

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of the settlement. As of this date, the remediation process still has not begun, so the Company has chosen to wait until a later rate case to seek recovery.

Q. Does the Company agree with the Staff recommendation to start amortization now?

A. Generally no. The Company understands Staff's concern that deferred costs could at some point reach an unmanageable level. However, the intent of the deferral account is to offset costs incurred over time with insurance proceeds. The Company believes that it is optimal for the Company to seek recovery once it is clearer what the final ***net*** costs will be. We do agree that at some point the deferral balance may increase to the point where it seems prudent and reasonable to begin amortization, even without knowing the ultimate recovery amount. However, the deferral balance as of July 31 is $155,324, and we do anticipate further recovery against that amount. On the other hand, Cascade is comfortable with beginning amortization if Staff believes it is necessary.

Q. Based on Staff's recommendation to start amortization, does the Company have a proposal?

A. Yes. The Company proposes to start amortization of the current balance using a three-year amortization. This will reduce the interest accrual to a short term rate. The Company then proposes to create a new deferral account to track future costs and insurance proceeds.

Q. What is the impact of the Company's proposal?

A. The result of this proposal is an increase in expenses of $51,775 and revenue requirement of $53,601. The calculation is shown in Exhibit of the expense increase CNGC/507.

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Issue 6 – ADIT

Q. Please briefly describe the Accumulated Deferred Income Tax (ADIT) included in the Company's case.

A. In the Company's original presentation the 2015 rate base was carried forward to 2016 reflecting an additional year of depreciation expense on accumulated depreciation. NWIGU witness Gorman correctly points out that the Company did not reflect the change in ADIT from 2015 to 2016.

Q. Do you agree with NWIGU witness Gorman's calculation?

A. No. While Mr. Gorman is correct that an additional year of deferred tax change must be included, his calculation of the impact of that additional year is incorrect. In particular, Mr. Gorman's calculation has the impact of assuming all plant at the end of 2015 was placed in service during 2016—with the result that deferred taxes for would be increasing from the base year to the test year.[12] Obviously this is not the case. In fact most plant has been in service long enough that book straight line depreciation is greater than tax depreciation thus the deferred tax balance—or ADIT—is actually reducing.

Q. Has the Company calculated the impact on ADIT for 2016 based on the 2015 plant balances?

A. Yes. Exhibit CNGC/508 shows an increase to rate base of $748,927 which has a corresponding increase to the revenue requirement of $79,886.

[12] Company witness Donna Genora provides a detailed discussion of the impact of accelerated depreciation on deferred taxes in Exhibit CNGC/700 and CNGC/701.

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Issue 7 – Basic Charges

Q. Please briefly describe the Company's recommendation regarding the basic charges for residential and commercial rate schedules.

A. The Company is proposing no change to the $3.00 basic charge for Schedules 101 (Residential) and 104 (Commercial) customers. This relatively low basic charge is proposed in light of the fact that gas users are also electric utility users, and so are required to bear two basic charges each month. Moreover, this proposal appropriately supports the direct use of natural gas, which is an environmentally sound policy.

Q. Please provide a brief summary of the Staff proposal.

A. Staff opposes the Company's proposal. Specifically, Staff performed an analysis comparing the impact of Staff's versus Cascade's proposal on customer demand charges in the highest use months. Staff found that in those months, customers benefit from a $5 basic charge for both of these rate schedules.

Q. Does the Company disagree with Staff's analysis?

A. The Company does not dispute Staff's calculations. However, the Company continues to support using its current basic charge as a matter of policy to support and endorse a direct use of natural gas philosophy.

Q. Does the Company have a compromise proposal?

A. Yes. Cascade would agree to modify the basic charge by $1 per month as long as the increase does not result in a decrease to the margin rate. Cascade believes that reducing the margin rate sends the wrong price signal to customers, thus discouraging conservation. However, the Company's Long Run Incremental Cost of Service Study shows that no increase to schedule 104 is warranted at this time, so this compromise

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proposal is not reflected in the revised rate calculations sponsored by Company witness Mr. Amen.

<u>Issue 8 – WACOG Reallocation</u>

Q. Please summarize the Staff proposal regarding the WACOG reallocation.

A. Staff witness Gibbens recommends that the commodity portion of gas costs be allocated differently to the various customer classes. Mr. Gibbens bases this proposal on the fact that there are seasonal differences in gas prices, and therefore higher load factor classes should pay a lower commodity rate.

Q. Does Cascade agree with the Staff proposal?

A. No, not at all.

Q. Can you identify the flaws in the Staff proposal?

A. Yes. First, Staff only looks at gas prices for a small sample of years and uses a narrow scope in his review. As a result, Staff does not take into account the full range of variation in seasonal prices. Over time, the Company has experienced significant variation in seasonal gas prices and in fact, there have been years when the actual winter price is lower than the summer price. See Exhibit CNGC/509 where the August 1 price is identified with an arrow and the following winter prices were lower. Second, Staff's analysis looks only at market prices and does not take into account the advantage that storage provides to the overall winter price particularly during peak usage and peak prices. Third, the proposal by Staff adds a tremendous amount of complication and unnecessary administrative burden to the gas cost deferral process.

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Q. Please explain further the complication created in the gas cost deferral process.

A. The Staff proposal appears to create the need to track specific contracts and purchases by class, thus trying to track therms used by class at a very granular level such as daily. There can be extreme daily difference in customer usage versus gas purchases. For example, issues such as line pack, drafting, imbalances, and even daily injections and withdrawals from storage would create complications.

Q. Please further describe line pack, drafting, and imbalances.

A. Cascade can, either intentionally or unintentionally, purchase more gas than is required to serve customers. The excess gas is essentially stored in the pipeline. This would be referred to as line pack. Drafting would be the opposite effect, where Cascade would draft or take more gas from the pipeline than it actually purchased for the day. The net effect of line pack and drafting create imbalance on the pipelines. Granted the pipelines have tolerances and Cascade cannot stay "imbalanced" indefinitely, but there is flexibility that is not reflected in simply assigning a WACOG to each customer class.

Q. What is the effect of these complications?

A. All these identified components that are reflected in an average system price create severe complications when trying to track individual molecules to specific customer classes and cannot be ignored.

Q. Does the Company have an alternative proposal?

A. At a minimum, if Staff or the Commission wishes to pursue this topic, it would be more appropriate to reopen UM 950, the PGA guideline process, or to initiate a generic investigation proceeding where the topic can be explored in detail on an industry-wide basis, rather than just be applied to Cascade.

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Q. Does this conclude your reply testimony?

A. Yes.

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BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Michael Parvinen

SETTLED ADJUSTMENTS
EXHIBIT CNGC/501

REDACTED

September 2016

THIS DOCUMENT CONTAINS PROTECTED INFORMATION.

ALL QUALIFIED PERSONS AS DEFINED IN

ORDER NO. 16-141 WILL RECEIVE IT VIA U.S. MAIL.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Michael Parvinen

WAGE & SALARY MODE
(EMPLOYEE COUNT FIX)
EXHIBIT CNGC/502

September 2016

CNGC UG 305
Calculation of PUC 3-Year Wage Formula
Actual 12/31/2013 to Proforma 12/31/2016

Line No.	Source		Officers	Exempt	Non Exempt	Union	Total
1	DR Response No. 254 6/27/2016	Actual Base Payroll (2013)	**$43,080**	**$1,762,089**	**$320,314**	**$2,737,635**	**$4,863,119** **$0**
2	DR Response No. 254 6/27/2016	Ave. # of Employees (FTE) (2013)	0.25	24	7	41	**72.25**
3	(1)/(2)	Average Salary	$172,321	$73,420	$45,759	$66,772	
4	Actual/Forecast CPI Index*	Allowable % Increase	1.0272 [1]	1.0272 [1]	1.0272 [1]	1.0975 [2]	
5	August 1, 2016 Actual Employee Count	Ave. # of Employees (FTE) (2016) -	0.25	28.25	9.00	48.00	**85.50**
6	(3)*(4)*(5)	Projected Payroll	**$44,252**	**$2,130,514**	**$423,029**	**$3,517,551**	**$6,115,345**
7	Standard DR Response 92 Revised 6-28-2016 & adjustments per Parvinen Workpapers Exhibits 201-206.xlsx, Exh 204 (f) & (h)	Test Period Payroll	**47,326**	**2,256,247**	**510,010**	**3,206,930**	**$6,020,513**
8	(7)-(6)	Total Difference for Sharing	$3,075	$125,733	$86,981	$0	
9	(7)*.10	10% Band - Allowable	$4,425	$213,051	$42,303	$0	
10	[(8) or (9)] *0.5	50% Sharing of Lesser of Difference or Band	$1,537	$62,867	$21,151	$0	
11	(6)+(10)	Staff Proposed Level	**$45,789**	**$2,193,380**	**$444,180**	**$3,206,930**	**$5,890,279**
12	(11)-(7)	Net Payroll Adjustment	**($1,537)**	**($62,867)**	**($65,829)**	**$0**	**($130,233)**
13	Standard DR Response 93	O&M Expense as % of Payroll Exp	77.64%	77.64%	77.64%	77.64%	77.64%
14	Standard DR Response 93	O&M Expense Adjustment - System wide	($1,194)	($48,811)	($51,111)	$0	($101,116)
15	Standard DR Response 93	Oregon Allocation Factor	1	1	1	1	1
16	(14)*(15)	**O&M Expense Adjustment -Oregon**	**($1,194)**	**($48,811)**	**($51,111)**	**$0**	**($101,116)**
17	Standard DR Response 93	Rate Base as % of Payroll Exp	22.36%	22.36%	22.36%	22.36%	22.36%
18	(12)*(17)	Rate Base Adjustment - System wide	($344)	($14,056)	($14,718)	$0	**($29,118)**
19	(18)*(15)	**Rate Base Adjustment - Oregon**	**($344)**	**($14,056)**	**($14,718)**	**$0**	**($29,118)**

Rate Base - Capitalized Labor (DR 180 revised 7/22/2015) $1,709,393
Change in O&M (Note: Capitalized labor amount provided separately. Staff adjusted same ratio as O&M -$174/$5,497=-3% -2%

[1] Source - OR Dept. of Admin Srvcs, Office of Economic Analysis
Oregon Economic & Revenue Forecast June 2016, Volume XXXVI, No. 2, Appendix A, Table A.4, page 40

Actual/Forecast All-Urban Consumer Price Index

2014	1.6%
2015	0.1%
2016	1.0%
	1.0272

[2] Union Factor Source: DR 94

Union Increase	2014	3.25%
	2015	3.10%
	2016	3.10%
		1.0975

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Michael Parvinen

WAGE & SALARY MODEL
(EMPLOYEE COUNT
FIX PLUS BAND)
EXHIBIT CNGC/503

September 2016

CNG UG 305
Calculation of PUC 3-Year Wage Formula
Actual 12/31/2013 to Proforma 12/31/2016

Line No.	Source		Officers	Exempt	Non Exempt	Union	Total
1	DR Response No. 254 6/27/2016	Actual Base Payroll (2013)	$43,080	$1,762,089	$320,314	$2,737,635	$4,863,119 $0
2	DR Response No. 254 6/27/2016	Ave. # of Employees (FTE) (2013)	0.25	24	7	41	72.25
3	(1)/(2)	Average Salary	$172,321	$73,420	$45,759	$66,772	
4	Actual/Forecast CPI Index*	Allowable % Increase	1.0272 [1]	1.0272 [1]	1.0272 [1]	1.0975 [2]	
5	August 1, 2016 actual emploee count	Ave. # of Employees (FTE) (2016) -	0.25	28.25	9.00	48.00	85.50
6	(3)*(4)*(5)	Projected Payroll	$44,252	$2,130,514	$423,029	$3,517,551	$6,115,345
7	Standard DR Response 92 Revised 6-28-2016 & adjustments per Parvinen Workpapers Exhibits 201-206.xlsx, Exh 204 (f) & (h)	Test Period Payroll	47,326	2,256,247	510,010	3,206,930	$6,020,513
8	(7)-(6)	Total Difference for Sharing	$3,075	$125,733	$86,981	$0	
9	(7)*.10	10% Band - Allowable	$4,425	$213,051	$42,303	$0	
10	[(8) * 0.5 only if (8)-(9) is greater than zero	50% Sharing of Difference beyond the Band	$0	$0	$22,339	$0	
11	(6)+(10)	Staff Proposed Level	$47,326.29	$2,256,247.10	$487,670.78	$3,206,929.54	$5,998,174
12	(11)-(7)	Net Payroll Adjustment	$0	$0	($22,339)	$0	($22,339)
13	Standard DR Response 93	O&M Expense as % of Payroll Exp	77.64%	77.64%	77.64%	77.64%	77.64%
14	Standard DR Response 93	O&M Expense Adjustment - System wide	$0	$0	($17,344)	$0	($17,344)
15	Standard DR Response 93	Oregon Allocation Factor	1	1	1	1	1
16	(14)*(15)	**O&M Expense Adjustment -Oregon**	$0	$0	($17,344)	$0	($17,344)
17	Standard DR Response 93	Rate Base as % of Payroll Exp	22.36%	22.36%	22.36%	22.36%	22.36%
18	(12)*(17)	Rate Base Adjustment - System wide	$0	$0	($4,995)	$0	($4,995)
19	(18)*(15)	**Rate Base Adjustment - Oregon**	$0	$0	($4,995)	$0	($4,995)

Rate Base - Capitalized Labor (DR 180 revised 7/22/2015) $1,709,393
Change in O&M (Note: Capitalized labor amount provided separately. Staff adjusted same ratio as O&M -$174/$5,497=-3% 0%

[1] Source - OR Dept. of Admin Srvcs, Office of Economic Analysis
Oregon Economic & Revenue Forecast June 2016, Volume XXXVI, No. 2, Appendix A, Table A.4, page 40
Actual/Forecast All-Urban Consumer Price Index

2014	1.6%
2015	0.1%
2016	1.0%
	1.0272

[2] Union Factor Source: DR 94

Union Increase	2014	3.25%
	2015	3.10%
	2016	3.10%

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Michael Parvinen

WAGE & SALARY MODEL
(EMPLOYEE COUNT FIX PLUS
BAND PLUS US WAGE CPI)
EXHIBIT CNGC/504

September 2016

CNGC UG 305

Calculation of PUC 3-Year Wage Formula

Actual 12/31/2013 to Proforma 12/31/2016

Line No.	Source		Officers	Exempt	Non Exempt	Union	Total
1	DR Response No. 254 6/27/2016	Actual Base Payroll (2013)	$43,080	$1,762,089	$320,314	$2,737,635	$4,863,119 $0
2	DR Response No. 254 6/27/2016	Ave. # of Employees (FTE) (2013)	0.25	24	7	41	72.25
3	(1)/(2)	Average Salary	$172,321	$73,420	$45,759	$66,772	
4	Actual/Forecast CPI Index*	Allowable % Increase	1.0864 [1]	1.0864 [1]	1.0864 [1]	1.0975 [2]	
5	August 1, 2016 actual employees	Ave. # of Employees (FTE) (2016)	0.25	28.25	9.00	48.00	85.50
6	(3)*(4)*(5)	Projected Payroll	$46,801	$2,253,249	$447,399	$3,517,551	$6,265,000
7	Standard DR Response 92 Revised 6-28-2016 & adjustments per Parvinen Workpapers Exhibits 201-206.xlsx, Exh 204 (f) & (h)	Test Period Payroll	47,326	2,256,247	510,010	3,206,930	$6,020,513
8	(7)-(6)	Total Difference for Sharing	$525	$2,998	$62,611	$0	
9	(7)*.10	10% Band - Allowable	$4,680	$225,325	$44,740	$0	
10	[(8) * 0.5 only if (8)-(9) is greater than zero	50% Sharing of Difference beyond the Band	$0	$0	$8,935	$0	
11	(6)+(10)	Staff Proposed Level	$47,326.29	$2,256,247.10	$501,074.26	$3,206,929.54	$6,011,577
12	(11)-(7)	Net Payroll Adjustment	$0	$0	($8,935)	$0	($8,935)
13	Standard DR Response 93	O&M Expense as % of Payroll Exp	77.64%	77.64%	77.64%	77.64%	77.64%
14	Standard DR Response 93	O&M Expense Adjustment - System wide	$0	$0	($6,938)	$0	($6,938)
15	Standard DR Response 93	Oregon Allocation Factor	1	1	1	1	1
16	(14)*(15)	**O&M Expense Adjustment -Oregon**	$0	$0	($6,938)	$0	($6,938)
17	Standard DR Response 93	Rate Base as % of Payroll Exp	22.36%	22.36%	22.36%	22.36%	22.36%
18	(12)*(17)	Rate Base Adjustment - System wide	$0	$0	($1,998)	$0	($1,998)
19	(18)*(15)	**Rate Base Adjustment - Oregon**	$0	$0	($1,998)	$0	($1,998)

Rate Base - Capitalized Labor (DR 180 revised 7/22/2015) $1,709,393
Change in O&M (Note: Capitalized labor amount provided separately. Staff adjusted same ratio as O&M -$174/$5,497=-3% 0%

[1] Source - OR Dept. of Admin Srvcs, Office of Economic Analysis
Oregon Economic & Revenue Forecast June 2016, Volume XXXVI, No. 2, Appendix A, Table A.4, page 40

Actual/Forecast All-Urban Consumer Price Index

2014	3.2%
2015	2.5%
2016	2.7%
	1.0864

[2] Union Factor Source: DR 94

Union Increase	2014	3.25%
	2015	3.10%
	2016	3.10%

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Michael Parvinen

CROSS CHARGE
LABOR & INCENTIVES
EXHIBIT CNGC/505

September 2016

CNGC UG 305
Calculation of Cross Labor Increase and Incentive Cross Charge Removal

Line #		
1	Total Cross Charge Labor (OPUC DR 254)	$1,192,254
2	2016 Actual granted salary increase	4.00%
3	2016 Salary increase for Cross Labor	$47,690.16
4	Staff Cross Charge Incentive removal	(169,339)
5	Total A&G Adjustment (Line 4 plus Line 3)	(121,649)
6	Staff Cross Charge Rate Base Reduction	(48,763)

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Michael Parvinen

2016 UPDATED PLANT PROJECTIONS
EXHIBIT CNGC/506

September 2016

Cascade Natural Gas
2016 Plant Additions
UG 305

Work Order and Description	Account	State	Investment		Investment
FP-101209 - INTANGIBLES - SOFTWARE	3030-Misc. Intangible Plant	AS	59,284.50	0.2427	14,388.35
FP-101472 - UG-INSTALL WORK MGT-GLE	3030-Misc. Intangible Plant	AS	330,236.54	0.2427	80,148.41
FP-101479 - UG MWM PROJECT - CNGC SHARE	3030-Misc. Intangible Plant	AS	43,116.00	0.2427	10,464.25
FP-101481 - UG GPSLS PROJECT - SOFTWARE	3030-Misc. Intangible Plant	AS	74,079.42	0.2427	0.00
FP-200064 - IVR-WEB IMPLEMENTATIION - DRCT	3030-Misc. Intangible Plant	AS	263,370.51	0.2427	63,920.02
FP-200663 - UG GIS ENHANCEMENTS CNG DIRECT	3030-Misc. Intangible Plant	AS	692,499.89	0.2427	104,000.00
FP-301808 - UG-Routing Software - Survey System	3030-Misc. Intangible Plant	AS	21,612.90	0.2427	0.00
FP-301813 - WR-GAS SCADA Enhancements	3030-Misc. Intangible Plant	AS	211,247.17	0.2427	51,269.69
FP-302571 - CC&B Upgrade	3030-Misc. Intangible Plant	AS	1,341,477.29	0.2427	46,000.00
FP-302579 - PII - Personal Info Security	3030-Misc. Intangible Plant	AS	32,983.80	0.2427	8,005.17
FP-302613 - PowerPlan Upgrade	3030-Misc. Intangible Plant	AS	208,501.67	0.2427	0.00
FP-302616 - Human Capital Management	3030-Misc. Intangible Plant	AS	57,122.21	0.2427	13,863.56
FP-302619 - JDE Upgrade	3030-Misc. Intangible Plant	AS	308,237.74	0.2427	0.00
FP-311939 - PCAD UPGRADE TO 6.5	3030-Misc. Intangible Plant	AS	236,535.11	0.2427	57,407.07
FP-200076 - MN - HANFORD DOE PRELIMINARY	3671-Transmission Mains	WA	17,608.00		
FP-309960 - RP 20" HP Anacortes Lateral	3671-Transmission Mains	WA	(302,000.00)		
FP-302062 - Mains - GO	3760-Mains	AS	(3,000,000.29)	0.2427	0.00
FP-306995 - OTHELLO REYNOLDS RD REINFORCEMENT	3760-Mains	WA	362,486.04		
FP-302369 - GB - GROUNDBED WASHINGTON	3761-CNG Mains Steel	WA	280,024.00		
FP-302370 - GB - GROUNDBED OREGON	3761-CNG Mains Steel	OR	140,012.00		140,012.00
FP-302665 - RICHLAND 4" IP CANAL/HWY CROSSING	3761-CNG Mains Steel	WA	435,043.61		
FP-306985 - SEDRO WOOLLEY IP REINFORCEMENT	3761-CNG Mains Steel	WA	105,518.21		
FP-307025 - CRM SHELTON 4" IP BRIDGE REPLACE	3761-CNG Mains Steel	WA	9,163.63		
FP-309000 - 4 in Steel IP Bore Columbia Park	3761-CNG Mains Steel	WA	147,983.11		
FP-309001 - 2 IN STEEL IP BORE BELFAIR PL	3761-CNG Mains Steel	WA	155,862.36		
FP-311354 - DEEP WELL GB - YAKIMA	3761-CNG Mains Steel	WA	91,480.64		
FP-311356 - DEEP WELL GB - KENNEWICK	3761-CNG Mains Steel	WA	91,480.64		
FP-311357 - DEEP WELL GB - ANACORTES	3761-CNG Mains Steel	WA	91,480.64		
FP-311358 - DEEP WELL GB - WALLA WALLA	3761-CNG Mains Steel	WA	91,480.64		
FP-312041 - CRM 6" Nob Hill Replacement	3761-CNG Mains Steel	WA	62,069.48		
FP-312043 - Kennewick RR Cross Near Kamiakin	3761-CNG Mains Steel	WA	123,821.09		
FP-312045 - V-7 MT VERNON	3761-CNG Mains Steel	WA	80,277.70		
FP-101170 - MAIN-GROWTH-OREGON	3762-CNG Mains High Press Steel	OR	498,617.72		498,617.72
FP-101171 - MAIN-REINFORCE-OREGON	3762-CNG Mains High Press Steel	OR	51,515.38		51,515.38
FP-101172 - MAIN-RELO-REPL-OREGON	3762-CNG Mains High Press Steel	OR	103,030.25		103,030.25
FP-101190 - MAIN-GROWTH-WASHINGTON	3762-CNG Mains High Press Steel	WA	997,235.45		
FP-101192 - MAIN-RELO-REPL-WASHINGTON	3762-CNG Mains High Press Steel	WA	309,090.84		
FP-200080 - RF; 12" STEEL HP SHELTON	3762-CNG Mains High Press Steel	WA	7,909,471.00		
FP-200394 - CRM RPL 10" SQUALICUM CRK EXPOSURE	3762-CNG Mains High Press Steel	WA	60,350.00		
FP-200419 - RF - KITSAP 12" HP REINFORCE	3762-CNG Mains High Press Steel	WA	32,934.38		
FP-200689 - RPL 12" BEND HP LINE #1	3762-CNG Mains High Press Steel	OR	63,641.86		63,641.86
FP-200691 - CRM REL ZILLAH @ MEYERS BRIDGE RD	3762-CNG Mains High Press Steel	WA	774.91		
FP-300346 - CRM RPL; 12" STEEL HP, KELSO	3762-CNG Mains High Press Steel	WA	62,069.48		
FP-302588 - HILDEBRAND BLVD 6" HP MAIN	3762-CNG Mains High Press Steel	WA	240,728.24		
FP-302596 - CRM 8" ATTALIA HP LINE REPLACEMENT	3762-CNG Mains High Press Steel	WA	62,069.48		
FP-302640 - 6" PILOT ROCK HP REPLACEMENT	3762-CNG Mains High Press Steel	OR	62,069.48		0.00
FP-302666 - MT. WASHINGTON BRIDGE CROSSING	3762-CNG Mains High Press Steel	OR	465,521.53		146,000.00
FP-302714 - PENDLETON V-23 REPLACEMENT	3762-CNG Mains High Press Steel	OR	230,536.03		230,536.03
FP-302715 - 16" N. WHATCOM VALVE VAULT	3762-CNG Mains High Press Steel	WA	3,576.73		
FP-306982 - CRM VANCE CREEK EXPOSURE REPLACE	3762-CNG Mains High Press Steel	WA	1,180,050.98		
FP-306983 - CRM CAMP CREEK EXPOSURE REPLACEMENT	3762-CNG Mains High Press Steel	WA	1,173,949.20		
FP-306986 - CRM 3" BURLINGTON HP LINE REPL	3762-CNG Mains High Press Steel	WA	1,118,159.30		
FP-306997 - 4" MADRAS HP LINE REPLACEMENT	3762-CNG Mains High Press Steel	OR	62,069.48		0.00
FP-307002 - V-9 ABERDEEN REPLACEMENT	3762-CNG Mains High Press Steel	WA	204,829.57		
FP-307221 - 8" YAKIMA HP PIPELINE	3762-CNG Mains High Press Steel	WA	62,069.48		
FP-200059 - RF 6" PE MN @ YAKIMA AIRPORT	3763-CNG Mains Plastic	WA	79.62		
FP-200686 - CRM RPL LONGVIEW BARE STEEL	3763-CNG Mains Plastic	WA	4,493,698.80		
FP-200687 - CRM RPL ANACORTES BARE STEEL	3763-CNG Mains Plastic	WA	2,945,079.99		
FP-200688 - BEND PIPE REPL	3763-CNG Mains Plastic	OR	4,637,699.96		2,300,000.00
FP-300363 - CRM RPL SHELTON BARE STEEL	3763-CNG Mains Plastic	WA	53.65		
FP-302641 - 4" PILOT ROCK IP REINFORCEMENT	3763-CNG Mains Plastic	OR	62,069.48		0.00
FP-303142 - PENDLETON BARE STEEL REPLACEMENT	3763-CNG Mains Plastic	OR	62,069.48		0.00
FP-307225 - RIVER ROAD REINFORCEMENT	3763-CNG Mains Plastic	WA	920,106.06		
FP-312040 - Poulsbo 4" PE Reinforcement	3763-CNG Mains Plastic	WA	309,552.61		
FP-312221 - MN 4" PE SHELTON	3763-CNG Mains Plastic	WA	4,470.24		
FP-101173 - R STA-GROWTH-OREGON	3780-Meas & Reg Equip Gen	OR	66,409.14		66,409.14
FP-101175 - R STA-RELO-REPL-OREGON	3780-Meas & Reg Equip Gen	OR	124,960.68		124,960.68
FP-101194 - R STA-GROWTH-WASHINGTON	3780-Meas & Reg Equip Gen	WA	265,636.56		
FP-101196 - R STA-RELO-REPL-WASHINGTON	3780-Meas & Reg Equip Gen	WA	493,122.24		

Cascade Natural Gas
2016 Plant Additions
UG 305

Work Order and Description	Account	State	Investment		Investment
FP-200122 - RP; R-58, ABERDEEN	3780-Meas & Reg Equip Gen	WA	213,930.35		
FP-200282 - R STA - SUN RIVER GATE UPGRADE	3780-Meas & Reg Equip Gen	OR	1,609,608.08		2,272,003.33
FP-302650 - O-4 UMATILLA	3780-Meas & Reg Equip Gen	OR	95,686.16		95,686.16
FP-302651 - O-6 ATHENA	3780-Meas & Reg Equip Gen	OR	209,852.11		209,852.11
FP-302672 - BREMERTON R-146 RELOCATE	3780-Meas & Reg Equip Gen	WA	578,487.99		
FP-302713 - CHICO CHECK METER	3780-Meas & Reg Equip Gen	WA	62,069.48		
FP-302724 - MCCLEARY GATE UPGRADE	3780-Meas & Reg Equip Gen	WA	23,119.39		
FP-311997 - 0-1 Ontario	3780-Meas & Reg Equip Gen	OR	153,985.41		153,985.41
FP-311998 - 0-3 Stanwood	3780-Meas & Reg Equip Gen	WA	309,552.62		
FP-311999 - 0-1 Mission	3780-Meas & Reg Equip Gen	OR	152,809.12		152,809.12
FP-312000 - 0-2 Terrace Heights	3780-Meas & Reg Equip Gen	WA	123,504.18		
FP-312003 - R-53 Shelton	3780-Meas & Reg Equip Gen	WA	55,862.72		
FP-312004 - R-2 Aberdeen	3780-Meas & Reg Equip Gen	WA	92,865.88		
FP-312005 - R-29 Nooksack	3780-Meas & Reg Equip Gen	WA	80,277.70		
FP-312006 - R-31 Kennewick	3780-Meas & Reg Equip Gen	WA	66,521.71		
FP-312013 - R-9 Weston	3780-Meas & Reg Equip Gen	OR	103,910.19		98,281.66
FP-312015 - R-4 Hermiston	3780-Meas & Reg Equip Gen	OR	103,910.19		17,099.17
FP-312037 - R-22 Toppenish	3780-Meas & Reg Equip Gen	WA	103,118.40		
FP-312038 - R-29 Toppenish	3780-Meas & Reg Equip Gen	WA	103,118.40		
FP-101176 - SERV-GROWTH-OREGON	3803-CNG Services Plastic	OR	1,818,539.98		1,818,539.98
FP-101197 - SERV-GROWTH-WASHINGTON	3803-CNG Services Plastic	WA	4,243,260.06		
FP-101210 - PRE-CAP MTR-GROWTH-INTERSTAT	3810-Gas Meters	AS	4,467,804.92	0.2427	1,084,336.25
FP-101259 - PRE-CAP REG-GROWTH-INTERSTAT	3830-Service Regulators	AS	508,638.39	0.2427	123,446.54
FP-101180 - IND M&R-GROWTH-OREGON	3850-Ind. Meas. & Reg. Statio	OR	176,262.98		176,262.98
FP-101181 - IND M&R-REMOVE&REPLACE-OREGON	3850-Ind. Meas. & Reg. Statio	OR	50,701.20		50,701.20
FP-101200 - IND M&R-GROWTH-WASHINGTON	3850-Ind. Meas. & Reg. Statio	WA	671,502.39		
FP-101201 - IND M&R-REMOVE&REPL-WASHINGTON	3850-Ind. Meas. & Reg. Statio	WA	123,280.80		
FP-312042 - M&R REBUILD, BOISE CASCADE	3850-Ind. Meas. & Reg. Statio	WA	123,504.18		
FP-101213 - GP BUILDINGS - INTERSTATE	3901-CNG Structures & Improvement	AS	32,337.00	0.2427	7,848.19
FP-101395 - GP BUILDINGS - TRI - CITIES	3901-CNG Structures & Improvement	WA	32,337.00		
FP-307044 - Aberdeen New Operations Building 20	3901-CNG Structures & Improvement	WA	10,044.51		
FP-200661 - DATA CENTER/NETWORKING EQUIP	3913-CNG Servers and Workstation	AS	150,690.48	0.2427	36,572.58
FP-200662 - PC SUPPORT EQUIPMENT	3913-CNG Servers and Workstation	AS	296,745.87	0.2427	72,020.22
FP-306967 - District Office Access Control Sys	3913-CNG Servers and Workstation	AS	78,359.32	0.2427	19,017.81
FP-101360 - GP OFFICE EQUIP - ABERDEEN	3915-CNG Office Furniture & Fixt	WA	10,347.84		
FP-101396 - GP OFFICE EQUIP - TRI - CITIES	3915-CNG Office Furniture & Fixt	WA	2,694.75		
FP-101184 - GP TRAN. VEHICLE - OREGON	3922-Transportation Equipmen	OR	389,751.64		389,751.64
FP-101204 - GP TRAN. VEHICLE - WASHINGTO	3922-Transportation Equipmen	WA	1,659,242.52		
FP-101215 - GP TRAN. VEHICLE - INTERSTAT	3922-Transportation Equipmen	AS	409,686.96	0.2427	99,431.03
FP-101216 - GP TOOLS - INTERSTATE	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	AS	133,228.44	0.2427	32,334.54
FP-101218 - GP TOOLS - BEND	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	OR	62,949.36		62,949.36
FP-101237 - GP TOOLS - PENDLETON	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	OR	25,652.94		25,652.94
FP-101255 - GP TOOLS - ONTARIO	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	OR	13,161.16		13,161.16
FP-101288 - GP TOOLS - BELLINGHAM	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	WA	19,509.99		
FP-101307 - GP TOOLS - MT VERNON	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	WA	45,271.80		
FP-101326 - GP TOOLS - BREMERTON	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	WA	67,260.96		
FP-101344 - GP TOOLS - LONGVIEW	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	WA	33,738.27		
FP-101362 - GP TOOLS - ABERDEEN	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	WA	15,952.92		
FP-101398 - GP TOOLS - TRI - CITIES	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	WA	44,409.48		
FP-101451 - GP TOOLS - YAKIMA	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	WA	66,829.80		
FP-311969 - Sensit Gold G-2 Detectors	3941-MDU/GPNG/CNG Tools, Shop & Garage Eq	AS	296,422.50	0.2427	71,941.74
FP-101163 - GP POWER EQUIP - INTERSTATE	3962-Power Operated Equipmen	AS	64,674.00	0.2427	15,696.38
FP-101186 - GP POWER EQUIP - OREGON	3962-Power Operated Equipmen	OR	234,749.12		234,749.12
FP-101206 - GP POWER EQUIP - WASHINGTON	3962-Power Operated Equipmen	WA	573,461.00		
FP-101164 - GP COMM EQUIP - INTERSTATE	3972-CNG Comm Equip Telemeterin	AS	271,630.80	0.2427	65,924.80
			53,670,290.94		**11,574,244.99**

Original Projection	$13,673,972.08
Difference	($2,099,727.09)

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Michael Parvinen

ENVIRONMENTAL REMEDIATION AMORTIZATION EXHIBIT CNGC/507

September 2016

CNG UG 305
Calculation of 3-Year Amortization of Environmental Remediation Costs

Line #		
1	Actual Deferral Balance as of July 31, 2016 (OPUC DR 378)	$155,324
2	Three year amortization	3
3	Recommended Amortization (Line 3 / Line 2)	$51,774.67

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Michael Parvinen

2016 ACCUM DEF TAX ON 2015
TOTAL PLANT
EXHIBIT CNGC/508

September 2016

Cascade Natural Gas
Plant rate base Accumulated Deferred Tax (Accts 2820.96301 and 2820.86301)
2016 activity with out 2016 additions

Total	
Federal	2,804,108.28
Oregon	91,363.78
	2,895,472.06
Oregon alloction	
Federal	2,804,108.28
Allocation %	23.45%
	657,563.39
Oregon	91,363.78
	748,927.17

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

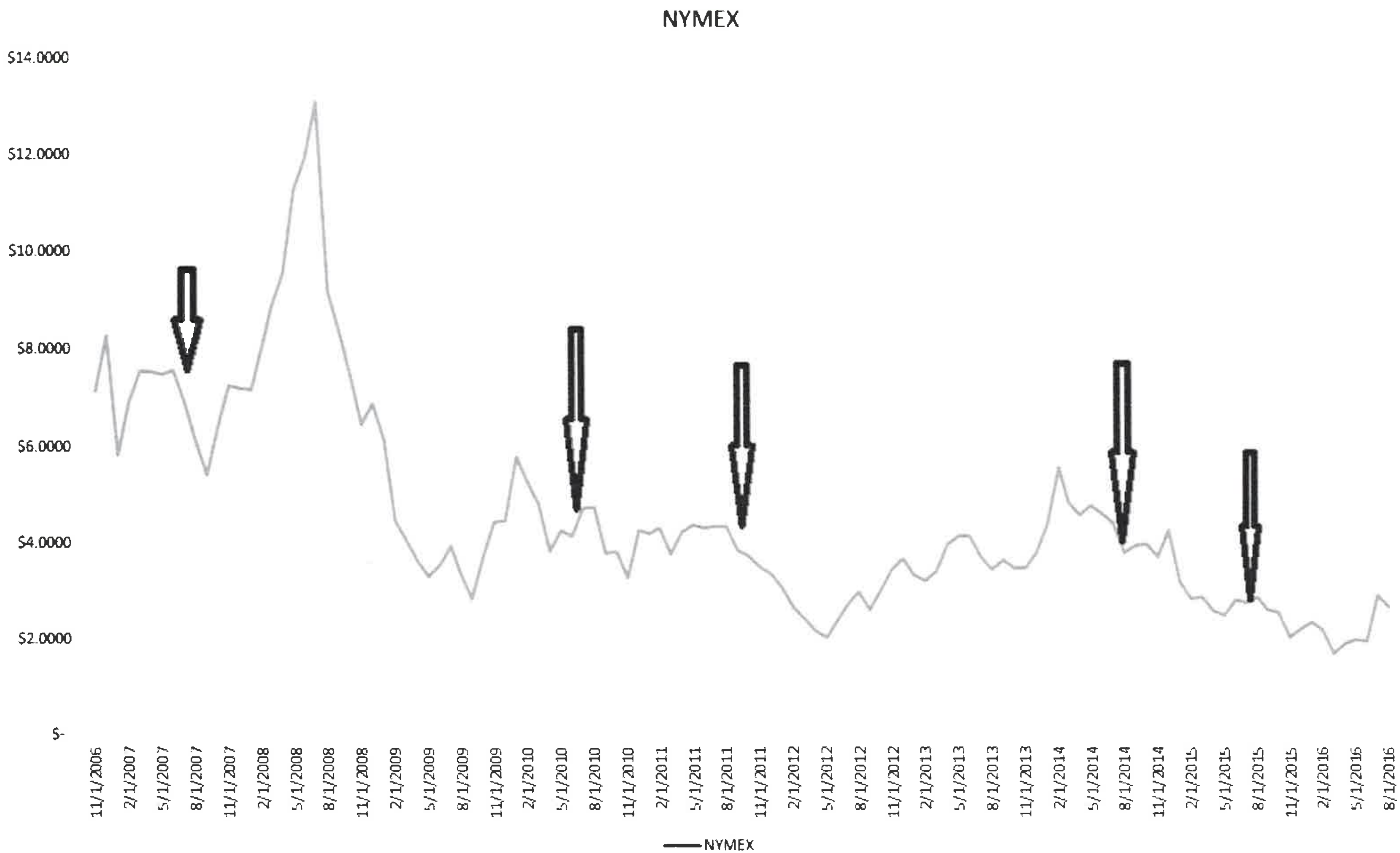
Cascade Natural Gas Corporation

Michael Parvinen

HISTORICAL NYMEX PRICES
EXHIBIT CNGC/509

September 2016

CNGC/509
Parvinen/1



BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Reply Testimony of Anne M. Jones

WAGES AND SALARIES
EXHIBIT CNGC/600

September 2016

EXHIBIT CNGC/600 REPLY TESTIMONY – WAGES AND SALARIES

Table of Contents

Regulatory Affairs
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

I. INTRODUCTION AND SUMMARY

Q. Would you please state your name and business address?

A. Yes, my name is Anne M. Jones. My business address is 1200 West Century Avenue, Bismarck, North Dakota 58503.

Q. What is your position with MDU Resources Group, Inc. (MDU Resources)?

A. I am the Vice President Human Resources.

Q. What are your duties and responsibilities?

A. I am responsible for all the disciplines in the Human Resources (HR) arena including compensation and benefits, organization development and training, labor and employee relations and governmental compliance with employment and employee relations laws and practices. I lead the Human Resources function for MDU Resources Group, Inc., Cascade Natural Gas Corporation (Cascade or Company), Great Plains Natural Gas Co., Intermountain Gas Company, Montana-Dakota Utilities Co., and WBI Energy. My team also provides services to Knife River Corporation and MDU Construction Service Group, Inc.

Q. Would you please outline your educational and professional background?

A. Yes. I have a Bachelor's Degree in Management with an emphasis in Human Resources from the University of Mary in Bismarck, ND. I began my career with MDU Resources in 1982 and have been in a variety of positions throughout the corporation. I have worked within Human Resources since 1997. My most recent job change was to move from Vice President, Human Resources and Customer Service for the Utility Group to Vice President Human Resources at MDU Resources Group, Inc. in January 2016.

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Q. What is the purpose of your testimony?

A. The purpose of my testimony is to respond to the testimony of Staff witness Marianne Gardner and Citizens' Utility Board of Oregon (CUB) witness Bob Jenks, regarding the Company's wage and salary costs included in this case. In particular, I am responding to Ms. Gardner's proposal to decrease the Company's wages and salary request for non-union employees by a total of $287,942 on an Oregon-allocated basis. My response is also relevant to Mr. Jenks' proposal to decrease the Company's proposal by $66,000. My testimony will explain the Company's process by which it sets wages and salaries, and the philosophy behind the process.

Q. Are any other witnesses addressing Staff's proposed decrease to the Company's wage and salary recovery?

A. Yes. Michael Parvinen will address the reasons why Staff's three-year wage model (Staff's Model or Three-Year Salary Model), upon which the proposed disallowance is based, does not produce an accurate estimate of the wage and salary costs that the Company can expect to incur during the rate-effective period.

II. RESPONSE TO PARTIES' TESTIMONY ON WAGE AND SALARY

Q. Please explain how the Company calculated the wage and salary costs included in its rate request.

A. The Company started with its actual wage and salary costs for the base year 2015. The Company escalated this cost to test year amounts by including: (1) ***actual wage increases granted for 2016***; (2) an annualizing adjustment for 2016; and (3) two additional budgeted full-time equivalent employees planned to work with our regulatory group on resource planning.

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Q. Does Staff support any aspect of the Company's rate proposal for labor costs?

A. Yes. Staff supports the Company's request for wages and salaries for its union employees.[1] In addition, Staff supports the Company's request for recovery of costs associated with benefits and incentives.[2] To be clear, Staff's proposed adjustment relates only to the calculation of base wages and salaries for non-union employees.

Q. What is the basis of Staff's proposed adjustment?

A. Staff relies on an application of its Three-Year Model to support its decrease. Staff's Model assumes that the Company's annual increase for employees' wages should be tied to the rate of inflation based on the All-Urban CPI.[3]

Q What is the basis of CUB's proposed adjustment?

A. CUB also focusses on the annual increase the Company granted employees for 2016, arguing that it is unwarranted given that the inflation rate for 2016 over 2015 was 1%.[4]

Q. Do you agree that employees' annual increases should be tied to the inflation?

A. As I will discuss further, inflation is only one factor in determining annual increases for employees. Market forces demand that we also provide appropriate merit and/or tenure increases. If we were to restrict annual increases to the rate of inflation, our compensation would fall below market levels and we would be unable to attract or retain a qualified work force.

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[1] Staff/100, Gardner/11.
[2] Staff/100, Gardner/11
[3] Staff/100, Gardner/8-9.
[4] CUB/100, Jenks/4.

Regulatory Affairs
Cascade Natural Gas Corporation
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Q. Please describe Cascade's general approach to setting wages and salaries.

A. There are three basic principles underlying Cascade's approach to employee compensation—all designed to minimize costs while allowing the Company to attract and retain the qualified employees required to deliver safe and reliable gas service to our customers.

First, Cascade has adopted a Total Rewards philosophy. This approach requires that we view base pay, incentives (or, pay-at-risk) and benefits together, as a total package—what we call the Total Rewards package-- when determining how to compensate our employees.

Second, we make every attempt to set total compensation at the market average. We are finding that the market for employees with the skills and experience we require is quite competitive. For that reason, the compensation we offer must provide the same general pay levels and components in its total remuneration package as are included in the packages provided by the Company's competitors for labor.

Third, the Company believes that, in order to encourage satisfactory performance, a certain percentage of each employee's market compensation must be "at risk." Accordingly, under the Company's incentive plan, each employee has the opportunity to receive total compensation and benefits at the market average, so long as the employee performs at an acceptable level. However, employees will earn less than the average remuneration when performance is less than acceptable and, conversely, will earn higher than the average remuneration when performance is exceptional. Importantly, the **goal** is for total wages and salary for the total Company to average at or very close to market.

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Q. How does the Company determine the market average when it sets the base pay component of the Total Rewards package?

A. When we market price a position within the organization, we pull data from all of our survey and/or online sources. The Company uses many reputable industry surveys when determining base pay levels, including the American Gas Association, Mercer Benchmark, Milliman, Towers Watson, World at Work and Compensation Analyst, among others.

The first step in determining market average base pay for a particular position is to review the requirements of the positions listed in our surveys and on-line sources against the job description we have created. Once we have determined a match, we then use the 50th percentile pricing associated with that position to determine where our new job will fit in our pay grade structure. This 50th percentile wage level then becomes the Company's market pay level pay—or "grade"—associated with the job we have created. ***To be clear, our pay grade is set at the middle of the market range of pay, as indicated by our sources***.

Q. When you hire new employees, is their compensation set at grade?

A. Not typically. In general, we start an employee somewhere closer to ten to fifteen percent below market—meaning new employees start at ten to fifteen percent below the 50th percentile wage level. Our goal is for most employees to achieve 100 percent of grade, or the middle of the market range of pay, within five-seven years from hire.

Q. Do any of your employees earn above market?

A. Yes. Some employees may earn above grade for reasons of performance or tenure. And there are occasionally more unusual situations—such as where the Company must

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provide a pay increase to maintain a supervisor's pay above that of union employees who have received negotiated increases. However, because we set our pay grade at the 50th percentile of the market range, even those Cascade employees earning at the 120 percent level of grade are still earning well below the top of the market range. Moreover, we have many more employees making below market than above market. Attached as Exhibit CNGC/601 is a breakdown of non-bargaining employees and where they fall within their grade.

Q. Do you have additional processes in place to ensure that the Company is not paying more than the minimum necessary to attract and retain a qualified workforce?

A. Yes. Periodically the Company contracts with an outside independent consultant to review compensation programs and practices. For instance, in 2013, the Company contracted with Aon Hewitt to provide a third-party review of base compensation and incentive compensation. This will be done again in 2017.

Q. What was the result of the 2013 Aon Hewitt review?

A. The report issued by Aon Hewitt indicated Cascade's compensation programs are well designed and utilize high quality and established external survey sources to ensure the programs align well with other utilities and industries that compete for the same types of employees. Importantly, the report made the following observations that suggest that the Company's wages and salaries are set at conservative levels:

- It is CNGC's standard practice to market price jobs using national general industry data. This practice is part of a growing trend in the utility industry. We support this approach for non-utility-specific roles at CNCG, given that the Company recruits from and loses talent to general industry for these roles. However, we do

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recognize that market pay level for these roles based on utility industry data tends to be higher than market data based on general industry. As such, CNGC has established a conservative approach to measuring the market for non-utility specific roles.[5]

- CNGC's salary structure midpoints compare favorably to the market in that they are 94% of the market values for the priced jobs.[6]

Recommendations for improvement were primarily minor enhancements to employee pay opportunities because of our conservative approach to total compensation. For example, Aon Hewitt suggested that in order to keep the Company from falling below market competitive base pay levels, salary structures should be increased more aggressively than they have been in the past. A copy of the Aon Hewitt Report is attached as Confidential Exhibit CNGC/602.

Q. Does the Company take any other measures to ensure that compensation does not exceed market average?

A. Yes. In addition to periodic third-party reviews, Human Resources reviews standard benchmark jobs in the corporation annually, including job families such as engineers, construction supervisors and system analysts. The Company's total compensation package for the benchmark jobs are compared to market compensation for comparable positions to ensure that the Company is compensating employees at the appropriate pay grade and range. Human Resources also reviews positions on an "as needed" basis throughout the year to ensure it is competitively compensating within the established pay ranges.

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[5] Confidential CNGC/602, Jones/4.
[6] Confidential CNGC/602, Jones/6.

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Q. How does the Company determine annual increases for the employees of Cascade?

A. Each year, we review the information provided by our compensation vendors which indicates the national percentage of compensation increase per the research in the report. There are two things we look at annually. First, we determine whether we need to adjust the pay grade structure for inflation. Any increase related to inflation would typically be close to that indicated by the CPI Index referenced by Ms. Gardner in her testimony. Ms. Gardner is absolutely correct that this is one aspect of the compensation process conducted annually. However, we must also consider the fact that employees must be granted increases related to merit, tenure, etc. To determine an overall amount for such increase, we rely on our compensation survey data as well as The Conference Board, World at Work, etc. Based on these resources, we set our overall budget for all employees' increases—increases—of which some employees may receive less and others may receive more. Individual increases are based on performance, placement within the grade structure and a review of equity to others within the grade.

We also include in that budget one half of one percent for the promotion of employees that may occur throughout the year and an additional one half of one percent is set aside for Human Resources to use if we have pay equity issues in the pay grades based on gender, ethnicity, etc.

Q. Staff's Three-Year Model does not include merit or tenure increases. Is that approach realistic?

A. No, it is not. In addition to increases to account for inflation, our competitors all provide their employees with merit and tenure increases to compensate them for increased

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experience and skill. If we did not provide merit increases, we would be unable to retain our skilled employees.

Q. You mentioned that Staff supports the Company's wage and salary recovery for its union employees. How do your union employees' negotiated salary increases effect your overall structure?

A. Oversight of our bargaining unit employees at the field level is typically via positions that are non-bargained. Therefore, over time we can experience compression issues in the pay equity between our bargained employees and those who have supervisory responsibilities. In such cases we have used additional funds to bring a supervisor or manager's compensation in line with those for whom they are responsible.

Q. CUB points out that the annual wage and salary increase granted by the Company for non-union employees for the test year was 4 percent compared to 3.1 percent for union employees, and nearly four times the rate of inflation. For that reason, CUB recommends that the Company's recovery for this increase be scaled back to 1.5 percent—which results in a $66,000 downward adjustment on an Oregon basis.[7] What is your response?

A. As I have explained, we simply could not retain qualified employees if we were to limit annual increases to the inflation rate—or even 1.5 percent of inflation as proposed by CUB. Moreover, annual increases are particularly important in our Company, given that we hire new employees at a level below market, with the intent to get their salaries to market within five to seven years. The bottom line is that, overall, our wages and

[7] CUB/100, Jenks/4.

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salaries are set at market, using an approach that is, as the Aon Hewitt Report confirms, conservative.

Q. Does this complete your testimony?

A. Yes, it does.

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BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Anne M. Jones

NON-BARGAINING EMPLOYEES
COMPARISON TO GRADE
EXHIBIT CNGC/601

September 2016

2016 SALARY RANGES

GRADE	ENTRY	MARKET	MAXIMUM
29	20,800	26,000	31,200
30	23,960	29,950	35,940
31	27,680	34,600	41,520
32	31,920	39,900	47,880
33	37,000	46,250	55,500
34	42,880	53,600	64,320
35	50,120	62,650	75,180
36	58,400	73,000	87,600
37	66,720	83,400	100,080
38	77,600	97,000	116,400
39	89,120	111,400	133,680
40	101,920	127,400	152,880
41	117,040	146,300	175,560
42	134,640	168,300	201,960

Employee Compa-Ratio by Grade (# of Ees)

80-90	91-100	101-110	111-120
4	7	4	
1	4	1	2
2	5	2	1
3	4	9	1
5	8	14	9
6	7	6	2
	7	4	
5	7	3	2
	1	1	
2	2		
28	52	44	17

Employees compas as of 8/11/16

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Anne M. Jones

2014 AON HEWITT REPORT
EXHIBIT CNGC/602

REDACTED

September 2016

THIS DOCUMENT CONTAINS PROTECTED INFORMATION.

ALL QUALIFIED PERSONS AS DEFINED IN

ORDER NO. 16-141 WILL RECEIVE IT VIA U.S. MAIL.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Reply Testimony of Donna Genora

Taxes and Bonus Depreciation
EXHIBIT CNG/700

September 2016

I. INTRODUCTION AND SUMMARY

Q. Please state your name, title and business address.

A. My name is Donna Genora. I am the Tax Director for MDU Resources Group, Inc. (MDU Resources). My business address is 400 North Fourth Street, Bismarck, North Dakota 58501.

Q. Would you please summarize your education and professional experience?

A. I graduated from San Jose State University with a Bachelor of Science in Accounting and I am pursuing a Masters in Taxation from Villanova University School of Law. I have worked as a tax professional for over 20 years, holding positions of increasing responsibility in both public accounting and industry. I have held my current position at MDU Resources since February of 2015. Prior to joining MDU Resources, I served as the Tax Director for SOAProjects, from 2012 to 2015, and a Senior Tax Manager at Omnicell, Inc., and before that at Ernst & Young.

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

A. The purpose of my testimony is to respond to Staff's proposed adjustment to the Company's income tax calculation, and the resulting reduction to rate base.

Q. Please explain Staff's proposed adjustment to the Company's proposed level of income taxes.

A. Staff proposes that the Company's accumulated deferred income tax liability—or ADIT—be increased by $4,094,231 million, which will result in a decrease to the Company's

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rate base in that same amount.[1] Staff's proposal results in a revenue requirement reduction of $437,000.

Q. What is the reason for Staff's proposed adjustment?

A. Cascade's income taxes are computed as part of a consolidated entity with all of the MDU Resources' companies. Staff claims that MDU Resources' decision not to take bonus depreciation for 2015 and 2016 was imprudent and detrimental to Cascade's customers.[2] In particular, Staff argues that customers are negatively impacted because rates are increased for the new plant additions without the offset of deferred income taxes in rate base.[3] For that reason, Staff has considered the increase to the Company's deferred tax balance that would have resulted from a decision to elect bonus depreciation in 2015 and 2016, and then used it to offset the Company's rate base in this case.[4]

Q. Please summarize the Company's response.

A. Cascade objects to Staff's proposal for three primary reasons:

- ***First***, MDU Resources' decision to opt out of bonus depreciation for 2015 and 2016 was based on important business considerations that benefitted the entire corporate family and Cascade's customers as well;
- ***Second,*** Staff's proposed decrease to rate base would result in a normalization violation that could seriously harm the Company and its customers; and

[1] Staff/100, Gardner/20
[2] Staff/100, Gardner/17.
[3] Staff/100, Gardner/18.
[4] Staff/100, Gardner/20.

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- ***Third***, Cascade's customers have overall benefitted from paying taxes on a consolidated basis through lower rate base; it is inappropriate for Staff to ignore the net benefit received by customers while punishing the Company for a decision that in isolation may have contributed to a rate base increase.

Q. In order to provide background, can you please explain what deferred taxes are and how they impact the utility ratemaking process?

A. Yes. Deferred income taxes arise when income tax amounts expensed for book purposes—and thus the amounts calculated and recovered in rates—differ from the amount of taxes that are currently due and payable by the utility to the federal government. These tax differences are primarily caused by the fact that taxes included in rates are calculated using straight-line depreciation rates, while state and federal tax authorities use accelerated depreciation—formally referred to as Modified Accelerated Cost-Recovery System (MACRS)-- to calculate tax obligations. Use of accelerated depreciations results in higher depreciation expense for tax purposes than for regulatory book purposes, in the early years of the life of the asset. The higher expense accrued will reflect as a reduction to profit for the period, causing the income taxes computed for regulatory purposes – and thus included in revenue requirement—to be higher than the taxes paid to the Internal Revenue Service (IRS) and state taxing authorities. In the later years in the life of the asset the situation reverses itself and the revenue requirement will include an amount less than is due in taxes.

Q. Could you provide an example of how the timing differences created by accelerated depreciation result in deferred taxes?

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A. Yes. The first two columns of the table below illustrate the results of the timing differences created, assuming a $3,000 asset, with a tax life of 3 years (resulting in $1,000 depreciation per year depreciation expense) and book life of 5 years ($600 per year depreciation expense), and a tax rate of 40 percent.

INCOME TAX EFFECT OF DEPRECIATION EXPENSE[3]			
IRS TAXES	BOOK TAXES	CURRENT YR. DIT	DIT BALANCE
$1,000 x 40% = $400	$600 x 40% = $240	$400 - $240 = $160	$160
$1,000 x 40% = $400	$600 x 40% = $240	$400 - $240 = $160	$160 + $160 = $320
$1,000 x 40% = $400	$600 x 40% = $240	$400 - $240 = $160	$320 + $160 = $480
$ 0 x 40% = $ 0	$600 x 40% = $240	$ 0 - $240 = ($240)	$480 - $240 = $240
$ 0 x 40% = $ 0	$600 x 40% = $240	$ 0 - $240 = ($240)	$240 - $240 = $ 0

As you can see from the third column, labelled "CURRENT YR DIT", these timing differences result in deferred taxes in the first three years, and a deferred tax credit in the last two years.

Q. What is the ADIT?

A. ADIT—which is shown in the last column of the table above labelled "DIT BALANCE" -- refers to the accumulated balance of deferred taxes carried on the utility's books. As you can see from the example above, for any one asset, the ADIT balance will increase for a period of time, and then decrease down to zero, over the life of the asset. The ADIT balance is available to the utility to invest until it is needed to fund the taxes due and payable in the later years. For that reason, the ADIT is sometimes characterized as an interest-free loan from the government. ADIT can either be a liability or asset. A deferred tax liability (DTL) is a future tax payment and a deferred tax asset (DTL) represents a future tax deduction.

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Q. How does the amount of the ADIT generally impact rates?

A. When the utility has a DTL, it is in effect receiving an interest-free loan ***from*** the government. Therefore, the DTL is applied as a deduction to rate base, thus decreasing customer rates. On the other hand, a DTA represents an interest free loan ***to*** the government. Because the company is not receiving interest on the loan, the amount of the DTA is added to rate base, thus increasing customer rates.

Q. What is a net operating loss and how does it create a deferred tax asset?

A. A net operating loss (NOL) occurs when the Company's taxable deductions exceed taxable earnings in the current year. The IRS allows the NOL to be carried over to future years to be deducted against future taxable income, which creates a deferred tax asset.

Q. Can you also explain what bonus depreciation is?

A. Since the beginning of the 2008 recession, Congress has used different approaches to boost the economy, including the allowance of "bonus depreciation"—which allows more rapid recovery of an investment, on the assumption that the money will be reinvested. Bonus depreciation allows companies to deduct from taxable income 50 percent to 100 percent of the cost of the new asset in the year of expenditure. As with accelerated depreciation, bonus depreciation reduces the taxable income of the company and the amount of income taxes that it must pay. For regulatory purposes, bonus depreciation increases the size of the ADIT in the year claimed.

Q. It sounds as if bonus depreciation is a good thing for companies. Why did MDU Resources elect out of bonus for 2015 and 2016?

A. Bonus depreciation is generally a good thing for companies, insofar as it reduces the company's income tax obligation. However, if the company's income tax obligation is

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already at zero, then the value of bonus depreciation diminishes significantly. In our case, MDU Resource's tax obligation was already at zero for 2015 and 2016 even without bonus depreciation, because we experienced and expected to have significant net operating losses NOLs for both periods. As a result, the bonus depreciation would have provided no cash benefit to the company.

Q. Net operating losses due to bonus depreciation can be carried over for as long as 20 years. Wouldn't it have made sense for the Company to elect bonus depreciation for 2015 and 2016, and simply carry the net operating loss forward, to reduce the Company's tax obligation in some future year when the Company is not operating at a loss?

A. No. It is true that net operating losses due to bonus depreciation can be carried forward to future years, and act as an addition tax deduction on future returns. However, there are other business considerations that the Company factors in when it determines whether to elect bonus depreciation.

As explained by Staff, the Company did elect to take bonus depreciation in years 2008 through 2014. However, in 2015 the company was impacted by two colliding factors. First, Cascade, along with other utility partners, had record capital expenditure during 2015. Second, MDU Resources experienced unprecedented changes in the oil & gas industry. Management and its Board of Directors, adopted a strategy to lower risk in MDU Resources Group business mix/portfolio and accordingly sold off assets and lines of business with high volatility. The strategy was adopted to strengthen the company's credit profile, which reflects metrics valued by our utility investors. These two factors created significant tax NOLs that across the board put at eminent risk our ability to

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realize state income tax credits earned together with other permanent tax benefits. These would be detriments of a permanent nature as opposed to temporary differences created by bonus depreciation.

Q. What was the result of this strategy?

A. The market and investors have look favorably on these decisions and our outlook is solid. However, this has been an unusual and extraordinary circumstance that is not indicative of past or future. With respect to bonus depreciation, we reiterate that opting out of bonus depreciation is an exception but an available tool only when necessary.

Q. Regardless of the reason MDU Resources did not take bonus depreciation for 2015 and 2016, why shouldn't Cascade's customers get the benefit of a bonus depreciation election? In other words, why shouldn't the Commission accept Staff's proposal to offset rate base as if the Company had elected bonus depreciation—which would have increased the Company's ADIT and thus served as a further reduction to rate base?

A. Because even if the Company had elected bonus depreciation, it would have received no benefit from the election—and therefore any associated ADIT would not appropriately have been offset against rate base.

Q. Please explain further.

A. Let's assume that MDU Resources ***had*** elected bonus depreciation for the 2015 and 2016 tax years. That election would have increased Cascade's ADIT. However, because MDU Resources was already in a net operating loss position, even before the election, any tax benefits associated with the increased net operating loss will be delayed until a future tax year. As a result, MDU Resources would not have received a

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cash benefit. And that for that reason, it would not have been appropriate to use the ADIT associated with the bonus deprecation as an offset to rate base. As explained above, the reason regulatory commissions use ADIT as an offset to rate base is because it acts like an interest-free loan, with the utility getting free use of cash until the associated taxes are due. However, in our case, MDU Resources would have received no benefit until some future date, so an offset to rate base today would make no sense.

Q. What would be the consequence if the Commission accepted Staff's adjustment to ADIT and consequent reduction to rate base? Increasing the amount of ADIT as if bonus was taken in 2015 for purpose of rate making, which is not reflective with our 2015 income tax filing, would be inconsistent with the normalization requirements, and result in a normalization violation.

Q. What is normalization?

A. Normalization spreads the tax benefits associated with utility assets over the same period that the costs of those assets are recovered from customers. It seeks to treat current and future utility customers equitably by allowing all customers to enjoy the tax benefits of depreciation.

Q. What is a normalization violation?

A. Although the normalization regulations are complex, generally speaking, any action that passes the benefits of accelerated depreciation, including bonus depreciation, to customers faster or in an amount greater than the related tax benefits are realized by the company is a normalization violation. When accelerated depreciation first became tax law, Congress included a provision in the legislation requiring the normalization method of accounting to be used in order to ensure that the company claiming deductions under

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the new law received the benefits of accelerated depreciation. If a utility were required to "flow through" the benefit to customers in the ratemaking process, then the intent of Congress would be thwarted. The provision insured that accelerated depreciation would remain a viable means of stimulating the economy when Congress so desired. For a regulated utility, the normalization method of accounting for accelerated depreciation requires the recording of deferred income tax liabilities resulting from the differences between book depreciation and the accelerated tax depreciation on which taxes are calculated. As previously mentioned, the normalization method of accounting prohibits passing through the benefits of accelerated depreciation to ratepayers faster than the benefits are realized or monetized by the company. An example of a normalization violation would be a reduction of Cascade's rate base through tax deduction for bonus depreciation, when Cascade did not actually claim that deduction on its tax return, or in an amount greater than used to reduce the utility's tax liability to the government.

Q. What happens if the Company is found to have committed a normalization violation?

A. If Cascade were found to have violated the federal normalization requirements, it would be limited to using only regulatory (book) depreciation for tax purposes henceforth, meaning that the company could not take advantage of any additional accelerated depreciation, including MACRS or bonus depreciation, at any time in the future. This would deprive the company of source zero-cost capital, which is extended to the company in the form of deferred liabilities for taxes owed to the government. The effect of a normalization violation would be to risk permanently removing a source of zero-cost capital, thereby increasing the Company's cost of capital and harming ratepayers.

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Q. Are there other problems with Staff's adjustment?

A. The proposed adjustment is overstated because Staff has neglected to consider the additional deferred tax asset produced by the net operating loss—which would increase customer rates.

Q. Please explain.

A. For a complete picture, we need to examine the effect of NOL carry-overs. As described above, NOLs can be carried forward as credits against future taxes due. These carried-over NOLs result in deferred tax assets. In our case, had Cascade taken bonus depreciation in 2015 and 2016 on a standalone basis, as Staff proposes it should have, Cascade would have been in an NOL position, which results in a DTA which would have to be added to rate base.

Q. Staff's adjustment seeks to set Cascade's rate recovery as if it had elected bonus depreciation for 2015 and 2016, on a standalone basis. Have you analyzed whether Cascade's customers have benefitted by virtue of the fact that they have filed taxes on a consolidated basis with MDU Resources?

A. Yes. Since 2008, the consolidated group of MDU Resources has consistently been able to use Cascade's stand-alone taxable losses. As such, Cascade's customers have enjoyed the benefit of cash inflows for the monetization of these taxable losses on an annual basis.

Q. Have you calculated the benefits that Cascade's customers have received?

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A. Yes. I compared Cascade's rate base as it exists today—and as presented in this case—with what it would have been had Cascade been filing its taxes on a standalone basis 2008 to 2014, and taking bonus depreciation in each year.

Q. What is the result?

A. The result is an increase to ADIT of $2.8 million dollars, which translates to a $350,000 annual reduction in revenue requirement.

Q. Please explain.

A. The $350,000 is the annual revenue requirement benefit that Cascade customers have received as a result of the additional ADIT the Company has over what it would have today, had Cascade filed on a standalone basis. This benefit is calculated by measuring the effect of the NOL generated from accelerated depreciation and bonus depreciation that the Company would have experienced on a stand-alone basis and comparing it to what was actually included in rate base. Furthermore, Staff's proposal to impute ADIT as if bonus were taken (omitting normalization implications and the ability to use all of the bonus depreciation on a stand-alone basis) 2015 & 2016 would have an incremental $1.4 million rate base increase or if you like a $4.2 million cumulative effect. This calculation is shown in CNGC/701.

Q. Does this conclude your testimony?

A. Yes.

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BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Donna Genora

BONUS DEPRECIATION EXPLANATION EXHIBIT CNGC/701

September 2016

CASCADE TAXABLE INCOME/(LOSS)

	Pre-2015	2015	2016
Federal tax rate	35.0%	35.0%	35%
Oregon tax rate (federal effect)	4.9%	4.9%	8%
Oregon apportionment	23%	20.0%	23%
	9.0%	8.0%	9.8%

		Taxable Income - Stand Alone	OREGON NOL (ADIT) - Elect out 2015 & 2016		Bonus	OREGON NOL (ADIT) - With Bonus 2015 & 2016	
		Bonus	Actual & Plan	(ADIT) @ YE	#356	Actual & Plan	(ADIT)
2008	*as filed*	(5,821,371)	(523,138)	(47,012)		(523,138)	(47,012)
2009	*as filed*	30,999,350	2,785,757	-		2,785,757	-
2010	*as filed*	4,191,806	376,697	-		376,697	-
2011	*as filed*	(5,023,546)	(451,441)	-		(451,441)	-
2012	*as filed*	(128,565)	(11,553)	-		(11,553)	-
2013	*as filed*	(15,977,360)	(1,435,805)	(1,435,805)		(1,435,805)	(1,435,805)
2014	*as filed*	(15,495,852)	(1,392,535)	(2,828,340)		(1,392,535)	(2,828,340)
2015	*as filed*	21,354,116	1,705,767	(1,122,573)	(21,622,503)	(21,439)	(2,849,779)
2016	*forecast @ 6/30*	16,598,000	1,626,272	-	(30,535,796)	(1,365,625)	**(4,215,404)**
		30,696,578	**2,680,020**			**(2,039,083)**	

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Reply Testimony of Tammy Nygard

Allocations
EXHIBIT CNGC/800

September 2016

EXHIBIT CNGC/800 – REPLY TESTIMONY – ALLOCATIONS

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I. INTRODUCTION AND SUMMARY

Q. Please state your name and business address.

A. My name is Tammy Nygard and my business address is 400 North Fourth Street, Bismarck, North Dakota 58501.

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

A. I am the Controller for the MDU Utilities Group which provides leadership and services for the four utility brands associated with MDU Resources Group, Inc. (MDU Resources): Cascade Natural Gas Corporation (Cascade), Intermountain Gas Company (Intermountain), Montana-Dakota Utilities Co. (Montana-Dakota) and Great Plains Natural Gas Co. (Great Plains).

Q. What are your duties and responsibilities with the MDU Utilities Group?

A. I am responsible for management of the accounting and the financial forecasting/planning functions, including the analysis and reporting of all financial transactions for Cascade, Intermountain, Montana-Dakota, and Great Plains.

Q. Please describe your educational and professional background.

A. I graduated from the University of Mary with a Bachelor of Science degree in Accounting and Computer Information Systems. I started my career with Montana-Dakota in 2002 in a professional development role and during my tenure with the Company have held positions of increasing responsibility, including Financial Analyst for Montana-Dakota as well as Director of Accounting and Finance for Cascade.

Q. Did you provide direct testimony in this proceeding?

A. No.

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Q. What is the purpose of your reply testimony?

A. I provide additional background regarding the corporate structure of MDU Resources, provide information regarding the overall reasonableness of Cascade's administrative and general (A&G) expenses, and respond to several of the adjustments proposed by Mr. Lance Kaufman on behalf of Staff regarding inter-company allocations.

Q. Do any other Cascade witnesses respond to the Mr. Kaufman's adjustment regarding inter-company allocations?

A. Yes. Mark Chiles also addresses Mr. Kaufman's adjustment regarding allocations, specifically with regard to inter-company allocation of costs related to customer service functions.

Q. Please summarize your testimony.

A. In my testimony, I:

- Provide background regarding MDU Resources' corporate structure, and describe the overall reasonableness of Cascade's A&G expenses. I also respond to Mr. Kaufman's comments regarding the transparency of inter-company cost allocations. I explain why Mr. Kaufman's adjustment regarding general overhead allocation incorrectly includes capitalization of MDU Resources' unregulated subsidiaries. I also respond to Mr. Kaufman's proposed adjustments for expenses with no supporting description and those expenses described by Mr. Kaufman as "non-utility" costs by providing additional justification and support for the expenses. Finally, I address Mr. Kaufman's adjustment regarding affiliated rent charges, and propose modifications to Mr. Kaufman's adjustment.

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- Describe the corporate structure of MDU Resources and explain why Cascade's overall share of A&G expenses is low compared to other similarly situated utilities, as further described in Sections II and III of my testimony. I propose holding a workshop so that Staff and interested stakeholders may gain a better understanding of MDU Resources' methodology for cost allocation in Section IV of my testimony. I demonstrate that the Company's methodology for inter-company allocations is reasonable and I also demonstrate that the expenses described by Mr. Kaufman as non-utility expenses or expenses having no supporting description are prudently incurred utility costs that are appropriate for recovery in rates in Section V, VI, and VII of my testimony. Finally, I demonstrate that the Company's methodology for calculating rent charges is reasonable, as modified to accept Mr. Kaufman's recommendations regarding cost of capital and net plant balances assumed in the rent charges as described further below in Sections VIII, IX, and X of my testimony.

Q. Did you prepare any exhibits in support of your testimony?

A. Yes, I prepared the following exhibits:

- Exhibit CNGC/801 - Organizational Chart
- Exhibit CNGC/802 - Cascade Administrative and General Study
- Exhibit CNGC/803 – Cascade Administrative and General Benchmark Analysis
- Confidential Exhibit CNGC/804 - MDU Resources Corporate Overhead Allocation Factor
- Exhibit CNGC/805 - Summary of Reply to Staff's "Non-Utility Costs" Adjustment
- Exhibit CNGC/806 - Cascade Rental Receipt Calculation

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- Exhibit CNGC/807 - Intermountain Rental Receipt Calculation
- Exhibit CNGC/808 - FutureSource Cost of Service
- Exhibit CNGC/809 - Description of FutureSource Expenses and Cost Allocation
- Exhibit CNGC/810 - MDU Rental Receipt Calculation

II. CORPORATE STRUCTURE OF MDU RESOURCES

Q. What is the Company's relationship to MDU Resources?

A. Cascade is a wholly-owned subsidiary of MDU Resources. MDU Resources is located in Bismarck, North Dakota.

Q. Please briefly describe the corporate structure of MDU Resources.

A. MDU Resources is the parent company of Cascade and Intermountain, as well as its unregulated subsidiaries (WBI Holdings, Knife River, Construction Services, and FutureSource). Montana-Dakota and Great Plains are divisions of MDU Resources. The MDU Utilities Group is an operating division of MDU Resources, which provides leadership and services to MDU Resources' utility brands. Please see my Exhibit CNGC/801 for an organizational chart depicting the corporate structure of MDU Resources.

Q. Please describe each utility brand.

A. The four utility brands include Cascade, Intermountain, Montana-Dakota, and Great Plains. The following is a high level overview of each brand:

- Cascade provides natural gas service in Oregon and Washington. As of December 31, 2015, Cascade served 69,833 retail customers in Oregon and 207,160 retail customers in Washington.

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- As of December 31, 2015, Intermountain provided natural gas service in Idaho to 338,149 retail customers.
- Montana-Dakota provides both natural gas and electric service in Montana, Wyoming, North Dakota, and South Dakota. As of December 31, 2015, Montana-Dakota served 189,612 natural gas-only retail customers, 64,698 electric-only retail customers, and 77,889 combined natural gas and electric retail customers.
- Great Plains provides natural gas service in Minnesota and North Dakota. Great Plains serves 21,520 customers in Minnesota and 2,182 customers in North Dakota.

III. REASONABLENESS OF CASCADE'S A&G EXPENSE

Q. Please provide some context for Cascade's overall A&G expense.

A. In August 2016, Cascade completed a study regarding Cascade's A&G expenses. The results of the study demonstrate that Cascade has maintained a relatively low A&G expense per customer compared with other gas utilities in the region and across the country. Specifically, Cascade's 2014 A&G expense was $84.86 per customer, which is lower than both the mean and median A&G per customer for gas utilities in the west and nationwide.[1]

Q. Is Cascade's A&G expense as a subsidiary of MDU Resources less than it would be for Cascade as a standalone utility?

A. Yes. As a condition of the acquisition of Cascade by MDU Resources, Cascade committed that "for Oregon regulatory purposes, that commencing with the closing of the

[1] *See* Exhibit CNGC/802, Nygard/1 and Nygard/4.

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Transaction and through December 31, 2012, the allocated shared corporate costs, as well as its allocated and assigned utility division costs, will not exceed the costs the Cascade customers would otherwise have paid absent the acquisition, as adjusted for changes in the Consumer Price Index."[2] As provided in section (a) of Commitment 10, compliance is determined through comparison with a 2005 Benchmark adjusted annually by the increase in the Consumer Price Index (CPI). Through December 31, 2012, Cascade filed an annual earnings report with the Public Utility Commission of Oregon (Commission) showing the calculation of actual A&G expense compared to the 2005 benchmark as adjusted for CPI and demonstrating that the Company has stayed under the threshold for A&G costs as adjusted for changes in CPI. Although Cascade no longer files the comparison to the 2005 A&G benchmark with the Commission, Cascade still performs this analysis. As shown in Exhibit CNGC/803, Cascade's 2015 A&G expense is still below the 2005 benchmark as adjusted for CPI.

IV. TRANSPARENCY OF ALLOCATION METHODOLOGY

Q. Mr. Kaufman comments that the MDU Resources' methodology for allocating costs to Cascade is not transparent.[3] How do you respond?

A. Throughout this proceeding, Cascade has endeavored to provide clear and accurate information regarding the methodology used to allocate costs from MDU Resources to Cascade. These efforts include responses to data requests as well as informal meetings with Staff. Nevertheless, Cascade acknowledges that its allocation methodology is

[2] *In the Matter of MDU Resources Group, Inc. Application for Authorization to Acquire Cascade Natural Gas Corporation*, Docket No. UM 1283, Order No. 07-221, Attachment A at 16 (June 5, 2007).
[3] Staff/1000, Kaufman/6.

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complicated and the documentation may be a bit confusing, and that additional explanation beyond what has been provided to date may be useful to Staff and other parties. To help Staff and other interested stakeholders better understand the allocation methodology used by the Company, Cascade proposes to hold a workshop regarding the allocation methodology. Montana-Dakota and Cascade will make its staff available to provide a presentation regarding the allocation methodology, and Staff and other interested stakeholders may ask questions as needed. Montana-Dakota and Cascade will also share information about their accounting system which will help parties understand the allocation process.

Q. Where and when do you propose to offer the workshop regarding the allocation methodology?

A. Cascade proposes to offer the workshop at the Commission in Salem, Oregon in the second quarter of 2017.

Q. Does Mr. Kaufman propose an adjustment in connection with his comment regarding the transparency of the allocation methodology?

A. No.

V. <u>GENERAL OVERHEAD ALLOCATION</u>

Q. How does MDU Resources allocate corporate overhead?

A. MDU Resources allocates corporate overhead based on each of its business unit's corporate allocation factor. The corporate allocation factor is determined by the relative capitalization of each business unit as a percentage of overall capitalization of MDU Resources. Cascade's corporate allocation factor—which reflects the Company's capitalization relative to MDU Resources' other business units—is 10.4 percent. The

MDU Utilities Group accounts for 35.8 percent of overall capitalization. When costs are allocated to the MDU Utilities Group, Cascade's share of those allocated costs is 29.1 percent based on its capitalization relative to MDU Resources' other utility brands.

Q. What does Mr. Kaufman propose for his general overhead allocation adjustment?

A. Based on Mr. Kaufman's interpretation of Cascade's Cost Allocation Manual,[4] Mr. Kaufman states that Cascade erroneously removed $2.4 billion from its calculation of the overall capitalization of MDU Resources, and proposes that the $2.4 billion should be added back to the total to calculate Cascade's relative capitalization.[5] By adding back the $2.4 billion for a total capitalization of MDU Resources of $7.4 billion, Mr. Kaufman calculates Cascade's corporate allocation factor to be 6.9 percent.[6] Mr. Kaufman's proposed adjustment would reduce Cascade's share of corporate overhead by $951,379 on a total system basis, or $235,181 on an Oregon basis.[7]

Q. Is Mr. Kaufman's proposed adjustment correct?

A. No. Because MDU Resources does not maintain its own books separate from division, Montana-Dakota, Montana-Dakota's books includes MDU Resources' investments in its subsidiaries, Centennial Energy Holdings (WBI Holdings, FutureSource, Knife River, and Construction Services Group) and MDU Energy Capital (Cascade and Intermountain). In calculating the corporate overhead allocation factors, the MDU Resources' investment in subsidiaries of $2.4 billion was removed to determine the stand-alone utility capital investment amount. The deduction for investment in subsidiaries is further illustrated in

[4] Staff/1002, Kaufman/15-33.
[5] Staff/1000, Kaufman/8.
[6] Staff/1000, Kaufman/8.
[7] Staff/1000, Kaufman/8.

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confidential Exhibit CNGC/804. The capital investment in Cascade—along with the other subsidiaries' capital investment amounts—were used to calculate the corporate overhead allocation factors. If the investment in the unregulated subsidiaries of $2.4 billion is *not* removed, it would result in double counting capital investment. Montana-Dakota is a division of MDU Resources, not a subsidiary of MDU Resources. Therefore, you see the removal of the investment in the subsidiaries in the MDU Utilities Group (labeled as "Utilities Group") column in the Cascade allocation manual.[8] The 10.4% allocation for Cascade is correct.

Q. Why does including the subsidiaries result in double counting?

A. As explained above, because of MDU Resources' corporate structure and the required Generally Accepted Accounting Principles (GAAP) accounting, the investment in the subsidiaries are included in Montana-Dakota's books. In the table on page 24 of Cascade's allocation manual, the investment is accounted for again for each business unit individually.[9] Thus, to avoid double-counting the investment in subsidiaries, it is necessary to remove $2.4 billion from the MDU Utilities Group (Utilities Group) column.

VI. EXPENSES WITH NO SUPPORTING DESCRIPTION

Q. Please describe Mr. Kaufman's proposed adjustment regarding certain MDU Resources expenses allocated to Cascade for which no narrative description was provided?

A. Mr. Kaufman proposed removing expenses for which no narrative description was included on the spreadsheets documenting the charges to Cascade. Based on this

[8] Staff/1002, Kaufman/26.
[9] Staff/1002, Kaufman/26.

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concern, Mr. Kaufman proposes a recommended reduction $234,201 on a total system basis, or $57,894 Oregon-basis.[10]

Q. Is Mr. Kaufman's proposed adjustment appropriate?

A. No. The expenses Mr. Kaufman proposes to exclude are primarily related to payroll and benefits which are cross charges of employee time from MDU Resources. And while the Company has not provided narrative descriptions of these costs on the supporting spreadsheets, they can clearly be recognized as payroll and benefit costs by the reference number in the object code column,[11]—object code 7110 indicates payroll and object codes 8191-8199 indicate benefits. The Company provided the key to these object codes in response to Staff's Data Request No. 122. The first digit of the object codes for MDU Resources is a 7 or 8 whereas the first digit of the objects codes for Cascade's is a 5. Thus, the documentation provided by the Company demonstrates that the charged costs are legitimate utility expenses that should be recovered in rates.

VII. NON-UTILITY EXPENSES

Q. Please describe Mr. Kaufman's proposed adjustment for expenses he claims do not have a utility purpose.

A. Mr. Kaufman reviewed the MDU Resources, Montana-Dakota and Intermountain expenses allocated to Cascade and concluded that certain expenses do not have a utility purpose, such as expenses for a corporate jet and private hanger, "flights to Palm Springs for Board of Director meetings held at luxury estates, golf supplies, golf green

[10] Staff/1000, Kaufman/10.
[11] The object code is in included in Staff's workpapers, Excel file 1005 Corporate Allocations, tab MDUR (4760500), Column H.

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fees, jewelry purchases, lobbying expenses and investor relation expenses." Mr. Kaufman's proposed adjustment to remove these expenses would result in a reduction of $334,770 on a total system basis, or $82,755 on an Oregon basis.

Q. Do you agree with Mr. Kaufman's proposed adjustment?

A. Yes, in part. Cascade inadvertently included certain costs that are inappropriate for inclusion in utility rates, and accordingly is removing those expenses. The expenses that Cascade agrees should be removed are for event sponsorships, lobbying, advertising, public relations and expenses specific to Knife River or Construction Services Group. These adjustments result in a reduction of $25,144 on a total system basis, or $6,216 on an Oregon-basis.

Q. Do you agree that golf related expenses and jewelry purchases should be removed?

A. No. The golf-related expenses are for corporate team building and are important to building positive company morale, and the jewelry purchases were for service anniversary awards. Consistent with the Commission's prior treatment of cost recovery for team building activities and gifts to employees,[12] it is appropriate to share cost recovery for these expenses equally between customers and shareholders. Cascade proposes to share these costs equally between customers and shareholders, which results in a reduction of $2,143 on a total system basis, or $530 on an Oregon-basis.

[12] *See In the Matter of Portland Gen. Elec. Co., Request for a Gen. Rate Revision*, Docket No. UE 197, Order No. 09-020 at 20-21 (Jan. 22, 2009).

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Q. Do you agree that expenses for a corporate jet and hanger, expenses associated with Board of Directors meetings, and investor relations expenses should be excluded?

A. No. These costs are legitimate costs of doing business, and are spread across the organization.

Q. Please explain why the corporate jet expenses are appropriately allocated to Cascade.

A. The corporate jet provides an important and cost effective alternative to commercial travel in many specific circumstances. MDU Resources and its executives are located in Bismarck, North Dakota—which has a small regional airport with limited flight options. As a result, if our executives need to attend a meeting in another city, flying commercial would mean flying out the day before the meeting and returning home the day after, which involves overnight lodging and meals and wasted time. By comparison, use of the corporate jet allows us to complete roundtrip travel on the same day. Thus, the corporate jet provides a less costly alternative mode of transportation for MDU Resources personnel, particularly when four or more people are all travelling to the same destination. As described further below, the MDU Resources travel coordinators perform an analysis for each flight to determine whether it is more cost effective to use the corporate jet or to book commercial flights.

Q. Please provide examples as to when the corporate jet may be used and charged to Cascade.

A. The corporate jet is used and may be charged to Cascade when MDU Utilities Group executives from Bismarck and Boise fly to Salem and Olympia for meetings at the Public

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Utility Commission of Oregon and Washington Utilities and Transportation Commission. Additionally, Cascade may be charged for a portion (according to its corporate allocation factor) of the corporate jet expenses for MDU Resources executives to fly for out of town meetings, such as utility financing meetings and meetings with ratings agencies.

Q. What steps does the MDU Resources travel department take to ensure that use of the corporate jet economical?

A. The MDU Resources travel department analyzes the cost effectiveness of each flight using the corporate jet in comparison with commercial travel. In particular, the variable costs of using the corporate jet (*i.e.,* pilot time for temporary pilots, airport fees and fuel) are compared with the costs of commercial travel.

Q. Are there also fixed costs associated with the corporate jet?

A. Yes. The fixed costs include depreciation of the aircraft, pilot payroll (non-temporary pilots), and the hanger facilities as well as insurance and the return component.

Q. What factors do the travel coordinators in the MDU Resources travel department analyze to determine the cost-effectiveness of using the corporate jet compared to using commercial flights?

A. The travel coordinators consider not only the cost of the commercial airline ticket, but also other factors that may entail additional costs such as additional hotel rooms, rental car expense and days of travel. The travel coordinators also consider the minimum passenger ratio. For example, flying three people from Bismarck to Minneapolis will not justify use of the corporate jet, but flying four or more people will typically be less expensive than flying commercial.

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Q. Can you provide an example cost comparison?

A. For example, a round trip of five MDU Utilities Group staff traveling from Bismarck to Salem would cost $648/person on the corporate jet compared to $807/person commercial.

Q. How are costs for the corporate jet billed to each business unit?

A. Costs for usage of the aircraft are billed based upon the number of individuals from each business unit utilizing the aircraft for each leg of travel and based upon an hourly usage rate. The rate is determined based on an estimate of the variable costs associated with the aircraft usage. If the aircraft is utilized by MDU Resources employees (i.e., debt ratings agencies, investment analyst presentations, etc.), the hourly usage charges for the specific travel are chargeable to all business units based on the corporate allocation factor. On the other hand, if the aircraft is utilized by employees of a particular utility for the sole benefit of that utility, charges for the specific travel are chargeable to the utility.

Q. Are fixed costs charged differently than variable costs?

A. Yes. Fixed costs are billed to all business units according to their respective corporate allocation factors.

Q. Please describe the expenses associated with Board of Directors meetings that Mr. Kaufman proposes to exclude.

A. Mr. Kaufman proposes to exclude expenses associated with a 2015 Board of Directors meeting in Palm Springs, California.

Q. Why was it reasonable for the Board of Directors to meet in Palm Springs?

A. The Board of Directors had requested a private, off-site location for the February 2015 strategic planning meeting. The secluded location at the Smoke Tree Ranch in Palm

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Springs, California included lodging and meeting facilities that provided the Board of Directors the ability to focus on strategic planning without distraction. Contrary to Mr. Kaufman's assertions, the Board of Directors did not stay at a "luxury estate."[13] In arranging for the meeting location and lodging for Board of Directors meetings, the travel department considers the available options and carefully selects a reasonably priced option that will provide appropriate facilities for the type of meeting to be held.

Q. Please describe the investor relations expenses that Mr. Kaufman proposes to exclude.

A. These expenses include costs associated with utility business such as financing meetings and meetings with ratings agencies. These meetings are essential to the financial health of the utility and directly benefit Cascade customers by ensuring access to low-cost capital. There is no precedent to suggest that these are not legitimate utility costs and there is no basis for Mr. Kaufman's proposal to exclude such costs from rates.

Q. Have you prepared workpapers that provide additional descriptions regarding the expenses that Mr. Kaufman has characterized as "non-utility" expenses?

A. Yes. I have added descriptions for the expenses that Mr. Kaufman proposed to remove as "non-utility" expenses. The additional detail regarding these expenses is provided in my workpapers in the Excel file Nygard Reply Workpapers for Exhibit CNGC/805, tabs MDUR (4760500), 47660 DA, and 47662 DA, in the far right hand column.

[13] Staff/1000, Kaufman/9.

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Q. What conclusions can be drawn from reviewing the additional descriptions for the expenses that Mr. Kaufman characterized as "non-utility" expenses?

A. The additional descriptions identify nearly all costs as legitimate business expenses, with the exclusion of costs such as event sponsorship, lobbying, advertising, public relations and expenses specific to Knife River or Construction Services Group. Additionally, Cascade proposes to share 50-50 cost recovery for corporate team building activities and gifts to employees. Accordingly, Cascade proposes that the appropriate adjustment to remove non-utility expenses is a reduction of $32,278 on a total system basis, or $7,979 on an Oregon-basis as shown in my Exhibit CNGC/805.

VIII. AFFILIATED RENT RECEIPT

Q. Do the utility brands in the MDU Utilities Group charge each other rent for use of their office buildings and other facilities?

A. Yes.

Q. Why do the utility brands charge each other rent?

A. Certain groups of employees perform functions for the benefit of all utility brands. For example, information technology employees and gas control employees perform work for all utility brands. Because the other utilities receive a benefit from these employees without incurring a cost to provide local office space for the work functions, the utilities charge each rent for the space occupied by the employees performing work for all utility brands.

Q. Please describe how the amount of rent chargeable to each utility is determined.

A. All of the utility brands use a revenue requirement model to charge rent to each other. The model calculates rent based on the square footage of the offices used by

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employees to provide service to the other utilities. The square footage is determined by the size of the cubicle the employee occupies, or for gas control, by the size of the room. The square footage amount does not include common spaces, such as lunchrooms, hallways, or bathrooms. The revenue requirement model also factors in a projected cost of capital of 8.75 percent, which is applied consistently across all utilities. The rent costs are then allocated among the utilities based on customer count.

Q. Please describe Mr. Kaufman's proposed adjustment for Cascade's affiliated rent receipts?

A. Mr. Kaufman seems to generally agree with the revenue requirement model, but proposes three changes. First, Mr. Kaufman proposes that Cascade use a cost of capital of 7.309 percent instead of 8.75 percent. Second, Mr. Kaufman proposes that customer count be calculated differently. Specifically, Mr. Kaufman proposes that the combined gas and electric customers of Montana-Dakota be counted as two individual customers, instead of a single customer, as calculated by the Company. Third, Mr. Kaufman proposes that the rents charged by Cascade to the other utility brands be assumed to include rent for common space in the calculation for rent in each building.[14] Mr. Kaufman's proposed adjustment results in an increase in rent charged by Cascade to the other utilities brands of $257,335 on a total system basis, or $63,613 on an Oregon basis.[15]

[14] Staff/1000, Kaufman/10-11.
[15] Staff/1000, Kaufman/10.

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Q. Do you agree with Mr. Kaufman's proposed adjustment?

A. In part.

Q. Please elaborate, and address each component of Mr. Kaufman's proposed adjustment, starting with cost of capital.

A. Cascade agrees to revise the cost of capital used in the model to 7.309 percent as filed in this rate case, instead of 8.75 percent, as long as all three utility brands are adjusted to use 7.309 percent.

Q. How do you respond to Mr. Kaufman's recommendation regarding common space?

A. Regarding common space, Cascade's model intentionally excludes common space. Neither Montana-Dakota nor Intermountain charge for common space either. Because each utility brand has an IT department using common space at the other brand's facilities, all utility brands determined it would be appropriate to exclude common space from the rent calculation. If common space were included, however, the net effect would most likely be an increase in cost for Cascade because Cascade has the smallest office building.[16]

Q. How do you respond to Mr. Kaufman's recommendation regarding customer count?

A. I disagree with Mr. Kaufman's recommendation. Mr. Kaufman recommends counting a Montana-Dakota customer who receives both gas and electricity (combination) as two

[16] The total square footage of the Cascade general office buildings is 25,328. This compares to the total square footage of the Intermountain and Montana-Dakota Utilities general office buildings of 50,280 and 89,208, respectively.

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separate customers. As explained in detail in the testimony of Mark Chiles, a combination customer generally causes the same costs on the utility as does a single service customer, and certainly does not cause double the work.[17] Therefore, combination customers should not be counted as two customers. The customer counts used by the Company are correct.

Q. Did Mr. Kaufman propose an adjustment to Cascade's net plant balance?

A. No, though he proposed an adjustment to net plant balance to Intermountain and Montana-Dakota to use a 13 month average instead of the approach currently employed by all three companies, which uses year-end balances to calculate the next year's cost of service amounts. If there is an adjustment to Intermountain and Montana-Dakota, Cascade needs to be adjusted as well.

Q. Please summarize your response to Mr. Kaufman's proposed adjustment.

A. By revising the cost of capital percentage and using a 13-month average balance for net plant, but not changing the customer counts or the space allocation to include common space, the adjustment should be (on an Oregon basis) a reduction of revenue in the amount of $14,371 instead of a revenue increase of $63,613. This effects the revenue requirement by $14,371. This adjustment is also shown in my Exhibit CNGC/806.

[17] *See* CNGC/900, Chiles/7-9.

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IX. INTERMOUNTAIN AFFILIATED RENT CHARGE

Q. Please describe Mr. Kaufman's proposed adjustment for Intermountain's affiliated rent receipts?

A. Mr. Kaufman proposes an adjustment to Intermountain's rent calculation to reflect cost of capital and customer counts as described above, and calculated the 13 month average balance for net plant in service, resulting in a proposed adjustment reducing charges to Cascade by $97,019 on a total system basis, or $23,983 on an Oregon basis.[18]

Q. Do you agree with Mr. Kaufman's proposed adjustment?

A. Yes and no. I agree with Mr. Kaufman's recommendation to modify the cost of capital, so long as cost of capital is consistent for all three utilities. As explained above, I do not agree with Mr. Kaufman's proposed adjustment to customer counts because it inappropriately double counts combined gas and electric customers, and does not accurately reflect the actual costs to serve those customers. I agree with Mr. Kaufman's adjustment to the net plant balance for Intermountain and Montana-Dakota to the average, as long as all three companies are done consistently. As shown in Exhibit CNGC/807, by changing the cost of capital percentage and the net plant balance to the 13 month average, but leaving the customer counts as initially determined by Cascade, the corrected adjustment would be a reduction to charges to Cascade of $63,492 on a total system basis or $15,695 on an Oregon basis.

[18] Staff/1000, Kaufman/11.

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X. MDU RESOURCES' AND MONTANA-DAKOTA'S AFFILIATED RENT CHARGE

Q. Please describe Mr. Kaufman's proposed adjustment for MDU Resources' and Montana-Dakota's affiliated rent receipts.

A. Mr. Kaufman proposes an adjustment to reflect the same cost of capital, customer count, and net plant average balance adjustments described above, and removes items Mr. Kaufman believes are not appropriately booked to rent, such as postage, shipping, labor, tax preparation and private jet costs.[19] Additionally, Mr. Kaufman allocated revenue requirement for Montana-Dakota's general office and Annex based on each affiliate's share of printing impressions. Finally, Mr. Kaufman's adjustment reflects his proposed change to Cascade's corporate allocation factor, changing it from 10.4 percent to 6.9 percent. Mr. Kaufman's adjustments result in a reduction to charges to Cascade of $635,007 on a total system basis or $156,974 on an Oregon basis.

Q. Do you agree with Mr. Kaufman's proposed adjustment?

A. Consistent with Cascade's approach on Mr. Kaufman's other adjustments, Cascade agrees to accept some portions of the adjustment and disagrees with other portions of the adjustment. Cascade agrees with Mr. Kaufman's recommendation to modify the cost of capital to 7.309 percent, as well as using the 13 month net plant average balance. For the same reasons as described above, Cascade does not agree that the customer counts or Cascade's corporate allocation factor should be adjusted.

[19] Staff/1000, Kaufman/11-12.

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Q. Were postage, shipping, labor, tax preparation and private jet costs actually charged to Cascade as rent?

A. No. These costs are charged to Cascade like any other expense, however, they were booked to the object code rent, which may have caused some confusion. Nonetheless, they are not charged through the revenue requirement model for rent and do not include cost of capital.

Q. Did Mr. Kaufman exclude any other costs?

A. Yes. FutureSource operations and maintenance (O&M) costs were excluded. The FutureSource O&M costs are a cost of the organization that provides a benefit to Cascade. FutureSource is the company that owns the land and buildings for MDU Resources, and MDU Resources is the corporate office that holds departments like Tax and Treasury Services, etc. The MDU Resources buildings are separate from the MDU General Office and Annex, which hold Montana-Dakota Utilities. The costs incurred by FutureSource provide a benefit to Cascade and Cascade's customers and therefore should be recoverable in rates.

Q. Please further describe the FutureSource O&M costs excluded by Mr. Kaufman.

A. Mr. Kaufman excluded $1,241,713 of FutureSource O&M costs. These costs are described further in Table 1, below, as well as Exhibits CNGC/808 and CNGC/809.

Table 1. Future Source O&M.

00001	[75200,98800]	5211	* * *	344,533.75	hanger contract services
00001	[75200,98800]	5630	* * *	545,268.88	office supplies
00001	[75200,98800]	5931	* * *	351,909.99	Return on assets not owned
				1,241,712.62	Future Source O&M

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Q. Does Cascade propose to exclude any costs associated with FutureSource O&M?

A. Yes. As shown in Exhibit CNGC/808, Cascade discovered that some of the Fitch and Standard & Poor costs were inadvertently included in the cost of service calculation, and should be excluded because some of these invoices were charged directly to each company. I have adjusted down the FutureSource O&M to account for this error.

Q. Please summarize your response to Mr. Kaufman's proposed adjustment for MDU Resources' rent receipts.

A. I agree with updating the cost of capital percentage and using the net average plant balance, but disagree with Mr. Kaufman's recommendation to modify the customer counts and corporate allocation factor, as explained further above. I have taken out the Fitch and Standard & Poor costs that were included in error. The charges for the corporate aircraft and the MDU Resources land and building are appropriate, and I have included these costs in my recommended adjustment. Taking these modifications into account, I agree with making an adjustment to reduce charges to Cascade by $101,372 or $25,059 on an Oregon basis. This adjustment is shown in Exhibit CNGC/810.

XI. CONCLUSION

Q. Can you summarize the adjustments made in your testimony?

A. Yes, in total I am recommending adjustments to our filing of $34,362 on an Oregon basis. These costs are described further in Table 2 below.

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Table 2. Summary of Cascade's Reply to Staff's Adjustments Regarding Allocations

Adjustment	Staff's Adjustment System	Staff's Adjustment Oregon	Cascade's Reply System	Cascade's Reply Oregon
General Overhead Allocation Adjustment	$ (951,379)	$ (235,181)	$ -	$ -
No Supporting Description	$ (234,201)	$ (57,894)	$ -	$ -
Non-Utility Costs	$ (334,770)	$ (82,755)	$ (32,278)	$ (7,979)
Affiliate Rent Charge - IGC	$ -	$ -	$ (63,492)	$ (15,695)
Affiliate Rent Charge - MDU	$ (635,007)	$ (156,974)	$ (101,372)	$ (25,059)
Total Cost Adjustment	$ (2,155,356)	$ (532,804)	$ (197,142)	$ (48,733)
Affiliate Rent Reciepts	$ 257,335	$ 63,613	$ (58,135)	$ (14,371)
Total Revenue Adjustment	$ 257,335	$ 63,613	$ (58,135)	$ (14,371)
Total Adjustment	$ (2,412,691)	$ (596,417)	$ (139,007)	$ (34,362)

Q. Does this conclude your reply testimony?

A. Yes.

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Cascade Reply Filing Overview

Exhibit CNGC/500 – Parvinen Reply Testimony
- Confidential CNGC/501 - Settled Adjustments
- CNGC/502 - Wage & Salary Model (employee count fix)
- CNGC/503 - Wage & Salary Model (employee count fix plus band)
- CNGC/504 - Wage & Salary Model (employee count fix plus band plus US Wage CPI)
- CNGC/505 - Cross Charge Labor & Incentives
- CNGC/506 - 2016 Updated Plant Projections
- CNGC/507 - Environmental Remediation Amortization
- CNGC/508 - 2016 Accum Def Tax on 2015 Total Plant
- CNGC/509 - Historical NYMEX Prices

Exhibit CNGC/600 – Jones Reply Testimony
- CNGC/601 – Non-Bargaining Employees Comparison to Grade
- Confidential CNGC/602 – 2014 Aon Hewitt Report

Exhibit CNGC/700 – Genora Reply Testimony
- CNGC/701 – Bonus Depreciation Explanation

Exhibit CNGC/800- Nygard Reply Testimony
- CNGC/801 - Organizational Chart
- CNGC/802 - Cascade Administrative and General Study
- CNGC/803 – Cascade Administrative and General Benchmark Analysis
- Confidential CNGC/804 - MDU Resources Corporate Overhead Allocation Factor
- CNGC/805 - Summary of Reply to Staff's "Non-Utility Costs" Adjustment
- CNGC/806 - Cascade Rental Receipt Calculation
- CNGC/807 - Intermountain Rental Receipt Calculation
- CNGC/808 - FutureSource Cost of Service
- CNGC/809 - Description of FutureSource Expenses and Cost Allocation
- CNGC/810 - MDU Rental Receipt Calculation

Exhibit CNGC/900 – Chiles Reply Testimony
- CNGC/901 – Customer Count Information
- CNGC/902 – Illustrative Calculation with Corrections to Staff's Adjustment

Exhibit CNGC/1000 – Amen Reply Testimony
- Exhibit CNG/1001 Summary of LRIC
- Exhibit CNG/1002 Functional Revenue Requirement
- Exhibit CNG/1003 Incremental Plant Carrying Costs
- Exhibit CNG/1004 Incremental O&M Costs
- Exhibit CNG/1005 Summary of Revenue by Rate Class
- Exhibit CNG/1006 Analysis of Revenue by Detailed Rate Schedule
- Exhibit CNG/1007 Residential Impact by Month
- Exhibit CNG/1008 Impact of Recommended Rate Changes

Exhibit CNGC/1100 – Gross Reply Testimony
- CNGC/1101 -Table of Tariff Revisions
- CNCG/1102 - Redlined Tariff Sheets
- CNGC/1103 - Clean Replacement Tariff Sheets

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

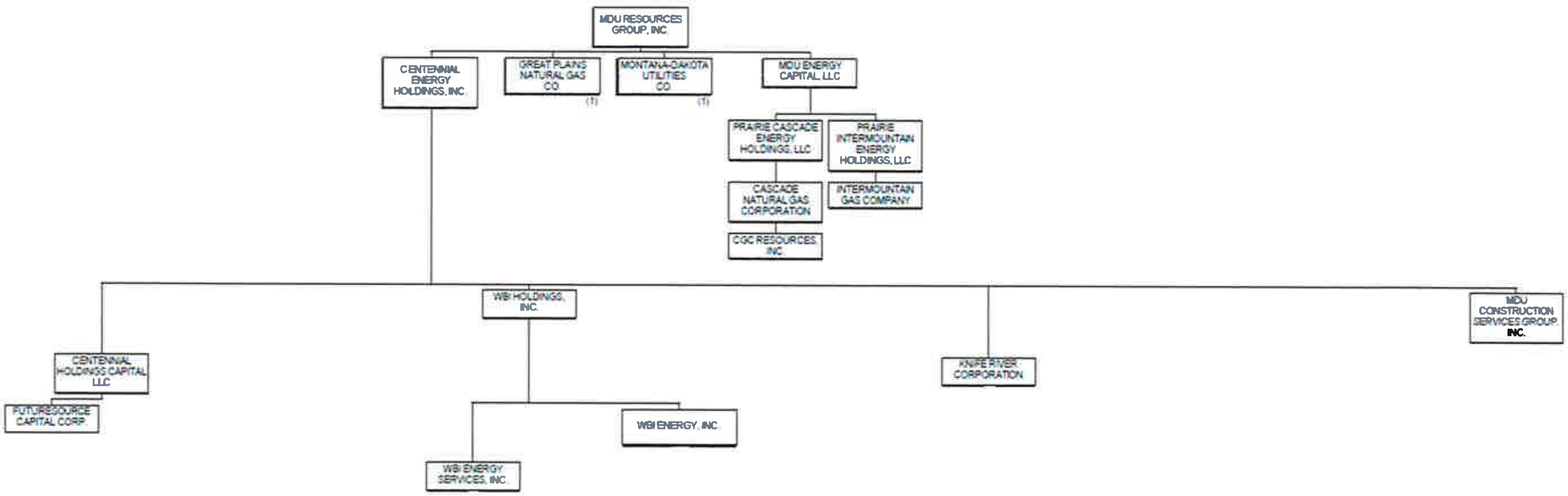
Cascade Natural Gas Corporation

Tammy Nygard

ORGANIZATIONAL CHART
EXHIBIT CNGC/801

September 2016

MDU Resources Group, Inc. Organizational Chart



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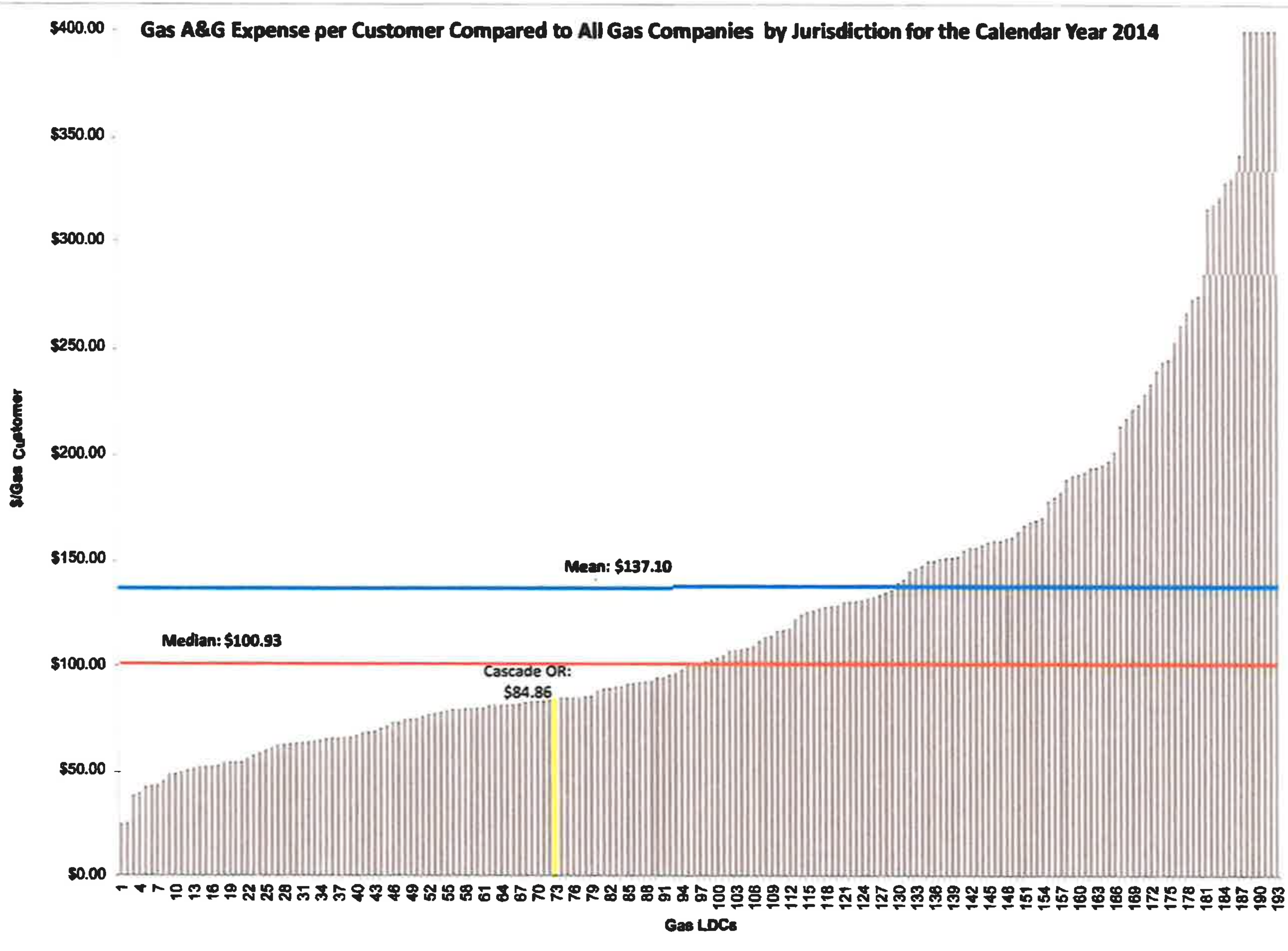
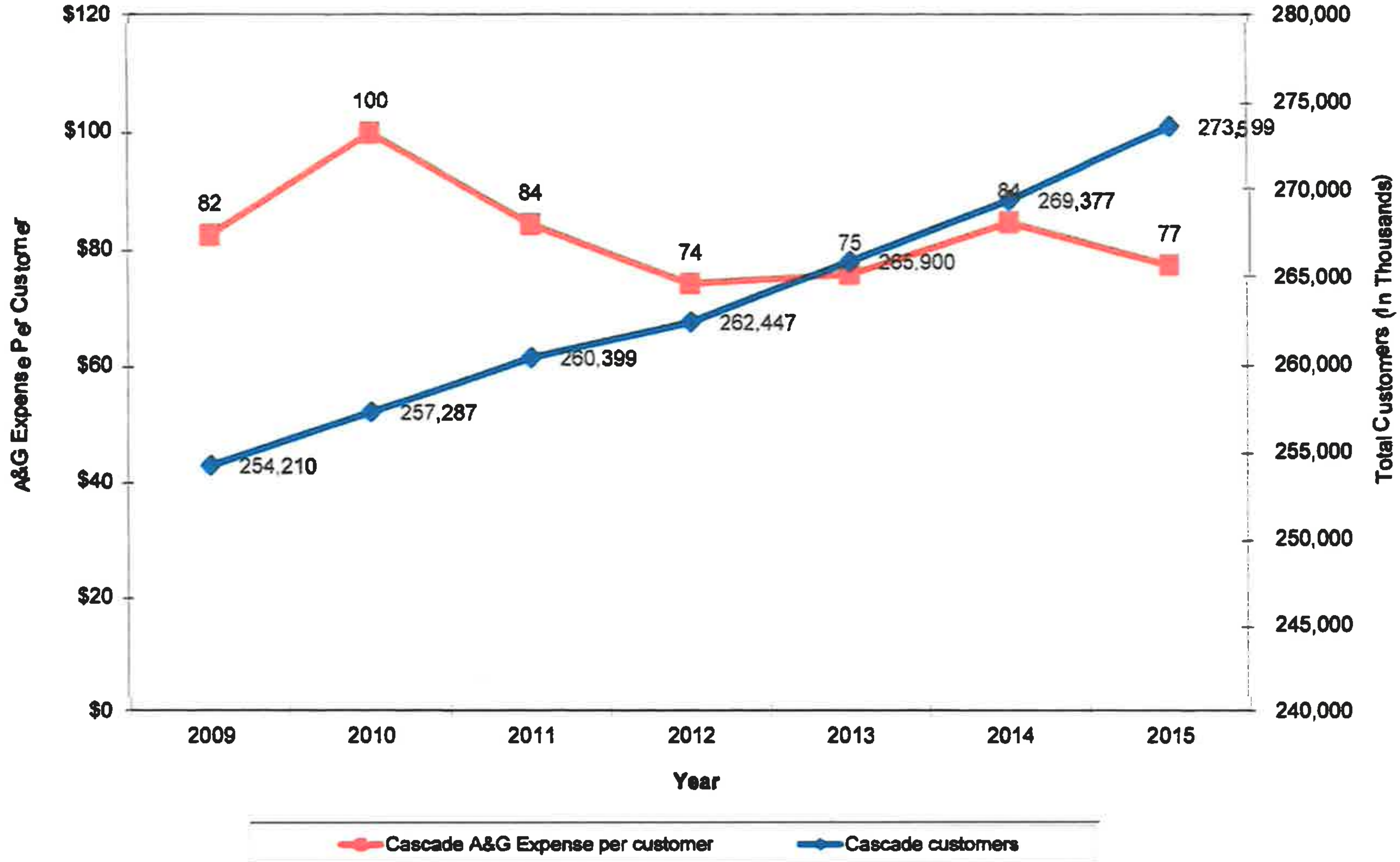
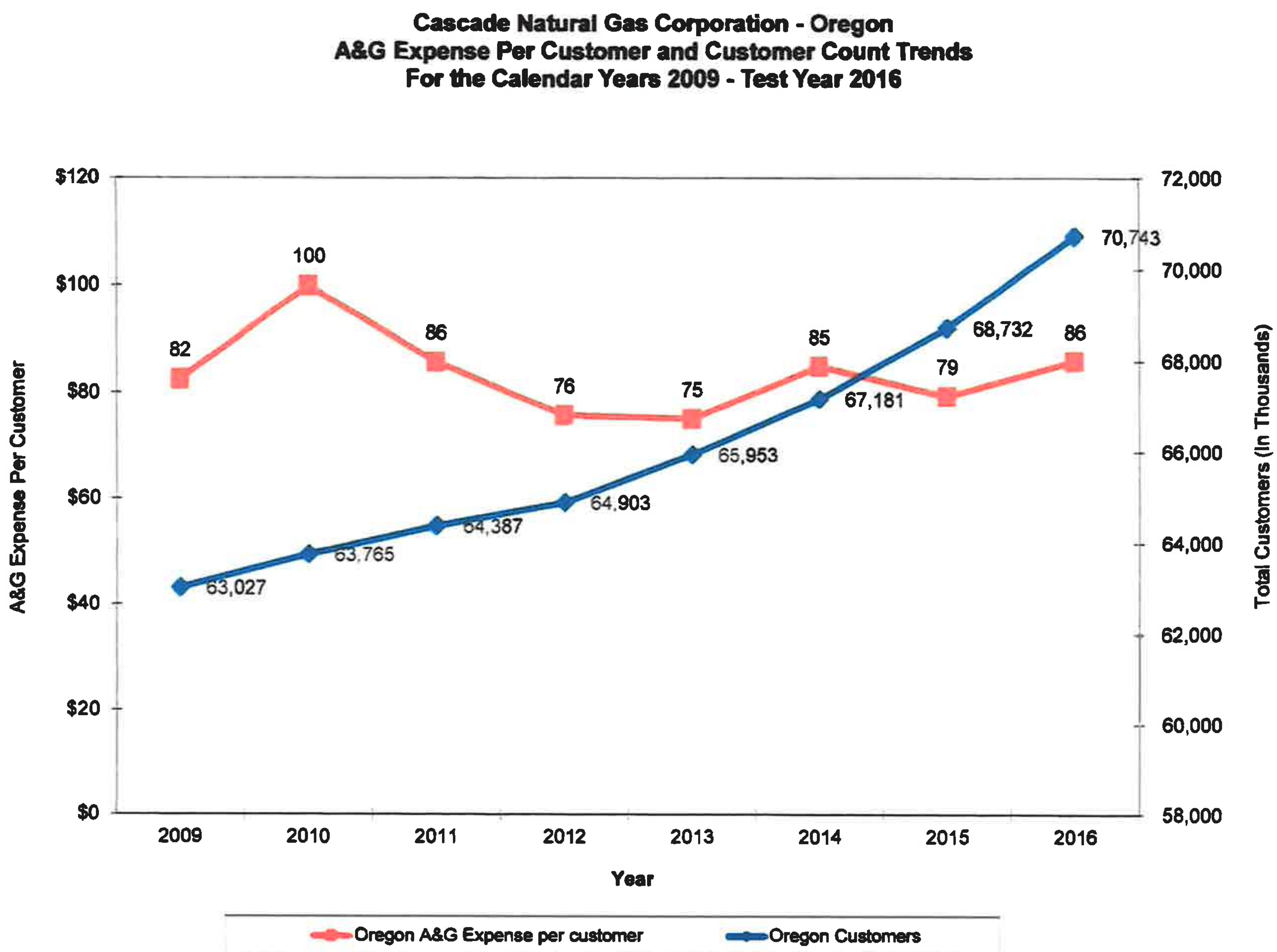
CASCADE ADMINISTRATIVE AND GENERAL STUDY EXHIBIT CNGC/802

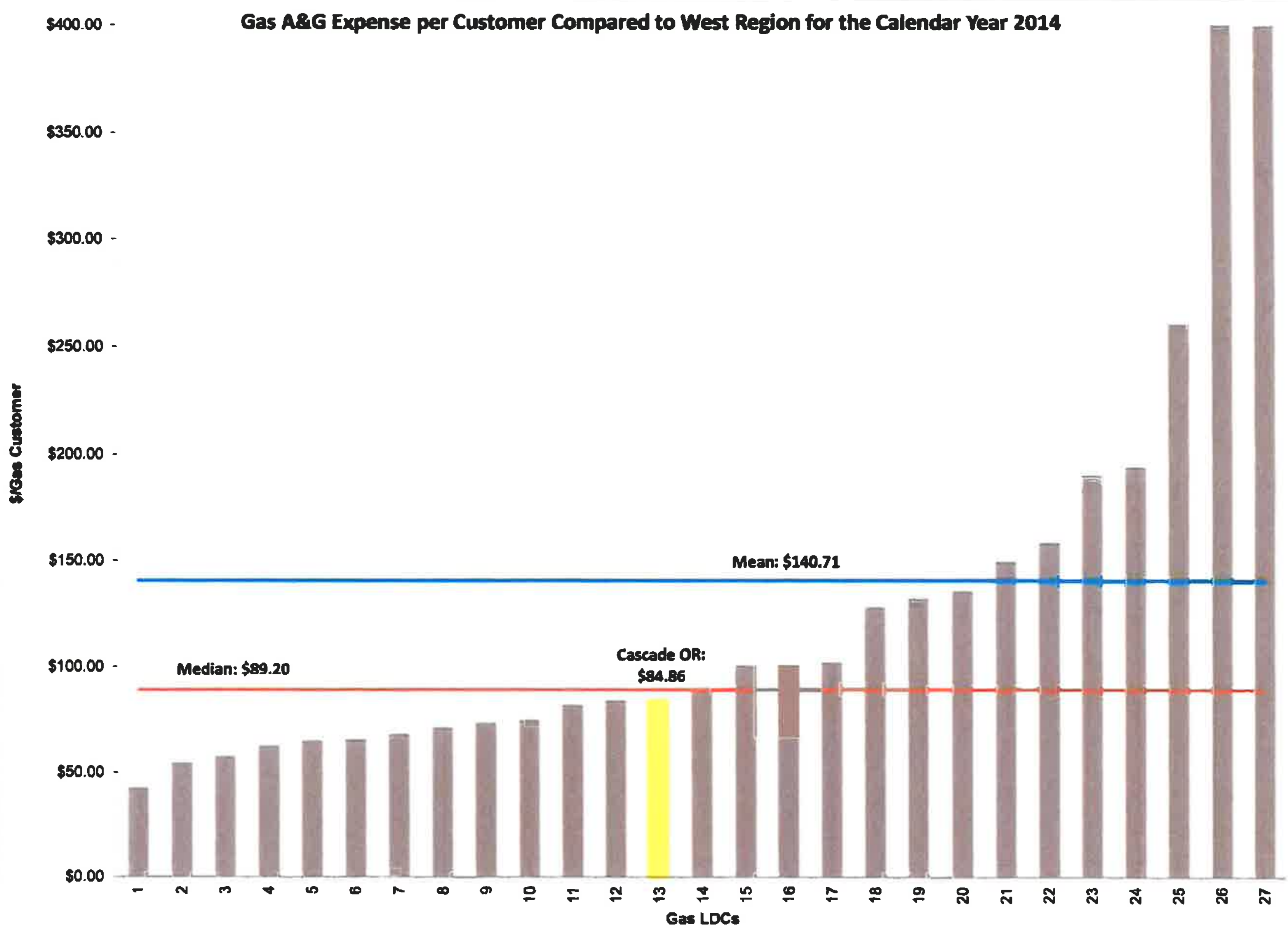
September 2016


Gas A&G Expense per Customer Compared to All Gas Companies by Jurisdiction for the Calendar Year 2014
$/Gas Customer
$400.00
$350.00
$300.00
$250.00
$200.00
$150.00
$100.00
$50.00
$0.00
Mean: $137.10
Median: $100.93
Cascade OR:
$84.86
Gas LDCs

Cascade Natural Gas Corporation
A&G Expense Per Customer and Customer Count Trends
For the Calendar Years 2009 - 2015




Cascade Natural Gas Corporation - Oregon
A&G Expense Per Customer and Customer Count Trends
For the Calendar Years 2009 - Test Year 2016
A&G Expense Per Customer
$120
$100
$80
$60
$40
$20
$0
Total Customers (In Thousands)
72,000
70,000
68,000
66,000
64,000
62,000
60,000
58,000
2009
2010
2011
2012
2013
2014
2015
2016
Year
82
100
86
76
75
85
79
86
63,027
63,765
64,387
64,903
65,953
67,181
68,732
70,743
Oregon A&G Expense per customer
Oregon Customers


Gas A&G Expense per Customer Compared to West Region for the Calendar Year 2014
$400.00
$350.00
$300.00
$250.00
$200.00
$150.00
$100.00
$50.00
$0.00
$/Gas Customer
Mean: $140.71
Median: $89.20
Cascade OR:
$84.86
1
2
3
4
5
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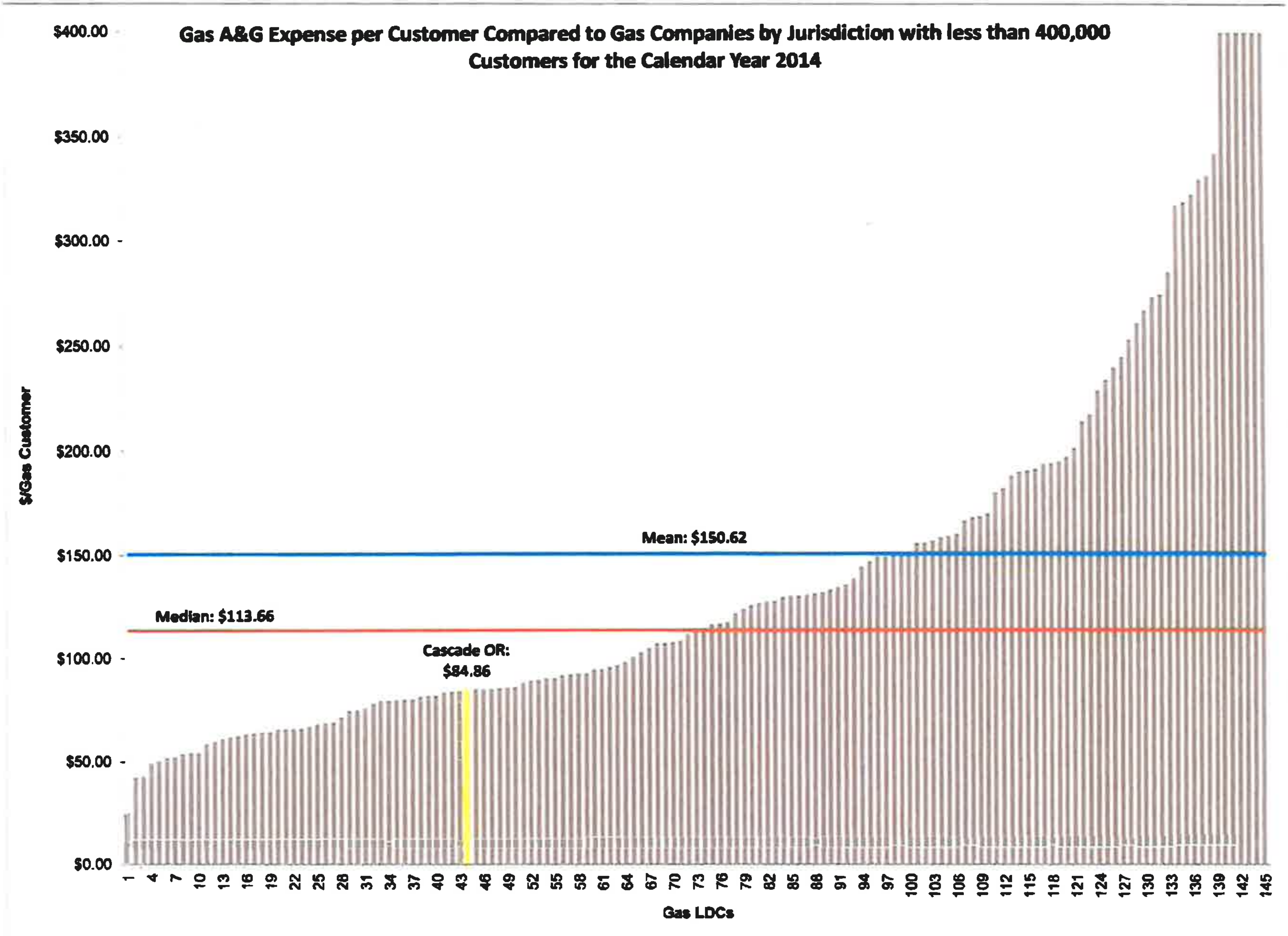
Gas LDCs


Gas A&G Expense per Customer Compared to Gas Companies by Jurisdiction with less than 400,000 Customers for the Calendar Year 2014
$400.00
$350.00
$300.00
$250.00
$200.00
$150.00
$100.00
$50.00
$0.00
$/Gas Customer
Mean: $150.62
Median: $113.66
Cascade OR: $84.86
Gas LDCs

BEFORE THE

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Cascade Natural Gas Corporation

Tammy Nygard

CASCADE ADMINISTRATION AND GENERAL BENCHMARK ANALYSIS
EXHIBIT CNGC/803

September 2016

Cascade Natural Gas Corporation

UM 1283 A&G Expense Adjustment

State of Oregon

	2007	2008	2009	2010	2011	2012	2013	2014	2015
2005 A&G Benchmark (per UM-1283)	$ 6,848,545	$ 6,848,545	$ 6,848,545	$ 6,848,545	$ 6,848,545	$ 6,848,545	$ 6,848,545	$ 6,848,545	$ 6,848,545
CPI Increase	7.15%	11.26%	10.87%	12.69%	16.24%	18.65%	20.38%	22.34%	22.51%
Annual A&G Benchmark	$ 7,338,154	$ 7,619,691	$ 7,592,780	$ 7,717,305	$ 7,960,749	$ 8,125,600	$ 8,244,620	$ 8,378,364	$ 8,390,152
Cascade Actual A&G Expense	$ 7,349,106	$ 6,522,058	$ 6,606,891	$ 7,494,560	$ 6,672,809	$ 6,236,397	$ 5,311,406	$ 6,940,669	$ 7,006,212
A&G Type 1 adjustments	$ (769,091)	$ (112,175)	$ (117,570)	$ (114,513)	$ (5,906)	$ (209,722)	$ 223,129	$ 4,360	$ (18,672)
Cascade Adjusted A&G Expense	$ 6,580,015	$ 6,409,884	$ 6,489,321	$ 7,380,047	$ 6,666,903	$ 6,026,674	$ 5,534,534	$ 6,945,029	$ 6,987,540
Below Threshold (Yes/No)	YES	YES	YES	YES	YES	YES	YES	YES	YES
A&G Adjustment (if below threshold then no adjustment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Tammy Nygard

MDU RESOURCES CORPORATE OVERHEAD ALLOCATION FACTOR EXHIBIT CNGC/804

REDACTED

September 2016

THIS DOCUMENT CONTAINS PROTECTED INFORMATION.

ALL QUALIFIED PERSONS AS DEFINED IN

ORDER NO. 16-141 WILL RECEIVE IT VIA U.S. MAIL.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Tammy Nygard

SUMMARY OF REPLY TO STAFF'S "NON-UTILITY COSTS" ADJUSTMENT EXHIBIT CNGC/805

September 2016

Non-Utility Costs

		System	Oregon
Staff's Proposed Adjustment		(334,770)	(82,755)
MDUR Costs Agreed to exclude at 100%	(25,144)	(25,144)	(6,216)
MDUR Costs Agreed to share 50/50	(4,285)	(2,143)	(530)
MDU Costs Agreed to exclude at 100%	(4,924)	(4,924)	(1,217)
IGC Costs Agreed to exclude at 100%	(67)	(67)	(17)
Cascade's Proposed Adjustment		(32,278)	(7,979)
Legitimate Business Expenses		(302,493)	(74,776)

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Tammy Nygard

CASCADE RENTAL RECEIPT CALCULATION EXHIBIT CNGC/806

September 2016

Casacade Natural Gas Corp. - **Kennewick General Office**
Cascade Natural Gas Company 100% owned
Cost of service by Montana-Dakota, Cascade, Intermountain
2015

Description	Net Book Value 100% ownership	MDU Portion @ 9.51%	IGC Portion @ 10.83%
Land	$ 1,062,681	$ 101,093	$ 115,097
Building	5,569,222	529,803	$ 603,194
Office Equipment	11,445	1,089	$ 1,240
Furniture & Fixtures	805,282	76,607	$ 87,219
Telephone Equipment	134,306	12,777	$ 14,546
Misc. Equipment	29,124	2,771	$ 3,154
	7,612,060	724,140	824,450
13 Month Average	**7,328,022.50**	**697,119.17**	**793,687.50**

Return	Amount	CNGC 2015 Projected Cost of capital (1)	Allocation %	By company
Montana-Dakota	$ 697,119	7.309%	36.60%	$ 18,649
Intermountain	793,688	7.309%	34.80%	20,188
Cascade	697,119	7.309%	28.50%	14,521
			100%	53,358
Income tax				
Montana-Dakota	$ 14,929		36.60%	5,464
Intermountain	16,996		34.80%	5,915
Cascade	14,929		28.50%	4,255
			100%	15,634
Depreciation				
Montana-Dakota	$ 12,970		36.60%	4,747
Intermountain	14,766		34.80%	5,139
Cascade	12,970		28.50%	3,697
			100%	13,583
Occupancy Expenses				
Montana-Dakota	$ 36,980		36.60%	13,535
Intermountain	42,103		34.80%	14,652
Cascade	36,980		28.50%	10,539
			100%	38,726

Customer Counts		
MDU Electric, Gas, Combo	343,965	36.600%
IGC	327,038	34.800%
CNG	267,938	28.500%
Total	938,941	

Depreciation	Depr Rate	Annual	MDU Portion @ 9.51%	IGC Portion @ 10.83%
Building	1.95%	$ 108,600	$ 10,331	$ 11,762
Office Equip	3.54%	405	39	44
FF&E	2.23%	17,958	1,708	1,945
Communication	6.31%	8,475	806	918
Misc. Equip	3.09%	900	86	97
		$ 136,338	$ 12,970	$ 14,766

INCOME TAX CALCULATION	MDU	IGC
NET RATE BASE	697,119	793,688
LTD INTEREST REQUIRED RETURN	3.500%	3.500%
LTD INTEREST	24,399	27,779
RETURN ON RATE BASE (ROR)	50,952	58,011
LTD INTEREST	(24,399)	(27,779)
APPLICABLE TO INCOME TAXES	26,553	30,232
TAX RATE	35.988%	35.988%
INCOME TAXES	14,929	16,996

Total	2015 Annual Cost	Monthly Cost
Montana-Dakota	$ 42,395	$ 3,533
Intermountain	45,894	3,825
	$ 88,289	$ 7,358

(1) Required ROE for MDU Utilities Group

Difference to Orignial

Total	Annual Cost	Monthly Cost
Montana-Dakota	$ (6,901)	$ (575)
Intermountain	$ (7,470)	$ (623)
	$ (14,371)	$ (1,198)

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Tammy Nygard

INTERMOUNTAIN RENTAL
RECEIPT CALCULATION
EXHIBIT CNGC/807

September 2016

CNGC/807
Nygard/1

Intermountain Gas Company
Cost of Service
2015

		January	February	March	April	May	June	July	August	September	October	November	December	To Record
IGC General Office Campus		$ 87,221	$ 87,221	$ 87,221	$ 87,221	$ 87,221	$ 87,221	$ 87,221	$ 87,221	$ 87,221	$ 87,221	$ 87,221	$ 87,221	
Percent of space occupied by MDU shared svc employees														
Customer Service & Credit		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Information Technology & GIS		26.33%	26.33%	26.33%	26.33%	26.33%	26.33%	26.33%	26.33%	26.33%	26.33%	26.33%	26.33%	
Customer Service & Credit		-	-	-	-	-	-	-	-	-	-	-	-	
Information Technology & GIS		$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	
Customer Service Center		$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	
Percent of space occupied by MDU shared svc employees		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Customer Service & Credit		70,175	70,175	70,175	70,175	70,175	70,175	70,175	70,175	70,175	70,175	70,175	70,175	
Total Information Technology		$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	$ 22,965	
Customer Count Allocation														
MDU Electric, Gas, Combo	36.6%	$ 8,405.19	$ 8,405.19	$ 8,405.19	$ 8,405.19	$ 8,405.19	$ 8,405.19	$ 8,405.19	$ 8,405.19	$ 8,405.19	$ 8,405.19	$ 8,405.19	$ 8,405.19	8,405.19
IGC	34.8%	7,991.82	7,991.82	7,991.82	7,991.82	7,991.82	7,991.82	7,991.82	7,991.82	7,991.82	7,991.82	7,991.82	7,991.82	
CNG	28.6%	6,567.99	6,567.99	6,567.99	6,567.99	6,567.99	6,567.99	6,567.99	6,567.99	6,567.99	6,567.99	6,567.99	6,567.99	6,567.99
Total Customer Service		$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	$ 70,175	
Customer Count Allocation														
MDU Electric, Gas, Combo	36.6%	$ 25,684.05	$ 25,684.05	$ 25,684.05	$ 25,684.05	$ 25,684.05	$ 25,684.05	$ 25,684.05	$ 25,684.05	$ 25,684.05	$ 25,684.05	$ 25,684.05	$ 25,684.05	25,684.05
IGC	34.8%	24,420.90	24,420.90	24,420.90	24,420.90	24,420.90	24,420.90	24,420.90	24,420.90	24,420.90	24,420.90	24,420.90	24,420.90	
CNG	28.6%	20,070.05	20,070.05	20,070.05	20,070.05	20,070.05	20,070.05	20,070.05	20,070.05	20,070.05	20,070.05	20,070.05	20,070.05	20,070.05
Total MDU		**34,089.24**												
Total CNG		**26,638.04**												
Total MDU		40860.24 As filed												
Total CNG		31929.04 As filed												
CNG Diff		5,291.00 Mo Adj												
		63,492.00 Annual Adj												

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Tammy Nygard

FUTURESOURCE COST
OF SERVICE
EXHIBIT CNGC/808

September 2016

FutureSource Cost Of Service

Company	Business Unit		Object		Sub	sl ty	subl		7.12 ***	1.6 ***	July - June	Subtotals
00001	75200	Treas Serv	5211	Subcontract Labor	1*	*	*	Electric	9,594.05	44,458.21	54,052.26	
00001	75200	Treas Serv	5211	Subcontract Labor	2*	*	*	Gas	7,414.23	33,820.26	41,234.49	95,286.75
00001	98800	Corporate Airplane	5211	Subcontract Labor	1*	*	*	Electric	66,348.00	74,490.12	140,838.12	
00001	98800	Corporate Airplane	5211	Subcontract Labor	2*	*	*	Gas	51,291.00	57,117.88	108,408.88	249,247.00
00001	75200	Treas Serv	5630	Office Supplies	1*	*	*	Electric	140,883.08	167,240.07	308,123.15	
00001	75200	Treas Serv	5630	Office Supplies	2*	*	*	Gas	108,908.81	128,236.92	237,145.73	545,268.88
											889,802.63	889,802.63

75200.5211 (electric and gas)

PV	1730612	7/29/2013	FITCH RATINGS	935.51
PV	1737436	9/10/2013	FITCH RATINGS	3,925.44
PV	1754055	12/12/2013	FITCH RATINGS	1,481.22
PV	1768253	3/14/2014	FITCH RATINGS	1,515.06
PV	1776152	5/8/2014	FITCH RATINGS	1,264.10
PV	1730612	7/29/2013	FITCH RATINGS	723.19
PV	1737436	9/10/2013	FITCH RATINGS	3,034.56
PV	1754055	12/12/2013	FITCH RATINGS	1,145.06
PV	1768253	3/14/2014	FITCH RATINGS	1,171.21
PV	1776152	5/8/2014	FITCH RATINGS	969.30
PV	1734678	8/21/2013	STANDARD & POOR'S	821.60
PV	1752130	11/30/2013	STANDARD & POOR'S	2,430.28
PV	1759316	1/14/2014	STANDARD & POOR'S	25,944.00
PV	1760051	1/17/2014	STANDARD & POOR'S	7,705.60
PV	1765444	2/21/2014	STANDARD & POOR'S	3,980.15
PV	1776712	5/13/2014	STANDARD & POOR'S	4,049.30
PV	1734678	8/21/2013	STANDARD & POOR'S	632.70
PV	1752130	11/30/2013	STANDARD & POOR'S	1,878.72
PV	1759316	1/14/2014	STANDARD & POOR'S	20,056.00
PV	1760051	1/17/2014	STANDARD & POOR'S	5,779.20
PV	1765444	2/21/2014	STANDARD & POOR'S	3,076.85
PV	1776712	5/13/2014	STANDARD & POOR'S	2,767.70
				95,286.75

98800.5211 (electric and gas)

JE	6080	7/31/2013	FS-COS Expense Allocation	7,740.00
JE	6080	7/31/2013	FS-COS Expense Allocation	5,983.00
JE	6137	8/31/2013	FS-COS Expense Allocation	6,983.00
JE	6137	8/31/2013	FS-COS Expense Allocation	5,399.00
JE	6190	9/30/2013	FS-COS Expense Allocation	10,965.00
JE	6190	9/30/2013	FS-COS Expense Allocation	8,477.00
JE	6245	10/31/2013	FS-COS Expense Allocation	14,339.00
JE	6245	10/31/2013	FS-COS Expense Allocation	11,085.00
JE	6310	11/30/2013	FS-COS Expense Allocation	13,385.00
JE	6310	11/30/2013	FS-COS Expense Allocation	10,347.00
JE	6393	12/31/2013	FS SS Returned Expenses	12,936.00
JE	6393	12/31/2013	FS SS Returned Expenses	10,000.00
JE	6469	1/31/2014	FS-COS Expense Allocation	18,648.00
JE	6469	1/31/2014	FS-COS Expense Allocation	14,299.00
JE	6514	2/28/2014	FS-COS Expense Allocation	11,840.15
JE	6514	2/28/2014	FS-COS Expense Allocation	9,078.85
JE	6574	3/27/2014	FS-COS Expense Allocation	11,219.82
JE	6574	3/27/2014	FS-COS Expense Allocation	8,603.18
JE	6631	4/30/2014	FS-COS Expense Allocation	10,108.19
JE	6631	4/30/2014	FS-COS Expense Allocation	7,750.81
JE	6694	5/14/2014	FS-COS Expense Allocation	10,639.10
JE	6694	5/14/2014	FS-COS Expense Allocation	8,157.90
JE	6756	6/25/2014	FS-COS Expense Allocation	12,034.86
JE	6756	6/25/2014	FS-COS Expense Allocation	9,228.14
				249,247.00

98800.5630

JE	6080	7/31/2013	FS-COS Expense Allocation	19,084.00
JE	6080	7/31/2013	FS-COS Expense Allocation	14,752.00
JE	6137	8/31/2013	FS-COS Expense Allocation	17,576.00
JE	6137	8/31/2013	FS-COS Expense Allocation	13,587.00
JE	6190	9/30/2013	FS-COS Expense Allocation	17,433.00
JE	6190	9/30/2013	FS-COS Expense Allocation	13,477.00
JE	6245	10/31/2013	FS-COS Expense Allocation	19,325.00
JE	6245	10/31/2013	FS-COS Expense Allocation	14,939.00
JE	6310	11/30/2013	FS-COS Expense Allocation	19,195.00
JE	6310	11/30/2013	FS-COS Expense Allocation	14,839.00
JE	6393	12/31/2013	FS SS Returned Expenses	20,655.00
JE	6393	12/31/2013	FS SS Returned Expenses	15,967.00
JE	6415	12/31/2013	CLEARING AIRPLANE	55,898.50
JE	6415	12/31/2013	CLEARING AIRPLANE	(16,691.72)
JE	6415	12/31/2013	CLEARING AIRPLANE	43,212.31
JE	6415	12/31/2013	CLEARING AIRPLANE	(12,903.54)
JE	6418	12/31/2013	ADJ FS O&M BUDGET TO ACTUA	(11,591.70)
JE	6418	12/31/2013	ADJ FS O&M BUDGET TO ACTUA	(8,960.96)
JE	6469	1/31/2014	FS-COS Expense Allocation	39,362.00
JE	6469	1/31/2014	FS-COS Expense Allocation	30,182.00
JE	6514	2/28/2014	FS-COS Expense Allocation	24,138.48
JE	6514	2/28/2014	FS-COS Expense Allocation	18,509.01
JE	6574	3/27/2014	FS-COS Expense Allocation	24,683.61
JE	6574	3/27/2014	FS-COS Expense Allocation	18,927.01
JE	6631	4/30/2014	FS-COS Expense Allocation	24,343.45
JE	6631	4/30/2014	FS-COS Expense Allocation	18,666.18
JE	6694	5/14/2014	FS-COS Expense Allocation	25,761.84
JE	6694	5/14/2014	FS-COS Expense Allocation	19,753.78
JE	6756	6/25/2014	FS-COS Expense Allocation	28,950.69
JE	6756	6/25/2014	FS-COS Expense Allocation	22,198.94
				545,268.88

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Tammy Nygard

DESCRIPTION OF FUTURESOURCE EXPENSES AND COST ALLOCATION
EXHIBIT CNGC/809

September 2016

FutureSource Explanation

The corporate office building and related land for MDU Resources Group, Inc. (as distinguished from the offices of its division – Montana-Dakota Utilities Co.), are owned jointly by FutureSource Capital Corp. ("FutureSource" which is an indirect subsidiary of MDU Resources Group, Inc./Centennial Energy Holdings, Inc.) and Montana-Dakota Utilities Co. The ownership of such property at the time by FutureSource and Montana-Dakota, was approximately 65% and 35%, respectively. These approximate ownership percentages were also true with respect to the corporate aircraft and hangar. The office furniture, office equipment, computer and network equipment, etc. within the MDU Resources corporate headquarters and hangar are wholly owned by FutureSource.

Montana-Dakota is invoiced monthly by FutureSource, based on Montana-Dakota's corporate factor, for its portion of the costs related to the corporate facilities and hangar. Such costs include the costs of maintaining the property (i.e., utilities, repairs, janitorial, etc.), insurance, property taxes, and office supplies. Budget amounts are used throughout the year, with a true-up of such operating costs to actual at year-end. The invoicing for corporate aircraft related ownership and operational costs, to the extent not recovered through an hourly usage rate, are also invoiced in a similar manner.

To the extent that the corporate factor for Montana-Dakota is greater than the ownership percentage at such time (approximately 35%), the monthly invoicing also includes an amount to recover depreciation, to the extent the depreciation for the total investment in the assets multiplied by Montana-Dakota's corporate factor exceeds the portion owned by Montana-Dakota.

In addition to the invoicing of the expenses for the costs described above, to the extent that the corporate factor for Montana-Dakota is greater than the ownership percentage at such time (which was approximately 35%), the monthly invoicing also includes an amount to recover a cost of capital charge. The calculation of this cost of capital charge is limited to the extent that the total investment in these assets multiplied by Montana-Dakota's corporate factor percentage, exceeds the portion of such assets which are owned by Montana-Dakota. Stated another way, Montana-Dakota is only assessed a cost of capital charge to the extent that the allocable investment in the facilities (based on its corporate factor) is in excess of its ownership portion.

Montana-Dakota allocates these FutureSource costs to Cascade based on capitalization.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Tammy Nygard

MDU RENTAL RECEIPT CALCULATION EXHIBIT CNGC/810

September 2016

MONTANA-DAKOTA UTILITIES CO.
MDUR COST OF SERVICE SUMMARY
6/30/2014

	CNGC	IGC	WBI PIPELINE	FIDELITY	WBI NON-REG	TOTAL WBI	KRC	CSG	TOTAL	MDU
G.O. COMPLEX-MDUR SUPPORT AREA										
2014 COST OF SERVICE	$ 15,439	$ 10,540	$ 8,462	$ 40,231	$ 5,790	$ 54,482	$ 33,253	$ 9,649	$ 123,364	25,089
2013 COST OF SERVICE	14,844	10,134	8,278	39,251	3,996	51,525	33,541	8,992	$ 119,036	23,693
DIFFERENCE	595	406	183	980	1,793	2,957	(288)	657	4,328	1,395
OFFICE SERVICES										
2014 COST OF SERVICE	54,949	31,399	66,723	98,123	47,099	211,945	467,063	172,696	938,052	2,986,851
2013 COST OF SERVICE	53,803	19,215	73,018	65,332	34,587	172,937	476,538	138,350	860,842	2,982,203
DIFFERENCE	1,146	12,184	(6,295)	32,791	12,511	39,008	(9,474)	34,346	77,210	4,648
VEHICLE MAINTENANCE BUILDING										
2014 COST OF SERVICE	-	-	2,530	-	-	2,530	-	-	2,530	48,078
2013 COST OF SERVICE	-	-	3,146	-	-	3,146	-	-	3,146	59,771
DIFFERENCE	-	-	(615)	-	-	(615)	-	-	(615)	(11,693)
PowerPlan Budget & Tax modules										
2014 COST OF SERVICE	6,138	4,190	3,364	15,993	2,302	21,658	13,219	3,836	49,041	9,973
2013 COST OF SERVICE	4,410	3,010	2,459	11,660	1,187	15,306	9,964	2,671	35,361	7,038
DIFFERENCE	1,728	1,180	905	4,333	1,114	6,352	3,255	1,165	13,680	2,935
ADMINISTRATIVE FEE										
2014 COST OF SERVICE	-	-	-	-	-	-	-	-	-	
2013 COST OF SERVICE	-	-	-	-	-	-	-	-	-	
DIFFERENCE	-	-	-	-	-	-	-	-	-	
TOTAL										
2014 COST OF SERVICE	76,525	46,129	81,079	154,346	55,190	290,616	513,536	186,181	1,112,987	3,069,991
2013 COST OF SERVICE	73,056	32,359	86,901	116,242	39,771	242,914	520,043	150,013	1,018,386	3,072,705
DIFFERENCE	$ 3,469	$ 13,770	$ (5,822)	$ 38,104	$ 15,419	$ 47,701	$ (6,507)	$ 36,168	$ 94,602	$ (2,714)

Recommende	As Filed	Adjustment	
76,525	78,426		(1,901)

MONTANA-DAKOTA UTILITIES CO.
MDU UTILITY GROUP COST OF SERVICE SUMMARY
6/30/2014

	CNGC	IGC	TOTAL
G.O. COMPLEX-CNGC/IGC SUPPORT AREA			
2014 COST OF SERVICE	66,267	79,311	145,578
2013 COST OF SERVICE	62,252	73,930	136,182
DIFFERENCE	4,015	5,381	9,396
UTILITY SHARED ASSETS			
2014 COST OF SERVICE	4,816	3,177	7,993
2013 COST OF SERVICE	7,543	5,153	12,696
DIFFERENCE	(2,727)	(1,976)	(4,703)
FUTURESOURCE			
2014 COST OF SERVICE	581,183	383,461	964,644
2013 COST OF SERVICE	659,739	450,713	1,110,452
DIFFERENCE	(78,556)	(67,252)	(145,808)
TOTAL			
2014 COST OF SERVICE	652,266	465,949	1,118,215
2013 COST OF SERVICE	729,534	529,796	1,259,330
DIFFERENCE	(77,268)	(63,847)	(141,115)

Excludes MDUR cost of service shown on MDUR-COS

Recommende	As Filed	Adjustment
652,266	751,737	(99,471)

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Reply Testimony of Mark A. Chiles

Allocations (Customer Service)
EXHIBIT CNGC/900

September 2016

EXHIBIT CNGC/900 – REPLY TESTIMONY – TARIFF REVISIONS

Table of Contents

Regulatory Affairs
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

I. INTRODUCTION

Q. Please state your name, title and business address.

A. My name is Mark A. Chiles. I am the Vice President of Regulatory Affairs for Cascade Natural Gas Corporation (Cascade, or Company) and Intermountain Gas Company and the Vice President of Customer Service for the MDU Utilities Group. My business address is 555 South Cole Road, Boise, ID 83709.

Q. Would you please summarize your educational and professional experience?

A. I am a graduate of Boise State University with a Bachelor of Business Administration degree in Accounting. I am a certified public accountant and a member of the American Institute of Certified Public Accountants and the Idaho Society of Certified Public Accountants. I have over 20 years of experience in the energy industry including time spent in the utility, gas marketing, and exploration and production industries. During my utility career, I have held the positions of Accounting Manager, Director of Accounting and Finance, and Vice President and Controller. I was appointed to my current position in March 2016. I am responsible for providing executive leadership and management for regulatory affairs and customer service including the scheduling and credit and collections functions.

Regulatory Affairs
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

II. SCOPE OF TESTIMONY

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

A. The purpose of my testimony is to respond to adjustments proposed by Staff witness Lance Kaufman regarding inter-company allocations to Cascade of costs related to MDU Utilities Group's customer service functions.

III. RESPONSE TO STAFF ADJUSTMENT REGARDING ALLOCATION OF CUSTOMER SERVICE FUNCTIONS

Q. Please describe the customer service functions that are allocated to Cascade.

A. The customer service costs included in this case are primarily associated with services provided to the MDU Utilities Group[1] for all three utility brands associated with MDU Resources—Cascade, Intermountain Gas Company, and Montana-Dakota Utilities Co./Great Plains Natural Gas Co. These services are provided by our Customer Service Call Center (or, Call Center), Credit and Collections, our Customer Support and Programs Department, the Scheduling Group, and the Director of Customer Service office.

Q. Please describe the location and functions each of the MDU Utilities Group's customer service departments.

A. Certainly. I will describe each department separately:

[1] The Reply Testimony of Tammy Nygard contains a description of the MDU Utilities Group (an operating division of MDU Resources) which oversees and provides services to our individual utility subsidiaries.

- The **Customer Service Call Center** is located in Meridian, Idaho. This department takes inbound calls from our customers on a variety of issues ranging from initiation and cancellation of service, emergency services, low income programs, and billing/payment issues. The Call Center also handles inquiries from and provides information to each of our field offices.
- The **Credit and Collections** department is located in Bismarck, North Dakota. This department is responsible for all activities related to customer credit and bill collections, including outbound collection calls, assigning disconnect orders, documenting and recording bankruptcy information, working with assistance agencies, and monitoring credit card and pay station payments related to disconnect orders. The department also works with external credit and collection agencies.
- The **Customer Support and Programs** department, located in Meridian, is responsible for administering customer programs such as level pay and landlord programs, and responding to requests for billing histories, monthly statement reprints, or form requests. They also are responsible for website management and social media postings, facilitating automated outbound calls for outage notifications or other major events, working with credit card and other outside vendors, and partnering with the Information Technology group on current and future applications.

Regulatory Affairs
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

- The **Scheduling Group** also works from our Meridian location, and is the liaison between our customer service functions and the field service technicians. They are responsible for balancing the daily workload for all companies and oversee the Mobile Workforce Management system. They are also responsible for handling after-hours emergency calls, therefore providing 24-hour emergency coverage.
- In addition, the MDU Utilities Group has an office of the **Director of Customer Service**. This office has three Consumer Specialists, each assigned to a different company, that act as liaisons between the utility and consumer assistance groups, administer payment files for low income payments, research and respond on consumer complaints, and respond to commission, local, state, or federal inquiries.

Q. What efficiencies have been gained through this organizational structure?

A. Since Cascade's acquisition, the MDU Utilities Group has been able to reduce the overall head count in the customer service area by roughly 25 employees. We have achieved this cost saving by assigning a single management team to oversee all customer service departments, integrating the individual departments, and implementing a common Customer Care and Billing System across all brands.

Regulatory Affairs
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

Q. How does the Company allocate customer service costs among the utilities?

A. Depending on the function involved, costs are either directly assigned (direct-assigned) to each utility, or they are allocated based on factors developed by MDU Utilities Group, with the consultation of the individual utilities. The methodology used for each department is described in Exhibit IV to Cascade's Cost Allocation Manual – Utility Operations Support Allocation Methodology.[2]

Q. What types of costs are direct-assigned to the utilities?

A. Costs that are incurred by employees specifically assigned to particular utility, or costs that are specifically incurred on behalf of a particular utility, are direct-assigned.

Q. Can you provide an example of specific customer service costs that are direct-assigned?

A. Yes. A significant portion of our labor costs for employees providing customer service functions are direct-assigned to the utilities. In particular, MDU Utilities Group has 116 Customer Service Representatives (CSRs) working in the Call Center in Meridian and in Bismarck. On average, 21 of those CSRs—representing 18 percent of the total number—are specifically assigned to answer

[2] Staff/1002, Kaufman/31-33.

Regulatory Affairs
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

customer service calls from Cascade's customers. Thus, the labor costs associated with these 21 representatives are direct-assigned to Cascade.

Q. How does the MDU Utilities Group determine how many Customer Service Representatives it requires for Cascade?

A. The number of CSRs assigned to Cascade is a function of the number of Cascade's customers, historical call volumes, and the response time required for Cascade's customer service calls. The management team evaluates the needs for each brand on an ongoing basis.

Q. Are all of the CSRs assigned to one of the individual utilities?

A. No. Specific CSRs are trained to take calls for multiple brands. This system allows for more efficient use of our CSRs' time. The costs associated with these specific CSRs are not direct-assigned, but instead are equally allocated among the individual utilities for which these CSRs are trained to take calls. Cascade receives an allocation of time for 23 of these CSRs.

Q. Are the costs associated with the agents in the Credit and Collections and Scheduling departments similarly allocated?

A. Generally, yes. Most of the agents in Credit and Collections and Scheduling departments handle matters for only one utility and therefore the associated labor costs are directly assigned to the relevant brand. The Credit and Collections agents who work on more than one utility track their time spent on each utility brand. The costs associated with these agents are allocated to each utility based

Regulatory Affairs
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

on these time records. The Scheduling agents who work on more than one brand have their time allocated based on factors described in Cascade's Cost Allocation Manual, which are reviewed on an annual basis.

Q. Are there other costs that are direct-assigned to the utilities?

A. Yes. Other costs that are direct-assigned to each utility include fees paid for electronic payments, postage, and billing supplies. For example, Cascade offers customers an option to pay bills at conveniently-located pay stations and covers the fee associated with the pay station. Therefore, the cost associated with walk-in pay stations are direct-assigned to Cascade.

Q. How do you allocated costs related to management of the customer services departments?

A. Management includes the director, department managers, and certain of the supervisors, and team leads. These positions are assigned to each brand based on allocation factors. These factors represent management's determination of time spent for each brand and are reviewed on an annual basis. The specific management allocation factors for each customer service department are shown in Cascade's Cost Allocation Manual, Attachment C.[3]

[3] Staff/1002, Kaufman/31-33.

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Cascade Natural Gas Corporation
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Q. Are there any other customer service costs that are assigned on the basis of allocation factors determined by management?

A. In addition to those I have described above—for customer service management and scheduling agents that work on more than one utility—costs associated with employees in the Customer Programs and Support department are also assigned on the basis of allocation factors described in Cascade's Cost Allocation Manual.[4]

Q. Does Staff support the Company's allocation methodology?

A. No. Staff takes the position that all customer service costs should be allocated among the utilities based on the relative number of customers of each utility. Staff calculates Cascade's share of all MDU Utilities Group customer service costs to be 25.6 percent, and accordingly proposes a downward adjustment of the Company's revenue requirement in this case by $191,130 on an Oregon-allocated basis.[5]

Q. What reason does Staff give for the recommendation to use customer counts to allocate all customer service costs?

A. Staff objects to the Company using fixed allocation factors—such as are used to allocate the labor costs associated with management employees—because such

[4] Staff/1002, Kaufman/31-33.
[5] Staff/1000, Kaufman/7-8.

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factors do not "vary with firm behavior."[6] Mr. Kaufman states that they are therefore not appropriate proxies for allocating costs.[7]

Q. Do you agree with Staff's analysis?

A. No, for several reasons. First, a very significant proportion of the customer service costs are allocated to Cascade by direct assignment. As I explained above, we direct-assign only those costs that are caused by Cascade customers alone. Therefore, there is no need to use customer count as a proxy for allocation of these costs. Staff provides no rationale for rejecting direct assignment of these costs and Mr. Kaufman's adjustment should be rejected on that basis alone.

Second, the allocation factors developed for management and certain other specific employees are not "fixed" as maintained by Staff. These factors are reviewed in the budgeting process, and are updated as necessary at the beginning of the year.

Third, based on my review of Staff's work papers, it appears that in developing its customer count factor, Staff treats Montana-Dakota Utilities Co.'s (Montana-Dakota) combined gas and electric customers as if they were two separate customers. Staff provides no rationale for this approach, and in fact, treating combination customers as if they were two customers completely

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[6] Staff/1000, Kaufman/7.
[7] Staff/1000, Kaufman/7.

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misrepresents the customer service costs they are responsible for causing. In fact, for most purposes, these combination customers cause the same costs as single service customers.

Q. Please explain.

A. For example, it only takes a single call to set up both the natural gas and electric service, make account changes, or set up payment arrangements. In addition, the combination customers receive a single bill and remit a single payment and any other correspondence is consolidated and sent as a single notification. Also, field service calls are handled by a combination technician so any scheduling is handled as a single transaction. These activities make up the vast majority of customer service costs imposed by our customers. In fact, the only area in which a combined customer might impose more costs on the system than a single-service customer would be outage and other service complaint-type calls, which are relatively infrequent.

Q. What is the impact on Staff's customer count allocation factor if a combination customer were treated as a single customer?

A. When all of the Montana-Dakota's combined gas and electric customers are counted only once, Cascade's allocation on that basis would increase from 25.6% to 28.53% as shown in Exhibit CNGC/901.

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Q. Are there any other problems with Staff's analysis?

A. Yes. Mr. Kaufman's analysis erroneously excludes all customer service costs for the Scheduling group.

Q. How would this affect the calculation?

A. As a percentage of total cost, Cascade was charged less than the calculated factor used by Mr. Kaufman. By appropriately including these costs in the calculation, the adjustment would be lower by $34,765 based on Staff's allocation factor and would be lower by $70,942 based on an allocation factor that counts combination customers as a single customer.

Q. Have you performed an alternative allocation of customer service costs that places Staff's adjustment into perspective?

A. Yes. Cascade believes that its allocation approach results in an accurate and reasonable result. To place Staff's concerns into perspective, and for illustrative purposes only, I accepted certain of Staff's revisions to the allocation process, while correcting Staff's error and customer count approach. Specifically, my illustrative calculation was performed as follows:

- First, I retained the direct assignment of certain non-labor costs that I could identify as directly assigned. The Company believes that direct assignment is the most accurate way to allocate costs, and Staff has provided no rationale whatsoever for rejecting the direct assignment of any category of customer service costs. However, for the purposes of

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this calculation, I retained direct assignment only for these specific non-labor costs.

- Second, all other costs were allocated based on customer counts. While the Company supports all of its directly allocated costs and those calculated using its own allocation factors, we applied Staff's method of allocation using customer counts to view the impact of that change.
- Third, I corrected customer counts so that each combination customer is counted as one customer. Staff has provided no evidence to rebut the Company's evidence that the customer service costs caused by combination customers do not differ in any significant respect from the costs caused by single service customers.
- Fourth, I corrected Staff's omission of the Scheduling Group costs—which I assume was in error.

Q. What is the impact of these changes on Staff's calculation?

A. As shown on Exhibit CNGC/902, the revenue impact of treating the Montana-Dakota's combination customers as a single customer, correctly including the scheduling department in the calculation, and separating out direct charges versus allocable charges, other than payroll, would be to decrease the original revenue requirement by $29,500 for costs related to the customer service center.

Q. Do you recommend that the Commission adopt this illustrative calculation?

A. No. We believe our original approach is correct and should be adopted.

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IV. CONCLUSION

Q. Does this conclude your testimony?

A. Yes.

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BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Mark Chiles

CUSTOMER COUNT INFORMATION EXHIBIT CNGC/901

September 2016

MDU Utilities Group
Customer Count Information

	12/31/2015	
Cascade Natural Gas	276,993	28.53%
Intermountain Gas	338,149	34.82%
Montana Dakota - gas only	189,612	19.53%
Montana Dakota - electric only	64,698	6.66%
Montana Dakota - combination	77,889	8.02%
Great Plains Natural Gas	23,702	2.44%
	971,043	

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Mark Chiles

**ILLUSTRATIVE CALCULATION
WITH CORRECTIONS TO
STAFF'S ADJUSTMENT
EXHIBIT CNGC/902**

September 2016

Customer Service Allocation Adjustment

	Affiliate Total	Company Factor	Company Allocation	Staff Factor	Staff Allocation	Allocation Adj	Disallowance	Total Adj	Oregon Allocated
Credit and Collections	$ 1,636,353	29.1%	$ 476,417	25.6%	$ 418,360	$ (58,057)			
Customer Services, Dir	$ 1,678,418	37.6%	$ 631,294	25.6%	$ 429,114	$ (202,180)			
Meridian-Cust Svc Ctr	$ 6,220,883	32.4%	$ 2,017,506	25.6%	$ 1,590,468	$ (427,038)			
Customer Development/Programs	$ 1,331,892	32.0%	$ 426,424	25.6%	$ 340,520	$ (85,904)			
	$ 10,867,546		$ 3,551,641		$ 2,778,462	$ (773,179)		$ (773,179)	$ (191,130)
Scheduling	$ 1,222,733	22.7%	$ 277,846	25.6%	$ 312,611	$ 34,765			
	$ 12,090,279	31.7%	$ 3,829,487	25.6%	$ 3,091,074	$ (738,414)		$ (738,414)	$ (182,536)

Allocated	Company Factor	Company Allocation	Direct	Total	Allocation Adj	Oregon Allocated
1,241,509	28.45%	353,191	202,476	555,667	79,250	
998,219	28.45%	284,067	296,593	580,660	(50,634)	
6,220,883	28.45%	1,769,756	-	1,769,756	(247,750)	
1,235,844	28.45%	351,495	96,348	447,843	21,419	
$ 9,696,455		$ 2,758,509	$ 595,417	$ 3,353,926	$ (197,715)	$ (48,875)
1,222,733	28.45%	347,851	-	347,851	70,005	
$ 10,919,188		$ 3,106,360	$ 595,417	$ 3,701,777	$ (127,710)	$ (31,570)

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Reply Testimony of Ronald J. Amen

LONG-RUN INCREMENTAL COST STUDY / RATE DESIGN
EXHIBIT CNGC/1000

September 2016

EXHIBIT CNGC/1000 REPLY TESTIMONY – LONG-RUN INCREMENTAL COST STUDY / RATE DESIGN

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I. INTRODUCTION AND SUMMARY

Q. Please state your name and business address.

A. My name is Ronald J. Amen and my business address is 17806 NE 109th Court, Redmond, Washington 98052.

Q. Are you the same Ronald J. Amen who submitted pre-filed Direct Testimony on behalf of Cascade Natural Gas Corporation (Cascade or the Company)?

A. Yes.

Q. What is the purpose of your Reply Testimony in this proceeding?

A. First, I will present the updated results of the Long-Run Incremental Cost (LRIC) Study filed by the Company in this proceeding. I will describe the revisions to the LRIC, which result from the adjustments to the Company's total cost of service discussed in the Reply Testimony of Company witness Mr. Parvinen, and some of the suggested modifications to the LRIC suggested by Staff witness Mr. Compton, as described below.

Second, my Reply Testimony responds to Staff witness Compton's comments and recommendations regarding certain related aspects of the Cascade LRIC. The issues raised by Mr. Compton include: a) critical view of Cascade's minimum sized distribution (two-inch) mains cost as compared to that of Avista and NW Natural, b) a claim that Cascade's per books cost of 2" PE does not include all mains cost elements, c) a recommendation for using the lower of NW Natural's and Avista's mains cost estimates, and d) criticism of the amount of steel mains in system replacement costs.

The LRIC recommendations of Mr. Compton that I have accepted are: a) deletion of capacity and safety related mains investment, b) separation of meters and services

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from main extensions to allocate embedded costs, and c) allocating M&R station equipment to system core mains.

Third, I will respond to certain cost allocation related issues that have been raised by other parties in these proceedings concerning the LRIC Study presented by the Company. Specifically, my Testimony addresses the Direct Testimonies of CUB witness Mr. Jenks and NWIGU witness Mr. Gorman. Issues raised by CUB witness Mr. Jenks include: a) objection to the use of 2" plastic mains as customer related and the assertion that Cascade's distribution system is oversized as a result, and by extension b) Interruptible customers are not interrupted because the system is oversized. NWIGU witness Mr. Gorman is critical of the cost of meters that were assigned to the large customer classes.

Finally, I will present the results of Cascade's revised proposed class revenues, the resulting impact on the Company's proposed rates, and customer bill impacts.

Q. Please summarize the conclusions of your Reply Testimony.

A. First, the Commission should rely upon the Company's LRIC study, as adjusted for the revisions I describe in this Reply Testimony, because it best reflects the long run incremental costs incurred to serve the Company's customers. Second, the Commission should reject the assertions made by CUB witness Mr. Jenks with respect to the Company's use of 2" mains as customer related and the resulting oversizing of the distribution system. Third, the criticism by NWIGU witness Mr. Gorman of the meter costs assigned to the large customer classes is misplaced for the reasons stated in my reply testimony. Finally, the Company's proposed revenue changes to the various rate

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classes that reflect the results of the Company's revised LRIC should be adopted for purposes of adjusting the rate components of the respective rate schedules.

Q. Please provide a list of exhibits supporting your reply testimony.

A. The following exhibits accompany my reply testimony.

- Exhibit CNGC/1001 Summary of LRIC
- Exhibit CNGC/1002 Functional Revenue Requirement
- Exhibit CNGC/1003 Incremental Plant Carrying Costs
- Exhibit CNGC/1004 Incremental Operations and Maintenance (O&M) Costs
- Exhibit CNGC/1005 Summary of Revenue by Rate Class
- Exhibit CNGC/1006 Analysis of Revenue by Detailed Rate Schedule
- Exhibit CNGC/1007 Residential Impact by Month
- Exhibit CNGC/1008 Impact of Recommended Rate Changes

II. CASCADE'S REVISED LRIC STUDY

Q. Have you prepared a revised LRIC Study?

A. Yes. Exhibit CNGC/1001 presents Cascade's revised LRIC Study. In particular, the exhibit presents the resulting allocation by rate schedule of Cascade's revised proposed revenue requirement based strictly on the results of the LRIC computations included in the LRIC Study.

Q. Please describe the revisions to Cascade's LRIC Study.

A. I have made the following revisions to Cascade's LRIC Study in addition to updating the Company's revised revenue requirement, as mentioned earlier: 1) modification of growth-related distribution main extension cost for Residential (Schedule No. 101) and

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Commercial (Schedule No. 104), 2) acceptance of certain recommendations of Staff witness Compton, and 3) minor corrections to costs for certain metering and regulator station installations on the premises of large customers.

Q. What were the modifications made to growth mains cost for Schedule Nos. 101 and 104?

A. Sampled work orders with unreasonably low cost per foot results of less than $5.00 (2015 dollars), were deleted from the calculation of the average cost per foot for 2-inch plastic main extensions for new customers in Schedule Nos. 101 and 104. I will discuss the reasons for this change later in my Reply Testimony.

Q. Please list and describe Staff's recommended changes to the LRIC Study that you have adopted.

A. I have accepted the following recommendations by Staff with respect to Cascade's LRIC:

1. Elimination of the capacity and safety related mains categories.[1]
2. The allocation of core mains, with exception of the cost of growth mains for Schedule Nos. 101 and 104[2], and the composition of system replacement mains,[3] discussed later in my Reply Testimony.[4]

[1] Staff/1300, Compton/14, Topic 3.
[2] Staff/1300, Compton/7, Topic 1.
[3] Staff/1300, Compton/11, Topic 2.
[4] Staff/1300, Compton/15, Topic 4.

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3. The change to cost functionalization related to separation of the meters and services from Main Extensions for embedded mains allocation; and shift of M&R Station Equipment to the System Core Mains column in Exhibit CNGC/1002.[5]

A. Incremental Main Investment Costs

Q. How were the costs to install customer growth-related distribution mains determined?

A. As described in my direct testimony, Cascade's distribution mains analysis derives the customer related costs associated with the installation of distribution mains to connect new customers. Mains investments that serve this function were extracted from Cascade's plant accounting records. Oregon new business project work orders were summarized for a fourteen-year period (2002 – 2015). The per customer cost was computed by taking the average cost per foot of Cascade's minimum-sized distribution main (two-inch), escalated to current dollars (2015) using the Handy Whitman Index of Public Utility Construction Costs, and multiplying that unit cost by the number of feet of main installed per new customer for Residential (Schedule No. 101), Commercial (Schedule No. 104), and Industrial (Schedule No. 105) service classes.

Q. Do you agree with the conclusion reached by Staff regarding the installed cost of two-inch plastic mains?

A. No. Staff concludes that the installed cost of Cascade's two-inch plastic mains is too low based almost exclusively on the basis of the claimed cost experience of

[5] Staff/1300, Compton/17, Topic 5.

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Avista and NW Natural.[6] This is an unprecedented tactic in my experience, whereby cost data from other utilities are quoted without the introduction of any comparative evidentiary data to critique pipeline construction costs within the context of a cost of service study. Further, Mr. Compton opines that the evidence provided by Cascade via responses to Staff data requests was of no value, when the information included over five years of work orders, with many containing twenty-five different categories of cost detail.[7]

Q. Notwithstanding the cost data provided by Cascade in response to Staff data requests, are there other reasons why Cascade's cost experience may differ from that of the other Oregon utilities cited by Staff?

A. Yes. Cascade's pipeline construction practices include the use of "open trenching" in its Oregon service territory, which requires builders and developers of new residential and small commercial projects to provide an open trench for all of Cascade's facilities to be installed. This practice has been particularly economical for Cascade in its Bend service area where the majority of the residential and small commercial growth has occurred in recent years and where the terrain consists of predominantly rocky soil. The labor and equipment cost of the trench is a significant component of the overall construction cost of a pipeline project. For example, the current contractor price in Oregon to install 2-inch plastic main in an open trench is $3.60 per foot, whereas the contractor price to dig a trench, provide bedding material, install and cover the pipe is $12.40 per foot. The

[6] Staff/1300, Compton/7, Topic 1.
[7] See response to Staff Data Request No.178.

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contract labor, equipment and materials cost savings associated with Cascade's open trenching practice is $8.80 per foot. By comparison, Cascade's current contractor price in its Washington territory where open trenching is not a common practice is $15.30 per foot for the installation of 2-inch plastic main.

Q. Please describe the adjustments to the installed cost of 2-inch plastic mains in the revised LRIC Study that you referenced earlier in your reply testimony.

A. As I described earlier, I have revised the growth main extension analysis to exclude all 2-inch plastic main installation work order records where the installed cost per foot is less than $5.00, when adjusted to 2015 dollars. Following further evaluation of the sampled work orders included in the development of growth mains used in Cascade's initial LRIC, and discussions with Cascade's operations management personnel in Oregon, data irregularities related in particular to a conversion in 2013 from the Company's JDE plant records system to its current Power Plan system may have led to certain lower than expected recorded costs for some main extension work orders.

Q. What was the reason for using $5.00 per foot as the threshold cost for excluding certain work orders?

A. As I mentioned, Cascade's currently effective price per foot for 2-inch plastic pipe in its pipeline construction contracts with third-party contractors in Oregon is $3.60 for "open trench" installation. The current inventory cost of 2-inch plastic pipe is $.86 per foot. Therefore, the minimum cost per foot of 2-inch plastic pipe installations in Oregon is $4.46, excluding any required construction-related company labor and administrative overheads.

Q. What was the result of the revisions made to the growth main extension analysis?

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A. The revised growth main extension analysis raised the installed average cost per foot of customer mains investment applicable to Schedule Nos. 101 and 104 from $7.81 to $9.06.[8]

Q. Do you agree with CUB's assertion that assigning 2-inch plastic main as customer related is problematic?[9]

A. No. Mr. Jenks appears to be mixing marginal cost principles with embedded cost of service methodology. The fact that the minimum 2-inch distribution system is built to meet the firm design day demands of residential and most small commercial customers is irrelevant to the determination of the incremental cost to serve new customers within the context of an LRIC Study.

Q. Do you agree with CUB's assertion that Cascade's distribution system is oversized?[10]

A. No. The use of 2-inch plastic pipe as the minimum pipe size for newly constructed distribution mains is common practice in the natural gas utility industry and is the most economic minimum size main to serve residential neighborhoods and adjacent small commercial zones. The cost difference of using smaller diameter piping is negligible and would be inadequate under most circumstances to satisfy the design day peak demands of these customer classes.

[8] CNGC/1003, Amen/1.
[9] CUB/100, Jenks/5.
[10] CUB/100, Jenks/6.

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Q. Do you agree with CUB's claim that interruptible customers are not interrupted because the Cascade system is oversized due to the installation of 2-inch distribution mains?

A. No. First, CUB's premise that the minimum main installation size is relevant to interruptible customers is wrong because all of Cascade's interruptible customers are served from mains larger than 2 inches. Second, as Mr. Jenks confirms in his direct testimony[11], interruptible customers should not be assigned costs associated with capacity because they can be curtailed during design day weather conditions. Therefore the size of the balance of the distribution system piping is irrelevant, as Cascade's system design specifications do not recognize or reflect the connected loads of interruptible customers, as embodied in the Company's Integrated Resource Plan.

B. Mains System Replacement Investment Costs

Q. Mr. Compton created an alternative cost estimate of replacing the entire core mains system, excluding the estimated cost of the customer main extensions. Do you concur with his stated reasoning?

A. No. Mr. Compton assumes that all but 95 of the existing 553 miles of 2-inch steel pipe would be replaced with plastic pipe, on the basis of its lower cost per foot and his opinion that plastic pipe possesses "superior, noncorrosive, slower-to-deteriorate properties."[12]

Q. Is this a valid assumption?

[11] CUB/100, Jenks/7.
[12] Staff/1300, Compton/13.

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A. No, for at least two reasons. First, Mr. Compton has failed to account for the presence of 2-inch high pressure steel pipeline in the Company's Oregon system. Cascade's plastic pipe does not have the physical properties to safely operate at high pressure (above 60 pounds per square inch (PSIG)). Cascade has many miles of high pressure small diameter steel mains in its Oregon distribution system. Without a district by district survey of the amount of 2-inch high pressure steel pipeline in the system, one cannot simply assume that the existing miles of 2-inch steel pipe would be replaced entirely with plastic pipe, the only exception being that which equates to the average main extension to serve new commercial customers.[13]

Second, steel pipe is often installed for safety reasons in high density urban areas with congested underground infrastructure because it is less likely to be accidently penetrated by incautious excavation than plastic pipe, and is equally slow to deteriorate through the application of cathodic protection systems. Plastic pipe has been installed in natural gas distribution systems since the 1970s; it's not a new technology. Like many natural gas utilities since that time, Cascade has used plastic pipe where it was most cost effective and suitable for adequately serving both the demand requirements and locational circumstances of a particular installation. Again, without a survey of the 2-inch steel mains in Cascade's Oregon system, one cannot assume that it would be predominantly replaced by plastic pipe. Therefore, the mains system replacement cost in the Company's LRIC retains its methodology using like material type, size, and footage.

[13] Staff/1303, Compton/1.

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C. Large Customer Meter Investment Costs

Q. How are the costs of services, meters, and regulators determined for the large customer classes?

A. As stated in my direct testimony, the service, metering and regulating installations were specifically identified for each customer in the customer classes 111, 170, 163, and the Special Contract class 900, using the Cascade geographical information system (GIS) and then valued at current cost. Once the investment costs were derived, the incremental costs were computed by applying the Economic Carrying Charge Rate (ECCR) to the investment costs. The derivation of the LRIC for services and meters is presented in Exhibit CNGC/1003.

Q. NWIGU witness Mr. Gorman believes that Cascade has overstated its meter costs for its large customers and further states that your testimony has not provided any support for the cost estimates for meters for customers served under Schedules 111, 163, 170, and 900. What is your response to his claims?

A. Obviously Mr. Gorman has failed to review the workpapers filed with my testimony, specifically workpaper RJA-WP-5. This workpaper provides a detailed description of the specific meters, regulators, and related equipment, including capitalized installation costs (in 2015 dollars) for each of the customers served under the aforementioned Schedules.

Q. What is the basis for Mr. Gorman's opinion?

A. Much like Mr. Compton's comparison of Cascade's main extension costs, Mr. Gorman simply compares the Company's large customer meter installation costs to the quoted meter costs of Avista and NW Natural. Had he compared the Avista and NW Natural

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meter costs to those listed in workpaper RJA-WP-5, NWIGU would have found that they are not inconsistent. However, NWIGU has not considered the additional installed cost of the associated pressure regulators, parallel bypass pipeline, and other attendant equipment such as electronic supervisory control and data acquisition (SCADA) or Metretek monitoring devices that comprise the various measurement stations on the premises of Cascade's large customers.

Q. Do you have any changes to your revised LRIC related to large customer meter investment cost?

A. Yes. While preparing my response to NWIGU's testimony and reviewing workpaper RJA-WP-5 related to large customer meter and regulator installations, I found four instances where the metering station installation costs were double counted. I have corrected these items and included the adjusted results in the revised LRIC Study.

D. Summary of Revised LRIC Study Results

Q. Please compare the revised LRIC Study estimates to the current rates and associated non-gas revenues for each of Cascade's rate schedules.

A. Line 37 of Exhibit CNGC/1001 presents the total LRIC-based revenue requirement for each of Cascade's rate schedules. Line 32 of this Exhibit presents Test Year revenues by rate schedule under Cascade's current rates. By comparing these two sets of revenues, one can see the extent to which Cascade's current rates and non-gas revenues are reflective of LRIC. The revenue-to-cost ratios on line 38 of this exhibit portray the relative difference between these two revenue amounts for each rate schedule. A revenue-to-cost ratio of less than 1.00 means that the current rates and

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revenues of the particular rate schedule are below its indicated LRIC (*e.g.*, Schedule Nos. 101, 105, and 111), while a revenue-to-cost ratio of greater than 1.00 means that the rates and revenues of the rate schedule are above its indicated LRIC (*e.g.*, Schedule Nos. 104, 163, 170 and Special Contract Class 900). These results provide cost guidelines for use in evaluating a utility's class revenue levels and rate structures. I will describe how these results were used to assign Cascade's proposed revenue increase to its rate classes in Section IV of my reply testimony.

Q. What was the source of the revenue requirement components?

A. Exhibit CNGC/1002 shows how the pro forma results of Cascade's operations, including the revised revenue increase discussed in Mr. Parvinen's Exhibit CNGC/500, have been assigned to the functional components used in the LRIC Study.

III. REVISED PROPOSED CLASS REVENUES

Q. Please describe how Cascade's revised proposed revenue increase of $988,000 was assigned to its rate classes.

A. As described in my direct testimony, the apportionment of revenues among rate classes consisted of deriving a reasonable balance between various criteria or guidelines that relate to the design of utility rates. The various criteria that were considered in the process included: (1) cost of service; (2) class contribution to present revenue levels; and (3) customer impact considerations. These criteria were evaluated for each of Cascade's rate classes. Based on this evaluation, adjustments to the present revenue levels in each of Cascade's rate classes that exhibited revenue-to-cost ratios less than 1.00 were made so that the proposed rates moved class revenues closer to the LRIC of serving each rate class.

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Q. Does Cascade accept Staff's proposed limitation on the maximum increase to a particular class of two to three times the system average?

A. Yes. This maximum increase limitation is reflected in Cascade's revised revenue allocation to Schedules Nos. 105 and 111.

Q. Have you prepared a comparison of Cascade's present and proposed revenues by rate schedule?

A. Yes. Exhibit CNGC/1005 presents a comparison of present and proposed revenues for each of Cascade's rate schedules based on the revisions to the LRIC.

IV. SUMMARY OF CASCADE'S RATE DESIGN PROPOSALS

Q. Please summarize the rate design changes Cascade has proposed in this rate proceeding.

A. Cascade has proposed the following rate structure and design changes to its current rate schedules:

- The establishment of a monthly Basic Service Charge for Schedule No. 111, Large Volume General Service, and Schedule No. 170, Interruptible Service, and the renaming of the current Dispatch Service Charge in the consolidated Schedule No.163 as a monthly Basic Service Charge.
- For customers served under Schedule No. 105, General Industrial Service, and Schedule No. 163, Cascade proposes to adjust the monthly Basic Service Charges to better reflect the underlying costs of providing basic customer service as well as the proposed change in class revenues.

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Q. Please describe the proposed Basic Service Charges for Schedule No. 111 and Schedule No. 170.

A. Cascade is proposing to establish the Basic Service Charge for Schedule No. 111 at $200.00 per month, approximately 27 percent of the upper range of incremental customer-related O&M and meter and service carrying charges for the class. The proposed Basic Service Charge for Schedule No. 170 was set at $300.00 per month, which is approximately 9 percent of the upper range of incremental customer-related O&M and meter and service carrying charges for the class.

Q. Please describe the changes to the monthly Customer Charge levels for Schedule No. 105 and Schedule No. 163.

A. The proposed monthly Basic Service Charge for Schedule No. 105 is $30.00, approximately 26 percent of the upper range of the incremental customer-related O&M and meter and service carrying charges for the class, as indicated in the LRIC Study. The renamed Basic Service Charge proposed for Schedule No. 163 is $750.00, which raises the charge to within 45 percent of the upper range of the indicated incremental customer-related O&M and meter and service carrying charges for the class.

Q. Have any of the Company's aforementioned proposals been challenged by any party to this proceeding?

A. No.

Q. Is Cascade proposing to change the Basic Service Charge for any of the remaining Schedules?

A. No. Cascade recommends that the Basic Service Charges for Schedule No. 101, General Residential Service, and Schedule No. 104, General Commercial Service,

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remain at their current $3.00 per month level. At this level, the Basic Service Charge for these two classes of service will recover the monthly customer-related O&M, as indicated by the LRIC Study. Cascade witness Mr. Parvinen discusses this recommendation further in his testimony.

Q. Have you provided an Exhibit that depicts the proposed rates for all classes of service?

A. Yes. Exhibit CNGC/1006 shows the derivation of each rate component for each of Cascade's service schedules.

V. CUSTOMER BILL IMPACTS

Q. Please describe the revised bill impacts for residential customers under Cascade's rate design proposal.

A. The monthly and annual bill impacts for a typical residential customer using 659 therms per year is shown on Exhibit CNGC/1007. The average monthly increase for this residential customer under the Company's proposed rate design is $1.25 or 2.48 percent. Average monthly residential bill impacts are depicted on page 1 of Exhibit CNGC/1007 and bill impacts over varying monthly levels of usage is presented on page 1 of Exhibit CNGC/1008.

Q. Have you prepared bill comparisons for Cascade's other rate classes?

A. Yes. Pages 2 through 6 of Exhibit CNGC/1008 presents bill comparisons for Cascade's non-residential service schedules at varying monthly levels of gas usage.

Q. Does this complete your testimony?

A. Yes, it does.

Regulatory Affairs
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Ronald J. Amen

SUMMARY OF LRIC
EXHIBIT CNGC/1001

September 2016

Cascade Natural Gas Corp.
Oregon Jurisdiction
Long Run Incremental Cost (LRIC) Study
Summary of LRIC

Line	Description	Total	101 Residential Service core	104 Commercial Service core	105 Industrial Service core	111 Large Volume Service core	163 General Distribution non-core	170 Interruptible core	900 Special Contracts non-core
1	Billing Determinants								
2	Peak Day Forecast	91,882	52,034	35,256	2,906	1,686	-	-	-
3	Customer Count	70,743	60,662	9,901	128	13	31	4	4
4	Throughput	31,599,959	3,996,951	2,811,784	254,327	156,543	3,272,979	243,922	20,863,452
5	O&M Costs								
6	Gas Supply Related								
7	Gas Planning	$ 21,037	$ 9,609	$ 6,556	$ 550	$ 323	$ 528	$ 107	$ 3,364
8	Gas Supply	$ 42,749	$ 17,007	$ 11,964	$ 1,082	$ 666	$ 1,491	$ 1,038	$ 9,502
9	Gas Control	$ 79,283	$ 32,689	$ 22,996	$ 2,080	$ 1,280	$ 5,241	$ 1,995	$ 13,002
10	Customer Related								
11	Meter Reading	$ 251,985	$ 210,829	$ 34,410	$ 444	$ 1,606	$ 3,733	$ 482	$ 482
12	Customer Account records and collection	$ 1,153,862	$ 986,592	$ 161,026	$ 2,080	$ 217	$ 3,137	$ 405	$ 405
13	Billing Postage & Printing	$ 385,330	$ 330,420	$ 53,929	$ 697	$ 73	$ 169	$ 22	$ 22
14	Uncollectible	$ 361,003	$ 300,336	$ 60,462	$ 205	$ -	$ -	$ -	$ -
15	Subtotal: O&M Costs	$ 2,295,250	$ 1,887,480	$ 351,344	$ 7,139	$ 4,165	$ 14,299	$ 4,048	$ 26,776
16	Customer Investment Carrying Costs								
17	Meter	$ 5,115,444	$ 2,560,894	$ 1,659,687	$ 112,329	$ 97,813	$ 437,513	$ 110,356	$ 136,851
18	Service	$ 12,842,908	$ 10,616,293	$ 1,907,494	$ 58,972	$ 17,430	$ 182,296	$ 47,567	$ 12,856
19	Mains	$ 14,178,272	$ 6,656,584	$ 1,670,699	$ 1,103,770	$ 266,644	$ 2,550,288	$ 352,256	$ 1,578,030
20	Subtotal: Customer Investment Costs	$ 32,136,623	$ 19,833,771	$ 5,237,880	$ 1,275,071	$ 381,886	$ 3,170,098	$ 510,179	$ 1,727,737
21	System Core Main Carrying Costs								
22	Capacity	$ 38,659,728	$ 21,893,643	$ 14,833,882	$ 1,222,856	$ 709,347	$ -	$ -	$ -
23	Commodity	$ 11,066,319	$ 4,119,732	$ 2,898,158	$ 262,140	$ 161,352	$ 3,373,521	$ 251,415	$ -
24	Subtotal: System Core Main Costs	$ 49,726,046	$ 26,013,375	$ 17,732,040	$ 1,484,996	$ 870,699	$ 3,373,521	$ 251,415	$ -
25	LRIC - Distribution	$ 84,157,920	$ 47,734,626	$ 23,321,264	$ 2,767,206	$ 1,256,750	$ 6,557,917	$ 765,643	$ 1,754,513
26	Functional Cost Assignment by LRIC								
27	Scheduling & Planning	$ 143,069	$ 59,304	$ 41,516	$ 3,712	$ 2,270	$ 7,259	$ 3,140	$ 25,868
28	Meter Reading, Billing etc.	$ 2,152,181	$ 1,828,176	$ 309,828	$ 3,426	$ 1,895	$ 7,039	$ 908	$ 908
29	Meters, Services	$ 17,958,352	$ 13,177,187	$ 3,567,181	$ 171,301	$ 115,243	$ 619,809	$ 157,923	$ 149,707
29A	Mains extensions	$ 14,178,272	$ 6,656,584	$ 1,670,699	$ 1,103,770	$ 266,644	$ 2,550,288	$ 352,256	$ 1,578,030
30	System Core Mains	$ 49,726,046	$ 26,013,375	$ 17,732,040	$ 1,484,996	$ 870,699	$ 3,373,521	$ 251,415	$ -
31	Total	$ 84,157,920	$ 47,734,626	$ 23,321,264	$ 2,767,206	$ 1,256,750	$ 6,557,917	$ 765,643	$ 1,754,513

Cascade Natural Gas Corp.
Oregon Jurisdiction
Long Run Incremental Cost (LRIC) Study
Summary of LRIC

Line	Description	Total	101 Residential Service core	104 Commercial Service core	105 Industrial Service core	111 Large Volume Service core	163 General Distribution non-core	170 Interruptible core	900 Special Contracts non-core
32	Non-Gas Revenue at Current Rates	$ 29,640,042	$ 16,926,173	$ 7,741,020	$ 505,501	$ 242,548	$ 2,159,441	$ 300,244	$ 1,765,115
33	Scheduling and Planning	$ 520,945	$ 215,940	$ 151,168	$ 13,518	$ 8,264	$ 26,433	$ 11,433	$ 94,190
34	Meter Reading & Billing	$ 3,375,659	$ 2,867,463	$ 485,960	$ 5,374	$ 2,972	$ 11,041	$ 1,425	$ 1,425
35	Meters & Services	$ 11,570,687	$ 8,490,150	$ 2,298,359	$ 110,370	$ 74,252	$ 399,347	$ 101,751	$ 96,457
36	Mains	$ 14,690,837	$ 7,382,624	$ 4,384,552	$ 584,999	$ 257,012	$ 1,338,638	$ 136,415	$ 606,597
37	Total LRIC Based Non-gas Rev Req.	$ 30,158,128	$ 18,956,177	$ 7,320,039	$ 714,261	$ 342,500	$ 1,775,460	$ 251,024	$ 798,669
38	Revenue to Cost Ratio	0.98	0.89	1.06	0.71	0.71	1.22	1.20	2.21
39	Incremental Non-gas Revenue Requirement	$ 988,093							
40	Step 1								
41	Increase relative to system average			-	3.00	3.00	-	-	-
42	Percent Increase	3.33%		0.00%	10.00%	10.00%	0.00%	0.00%	0.00%
43	Increase Step 1	$ 74,812		$ -	$ 50,555	$ 24,257	$ -	$ -	$ -
44	Step 2								
45	Remainder allocated on Current Revenue	$ 16,926,173	$ 16,926,173	$ -	$ -	$ -	$ -	$ -	$ -
46	Increase Step 2	$ 913,281	$ 913,281	$ -	$ -	$ -	$ -	$ -	$ -
47	Total Non-gas Revenue Increase	$ 988,093	$ 913,281	$ -	$ 50,555	$ 24,257	$ -	$ -	$ -
48	Non-Gas Revenue after Revenue Increase	$ 30,628,135	$ 17,839,454	$ 7,741,020	$ 556,056	$ 266,805	$ 2,159,441	$ 300,244	$ 1,765,115
49	Percent Increase		5.40%	0.00%	10.00%	10.00%	0.00%	0.00%	0.00%
50	Revenue to Cost Ratio		0.94	1.06	0.78	0.78	1.22	1.20	2.21
51	Final Increase relative to system average		1.62	-	3.00	3.00	-	-	-
52	LRIC Supported Customer Cost per month								
53	Cust O&M Plus Meter & Service Carrying Charge		$ 20.61	$ 32.63	$ 113.87	$ 732.11	$ 1,685.08	$ 3,308.99	$ 3,137.82
54	Cust O&M		$ 2.51	$ 2.61	$ 2.23	$ 11.84	$ 18.92	$ 18.92	$ 18.92

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Ronald J. Amen

FUNCTIONAL REVENUE REQUIREMENT
EXHIBIT CNGC/1002

September 2016

Cascade Natural Gas Corp.
Oregon Jurisdiction
Long Run Incremental Cost (LRIC) Study
Functional Revenue Requirement

No.	FERC	Description	2015 Results	Adjustment	Total	Allocator	Gas Scheduling & Planning	Meter Reading & Billing	Meters & Services	System Core Mains
		Plant In Service								
1		Intangible Plant	$ 187,041	$ 449,467	$ 636,508	Plant	$ -	$ -	$ 267,987	$ 368,521
2		Production Plant		$ -	$ -					
3		Storage Plant		$ -	$ -					
4		Transmission Plant	$ 5,900,639	$ -	$ 5,900,639					$ 5,900,639
5		Distribution Plant		$ -	$ -					$ -
6	374	Land and Land Rights	$ 223,037	$ -	$ 223,037					$ 223,037
7	375	Structures and Improvements	$ 363,785	$ -	$ 363,785					$ 363,785
8	376	Mains	$ 82,433,817	$ 3,533,353	$ 85,967,170					$ 85,967,170
9	377	Compressor Station		$ -	$ -					$ -
10	378	M & R Station Equipment	$ 7,895,830	$ 3,191,087	$ 11,086,917					$ 11,086,917
11	380	Services	$ 46,742,011	$ 1,818,540	$ 48,560,551				$ 48,560,551	
12	381	Meters	$ 12,802,931	$ 1,084,336	$ 13,887,267				$ 13,887,267	
13	382	Meter Install	$ 8,242,825	$ -	$ 8,242,825				$ 8,242,825	
14	383	House Regulator & Install.	$ 2,583,471	$ 123,447	$ 2,706,918				$ 2,706,918	
15	385	Industrial M & R Station Equipment	$ 1,670,381	$ 226,964	$ 1,897,345				$ 1,897,345	
16	388	ARO - Distribution	$ 12,504,773	$ -	$ 12,504,773	Plant	$ -	$ -	$ 5,264,842	$ 7,239,931
17		General Plant	$ 12,200,707	$ 1,098,289	$ 13,298,996	Plant	$ -	$ -	$ 5,599,231	$ 7,699,765
18		Subtotal Plant In Service	$ 193,751,247	$ 11,525,482	$ 205,276,729		$ -	$ -	$ 86,426,966	$ 118,849,763
19		**Accumulated Depreciation**								
20		Intangible Plant	$ (2,032,242)	$ -	$ (2,032,242)	Plant	$ -	$ -	$ (855,628)	$ (1,176,614)
21		Production Plant		$ -	$ -					
22		Storage Plant		$ -	$ -					
23		Transmission Plant	$ (3,280,283)	$ -	$ (3,280,283)					$ (3,280,283)
24		Distribution Plant	$ (80,106,396)	$ -	$ (80,106,396)	DistPlant	$ -	$ -	$ (34,877,701)	$ (45,228,696)
25		General Plant	$ (5,954,748)	$ -	$ (5,954,748)	Plant	$ -	$ -	$ (2,507,107)	$ (3,447,640)
26		Test Year Accumulated Depreciation Adjustment		$ (6,755,669)	$ (6,755,669)	Plant	$ -	$ -	$ (2,844,316)	$ (3,911,352)
27		Subtotal Accumulated Depreciation	$ (91,373,668)	$ (6,755,669)	$ (98,129,337)		$ -	$ -	$ (41,084,752)	$ (57,044,585)
28		**Other Ratebase Items**								
29		Contributions in Aid of Construction	$ -	$ -	$ -					
30		Customer Adv. For Construction	$ (495,562)	$ -	$ (495,562)				$ (495,562)	
31		Deferred Accumulated Income Taxes	$ (26,536,580)	$ 678,695	$ (25,857,885)	Plant	$ -	$ -	$ (10,886,858)	$ (14,971,027)
32		Deferred Debits	$ -	$ -	$ -					
33		Working Capital Allowance	$ 2,287,971	$ (99,641)	$ 2,188,330	Plant	$ -	$ -	$ 921,345	$ 1,266,985
34		Subtotal Other Ratebase	$ (24,744,171)	$ 579,054	$ (24,165,117)		$ -	$ -	$ (10,461,075)	$ (13,704,042)

Cascade Natural Gas Corp.
Oregon Jurisdiction
Long Run Incremental Cost (LRIC) Study
Functional Revenue Requirement

No.	FERC	Description	2015 Results	Adjustment	Total	Allocator	Gas Scheduling & Planning	Meter Reading & Billing	Meters & Services	System Core Mains
35		Total Ratebase	$ 77,633,407	$ 5,348,868	$ 82,982,275		$ -	$ -	$ 34,881,139	$ 48,101,136
36		Rate of Return			6.563%					
37		Return on Ratebase			$ 5,446,327		$ -	$ -	$ 2,289,333	$ 3,156,993
38		**Operating Expenses**								
39		Production	$ 108,233	$ (701)	$ 107,532		$ 107,532			
40		Distribution								
41	870	Operation Supervision & Engineering	$ 502,211	$ -	$ 502,211	OpEx	$ 28,768	$ -	$ 204,465	$ 268,977.90
42	871	Distribution Load Dispatching	$ 140,032	$ -	$ 140,032		$ 140,032			
43	872	Compressor Station	$ -	$ -	$ -					$ -
44	874	Mains and Services Expenses	$ 1,073,812	$ -	$ 1,073,812					$ 1,073,812
45	875	Meas. & Reg. Station Expenses	$ 223,345	$ -	$ 223,345					$ 223,345
46	876	Meas. & Reg. Station Expenses - Ind	$ 12,145	$ -	$ 12,145					$ 12,145
47	878	Meter & House Regulator Expenses	$ 543,771	$ -	$ 543,771				$ 543,771	
48	879	Customer Installations Expenses	$ 451,504	$ -	$ 451,504				$ 451,504	
49	880	Other Expenses	$ 1,350,048	$ -	$ 1,350,048	OpEx	$ 77,333	$ -	$ 549,646	$ 723,068.61
50	881	Rents	$ 20,039	$ -	$ 20,039	Plant	$ -	$ -	$ 8,437	$ 11,602
51	885	Maint. Supervision & Engineering	$ 109,200	$ -	$ 109,200	MaintEx	$ -	$ -	$ 66,720	$ 42,480
52	886	Maint. of Structures & Improvements	$ 487	$ -	$ 487					$ 487
53	887	Maint. of Mains	$ 354,201	$ -	$ 354,201					$ 354,201
54	888	Maint. of Compressor Station Equip.	$ 781	$ -	$ 781					$ 781
55	889	Maint. of Meas. & Reg. Station Expenses-General	$ 33,903	$ -	$ 33,903					$ 33,903
56	890	Maint. of Meas. & Reg. Station Expenses-Indust.	$ 60,495	$ -	$ 60,495					$ 60,495
57	892	Maint. of Services	$ 331,052	$ -	$ 331,052				$ 331,052	
58	893	Maint. of Meters & House Regulators	$ 375,529	$ -	$ 375,529				$ 375,529	
59	894	Maint. of Other Equipment	$ 57,136	$ -	$ 57,136	MaintEx	$ -	$ -	$ 34,909	$ 22,226
60	NA	Distribution Adjustments	$ -	$ 141,092	$ 141,092	DistEx	$ 6,158	$ -	$ 64,196	$ 70,738
61		Customer Accounts	$ 1,709,474	$ 140,205	$ 1,849,679			$ 1,849,679		
62		Customer Service	$ 612,804	$ (506,656)	$ 106,148			$ 106,148		
63		Sales	$ 2,313	$ (19,501)	$ (17,189)			$ (17,189)		
64		Administrative and General	$ 5,451,075	$ (220,737)	$ 5,230,338	O&M	$ 161,123	$ 1,437,021	$ 1,744,265	$ 1,887,929
65		Depreciation & Amortization	$ 6,111,512	$ 896,377	$ 7,007,888	Plant	$ -	$ -	$ 2,950,507	$ 4,057,381
66		Regulatory Debits	$ -	$ -	$ -	Plant	$ -	$ -	$ -	$ -
67		Taxes Other Than Income	$ 1,926,429	$ 200,857	$ 2,127,286	Plant	$ -	$ -	$ 895,644	$ 1,231,642
68		State & Federal Income Taxes	$ 1,356,152	$ 1,163,186	$ 2,519,338	Plant	$ -	$ -	$ 1,060,708	$ 1,458,630
69		Total Operating Expense	$ 22,917,681	$ 1,794,121	$ 24,711,802		$ 520,945	$ 3,375,659	$ 9,281,354	$ 11,533,844
70		Functionalized Revenue Requirement	$ 22,917,681		$ 30,158,128		$ 520,945	$ 3,375,659	$ 11,570,687	$ 14,690,837

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Ronald J. Amen

INCREMENTAL PLANT CARRYING COSTS
EXHIBIT CNGC/1003

September 2016

Cascade Natural Gas Corp.
Oregon Jurisdiction
Long Run Incremental Cost (LRIC) Study
Incremental Plant Carrying Costs

Line	Description	Unit	Total	101 Residential Service core	104 Commercial Service core	105 Industrial Service core	111 Large Volume Service core	163 General Distribution non-core	170 Interruptible core	900 Special Contracts non-core	Source
1	**Billing Determinants**										
2	Peak Day Forecast	Dth-Day	91,882	52,034	35,256	2,906	1,686	-	-	-	
3	Customer Count		70,743	60,662	9,901	128	13	31	4	4	
4	Throughput	Dth	31,599,959	3,996,951	2,811,784	254,327	156,543	3,272,979	243,922	20,863,452	
5	**Service Installation**										
6	Typical Size	in.		0.5	1	2					
7	Material			Plastic	Plastic	Plastic					
8	Average Cost	$		$ 1,089	$ 1,198	$ 2,868					RJA-1
9	Total Investment	$	$ 79,880,857	$ 66,031,665	$ 11,864,310	$ 366,796	$ 108,411	$ 1,133,852	$ 295,860	$ 79,962	RJA-5
10	Economic Carrying Charge Rate			16.08%	16.08%	16.08%	16.08%	16.08%	16.08%	16.08%	
11	Annual Carrying Charge per customer	$		$ 175.01	$ 192.66	$ 461.18					
12	Class Annual Carrying Charge	$	$ 12,842,908	$ 10,616,293	$ 1,907,494	$ 58,972	$ 17,430	$ 182,296	$ 47,567	$ 12,856	
13	**Meters & Regulators**										
14	Average Cost	$		$ 225	$ 895	$ 4,690					RJA-2
15	Total Investment	$	$ 27,312,583	$ 13,673,227	$ 8,861,469	$ 599,753	$ 522,247	$ 2,335,989	$ 589,218	$ 730,680	RJA-5
16	Economic Carrying Charge Rate			18.73%	18.73%	18.73%	18.73%	18.73%	18.73%	18.73%	
17	Annual Carrying Charge per customer	$		$ 42.22	$ 167.63	$ 878.45					
18	Class Annual Carrying Charge	$	$ 5,115,444	$ 2,560,894	$ 1,659,687	$ 112,329	$ 97,813	$ 437,513	$ 110,356	$ 136,851	
19	**Mains Investment**										
20	A. Customer Mains Investment										
21	Typical Size	in.		2	2	2					
22	Material			Plastic	Plastic	Steel					
23	Avg. Mains extension per customer	ft		78.68	121.00	899.14					RJA-3E
24	Average cost per ft	$/ft		$ 9.06	$ 9.06	$ 62.34					RJA-3B
25	Customer mains investment per customer	$		$ 713	$ 1,096	$ 56,051					
26	Customer Mains Investment by Class		$ 92,067,244	$ 43,224,829	$ 10,848,759	$ 7,167,381	$ 1,731,462	$ 16,560,413	$ 2,287,390	$ 10,247,011	RJA-5
27	B. Capacity Related										
28	Incr. mains capacity investment	$	$ -	$ -	$ -	$ -	$ -				
29	Capacity Mains Investment per customer	$		$ -	$ -	$ -	$ -				

Cascade Natural Gas Corp.
Oregon Jurisdiction
Long Run Incremental Cost (LRIC) Study
Incremental Plant Carrying Costs

Line	Description	Unit	Total	101 Residential Service core	104 Commercial Service core	105 Industrial Service core	111 Large Volume Service core	163 General Distribution non-core	170 Interruptible core	900 Special Contracts non-core	Source
30	C. Commodity (Safety) Related										
31	Incr. mains commodity investment/therm	$	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
32	Safety Related Investment per customer	$		$ -	$ -	$ -	$ -	$ -	$ -	$ -	
33	Long-Run System Replacement Investment										
34	Mains System Replacement Cost	$	$ 414,965,562								RJA-3A
35	Less: Customer Mains Investment	$	$ (92,067,244)								
36	Long-Run System Replacement Investment	$	$ 322,898,318								
37	Capacity	%	78%								
38	Investment per Peak Day Capacity	$/Dth-Day	$ 2,732								
39	Investment by Class	$	$ 251,038,681	$ 142,167,355	$ 96,324,480	$ 7,940,671	$ 4,606,175	$ -	$ -	$ -	
40	Investment per customer	$		$ 2,344	$ 9,729	$ 62,098	$ 345,463	$ -	$ -	$ -	
41	Commodity	%	22%								
42	System Replacement Investment per Dth	$/Dth	$ 6.69								
43	Investment by Class	$	$ 71,859,637	$ 26,751,664	$ 18,819,321	$ 1,702,218	$ 1,047,747	$ 21,906,109	$ 1,632,577		
44	Investment per customer	$		$ 441	$ 1,901	$ 13,312	$ 78,581	$ 706,649	$ 408,144	$ -	
45	Total mains investment by class	$	$ 414,965,562	$ 212,143,848	$ 125,992,560	$ 16,810,270	$ 7,385,384	$ 38,466,522	$ 3,919,967	$ 10,247,011	
46	Economic Carrying Charge Rate			15.40%	15.40%	15.40%	15.40%	15.40%	15.40%	15.40%	
47	Class Annual Carrying Charge	$	$ 63,904,318	$ 32,669,959	$ 19,402,739	$ 2,588,766	$ 1,137,342	$ 5,923,809	$ 603,671	$ 1,578,030	
48	**Total Carrying Costs**		**$ 81,862,670**	**$ 45,847,146**	**$ 22,969,920**	**$ 2,760,067**	**$ 1,252,585**	**$ 6,543,619**	**$ 761,595**	**$ 1,727,737**	

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Ronald J. Amen

INCREMENTAL O&M COSTS
EXHIBIT CNGC/1004

September 2016

Cascade Natural Gas Corp.
Oregon Jurisdiction
Long Run Incremental Cost (LRIC) Study
Incremental O&M Costs

Line	Description	Total	101 Residential Service core	104 Commercial Service core	105 Industrial Service core	111 Large Volume Service core	163 General Distribution non-core	170 Interruptible core	900 Special Contracts non-core	Source
1	**Billing Determinants**									
2	Peak Day Forecast	91,882	52,034	35,256	2,906	1,686	-	-	-	
3	Customer Count	70,743	60,662	9,901	128	13	31	4	4	
4	Throughput	31,599,959	3,996,951	2,811,784	254,327	156,543	3,272,979	243,922	20,863,452	
5	Sales	7,463,528	3,996,951	2,811,784	254,327	156,543		243,922		
6	Peak & Average	100%	35%	24%	2%	1%	5%	0%	33%	
7	Customer Count (Small Customers)	70,690	60,662	9,901	128					
8	Customer Count (Large Customers)	52				13	31	4	4	
9	Volumes (Core)		3,996,951	2,811,784	254,327	156,543		243,922		
10	Volumes (Non-core)						3,272,979		20,863,452	
11	**Gas Planning**									
12	Core	$ 17,145	$ 9,609	$ 6,556	$ 550	$ 323		$ 107		RJA-4A
13	Non-core	$ 3,892					$ 528		$ 3,364	RJA-4A
14	Total Core + Non-core	$ 21,037	$ 9,609	$ 6,556	$ 550	$ 323	$ 528	$ 107	$ 3,364	
15	Cost per customer		$ 0.16	$ 0.66	$ 4.30	$ 24.24	$ 17.02	$ 26.76	$ 841.02	
16	**Gas Supply**									
17	Core	$ 31,757	$ 17,007	$ 11,964	$ 1,082	$ 666		$ 1,038		RJA-4A
18	Non-core	$ 10,993					$ 1,491		$ 9,502	RJA-4A
19	Total Core + Non-core	$ 42,749	$ 17,007	$ 11,964	$ 1,082	$ 666	$ 1,491	$ 1,038	$ 9,502	
20	Cost per Cust		$ 0.28	$ 1.21	$ 8.46	$ 49.96	$ 48.09	$ 259.47	$ 2,375.51	
21	**Gas Control**									
22	Core	$ 61,040	$ 32,689	$ 22,996	$ 2,080	$ 1,280		$ 1,995		
23	Non-core	$ 18,243					$ 5,241		$ 13,002	RJA-4A
24	Total Core + Non-core	$ 79,283	$ 32,689	$ 22,996	$ 2,080	$ 1,280	$ 5,241	$ 1,995	$ 13,002	RJA-4A
25	Cost per Cust		$ 0.54	$ 2.32	$ 16.27	$ 96.02	$ 169.06	$ 498.73	$ 3,250.43	
26	**Total Gas Supply O&M**	**$ 143,069**	**$ 59,304**	**$ 41,516**	**$ 3,712**	**$ 2,270**	**$ 7,259**	**$ 3,140**	**$ 25,868**	

Cascade Natural Gas Corp.
Oregon Jurisdiction
Long Run Incremental Cost (LRIC) Study
Incremental O&M Costs

Line	Description	Total	101 Residential Service core	104 Commercial Service core	105 Industrial Service core	111 Large Volume Service core	163 General Distribution non-core	170 Interruptible core	900 Special Contracts non-core	Source
27	**Meter Reading**									
28	Meter Reading Expense (Res + Small Comm.)	$ 245,683	$ 210,829	$ 34,410	$ 444	$ -	$ -	$ -	$ -	RJA-4B
29	Meter Reading Expense (Industrial)	$ 6,302	$ -	$ -	$ -	$ 1,606	$ 3,733	$ 482	$ 482	RJA-4B
30	Meter Reading Expense	$ 251,985	$ 210,829	$ 34,410	$ 444	$ 1,606	$ 3,733	$ 482	$ 482	
31	Cost per customer		$ 3.48	$ 3.48	$ 3.48	$ 120.42	$ 120.42	$ 120.42	$ 120.42	
32	**Customer Account records and collection**									
33	Expense	$ 1,149,915	$ 986,592	$ 161,026	$ 2,080	$ 217				
34	Expense - Manual Billing	$ 3,947					$ 3,137	$ 405	$ 405	RJA-4C
35	Cost per customer		$ 16.26	$ 16.26	$ 16.26	$ 16.26	$ 101.20	$ 101.20	$ 101.20	RJA-4C
36	**Billing Postage & Printing**									
37	Expense	$ 385,330	$ 330,420	$ 53,929	$ 697	$ 73	$ 169	$ 22	$ 22	RJA-4D
38	Cost per customer		$ 5.45	$ 5.45	$ 5.45	$ 5.45	$ 5.45	$ 5.45	$ 5.45	
39	**Uncollectible**									
40	COMMERCIAL	$ 60,462		$ 60,462						RJA-4E
41	INDUSTRIAL	$ 205			$ 205					RJA-4E
42	RESIDENTIAL	$ 300,336	$ 300,336							RJA-4E
43	Total OR	$ 361,003	$ 300,336	$ 60,462	$ 205	$ -	$ -	$ -	$ -	
44	Cost per customer		$ 4.95	$ 6.11	$ 1.61	$ -	$ -	$ -	$ -	
45	**Total Customer O&M**	**$ 2,152,181**	**$ 1,828,176**	**$ 309,828**	**$ 3,426**	**$ 1,895**	**$ 7,039**	**$ 908**	**$ 908**	
46	Gas Control O&M Allocation to Non-core						28.7%		71.3%	RJA-4F

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Ronald J. Amen

SUMMARY OF REVENUE
BY RATE CLASS
EXHIBIT CNGC/1005

September 2016

Cascade Natural Gas Corporation
Oregon Jurisdiction
Test Year Ended December 31, 2015

CNG/1005
Amen/1
Summary of Revenue by Rate Class
Present and Proposed Rates

Customer Class	Revenues			
	Pro Forma	Proposed	$ Difference	% Difference
Residential - 101				
Basic Service Charge	$ 2,183,820	$ 2,183,820	$ -	0%
Delivery Charge	14,742,354	15,655,657	913,303	6%
Rounding Difference	-	(22)	(22)	
Total 101 Revenue	$ 16,926,173	$ 17,839,454	$ 913,281	5%
Commercial - 104				
Basic Service Charge	$ 356,432	$ 356,432	$ -	0%
Delivery Charge	7,384,588	7,384,588	-	0%
Rounding Difference	-	-	-	
Total 104 Revenue	$ 7,741,020	$ 7,741,020	$ -	0%
Industrial - 105				
Basic Service Charge	$ 18,414	$ 46,034	$ 27,620	150%
Delivery Charge	487,088	510,028	22,940	5%
Rounding Difference	-	(6)	(6)	
Total 105 Revenue	$ 505,501	$ 556,056	$ 50,555	10%
Large Volume - 111				
Basic Service Charge	$ -	$ 32,000	$ 32,000	n/a
Delivery Charge	242,548	234,799	(7,749)	-3%
Rounding Difference	-	6	6	
Total 111 Revenue	$ 242,548	$ 266,805	$ 24,257	10%
General Distribution - 163				
Basic Service Charge	$ 186,000	$ 279,000	$ 93,000	50%
Delivery Charge	1,973,441	1,880,535	(92,905)	-5%
Rounding Difference	-	(95)	(95)	
Total 163 Revenue	$ 2,159,441	$ 2,159,441	$ -	0%
Interruptible - 170				
Basic Service Charge	$ -	$ 14,400	$ 14,400	n/a
Delivery Charge	300,244	285,853	(14,391)	-5%
Rounding Difference	-	(9)	(9)	
Total 170 Revenue	$ 300,244	$ 300,244	$ -	0%
Special Contracts - 9xx				
Basic Service Charge	$ 24,000	$ 24,000	$ -	0%
Delivery Charge	572,315	572,315	(0)	0%
Demand Charge	1,168,799	1,168,799	(0)	
Rounding Difference	-	-	-	
Total 9xx Revenue	$ 1,765,115	$ 1,765,114	$ (0)	0%
TOTAL	**$ 29,640,042**	**$ 30,628,135**	**$ 988,093**	

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Ronald J. Amen

ANALYSIS OF REVENUE BY DETAILED RATE SCHEDULE
EXHIBIT CNGC/1006

September 2016

Cascade Natural Gas Corporation
Oregon Jurisdiction
Test Year Ended December 31, 2015

CNG/1006
Amen/1
Analysis of Revenue by Detailed Rate Schedule

Customer Class	Pro Forma Test Year Revenues			Proposed Revenues		Difference	
	Billing Units*	Present Rate	Revenue	Proposed Rates	Revenue	$ Amount	% Amount
Residential - 101	60,662						
Basic Service Charge	727,940	$3.00	$ 2,183,820	$3.00	$ 2,183,820	$ -	0%
Delivery Charge	39,969,509	$0.36884	$ 14,742,354	$0.39169	$ 15,655,657	$ 913,303	6%
Rounding Difference					$ (22)	$ (22)	
Total 101 Revenue			**$ 16,926,173**		**$ 17,839,454**	**$ 913,281**	5%
Commercial - 104	9,901						
Basic Service Charge	118,811	$3.00	$ 356,432	$3.00	$ 356,432	$ -	0%
Delivery Charge	28,117,840	$0.26263	$ 7,384,588	$0.26263	$ 7,384,588	$ -	0%
Rounding Difference					$ -	$ -	
Total 104 Revenue			**$ 7,741,020**		**$ 7,741,020**	**$ -**	0%
Industrial - 105	128						
Basic Service Charge	1,534	$12.00	$ 18,414	$30.00	$ 46,034	$ 27,620	150%
Delivery Charge	2,543,274	$0.19152	$ 487,088	$0.20054	$ 510,028	$ 22,940	5%
Rounding Difference					$ (6)	$ (6)	
Total 105 Revenue			**$ 505,501**		**$ 556,056**	**$ 50,555**	10%
Large Volume - 111	13.33						
Basic Service Charge	160	$0.00	$ -	$200.00	$ 32,000	$ 32,000	
Delivery Charge	1,565,433	$0.15494	$ 242,548	$0.14999	$ 234,799	$ (7,749)	-3%
Rounding Difference					$ 6	$ 6	
Total 111 Revenue			**$ 242,548**		**$ 266,805**	**$ 24,257**	10%
General Distribution - 163	31						
Basic Service Charge	372	$500.00	$ 186,000	$750.00	$ 279,000	$ 93,000	50%
Delivery Charge - first 10,000 therms	3,221,176	$0.12402	$ 399,490	$0.11818	$ 380,679	$ (18,812)	-5%
Delivery Charge - next 10,000 therms	2,500,576	$0.11188	$ 279,764	$0.10661	$ 266,586	$ (13,178)	-5%
Delivery Charge - next 30,000 therms	4,413,295	$0.10512	$ 463,926	$0.10017	$ 442,080	$ (21,846)	-5%
Delivery Charge - next 50,000 therms	4,000,770	$0.06456	$ 258,290	$0.06152	$ 246,127	$ (12,162)	-5%
Delivery Charge - next 400,000 therms	16,160,944	$0.03275	$ 529,271	$0.03121	$ 504,383	$ (24,888)	-5%
Delivery Charge - over 500,000 therms	2,433,032	$0.01755	$ 42,700	$0.01672	$ 40,680	$ (2,019)	-5%
Rounding Difference					$ (95)	$ (95)	
Total 163 Revenue			**$ 2,159,441**		**$ 2,159,441**	**$ -**	0%
Interruptible - 170	4						
Basic Service Charge	48	$0.00	$ -	$300.00	$ 14,400	$ 14,400	
Delivery Charge	2,439,224	$0.12309	$ 300,244	$0.11719	$ 285,853	$ (14,391)	-5%
Rounding Difference					$ (9)	$ (9)	
Total 170 Revenue			**$ 300,244**		**$ 300,244**	**$ -**	0%

*** Delivery Charge units are in therms**

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Ronald J. Amen

RESIDENTIAL IMPACT BY MONTH
EXHIBIT CNGC/1007

September 2016

Residential - 101

Line No.	(a)	(b)	(c)	(d)	(e)	(f)
			Present Rates	Proposed Rates		
1	Basic Service Charge		$3.00	$3.00		
2	Delivery Charge		$0.36884	$0.39169		
3	PGA Rate		$0.49633	$0.49633		

Line No.	Month	Average therms per Customer	Revenue at Present Rates	Revenue at Proposed Rates	Monthly Bill Change Amount	Monthly Bill Change Percent
4	January	104	$ 92.98	$ 95.35	$ 2.38	2.56%
5	February	89	$ 80.00	$ 82.03	$ 2.03	2.54%
6	March	70	$ 63.56	$ 65.16	$ 1.60	2.52%
7	April	51	$ 47.12	$ 48.29	$ 1.17	2.47%
8	May	33	$ 31.55	$ 32.30	$ 0.75	2.39%
9	June	19	$ 19.44	$ 19.87	$ 0.43	2.23%
10	July	15	$ 15.98	$ 16.32	$ 0.34	2.15%
11	August	15	$ 15.98	$ 16.32	$ 0.34	2.15%
12	September	22	$ 22.03	$ 22.54	$ 0.50	2.28%
13	October	46	$ 42.80	$ 43.85	$ 1.05	2.46%
14	November	81	$ 73.08	$ 74.93	$ 1.85	2.53%
15	December	114	$ 101.63	$ 104.23	$ 2.60	2.56%
16	Total	659	$ 606.15	$ 621.21	$ 15.06	
17	Monthly Average		$ 50.51	$ 51.77	$ 1.25	2.48%

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Ronald J. Amen

IMPACT OF RECOMMENDED RATE CHANGES
EXHIBIT CNGC/1008

September 2016

Residential - 101

Line No.	(a)	(b)	(c)	(d)	(e)
		Present Rates	Proposed Rates		
1	Basic Service Charge	$3.00	$3.00		
2	Delivery Charge	$0.36884	$0.39169		
3	PGA Rate	$0.49633	$0.49633		
	Monthly Consumption (therms)	Revenue at Present Rates	Revenue at Proposed Rates	Revenue Change Amount	Revenue Change Percent
4	0	$3.00	$3.00	$0.00	0.00%
5	25	$24.63	$25.20	$0.57	2.32%
6	30	$28.96	$29.64	$0.69	2.37%
7	35	$33.28	$34.08	$0.80	2.40%
8	40	$37.61	$38.52	$0.91	2.43%
9	45	$41.93	$42.96	$1.03	2.45%
10	50	$46.26	$47.40	$1.14	2.47%
11	60	$54.91	$56.28	$1.37	2.50%
12	70	$63.56	$65.16	$1.60	2.52%
13	80	$72.21	$74.04	$1.83	2.53%
14	90	$80.87	$82.92	$2.06	2.54%
15	100	$89.52	$91.80	$2.29	2.55%
16	110	$98.17	$100.68	$2.51	2.56%
17	120	$106.82	$109.56	$2.74	2.57%
18	130	$115.47	$118.44	$2.97	2.57%
19	140	$124.12	$127.32	$3.20	2.58%
20	150	$132.78	$136.20	$3.43	2.58%
21	160	$141.43	$145.08	$3.66	2.59%
22	170	$150.08	$153.96	$3.88	2.59%
23	180	$158.73	$162.84	$4.11	2.59%
24	190	$167.38	$171.72	$4.34	2.59%
25	200	$176.03	$180.60	$4.57	2.60%
26	210	$184.69	$189.48	$4.80	2.60%
27	220	$193.34	$198.36	$5.03	2.60%
28	230	$201.99	$207.24	$5.26	2.60%
29	240	$210.64	$216.12	$5.48	2.60%
30	250	$219.29	$225.01	$5.71	2.60%

Commercial - 104

Line No.	(a)	(b)	(d)	(e)	(f)
		Present Rates	Proposed Rates		
1	Basic Service Charge	$3.00	$3.00		
2	Delivery Charge	$0.26263	$0.26263		
3	PGA Rate	$0.49633	$0.49633		

Line No.	Monthly Consumption (therms)	Revenue at Present Rates	Revenue at Proposed Rates	Revenue Change Amount	Revenue Change Percent
4	0	$3.00	$3.00	$0.00	0.00%
5	50	$40.95	$40.95	$0.00	0.00%
6	60	$48.54	$48.54	$0.00	0.00%
7	70	$56.13	$56.13	$0.00	0.00%
8	80	$63.72	$63.72	$0.00	0.00%
9	90	$71.31	$71.31	$0.00	0.00%
10	100	$78.90	$78.90	$0.00	0.00%
11	110	$86.49	$86.49	$0.00	0.00%
12	120	$94.08	$94.08	$0.00	0.00%
13	130	$101.66	$101.66	$0.00	0.00%
14	140	$109.25	$109.25	$0.00	0.00%
15	150	$116.84	$116.84	$0.00	0.00%
16	160	$124.43	$124.43	$0.00	0.00%
17	170	$132.02	$132.02	$0.00	0.00%
18	180	$139.61	$139.61	$0.00	0.00%
19	190	$147.20	$147.20	$0.00	0.00%
20	200	$154.79	$154.79	$0.00	0.00%
21	250	$192.74	$192.74	$0.00	0.00%
22	300	$230.69	$230.69	$0.00	0.00%
23	350	$268.64	$268.64	$0.00	0.00%
24	400	$306.58	$306.58	$0.00	0.00%
25	450	$344.53	$344.53	$0.00	0.00%
26	500	$382.48	$382.48	$0.00	0.00%
27	600	$458.38	$458.38	$0.00	0.00%
28	700	$534.27	$534.27	$0.00	0.00%
29	800	$610.17	$610.17	$0.00	0.00%
30	1,000	$761.96	$761.96	$0.00	0.00%
31	1,250	$951.70	$951.70	$0.00	0.00%
32	1,500	$1,141.44	$1,141.44	$0.00	0.00%
33	1,750	$1,331.18	$1,331.18	$0.00	0.00%
34	2,000	$1,520.92	$1,520.92	$0.00	0.00%
35	2,500	$1,900.40	$1,900.40	$0.00	0.00%
36	3,000	$2,279.88	$2,279.88	$0.00	0.00%
37	3,500	$2,659.36	$2,659.36	$0.00	0.00%
38	4,000	$3,038.84	$3,038.84	$0.00	0.00%

Industrial - 105

Line No.	(a)	(b)	(d)	(e)	(f)
		Present Rates	Proposed Rates		
1	Basic Service Charge	$12.00	$30.00		
2	Delivery Charge	$0.19152	$0.20054		
3	PGA Rate	$0.49633	$0.49633		

Line No.	Monthly Consumption (therms)	Revenue at Present Rates	Revenue at Proposed Rates	Revenue Change Amount	Revenue Change Percent
4	0	$12.00	$30.00	$18.00	150.00%
5	100	$80.79	$99.69	$18.90	23.40%
6	200	$149.57	$169.37	$19.80	13.24%
7	300	$218.36	$239.06	$20.71	9.48%
8	400	$287.14	$308.75	$21.61	7.53%
9	500	$355.93	$378.44	$22.51	6.32%
10	600	$424.71	$448.12	$23.41	5.51%
11	700	$493.50	$517.81	$24.31	4.93%
12	800	$562.28	$587.50	$25.22	4.48%
13	900	$631.07	$657.18	$26.12	4.14%
14	1,000	$699.85	$726.87	$27.02	3.86%
15	1,100	$768.64	$796.56	$27.92	3.63%
16	1,200	$837.42	$866.24	$28.82	3.44%
17	1,300	$906.21	$935.93	$29.73	3.28%
18	1,400	$974.99	$1,005.62	$30.63	3.14%
19	1,500	$1,043.78	$1,075.31	$31.53	3.02%
20	2,000	$1,387.70	$1,423.74	$36.04	2.60%
21	2,500	$1,731.63	$1,772.18	$40.55	2.34%
22	3,000	$2,075.55	$2,120.61	$45.06	2.17%
23	3,500	$2,419.48	$2,469.05	$49.57	2.05%
24	4,000	$2,763.40	$2,817.48	$54.08	1.96%
25	5,000	$3,451.25	$3,514.35	$63.10	1.83%
26	6,000	$4,139.10	$4,211.22	$72.12	1.74%
27	7,000	$4,826.95	$4,908.09	$81.14	1.68%
28	8,000	$5,514.80	$5,604.96	$90.16	1.63%
29	9,000	$6,202.65	$6,301.83	$99.18	1.60%
30	10,000	$6,890.50	$6,998.70	$108.20	1.57%
31	12,500	$8,610.13	$8,740.88	$130.75	1.52%
32	15,000	$10,329.75	$10,483.05	$153.30	1.48%
33	17,500	$12,049.38	$12,225.23	$175.85	1.46%
34	20,000	$13,769.00	$13,967.40	$198.40	1.44%
35	25,000	$17,208.25	$17,451.75	$243.50	1.42%
36	30,000	$20,647.50	$20,936.10	$288.60	1.40%
37	35,000	$24,086.75	$24,420.45	$333.70	1.39%
38	40,000	$27,526.00	$27,904.80	$378.80	1.38%
39	45,000	$30,965.25	$31,389.15	$423.90	1.37%
40	50,000	$34,404.50	$34,873.50	$469.00	1.36%
41	60,000	$41,283.00	$41,842.20	$559.20	1.35%
42	70,000	$48,161.50	$48,810.90	$649.40	1.35%
43	80,000	$55,040.00	$55,779.60	$739.60	1.34%
44	90,000	$61,918.50	$62,748.30	$829.80	1.34%
45	100,000	$68,797.00	$69,717.00	$920.00	1.34%

Large Volume - 111

Line No.	(a)	(b)	(d)	(e)	(f)
		Present Rates	Proposed Rates		
1	Basic Service Charge	$0.00	$200.00		
2	Delivery Charge	$0.15494	$0.14999		
3	PGA Rate	$0.49633	$0.49633		

Line No.	Monthly Consumption (therms)	Revenue at Present Rates	Revenue at Proposed Rates	Revenue Change Amount	Revenue Change Percent
4	0	$0.00	$200.00	$200.00	
5	100	$65.13	$264.63	$199.51	306.33%
6	200	$130.25	$329.26	$199.01	152.79%
7	300	$195.38	$393.90	$198.52	101.60%
8	400	$260.51	$458.53	$198.02	76.01%
9	500	$325.64	$523.16	$197.53	60.66%
10	600	$390.76	$587.79	$197.03	50.42%
11	700	$455.89	$652.42	$196.54	43.11%
12	800	$521.02	$717.06	$196.04	37.63%
13	900	$586.14	$781.69	$195.55	33.36%
14	1,000	$651.27	$846.32	$195.05	29.95%
15	1,100	$716.40	$910.95	$194.56	27.16%
16	1,200	$781.52	$975.58	$194.06	24.83%
17	1,300	$846.65	$1,040.22	$193.57	22.86%
18	1,400	$911.78	$1,104.85	$193.07	21.18%
19	1,500	$976.91	$1,169.48	$192.58	19.71%
20	2,000	$1,302.54	$1,492.64	$190.10	14.59%
21	2,500	$1,628.18	$1,815.80	$187.63	11.52%
22	3,000	$1,953.81	$2,138.96	$185.15	9.48%
23	3,500	$2,279.45	$2,462.12	$182.68	8.01%
24	4,000	$2,605.08	$2,785.28	$180.20	6.92%
25	5,000	$3,256.35	$3,431.60	$175.25	5.38%
26	6,000	$3,907.62	$4,077.92	$170.30	4.36%
27	7,000	$4,558.89	$4,724.24	$165.35	3.63%
28	8,000	$5,210.16	$5,370.56	$160.40	3.08%
29	9,000	$5,861.43	$6,016.88	$155.45	2.65%
30	10,000	$6,512.70	$6,663.20	$150.50	2.31%
31	12,500	$8,140.88	$8,279.00	$138.13	1.70%
32	15,000	$9,769.05	$9,894.80	$125.75	1.29%
33	17,500	$11,397.23	$11,510.60	$113.38	0.99%
34	20,000	$13,025.40	$13,126.40	$101.00	0.78%
35	25,000	$16,281.75	$16,358.00	$76.25	0.47%
36	30,000	$19,538.10	$19,589.60	$51.50	0.26%
37	35,000	$22,794.45	$22,821.20	$26.75	0.12%
38	40,000	$26,050.80	$26,052.80	$2.00	0.01%
39	45,000	$29,307.15	$29,284.40	-$22.75	-0.08%
40	50,000	$32,563.50	$32,516.00	-$47.50	-0.15%
41	60,000	$39,076.20	$38,979.20	-$97.00	-0.25%
42	70,000	$45,588.90	$45,442.40	-$146.50	-0.32%
43	80,000	$52,101.60	$51,905.60	-$196.00	-0.38%
44	90,000	$58,614.30	$58,368.80	-$245.50	-0.42%
45	100,000	$65,127.00	$64,832.00	-$295.00	-0.45%

General Distribution - 163

Line No.	(a)	(b) Present Rates	(d) Proposed Rates	(e)	(f)
1	Basic Service Charge	$500.00	$750.00		
2	Delivery Charge				
3	First 10,000 therms	$0.12402	$0.11818		
4	Next 10,000 therms	$0.11188	$0.10661		
5	Next 30,000 therms	$0.10512	$0.10017		
6	Next 50,000 therms	$0.06456	$0.06152		
7	Next 400,000 therms	$0.03275	$0.03121		
8	Over 500,000 therms	$0.01755	$0.01672		
9	PGA Rate	$0.00000	$0.00000		

Line No.	Monthly Consumption (therms)	Revenue at Present Rates	Revenue at Proposed Rates	Revenue Change Amount	Revenue Change Percent
10	0	$500.00	$750.00	$250.00	50.00%
11	2,000	$748.04	$986.36	$238.32	31.86%
12	4,000	$996.08	$1,222.72	$226.64	22.75%
13	6,000	$1,244.12	$1,459.08	$214.96	17.28%
14	8,000	$1,492.16	$1,695.44	$203.28	13.62%
15	10,000	$1,740.20	$1,931.80	$191.60	11.01%
16	12,000	$1,963.96	$2,145.02	$181.06	9.22%
17	14,000	$2,187.72	$2,358.24	$170.52	7.79%
18	16,000	$2,411.48	$2,571.46	$159.98	6.63%
19	18,000	$2,635.24	$2,784.68	$149.44	5.67%
20	20,000	$2,859.00	$2,997.90	$138.90	4.86%
21	25,000	$3,384.60	$3,498.75	$114.15	3.37%
22	30,000	$3,910.20	$3,999.60	$89.40	2.29%
23	35,000	$4,435.80	$4,500.45	$64.65	1.46%
24	40,000	$4,961.40	$5,001.30	$39.90	0.80%
25	45,000	$5,487.00	$5,502.15	$15.15	0.28%
26	50,000	$6,012.60	$6,003.00	-$9.60	-0.16%
27	60,000	$6,658.20	$6,618.20	-$40.00	-0.60%
28	70,000	$7,303.80	$7,233.40	-$70.40	-0.96%
29	80,000	$7,949.40	$7,848.60	-$100.80	-1.27%
30	90,000	$8,595.00	$8,463.80	-$131.20	-1.53%
31	100,000	$9,240.60	$9,079.00	-$161.60	-1.75%
32	125,000	$10,059.35	$9,859.25	-$200.10	-1.99%
33	150,000	$10,878.10	$10,639.50	-$238.60	-2.19%
34	175,000	$11,696.85	$11,419.75	-$277.10	-2.37%
35	200,000	$12,515.60	$12,200.00	-$315.60	-2.52%
36	250,000	$14,153.10	$13,760.50	-$392.60	-2.77%
37	300,000	$15,790.60	$15,321.00	-$469.60	-2.97%
38	350,000	$17,428.10	$16,881.50	-$546.60	-3.14%
39	400,000	$19,065.60	$18,442.00	-$623.60	-3.27%
40	450,000	$20,703.10	$20,002.50	-$700.60	-3.38%
41	500,000	$22,340.60	$21,563.00	-$777.60	-3.48%
42	600,000	$24,095.60	$23,235.00	-$860.60	-3.57%
43	700,000	$25,850.60	$24,907.00	-$943.60	-3.65%
44	800,000	$27,605.60	$26,579.00	-$1,026.60	-3.72%
45	900,000	$29,360.60	$28,251.00	-$1,109.60	-3.78%
46	1,000,000	$31,115.60	$29,923.00	-$1,192.60	-3.83%

Interruptible - 170

Line No.	(a)	(b) Present Rates	(d) Proposed Rates	(e)	(f)
1	Basic Service Charge	$0.00	$300.00		
2	Delivery Charge	$0.12309	$0.11719		
3	PGA Rate	$0.49633	$0.49633		

Line No.	Monthly Consumption (therms)	Revenue at Present Rates	Revenue at Proposed Rates	Revenue Change Amount	Revenue Change Percent
4	0	$0.00	$300.00	$300.00	
5	500	$309.71	$606.76	$297.05	95.91%
6	1,000	$619.42	$913.52	$294.10	47.48%
7	1,500	$929.13	$1,220.28	$291.15	31.34%
8	2,000	$1,238.84	$1,527.04	$288.20	23.26%
9	2,500	$1,548.55	$1,833.80	$285.25	18.42%
10	3,000	$1,858.26	$2,140.56	$282.30	15.19%
11	3,500	$2,167.97	$2,447.32	$279.35	12.89%
12	4,000	$2,477.68	$2,754.08	$276.40	11.16%
13	4,500	$2,787.39	$3,060.84	$273.45	9.81%
14	5,000	$3,097.10	$3,367.60	$270.50	8.73%
15	6,000	$3,716.52	$3,981.12	$264.60	7.12%
16	7,000	$4,335.94	$4,594.64	$258.70	5.97%
17	8,000	$4,955.36	$5,208.16	$252.80	5.10%
18	9,000	$5,574.78	$5,821.68	$246.90	4.43%
19	10,000	$6,194.20	$6,435.20	$241.00	3.89%
20	11,000	$6,813.62	$7,048.72	$235.10	3.45%
21	12,000	$7,433.04	$7,662.24	$229.20	3.08%
22	13,000	$8,052.46	$8,275.76	$223.30	2.77%
23	14,000	$8,671.88	$8,889.28	$217.40	2.51%
24	15,000	$9,291.30	$9,502.80	$211.50	2.28%
25	17,500	$10,839.85	$11,036.60	$196.75	1.82%
26	20,000	$12,388.40	$12,570.40	$182.00	1.47%
27	22,500	$13,936.95	$14,104.20	$167.25	1.20%
28	25,000	$15,485.50	$15,638.00	$152.50	0.98%
29	30,000	$18,582.60	$18,705.60	$123.00	0.66%
30	35,000	$21,679.70	$21,773.20	$93.50	0.43%
31	40,000	$24,776.80	$24,840.80	$64.00	0.26%
32	45,000	$27,873.90	$27,908.40	$34.50	0.12%
33	50,000	$30,971.00	$30,976.00	$5.00	0.02%
34	60,000	$37,165.20	$37,111.20	-$54.00	-0.15%
35	70,000	$43,359.40	$43,246.40	-$113.00	-0.26%
36	80,000	$49,553.60	$49,381.60	-$172.00	-0.35%
37	90,000	$55,747.80	$55,516.80	-$231.00	-0.41%
38	100,000	$61,942.00	$61,652.00	-$290.00	-0.47%
39	125,000	$77,427.50	$76,990.00	-$437.50	-0.57%
40	150,000	$92,913.00	$92,328.00	-$585.00	-0.63%
41	175,000	$108,398.50	$107,666.00	-$732.50	-0.68%
42	200,000	$123,884.00	$123,004.00	-$880.00	-0.71%
43	225,000	$139,369.50	$138,342.00	-$1,027.50	-0.74%
44	250,000	$154,855.00	$153,680.00	-$1,175.00	-0.76%

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Reply Testimony of Jennifer G. Gross

Tariff Revisions
EXHIBIT CNGC/1100

September 2016

EXHIBIT CNGC/1100 – REPLY TESTIMONY – TARIFF REVISIONS

Table of Contents

Regulatory Affairs
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Jennifer G. Gross. My business address is 8113 W. Grandridge Boulevard, Kennewick, Washington 99336-7166. My email address is jennifer.gross@cngc.com.

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

A. I am employed by Cascade Natural Gas Corporation (Cascade or Company) as a Regulatory Analyst IV.

Q. How long have you been employed by Cascade?

A. I have been with the Company since May 4, 2015.

Q. What are your educational and professional qualifications?

A. I graduated from Oregon State University in June 1993 with a Bachelor of Arts in English and from Portland State University in December 1995 with a Master of Arts in English.

I worked for Portland General Electric for twelve years in various capacities, including seven years as a Regulatory Analyst in Rates and Regulatory Affairs. Following my time at Portland General Electric, I worked for seven years as a Tariff and Compliance Consultant in the Rates and Regulatory Department at Northwest Natural Gas Corporation. In 2015, I began working for Cascade as a Regulatory Analyst.

Q. Have you testified before the Public Utility Commission of Oregon (Commission) before?

A. No. I have not filed testimony before but I have prepared materials and assisted in other utility proceedings including advice filings, rulemakings, and various Commission investigations, and I have testified before the Washington Utility and Transportation

Regulatory Affairs
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Commission in the Company's last general rate case in Washington, docketed as UG-152286.

II. SCOPE AND SUMMARY OF TESTIMONY

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

A. My reply testimony responds to Staff Exhibit 800, the Opening Testimony of Scott Shearer, and Exhibit 803, Proposed Tariff Language Revisions. My testimony addresses Mr. Shearer's comments on the tariff housekeeping changes proposed in the Company's initial submission. I make no comments on Mr. Shearer's presentation on consumer complaints.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I am sponsoring the following three exhibits which are explained in my testimony:

Exhibit CNGC/1101	Table of Tariff Revisions
Exhibit CNCG/1102	Redlined Tariff Sheets
Exhibit CNGC/1103	Clean Replacement Tariff Sheets

III. RECOMMENDED TARIFF LANGUAGE REVISIONS

Q. On pages 5 through 7 of his opening testimony, Mr. Shearer presents twelve issues (labeled A through L) with the Company's proposed tariff language. In Exhibit Staff/803, he provides recommended revisions to the Company's tariff language for each issue addressed in his testimony. Does the Company agree with all of Mr. Shearer's recommended tariff revisions?

A. The Company agrees to all of Mr. Shearer's recommended tariff language revisions with three exceptions—where we propose minor alterations to Staff's proposals.

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Q. Which of recommended changes does the Company agree to without alterations?

A. The Company agrees to adopt Staff's recommended language on the sheets as noted for Issues A, B, C, D, E, H, J, K, and L.

Q. On which issues does the Company propose alterations to Staff's proposals?

A. The Company proposes minor alterations to Staff's proposals on Issues F, G, and I.

Q. What are the Company's concerns with Issues F, G, and I?

A. The Company's concerns with Issues F, G, and I are simple:

- The Company agrees with Mr. Shearer's presentation of Issue F and his recommendation to make the tariff language match OAR 860-021-0405(2); however there appears to be a typographical error in Staff's insertion of the rule's requirements and as a result, the language presented in Exhibit Staff/803 does not match the administrative rule. This appears to be an unintentional error. The Company's replacement Sheet No. 5.2 includes language from the rule rather than Staff's exhibit, Staff/803.
- The Company agrees with Mr. Shearer's presentation of Issue G; however, the recommended language in Exhibit Staff/803 is the language the Company initially filed in Exhibit Archer/502. The Company includes in its replacement Sheet No. 5.3 language that addresses Staff's concerns, and on which Staff and the Company agreed to by email on June 15, 2016.
- The Company agrees to the language recommended for Issue I, but notes that due to revisions that adjusted pagination, this language is on Sheet No. 5.5, not Sheet No. 5.4.

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Q. Does that address all Staff's issues?

A. Yes.

Q. Does the Company recommend additional revisions to the tariff as initially filed?

A. Yes. After the Company filed its proposed housekeeping revisions with this case, Staff contacted us with some of their concerns. As a result of discussions with Staff, the Company considered how Staff's concerns impacted the tariff more broadly. As a result the Company has a number of additional recommended language changes, which are as follows:

- Sheet No. ii. In response to Staff Issue D, the Company revised the title of Rule 4 from Customer Deposits to "Customer Deposits and Other Security." This change is made to the Index.
- Sheet No. 2.2. In Issue C, Staff raised the concern with the awkward and unnecessary citation found in the definition of "High Priority Use." This issue caused the Company to realize the same awkward type of citation was in the definition of "Essential Agricultural Use." That citation is removed.
- Sheet No. 4.1. After discussing Issue D with Staff, the Company has renamed and revised Rule 4 to clarify the terms related to other, non-cash forms of security.
- Sheet 4.3. In response to Issue E, the Company removed language requiring that a nonresidential customer may need to establish credit, and to capture the intent, added a term to non-residential deposit requirements, stating that non-residential customers may owe a deposit if they are past due on other financial obligations.

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- Sheet No. 5.1. The Company revised the list of reasons why a customer may have service disconnected so that the list matches OAR 860-021-0305. This change was discussed with Staff but not included in Staff's final recommended changes.
- Sheet No. 17.1. Language is added to clarify the meaning of "agricultural service customers" and "high priority use customers." This issue was raised by Staff's concern, in Issue C, regarding the definition of high priority use.
- Sheet No. 170.2. Again, in response to Staff Issue C, the Company looked at the use of the terms "essential agricultural use" and "high priority" use within the Interruptible Service Schedule and realized that the language where these terms were used was no longer accurate and is now removed.
- Sheet. 200.1. Apart from Staff review, the Company realized that the Late Payment Charge was incorrectly stated as being $200. It is corrected to be 0.3% annualized interest.

Q. Does this represent all the Company's recommended tariff changes?

A. No. The revisions resulted in changes to pagination and, therefore, the need to submit other replacement sheets. Exhibit CNGC/1103 includes all replacement sheets. Exhibit CNGC/1102 is a redlined version showing the language changes as compared to the tariff sheets submitted in the Company's initial rate case filing. Exhibit CNGC/1101 is a table listing all replacement sheets as well as a brief summary of the changes made and the corresponding Staff issue, if applicable.

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IV. CONCLUSION

Q. Does this conclude your testimony?

A. Yes.

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BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Jennifer G. Gross

TABLE OF TARIFF REVISIONS
EXHIBIT CNGC/1101

September 2016

REVISED PAGES	RULE OR SCHEDULE TITLE	SUMMARY OF CHANGE	CITATION FOR RELATED ISSUE AS PRESENTD IN STAFF 800, SHEARER
Original Sheet No. ii	Index	Revises The title of Rule 4 from "Customer Deposits" to "Customer Deposits and Other Security" to respond to Issue D	Issue D, page Shearer/5, lines 18-20 Staff did not directly request this change.
Original Sheet No. 2.1	Definitions	Corrects reference to Rule 2 in definition of "Applicant" from to Rule 3 Revises definition of "Customer" to include someone who has voluntarily terminated service within the past 20 days.	Issue A, page Shearer/5, lines 9-10 Issue B, page Shearer/5, lines 11-14 The changes to this page are as requested by Staff.
Original Sheet No. 2.2	Definitions	Removes defined term, "Essential Agricultural Use"	Staff did not request this change; but like Issue C, the definition contained an unnecessary citation which is now removed.
Original Sheet No. 2.3	Definitions	Removes defined term, "High Priority Use." This term is used only in Rule 17 so the definition is removed from Rule 2, revised and placed in Rule 17, the only place where the term is used.	Issue C, page Shearer/5, lines 15-17 The changes to this page are as requested by Staff.
Original Sheet No. 3.1	Establishing Service	The option to provide a written surety agreement is added.	Issue D, page Shearer/5, lines 18-20 The changes to this page are as requested by Staff.
Original Sheet No. 3.2	Establishing Service	Language is removed that states a non-residential customer may have to establish credit.	Issue E, page Shearer/5, lines 21-23 The changes to this page are as requested by Staff

Original Sheet No. 4.1	Customer Deposits and Other Security	The title of the Rule is Changes from "Customer Deposits" to "Customer Deposits and Other Security". (all of rule 4) A General section is added to clarify the terms and conditions established in the Rule are applicable for cash deposits and other forms of security. The title to the second section is revised to include surety agreements. The language establishing surety agreements as an option is moved from no. 2 to no. 4 in the list, and additional information is added about surety agreements for added clarity. And addition	While Staff did not request this change, it is consistent with Issue D, page Shearer/5, lines 18-20 Same as above. Same as above. Same as above.
Original Sheet No. 4.2	Customer Deposits and Other Security	Changes resulted in revised pagination.	N/A
Original Sheet No. 4.3	Customer Deposits and Other Security	Section (f) under Nonresidential Deposit Requirements is added to clarify that a non-residential customer may have to pay a deposit if that customer is passed due on other financial commitments.	This language change was not requested by Staff but relates to Issue E, page Shearer/5, lines 21-23. When we remove the requirement that a customer may have to establish credit, we needed to capture the initial intent of that language by adding language requiring a deposit when a large customer is having financial difficulties.
Original Sheet No. 4.4	Customer Deposits and Other Security	Revisions to the rule changed the pagination	N/A - pagination
Original Sheet No. 5.1	Discontinuation of Service	The grounds for disconnecting a customer's service are revised to align with OAR 860-021-0305.	While this issue is not included in Staff's testimony, Staff discussed it with the Company.

Original Sheet No. 5.2	Discontinuation of Service	The language describing the contents of disconnect notices is revised to match OAR 860-021-0405.	Issue F, page Shearer/6, lines 4-6 The changes related to this issue match the rule. The language as presented in Staff/800, Shearer/2 has typos.
Original Sheet No. 5.3		The language detailing when a 15-day notice is not required is revised to match the language in OAR 860-021-0405.	Issue G The revised language removes establishing credit as a reason for disconnecting without a 15-day notice. This language differs from Staff's as presented in Exhibit Staff/803, but matches was Staff and the Company discussed over email (June 15, 2016).
Original Sheet No. 5.3	Discontinuation of Service	Revisions are made to section (5) correcting when service is complete on a 15-day notice.	Issue H, page Shearer/6, lines 12-15 The changes related to this issue are as requested by Staff.
Original Sheet No. 5.5	Discontinuation of Service	Language is added defining the different timeframes for medical certificates issued for both non-specific chronic illnesses and specific chronic illnesses.	Issue I, page Shearer/6, lines 16-18 The changes related to this issue are as requested by Staff.
Original Sheet No. 5.6 through 5.8	Discontinuation of Service	Revisions resulted in changes to pagination.	N/A
Original Sheet No. 6.1	Billing	Revisions are made to correct when a bill is due and payable.	Issue J, page Shearer/6, lines 19-22 The changes related to this issue are as requested by Staff.
Original Sheet No. 6.2	Billing	Language allowing estimated bills is removed.	Issue K, page Shearer/7, lines 1-6

		The language on Budget payment plans is revised to align with OAR 860-021-0414.	Issue L, page Shearer/7, lines 7-13 The changes on this sheet are as requested by Staff.
Original Sheet No. 6.3 and 6.4		Changes resulted in revised pagination. Original Sheet No. 6.5 is removed.	N/A
Original Sheet No. 17.1	Order of Priority for Gas Service	Language is added to clarify the meaning of the terms essential agricultural use and high priority use.	While not requested by Staff, this revision stems from looking at Issue C, page Shearer/5, lines 15-17.
Original Sheet No. 170.2	Interruptible Service	A section on Essential Agricultural and High Priority Use is removed as it is not accurate.	While not requested by Staff, this revision stems from looking at Issue C, page Shearer/5, lines 15-17.
Original Sheet No. 200.1	Various Miscellaneous Charges	The Late Payment Charge is corrected from $200 to 0.3% annualized interest.	The Company noticed this error apart from Staff's review.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Jennifer G. Gross

RELINED TARIFF SHEETS
EXHIBIT CNGC/1102

September 2016

CASCADE NATURAL GAS CORPORATION

INDEX

RULES

PUBLIC PURPOSES

RATE SCHEDULES

(continued)

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 2.1**

RULE 2
DEFINITIONS

DEFINITIONS
When used in this Tariff the following terms shall have the meanings defined below:

1. Applicant - A person, firm, or corporation that (1) applies for service; (2) reapplies for service at a new or existing location after service has been disconnected; or (3) has not met the requirements for becoming a customer as established in Rule ~~2~~3.

2. BTU - British Thermal Unit

3. British Thermal Unit - The standard unit for measuring a quantity of thermal energy. One BTU equals the amount of thermal energy required to raise the temperature of one pound of water one degree Fahrenheit and is exactly defined as equal to 1,055.05585262 joules. 100,000 BTUs is equivalent to one therm.

4. Commission - The Public Utility Commission of Oregon or otherwise referred to as OPUC.

5. Company - Cascade Natural Gas Corporation (Cascade) or its assigned agents acting through its duly authorized officers or employees within the scope of their respective duties.

6. Customer - Any person, firm, or corporation that has~~; applied for, been accepted, and~~
   a. Applied for, been accepted, and is currently receiving gas and, or distribution service from the Company under these Rules and Regulations at one location under one rate classification contract, or
   ~~6.~~b. Received gas or distribution service from the Company, and voluntarily terminated service within the past twenty days.~~,~~

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7. Curtailment - An event when the Company must interrupt service to customers in accordance with Rule 17. A Curtailment event may affect any level of service depending on the severity and geographical scope of the event.

8. Customer Classifications:
   A. Residential - Service to a single family dwelling, two family (duplex) dwelling or to an individual dwelling unit in a multiple family dwelling building for residential purposes including space heating, water heating, and cooking.

      1. Dwelling - A building designed exclusively for housing that contains permanent facilities for sleeping, bathing, and cooking. A dwelling may be a one family home, a duplex, a multiplex, but not including hotel or motel units that have no permanent kitchens.

(continued)

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 2.2**

RULE 2
DEFINITIONS

DEFINITIONS (continued)
Customer Classifications (continued)

B. Commercial - Service to a customer engaged in selling, warehousing, or distributing a commodity, in some business activity or in a profession, or in some form of economic or social activity (office, stores, clubs, hotels, etc.) and for purposes that do not come directly under another classification of service.

C. Industrial - Service to a customer engaged in a process which creates or changes raw or unfinished materials into another form or product. (Factories, mills, machine shops, mines, oil wells, refineries, pumping plants, creameries, canning and packing plants, shipyards, etc., i.e., in extractive, fabricating or processing activities).

D. Institutional - Service to a customer of a public character including but not limited to governmental buildings, colleges, schools, hospitals, clinics, institutions for the care or detention of persons, and similar establishments.

E. Interruptible Gas - An interruptible gas service customer is considered “non-core” and receives a reduced rate on natural gas service because this class of customers is the first curtailed when gas supply or distribution is constrained for reasons other than force majeure.

F. Transportation - Transportation customers purchase their own natural gas and procure only distribution services from the Company.

9. Gas Day - A twenty-four hour period beginning daily at 7:00 a.m. Pacific Clock Time (PCT), which is Pacific Standard Time or Daylight Savings Time in Kennewick, Washington, whichever is effective at the time of reference. The Company's Gas Day coincides with the Gas Day established in Northwest Pipeline’s tariff, which may change from time to time, upon approval of the Federal Energy Regulatory Commission (FERC).

10. Essential Agricultural Use - When ~~As established by the Secretary of Agriculture under section 401(c) of the Natural Gas Policy Act of 1978 (NGPA), or identified in 7 CFR 2900, et seq. and amendments thereof, essential agricultural use is gas use (1)~~gas is used: (1)f ~~F~~or agricultural production, natural fiber production, natural fiber processing, food processing, food quality maintenance, irrigation pumping, crop drying; or (2) As a process fuel or feedstock in the production of fertilizer, agricultural chemicals, animal feed, or food which the Secretary of Agriculture determines is necessary for full food and fiber production.

11. Firm Service - The sale of natural gas on a firm basis where the Company will exercise reasonable diligence to supply and deliver continuous service to customers not receiving interruptible service. See Order of Priority in Rule 17.

(continued)

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CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 2.3**

RULE 2
DEFINITIONS

DEFINITIONS (continued)

12. ~~12. High Priority Use – As defined in 281.203(a), Title 18 Code of Federal Regulations, high priority use is natural gas in a residence, a small commercial establishment, in a school or hospital, or for police protection, for fire protection or in a correctional facility.~~ High Priority Use – High priority use is where continuity of gas service is considered in the public's best interest such as gas usage in a residence, school, hospital, or correctional facility, or for police or fire protection.

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13. Month - The period of time between and including the date of the current meter read and the date of the prior meter read which is the period upon which the Customer's monthly bill is based. A billing month may be contained within a single calendar month, or may encompass a portion of two separate calendar months.

14. Premise - All of the real property and personal property in use by a single customer on a parcel of land which comprises the site upon which customer facilities are located and to which natural gas service is provided.

15. Tariff - This Tariff, including all schedules, rules, regulations, and rates as they may be modified or amended from time to time.

16. Therm - A unit of heating value equivalent to 100,000 BTUs.

17. WACOG - The Weighted Average Commodity Cost of System Supply Gas (WACOG) reflected in Cascade's tariffs shall be as established by gas cost tracking or other similar filings.

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 3.1**

RULE 3
ESTABLISHING SERVICE

REQUIREMENTS FOR ESTABLISHING SERVICES
To establish service with the Company, an applicant must do the following:
1. Provide the Company with: a) the date service is to begin; b) whether the premise has previously received service from the Company; c) the purpose for which the gas is to be used; d) whether the applicant owns or rents the premise; e) the applicable rate schedule; and f) any other information that the Company deems necessary;
2. Establish Identity in accordance with the requirement in Section A below in this Rule; and
3. Establish Credit in accordance with the requirements found in Section B below in this Rule.

By establishing service, a customer agrees to be bound by all the terms and conditions of service as established in the Company Tariff as periodically revised and approved by the Public Utility Commission of Oregon.

A. ESTABLISHING IDENTITY

To establish an account, each applicant, including an applicant for co-customer, is required to provide documentation verifying his/her identity. Cascade may require: a) the name of person responsible; b) name on the account if different; c) birthdate; d) Social Security Number; e) valid Oregon driver's license; f) service address; g) billing address if different; h) telephone numbers where applicant can be reached; and I) other information as deemed necessary by the Company.

If the applicant does not wish to provide his/her Social Security Number or valid driver's license, he/she may provide a valid State or Federal picture identification; a combination of a birth certificate and current school or employer picture identification; the name of another person that can verify the applicant's identity; or other information deemed sufficient by the utility.

Once an account is established, at the customer's request, Cascade will restrict access of the account by other individuals through the use of a password.

B. ESTABLISHING CREDIT

Below are the criteria for establishing credit for residential and non-residential customers, respectively. A customer who cannot meet the requirements put forth below must pay a Deposit or provide other ~~it in~~security in accordance with the terms and conditions in Rule 4.

(continued)

RULE 3
ESTABLISHING SERVICE

ESTABLISHING SERVICE (continued)

B. ESABLISHING CREDIT (continued)

1. **RESIDENTIAL SERVICE**

   Satisfactory credit may be established by any of the following:

   a. Received twelve months of continuous utility service (of same type) in the preceding 24-month period and the utility can verify that the applicant voluntarily terminated service and paid for services as required;

   b. Provides proof of ability to pay by providing either proof of employment during the prior 12-month period, or statement by income provider that applicant has a regular source of income; or

   c. Meets the Commission approved minimum credit requirements based on a third party credit report score or the Company's own credit scoring formula.

2. **NON RESIDENTIAL SERVICE**

   A non-residential applicant ~~or customer~~ may establish credit if either of the following is verified:

   a. The non-residential applicant ~~or customer~~ has received continuous utility service of a type and in quantities similar to the service for which application is made during the 12-month period prior to the date of the credit screen and has not received any notices of disconnection during such period; or

   b. The non-residential applicant ~~or customer~~ is licensed to do business in the state of Oregon and has kept current over the past twelve months on all real estate mortgages or lease agreements, commercial loans, utility bills and trade accounts.

COMPLIANCE TO RULES AND REGULATIONS

By establishing an account, a customer agrees to comply with all the applicable rules and regulations as established in this Tariff as revised from time to time.

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 | **Original Sheet No. 4.1**

RULE 4
CUSTOMER DEPOSITS AND OTHER SECURITY

GENERAL

The Company may require a deposit or other form security from an applicant or customer for reasons set forth in Rule 3 and this Rule.

Paying a deposit or providing some other form of security does not excuse a customer from complying with Cascade's tariffs or other regulations on file with the Commission, such as the obligation to pay bills promptly.

RESIDENTIAL DEPOSITS REQUIREMENTS AND SURETY AGREEMENTS

1. An applicant or customer may be required to pay a deposit when the applicant or customer:
   a. Is unable to establish credit as outlined in Rule 3;
   b. Received the same type of service from any Oregon energy utility within the prior 24 months and owed a balance when service was terminated; or
   c. Was previously terminated for theft of service by any Oregon utility, found to have tampered with the meter, or diverted service.

~~2. In lieu of paying a deposit, the applicant may provide a written surety agreement from a responsible party.~~

2.~~3~~ A deposit required under these rules shall not exceed one-sixth the amount of reasonable estimated billing for one year at rates then in effect. This estimate shall be based upon the use of service at the premise during the prior year or upon the type and size of the customer's equipment that will use the service.

~~4.~~ 3. Any additional or subsequent deposit may be required as a condition of continued service if any of the following are true:

   a. If the customer remodels, adds gas appliances or moves, and the anticipated usage will be at least 20 percent greater than that upon which the prior deposit was based;
   b. The customer gave false information to establish an account and/or credit status; or
   c. The customer has stolen service, tampered with the meter, or diverted service.

4. In lieu of paying a deposit, a residential customer may provide the Company with a written surety agreement from a responsible party. A responsible party must be a current Cascade customer who is able to meet the requirements for establishing credit per Rule 3. The written surety must secure payment equal to two months average usage. If the customer, whose account is secured with a surety agreement, is disconnected for non-payment, the Company may require that the responsible party who signed the surety agreement pay the amount specified in the surety agreement.

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5. ~~Paying a deposit does not excuse a customer from complying with Cascade's tariffs or other regulations on file with the Commission, such as the obligation to pay bills promptly.~~

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~~DEPOSIT PAYMENT ARRANGEMENTS FOR RESIDENTIAL SERVICE~~

1. ~~When Cascade require a deposit, the customer may pay the deposit in full or elect to pay the deposit in three installments. The first installment is due immediately. The remaining installments are due 30 days and 60 days after the first installment payment. Except for the last payment, installments shall be the greater of $30 or one-third the deposit.~~

2. ~~Where an installment payment of a deposit is made together with a payment for gas service, the amount paid shall first be applied toward payment of the amount due for deposit.~~

(continued)

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 4.3**

RULE 4
CUSTOMER DEPOSITS AND OTHER SECURITY

~~**DEPOSIT PAYMENT ARRANGEMENTS FOR RESIDENTIAL SERVICE (continued)**~~
DEPOSIT PAYMENT ARRANGEMENTS FOR RESIDENTIAL SERVICE

1. When Cascade requires a deposit, the customer may pay the deposit in full or elect to pay the deposit in three installments. The first installment is due immediately. The remaining installments are due 30 days and 60 days after the first installment payment. Except for the last payment, installments shall be the greater of $30 or one-third the deposit.

2. Where an installment payment of a deposit is made together with a payment for gas service, the amount paid shall first be applied toward payment of the amount due for deposit.

3. In the event a consumer is required to pay an additional deposit, the customer shall pay within five days one-third of the total deposit, or at least $30, whichever is greater. The remainder of the deposit is due under the terms of Subsection 1. If the customer has an existing deposit installment agreement, the remaining installment payments will be adjusted to include the additional deposit; however, two installment payments cannot be required within the same 30-day period.

4. Where a customer enters into an installment agreement for payment of a deposit under Subsection 1 of these rules, Cascade shall provide written notice explaining its deposit requirements. The notice shall specify the date each installment payment shall be due and shall include a statement printed in boldface type informing the person that service will be disconnected if payment is not received when due. The notice shall also set forth the name and telephone number of the appropriate unit within the Department of Human Services or other agencies which may be able to help the customer obtain financial aid.

5. If a customer fails to abide by the terms of a deposit installment agreement, the Company may disconnect service after a five-day notice. The notice shall contain the information and shall be served in the manner set forth in Rule 5.

6. Where good cause exists, Cascade may provide more liberal arrangements for payment of deposits than those set forth in this rule. Cascade shall keep a written record of the reasons for such action.

7. Should disconnection for nonpayment of a deposit occur, the person disconnected shall be required to pay the full amount of the deposit, and any applicable reconnection fee, disconnect visit charge, late-payment fee, and one-half the past due amount before service is restored. The balance of the past-due amount shall be paid within 30 days of the date service is restored. A customer may continue with an existing time-payment agreement by paying all past-due installments, along with the full deposit and other applicable fees.

~~**NONRESIDENTIAL DEPOSIT REQUIREMENTS**~~

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 4.4**

1. ~~Deposit Requirement – Nonresidential (Seasonal and Non-seasonal Service). A deposit may be required equal to one-sixth the estimated annual usage at the service address if an applicant or customer:~~
   a. ~~Does not satisfy the credit-screening criteria set forth in Rule 3.~~

(continued)

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 4.5**

RULE 4
CUSTOMER DEPOSITS AND OTHER SECURITY

~~**NONRESIDENTIAL DEPOSIT REQUIREMENT (continued)**~~

NONRESIDENTIAL DEPOSIT REQUIREMENTS

1. Deposit Requirement - Nonresidential (Seasonal and Non-seasonal Service). A deposit may be required equal to one-sixth the estimated annual usage at the service address if an applicant or customer:
   a. Does not satisfy the credit-screening criteria set forth in Rule 3.
   b. Owes a bill that is overdue by thirty (30) days or more;
   c. Was previously exempted from paying a deposit based upon false information given at the time of application;
   d. Is involved in a bankruptcy action, liquidation, bulk sale or financial reorganization; ~~or~~
   ~~a.~~ e. Is adding incremental demand at a premise with an existing service account~~.~~; or
   f. The non-residential customer is past due on commitments to creditor such as real estate mortgages or lease agreements, commercial loans, other utility bills and trade accounts.

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DEPOSIT PAYMENT ARRANGEMENTS FOR NON-RESIDENTIAL SERVICE

1. An applicant for nonresidential service who is required to pay a deposit shall pay the deposit in full prior to receiving service. An applicant for nonresidential service may also fulfill the deposit requirement with an irrevocable letter of credit, surety bond (performance bond) or some other form of guarantee acceptable to the Company.

2. An existing nonresidential customer is considered to be an applicant for purposes of satisfying the deposit requirement. An existing nonresidential customer, if required to pay or supplement a deposit, is required to pay the full amount within 10 days of the date of the notice from the Company that such a deposit is required. This notice will also serve as the notice of disconnection required under OAR 860-021-0505.

3. If service is disconnected for nonpayment of a deposit, the customer disconnected will be required to pay the full amount of the deposit, plus any applicable reconnection fee, disconnect visit charge, late payment fee and past due account balance before service is restored.

INTEREST ON DEPOSITS FOR RESIDENTIAL AND NONRESIDENTIAL SERVICE

1. Unless otherwise specified by the Commission, customer deposits shall accrue interest at a rate based upon the effective interest rate for new issues of one-year Treasury Bills issued during the last week of October as determined by the Commission in Docket No. UM 779. This interest rate, rounded to the nearest percent, shall apply to deposits held during January 1 through December 31 of the subsequent year.

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CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 4.6**

RULE 4
CUSTOMER DEPOSITS AND OTHER SECURITY

INTEREST ON DEPOSITS FOR RESIDENTIAL AND NONRESIDENTIAL SERVICE (continued)

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2. Upon payment of a deposit, Cascade shall furnish a receipt showing the date, name of the applicant or customer, the service address, the amount of deposit, a statement that the deposit will accrue interest at the rate prescribed by the Commission, and an explanation of the conditions under which the deposit will be refunded.

3. If the deposit is held beyond one year, accrued interest will be paid through a credit to the customer's account. If held less than one year, interest will be prorated. Cascade shall keep a detailed record of each deposit received until the deposit is credited or refunded.

~~(continued)~~

~~RULE 4~~

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~~CUSTOMER DEPOSITS~~

REFUND OF DEPOSITS FOR RESIDENTIAL AND NONRESIDENTIAL SERVICE

1. Upon termination of service, a customer's deposit plus accrued interest, shall first be applied to any unpaid balance on the customer's account and any remaining balance will be refunded to the customer.

2. Cascade may continue holding a deposit until such time as credit is satisfactorily established or reestablished. For purposes of this rule, credit shall be considered to be established or reestablished if one year after a deposit is made:

   a. The account is current;
   b. Not more than two five-day disconnection notices were issued to the customer during the previous 12 months; and
   c. The customer was not disconnected for nonpayment during the previous 12 months.

3. After satisfactory credit has been established or reestablished, the deposit plus any accrued interest shall be promptly credited to the customer's account or refunded at the customer's request.

4. In the event the customer moves to a new address within Cascade's service area, the deposit, plus accrued interest, will be transferred to the new account.

5. Unless otherwise specified by the customer, Cascade shall mail deposit refunds to the customer's last known address. Valid claims for refunds received within one year of the date service was terminated shall be promptly honored. Funds held beyond one year will be disposed of in accordance with ORS 98.316.

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 5.1**

RULE 5
DISCONTINUATION OF SERVICE

GROUNDS FOR DISCONNECTING GAS SERVICE

~~a)~~ Gas service may be disconnected:

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a) When the applicant or customer fails to pay a deposit or make payments in accordance with the terms of a deposit payment arrangement as outlined in Rule 4;

b) When the applicant or customer provides false identification to establish service, continue service, or verify identity;

c) When the customer fails to pay Oregon tariff or price-listed charges due for services rendered.

d) When the customer fails to abide by the terms of a time-payment agreement;

e) When the customer requests Cascade disconnect service or close an account or when a co-customer fails to reapply for service within 20 days after a joint account is closed by the other co-customer, so long as the Company has provided a notice of pending disconnection;

f) When the customer does not cooperate in providing access to the meter;

g) When facilities provided are unsafe or do not comply with state and municipal codes governing service or the utility's rules and regulations;

h) When there is evidence of meter-tampering, diverting service, or other theft of service;

i) When dangerous or emergency conditions exist at the service premises under OAR 860-021-0315; or

j) When the Commission approves the disconnection of service.

~~a. For failing to pay a deposit or make payments in accordance with the terms of a deposit payment arrangement (Rule 4);~~

~~b. For providing false identification or verification of identity;~~

~~c. Where facilities provided are unsafe or do not comply with state and municipal codes governing service or the rules and regulations contained in this Tariff;~~

~~d. Where the customer does not cooperate in providing access to the meter;~~

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 5.2**

~~e. Where a customer requests Cascade to disconnect service or close an account;~~

~~f. Where dangerous or emergency conditions exist at the service premise;~~

~~g. For failure to pay Oregon tariff or price listed charges due for services rendered, or by meter tampering, diverting service, or other theft of service (Rule 5);~~

~~h. For failure to abide by the terms of a time-payment agreement; or~~

~~i. Where the Commission approves the disconnection of service.~~

VOLUNTARY DISCONNECTION

Every customer who is about to vacate any premise supplied with gas service, or who for any reason wishes to have such service discontinued, shall give five days' notice to the Company in advance of specified date of discontinuance of service. Until the Company has such notice, the customer shall be held responsible for all service rendered.

~~**EMERGENCY DISCONNECTION**~~

~~In emergencies endangering life or property, a utility may terminate service without following the procedures set forth in this rule. However, Cascade shall immediately thereafter notify the Commission. In such cases, where the necessity for emergency termination was through no fault of the customer, there will be no charge made for restoration of service.~~

(continued)

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 5.3**

RULE 5
DISCONTINUATION OF SERVICE

EMERGENCY DISCONNECTION
In emergencies endangering life or property, a utility may terminate service without following the procedures set forth in this rule. However, Cascade shall immediately thereafter notify the Commission. In such cases, where the necessity for emergency termination was through no fault of the customer, there will be no charge made for restoration of service.

DISCONNECTION OF SERVICE ON WEEKENDS AND HOLIDAYS
Gas service shall not be disconnected for nonpayment on or the day prior to a weekend or a state or utility-recognized holiday.

NOTICE OF PENDING DISCONNECTION OF RESIDENTIAL SERVICE

1. Notice requirements are waived where safety concerns, or meter tampering, diverting of service, or other theft of service is detected. When a written notice is given under these rules:

   a. The notice shall contain multilingual information as required by Commission rules and be served on the customer's designated representative, if any;

   b. If Cascade's records show that the billing address is different from the service address, and Cascade has reason to believe the address is occupied by someone other than the customer, Cascade shall provide a five-day notice to both the occupants of the service address and to the customer's mailing address. The notice may be addressed to "tenant" or "occupant." The envelope shall bear a bold notice stating "Important notice regarding continuance of gas service" or similar words. The notice to occupants may not include the dollar amount owing.

   c. When Cascade's records show service is to a master-metered multi-family dwelling (including rooming houses), Cascade must notify the Commission's Consumer Services Section at least five business days prior to disconnecting the service. Cascade will use reasonable efforts to notify occupants of the impending disconnection and alternatives available to them.

2. The notice shall be printed in **bold face type** and shall state in easy to understand language:

   a. ~~a. The reason for the proposed disconnection;~~The reason for the proposed disconnection;

   ~~c.~~b. The earliest date for disconnection;

   b. An explanation of the Commission's complaint process and toll-free number; and

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CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 5.5**

RULE 5
DISCONTINUATION OF SERVICE

NOTICE OF PENDING DISCONNECTION OF RESIDENTIAL SERVICE (continued)

c. If the disconnection is for nonpayment of services rendered, including failure to abide by a time payment agreement, the notice must also state:

1. The amount to be paid to avoid disconnection;

2. An explanation of the time payment agreement provisions of OAR 860-021-0415;

3. An explanation of the medical certificate provisions of OAR 860-021-0410; and

4. The name and telephone number of the appropriate unit of the Department of Human Services or other agencies that may be able to provide financial assistance.

~~b. The amount to be paid to avoid disconnection;~~

~~c. The earliest date for disconnection;~~

~~d. An explanation of the time-payment agreement provisions;~~

~~e. An explanation of the medical certificate provisions;~~

~~f. The name and telephone number of the appropriate unit of the Department of Human Services or other agencies which may be able to provide financial aid; and~~

~~g. An explanation of the Commission's complaint process and toll-free number.~~

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CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 5.6**

~~**RULE 5**~~
~~**DISCONTINUATION OF SERVICE**~~

~~**NOTICE OF PENDING DISCONNECTION OF RESIDENTIAL SERVICE (continued)**~~

At least 15 days before Cascade disconnects a residential customer for nonpayment of services rendered, Cascade will provide written notice to the customer. A 15-day notice is not required when disconnection is for:

~~failure to establish credit, theft of service, or safety.~~

a) Providing false identification to establish service, continue service, or verify identity;

b) Meter tampering diverting service, or other theft; or

c) The existence of unsafe conditions.

~~1.~~

4. A notice of disconnection may not be sent prior to the due date for payment of a bill.

5. Cascade may serve the 15-day notice of disconnection in person or send it by first class mail to the last known address of the customer. Service is complete on the date of ~~the mailing or~~ personal delivery or the day after notification is postmarked.

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CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 5.7**

RULE 5
DISCONTINUATION OF SERVICE

NOTICE OF PENDING DISCONNECTION OF RESIDENTIAL SERVICE (continued)

6. At least five business days before the proposed disconnection date, Cascade must mail or deliver a written disconnection notice to the customer.

    a. The disconnection notice shall inform the person that service will be disconnected on or after a specific date and shall explain the alternatives and assistance that might be available.

    b. If notification is made by delivery to the residence, Cascade shall attempt personal contact. If personal contact cannot be made with the customer or an adult resident, Cascade shall leave the notice in a conspicuous place at the residence.

7. On the day that Cascade expects to disconnect service and prior to disconnection, Cascade will make a good faith effort to personally contact the customer or an adult at the residence scheduled to be disconnected.

    a. If the contact is made, Cascade shall advise the person of the proposed disconnection;

    b. If contact is not made, Cascade must leave a notice in a conspicuous place at the residence informing the customer that service has been, or is about to be, disconnected.

8. Where personal contact is made by the Company under this rule, and the circumstances are such that a reasonable person would conclude that the customer does not understand the consequences of disconnection, the Company must:

    a. Notify the Department of Human Services and the Commission; and

    b. Delay the proposed disconnection date for five additional business days.

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CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 5.8**

RULE 5
DISCONTINUATION OF SERVICE

NOTICE OF PENDING DISCONNECTION OF RESIDENTIAL SERVICE (continued)

9. Where personal contact is made, the representative of the Company making contact shall be empowered to accept reasonable partial payment of the overdue balance in accordance with the time payment provisions.

10. Cascade must document its effort to provide notice and shall make the documentation available to the customer and the Commission upon request.

EMERGENCY MEDICAL CERTIFICATE FOR RESIDENTIAL SERVICE

1. Cascade shall not disconnect residential service if the customer submits certification from a qualified medical professional stating that disconnection would significantly endanger the physical health of the customer or a member of the customer's household. "Qualified medical professional" means a licensed physician, nurse-practitioner, or physician's assistant authorized to diagnose and treat the medical condition described without direct supervision by a physician.

2. An oral certification must be confirmed in writing within 14 days by the qualified medical professional prescribing medical care. Written certification must include:

   a. The name of the person to whom the certificate applies and relationship to the customer;

   b. A complete description of the health condition;

   c. An explanation how the health of the person will be significantly endangered by the termination of service;

   d. A statement indicating how long the health condition is expected to last;

   e. A statement specifying the particular type of utility service required (e.g. gas for heating); and

   f. The signature of the qualified medical professional prescribing medical care.

3. An emergency medical certificate shall be valid only for the length of time the health endangerment is certified to exist, but no longer than six months without renewal when the certificate is issued for a non-specific chronic illness or no longer than twelve months without renewal when the certificate is issued for a specific chronic illness. At least 15 days before the certificate's expiration date, Cascade will give the customer written notice of the date the certificate expires unless it is renewed with Cascade before that day arrives.

(continued)

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 5.9**

RULE 5
DISCONTINUATION OF SERVICE

EMERGENCY MEDICAL CERTIFICATE FOR RESIDENTIAL SERVICE (continued)

4. A customer submitting a medical certificate is not excused from paying for gas service.

   a. Customers are required to enter into a written time-payment agreement with Cascade where an overdue balance exists. Terms of the time-payment agreement shall be those set forth in this Rule 5 or other terms as agreed upon in writing between the parties.

   b. Where financial hardship can be shown, a customer with a medical certificate shall be permitted to renegotiate the terms of a time-payment agreement with Cascade.

   c. Time-payment arrangements in effect when a medical certificate terminates remain in effect for the balance then owing. If a customer fails to pay charges incurred after the certificate terminates, standard time-payment provisions (Rule 5) will apply to payment of the arrearage incurred after the medical certificate expires. The terms of the medical certificate time-payment plan continue to apply to the arrearage accrued during the disability.

5. If a medical certificate customer fails to enter into a written time-payment agreement within 20 days of filing the certificate or to abide by its terms, Cascade shall notify the Commission's Consumer Services Section of its intent to disconnect service and the reason for the disconnection. Cascade may disconnect service after providing a notice 15 days in advance of disconnection for nonpayment, or five days before disconnection for failure to enter into a written time-payment agreement. The notice shall comply with the requirements of Part I, Subsection 2, except that Subsection e shall not apply. A hearing may thereafter be held to determine whether Cascade should be permitted to disconnect service to the customer.

6. Cascade may verify the accuracy of a medical certificate. If Cascade believes a customer does not qualify, or no longer qualifies for a medical certificate, Cascade may apply to the Commission for permission to disconnect the customer's service.

TIME-PAYMENT AGREEEMENTS FOR RESIDENTIAL SERVICE (NON MEDICAL CERTIFICATE CUSTOMERS)

1. Cascade will not disconnect residential service for nonpayment if a customer enters into a written time-payment plan. Cascade will offer customers a choice of payment agreements. At a minimum, the customer may choose between a levelized payment plan and an equal payment arrearages plan.

(continued)

CASCADE NATURAL GAS CORPORATION

RULE 5
DISCONTINUATION OF SERVICE

TIME-PAYMENT AGREEEMENTS FOR RESIDENTAIL SERVICE (NON MEDICAL CERTIFICATE CUSTOMERS) (continued)

2. A customer who selects a levelized-payment plan will pay a down payment equal to the average annual bill including the account balance, divided by twelve, and a like payment each month for eleven months thereafter.

   a. Cascade shall periodically review the monthly installment plan. If necessary, due to changing rates or variations in the amount of service used by the customer, the installment amount may be adjusted to bring the account into balance within the time period specified in the original agreement.

   b. If a customer changes service address at any time during the period of a time-payment agreement, provided that payments are then current and the customer pays other tariff charges associated with the change in residence, Cascade shall recalculate the customer's deposit and/or monthly installment. The recalculated amount shall reflect the balance of the account at the previous service address and the average annual bill at the new service address for the months remaining in the original time-payment agreement. When installments on a time-payment agreement have not been kept current, a customer shall be required to pay all past-due installments, together with any other applicable charges before service is provided at the new residence.

3. A customer who selects an equal payment arrearages plan will pay a down payment equal to one-twelfth the amount owed for past gas service (including the overdue amount and any amounts owed for a current bill or a bill being prepared but not yet delivered to the customer). Each month, for the next eleven months, an amount equal to the down payment will be added to, and payable with, the current charges due for service. If a customer changes service address at any time during the period of an arrearages payment plan, the plan continues. However, the customer must pay any past-due charges and all other applicable charges before Cascade provides service at the new address.

4. Cascade and the customer may agree in writing to an alternate payment arrangement, provided Cascade first informs the customer of the availability of the payment terms set forth in this rule.

5. If a customer fails to abide by the time-payment agreement, Cascade may disconnect service after serving 15 days' notice.

(continued)

CASCADE NATURAL GAS CORPORATION

RULE 5
DISCONTINUATION OF SERVICE

FIELD VISIT CHARGE
A Field Visit Charge as established in Schedule 200 may be charged whenever Cascade is required to visit a residential service address for the purpose of disconnecting or reconnecting service, but due to the customer's action, is unable to complete the reconnect or disconnect.

LATE PAYMENT CHARGE
A Late-Payment Charge as established in Schedule 200 will be applied to overdue account balances, both residential and nonresidential, at the time of preparing the subsequent month's bill. The Late-Payment Charge may not be applied to time-payment or equal-payment accounts that are current, and will be applied only to accounts that have an overdue balance greater than $200. The Commission will determine the Late-Payment Charge by surveying prevailing market rates for late-payment charges of commercial enterprises. The Commission will notify Cascade by November 15 of each year what rate may be used to determine late-payment charges on overdue customer accounts during the following calendar year. The current late-payment rate and the conditions for its application to customer accounts shall be specified on the gas bill.

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 6.1**

RULE 6
BILLING

GENERAL

Gas consumed, as indicated by meter readings, will be billed to customers as promptly as possible after reading dates, at approximately thirty day intervals, computed per applicable filed tariff rates. Bills will be due and payable ~~as of dates rendered and delinquent or past due~~ fifteen days ~~thereafter~~ after they are rendered.

When an under- or overbilling occurs, Cascade shall provide written notice to the customer detailing the circumstances, period of time, and amount of adjustment. The exception to these provisions is if issuing a correction is uneconomical in the sole view of the Company.

1. Underbillings: For underbillings, the Company may issue a bill correction if the error occurred within the prior twelve month period ending on the date on which the customer or former customer was last billed. The Company will not issue billing corrections for underbillings in excess of two years (twenty-four months). However, if an underbilling is a result of fraud, tampering, diversion, theft, misinformation, false information or other unlawful conduct on the part of the customer or former customer, the Company may collect full payment for any amount owed without limitation.

   Where a Customer is required to repay an underbilling, the Customer shall be entitled to enter into a time payment agreement without regard to whether the customer already participates in such an agreement. If the customer and Cascade cannot agree upon payment terms, the Commission shall establish terms and conditions to govern the repayment obligation. Cascade shall provide written notice advising the customer of the opportunity to enter into a time payment agreement and of the Commission's appeal and complaint process.

2. Overbillings: For overbillings, the Company will issue a credit for amounts previously overbilled within the prior twelve month period ending on the date on which the customer or former customer was last overbilled. The Company will not issue credits for amounts overbilled for more than three years (thirty-six months) before the date the energy utility discovered the overbilling.

No billing adjustment shall be required if a gas meter registers less than two percent error under conditions of normal operation.

Bills will show dates of readings, readings at beginning of period and end of period, the number of cubic feet, therms, or other units of measurement of gas consumed, the tariff schedule code applicable, the delinquent date of bill, and the amount of the bill. Any estimated reading shall be clearly noted on the bill.

Cascade should make reasonable efforts to prepare opening and closing bills from actual meter readings.

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 6.3**

RULE 6
BILLING

~~**ESTIMATED BILLING CAPABILITY**~~
~~The Company may issue small commercial customers and residential customers excluding accounts with pool water heating load an estimated bill during the months of June through September. Actual meter readings will be made the month following any month in which the customer's bill is estimated.~~

TRANSFER BILLINGS
If Cascade identifies that a customer owes Cascade a balance from the customer's prior account for Oregon service, Cascade may transfer the amount to the customer's current account after giving the customer notice of the transfer, the amount due under the prior account, the period of time during which the balance was incurred and the service address under which the bill was incurred. The notice must also meet the provisions for notifications as established in Rule 5. If the bill is identified at the time a customer changes residences, the provisions of this rule apply.

If the customer has six months or more remaining on a time-payment agreement, the installment amount will be adjusted in order to bring the account into balance within the time period specified in the original agreement. If the customer has less than six months remaining on a time-payment agreement, Cascade will recalculate the agreement to bring the account into balance within 12 months. The customer must pay any past due time-payment installments before Cascade adjusts or recalculates the agreement. Cascade may make more liberal payment arrangements for customers on medical certificates who cannot reasonably be expected to pay the outstanding balance in the time otherwise applicable under this rule.

BUDGET PAYMENT PLAN FOR PAYMENTS OF GAS BILLS
The budget payment plan for payment of gas bills ~~is devised to~~ averages ~~out the~~ a residential customer's monthly payments for gas service~~.~~ for a period of no less than twelve months. The budget payment plan is available to residential customers who have no outstanding balance with the Company.~~of any residential customer who can establish satisfactory credit with the Company.~~

At the request of a residential customer with satisfactory credit and no balance outstanding, the Company will estimate the customer's annual billing for gas service, based on the previous twelve months' usage. The estimated amount will then be divided by twelve. The resultant amount, rounded to the next full dollar, shall be the amount the customer will pay in lieu of the regular monthly billing for each month of the budget payment plan period. At the end of the plan year, any outstanding debit or credit balances will be rolled into the estimated usage for the following plan year and will be reflected in that year's monthly budget payment plan amount. Credit balances will be refunded to the customer if the customer specifically requests a refund.

For each succeeding annual budget payment period the Company will re-estimate the amount of the customer's bills for service for the ensuing period and so advise the customer. Unless the customer

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 6.4**

advises the Company to the contrary, such new monthly budget payment installments will be used for the ensuing payment period. If the customer requests to leave the plan, any debit balance will be due and payable under the regular terms of payment for gas service; credit balances may be applied to future gas bills or, if the customer so requests, refunded to the customer.

(continued)

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 6.5**

RULE 6
BILLING

BUDGET PAYMENT PLAN FOR PAYMENTS OF GAS BILLS (continued)
~~For each succeeding annual budget payment period the Company will re-estimate the amount of the customer's bills for service for the ensuing period and so advise the customer. Unless the customer advises the Company to the contrary, such new monthly budget payment installments will be used for the ensuing payment period. If the customer requests to leave the plan, any debit balance will be due and payable under the regular terms of payment for gas service; credit balances may be applied to future gas bills or, if the customer so requests, refunded to the customer.~~

During each budget payment plan period the customer shall be entitled to receive gas service so long as the customer pays each monthly budget payment plan installment as it becomes due. If a customer fails to comply with the terms of this plan, the budget payment plan will be discontinued and the customer will be billed monthly on the basis of actual usage. If a customer fails to comply with the terms of this plan, and has a debit balance, customer may be subject to disconnection of service under Rule 5.

For each billing period the customer will receive a bill showing the amount of gas used during the billing period, the charge for such gas used, the balance of account and the amount of the current month's budget payment plan installment.

Any estimates furnished by the Company in connection with such budget payment plan shall not be construed as a guarantee or assurance that the total actual charges will not exceed the estimates. The Company may at any time submit a revised estimate to the customer and require that the customer pay the revised monthly budget payment plan installment as a condition to the continuation of the budget payment plan for that customer.

Such estimates or any revising thereof shall apply only to the premise then occupied by the customer. If the customer vacates such premise and moves to a different premise served by Cascade, the amount of the budget payment will be re-estimated and the customer will be advised of the change. If the customer will not desire natural gas service from Cascade at the new premise, the budget payment plan shall immediately terminate and any amount payable from the customer will be due and payable under the regular terms of payment for gas service; any amount due the customer by the Company shall be refunded.

RETURNED PAYMENT FEE
The Company will charge a Returned Payment Fee, as established in Schedule 200, for any payment returned unpaid.

CONVERSION OF METER MEASUREMENTS TO THERMS
All meter measurements for gas service shall be converted to a therm basis for billing purposes. Such conversion shall be based on the temperature of the gas, the absolute pressure of the gas, and the measured heating values at standard conditions of the gas received from the pipeline supplier(s).

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 6.7**

RULE 6
BILLING

CONVERSION OF METER MEASUREMENTS TO THERMS (continued)

~~CONVERSION OF METER MEASUREMENTS TO THERMS~~

~~All meter measurements for gas service shall be converted to a therm basis for billing purposes. Such conversion shall be based on the temperature of the gas, the absolute pressure of the gas, and the measured heating values at standard conditions of the gas received from the pipeline supplier(s).~~

In cases where meters are not mechanically or electronically corrected for temperature, monthly temperature correction factors (Heat Value Multiplier) will be used to determine customer billing therms. The Heat Value Multiplier is calculated as the current pipeline heating value times a temperature factor of 520, divided by the sum of 460 and the published 30-year normal average temperature data.

In cases where meters are not mechanically or electronically corrected for pressure, a Pressure Factor will be used to determine customer billing therms. The Pressure Factor equals the sum of individual customer delivery pressure and the following applicable atmospheric pressure, both divided by 14.73 psi, (atmospheric pressure at sea level).

Town	Atmospheric Pressure, psi
Athena	13.86
Baker	13.03
Bend	12.95
Boardman	14.61
Chemult	12.42
Crescent	12.59
Gilchrist	12.59
Hermiston	14.50
Huntington	13.67
Irrigon	14.58
Madras	13.60
McNary	14.50
Milton-Freewater	14.21
Mission	14.11
Nyssa	13.63
Ontario	13.65
Pendleton	14.19
Pilot Rock	13.90
Prineville	13.30
Redmond	13.24

~~(continued)~~

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CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 6.8**

~~RULE 6~~
~~BILLING~~

~~CONVERSION OF METER MEASUREMENTS TO THERMS (continued)~~

~~Town~~	~~Atmospheric Pressure, psi~~
Stanfield	14.43
Sunriver	12.70
Umatilla	14.58
Vale	13.60
Weston	13.87

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CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet 17.1**

RULE 17
ORDER OF PRIORITY FOR GAS SERVICE

GENERAL

The Company will exercise reasonable diligence to supply and deliver continuous natural gas service to all customers receiving firm service, as defined in Rule 2.

Should the Company's supply of gas or capacity be insufficient at any time or any location, for reasons other than force majeure (as defined in Company's Rule 16) to meet the full requirements of all customers, the Company will curtail service to customers in the inverse order of order of priority listed hereinafter. Such curtailment, when required, will be imposed to protect continuity of service first, to firm service customers, and more generally, to customers having a higher service priority.

ORDER OF PRIORITY

1. Residential customers.

2. Firm Service Commercial and institutional customers as follows:
   a. Commercial and institutional customers served under Rate Schedules 104 and 105~~,~~;
   b. Commercial or institutional customers served on other firm service rate schedules;~~,~~
   c. Agricultural service customers including customers who use gas for ~~and essential~~ agricultural production, natural fiber production or processing, food processing, food quality maintenance, and irrigation pumping, and where gas is used as a process fuel or feedstock in the production of fertilizer, agricultural chemicals, animal feed, or food; and
   ~~service and other high priority users not covered elsewhere.~~d. High priority use customers where the continuity of gas service is considered in the public's best interest such as gas usage in a school, hospital, correctional facility or for police or fire protection.

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3. Firm Service Industrial customers using gas as feedstock in a process in which natural gas is used as a raw material and as plant protection requirements of lower priority customers.

4. Firm Service Industrial customers with consumption of less than 1,000 therms per day.

5. Firm Service Industrial customers with consumption of more than 1,000 therms per day but less than 10,000 therms per day.

6. Industrial customers with consumption of more than 10,000 therms per day, including customers receiving service on Schedule 201, Special Contracts.

7. General distribution system interruptible transportation service customers.

8. Customers receiving interruptible natural gas service.

CASCADE NATURAL GAS CORPORATION

SCHEDULE 170
INTERRUPTIBLE SERVICE

ANNUAL DEFICIENCY BILL

In the event a customer purchases less than the annual minimum quantity, as defined in the contract, the customer shall be charged an Annual Deficiency Bill. Annual Deficiency Bill shall be calculated by multiplying the difference between the Annual Minimum Quantity and the therms actually taken (Deficiency Therms) times the difference between the commodity rate in this Rate Schedule 170, as modified by any applicable rate adjustments, and the weighted average commodity cost of system supply gas as such costs are reflected in the Company's tariffs. If the Company curtailed or interrupted service, the Annual Minimum Quantity shall be reduced by a fraction, the numerator of which is the actual number of days or fraction thereof, service was curtailed and the denominator of which is 365.

CURTAILMENT

Service under this schedule is subject to curtailment as established in Rule 17. Customer usage of gas above the amount authorized by the Company during a curtailment period shall be considered an unauthorized overrun volume. The overrun charge that will be applied during any overrun entitlement period will equal the greater of $1.00 per therm or 150% of the highest midpoint price for the day at NW Wyoming Pool, NW south of Green River, Stanfield Oregon, NW Canadian Border (Sumas), Kern River Opal, or El Paso Bondad supply pricing points (as published in "Gas Daily"), converted from dollars per dekatherms to dollars per therm by dividing by ten. The overrun charge will be in addition to the incremental costs of any supplemental gas supplies the Company may have had to purchase to cover such unauthorized use, in addition to the regular charges incurred in the Rate section of this Schedule and any other charges incurred per the terms and conditions established in this Schedule. The payment of an overrun penalty shall not under any circumstances be considered as giving customer the right to take unauthorized overrun gas or to exclude any other remedies which may be available to the Company to prevent such overrun. The charge that will apply during any underrun entitlement period will be $1.00 per therm for any underrun imbalances.

~~**ESSENTIAL AGRICULTURAL AND HGH PRIORITY USE**~~

~~Service under this schedule is not available to an essential agricultural user or a high priority user, as defined in Rule 2.~~

SPECIAL TERMS AND CONDITIONS

Service under this schedule shall be rendered through one or more meters at a single point of delivery and may at the Company's option be rendered in conjunction with firm service to said customer.

GENERAL TERMS

Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

CASCADE NATURAL GAS CORPORATION

P.U.C. OR. No. 10 **Original Sheet No. 200.1**

SCHEDULE 200
VARIOUS MISCELLANEOUS CHARGES

APPLICABILITY

This schedule sets forth the provisions for various charges throughout these rules and regulations. The name and amount of the charges are listed below. The rules or rate schedules to which each charge applies are in parenthesis.

I. Reconnection Charge (Rule 5)

a. Standard, 8 a.m. and 5 p.m., Monday through Friday, excluding holidays	$32.00
b. After Hours between 5 p.m. and 9 p.m., Monday through Friday	$50.00
c. Same Business Day or on a Saturday, Sunday or holidays	$100.00

A reconnection charge will be required for reestablishment of service at the same address for the same person taking service, if service was disconnected at the customer's request or if it was disconnected involuntarily for reasons other than for Company initiated safety or maintenance.

II. Deposit for Meter Test - (Rule 8) $50.00

III. Field Visit Charge- (Rule 5) $10.00

A field visit charge may be assessed whenever Cascade visits a customer's address for the purpose of disconnecting service or reconnecting service and due to the customer's action is unable to complete the disconnection or reconnection.

IV. Late Payment Charge – (Rule 5) 0.3% annualized interest~~$200.00~~

A late payment charge at a rate determined by the Commission based upon a survey of prevailing market rates will be charged to the customer's current bill when the customer has a prior balance owing of $200 or more.

V. Returned Payment Charge - (Rule 6) $10.00

A returned check fee of ten dollars ($10.00) may apply for any payment returned unpaid.

VI. Residential Excess Flow Valves – (Rule 9)

a. Installation of an Excess Flow Valve: $38.00

The customer will be responsible for any maintenance or replacement costs that may be incurred due to the excess flow value. Such cost shall be based upon time and materials.

b. Modifying an Existing Service Line:

- Time of Construction Crew up to $220.00 per hour
- Cost of Materials required to open and close service connection trench, including asphalt replacement, if any.
- Installation of the Excess Flow Valve $38.00

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG 305

Cascade Natural Gas Corporation

Jennifer G. Gross

CLEAN REPLACEMENT
TARIFF SHEETS
EXHIBIT CNGC/1103

September 2016

INDEX

RULES

PUBLIC PURPOSES

RATE SCHEDULES

(continued)

RULE 2
DEFINITIONS

DEFINITIONS

When used in this Tariff the following terms shall have the meanings defined below:

1. Applicant - A person, firm, or corporation that (1) applies for service; (2) reapplies for service at a new or existing location after service has been disconnected; or (3) has not met the requirements for becoming a customer as established in Rule 3.

2. BTU - British Thermal Unit

3. British Thermal Unit - The standard unit for measuring a quantity of thermal energy. One BTU equals the amount of thermal energy required to raise the temperature of one pound of water one degree Fahrenheit and is exactly defined as equal to 1,055.05585262 joules. 100,000 BTUs is equivalent to one therm.

4. Commission - The Public Utility Commission of Oregon or otherwise referred to as OPUC.

5. Company - Cascade Natural Gas Corporation (Cascade) or its assigned agents acting through its duly authorized officers or employees within the scope of their respective duties.

6. Customer - Any person, firm, or corporation that has:
   a. Applied for, been accepted, and is currently receiving gas and, or distribution service from the Company under these Rules and Regulations at one location under one rate classification contract, or
   b. Received gas or distribution service from the Company, and voluntarily terminated service within the past twenty days.

7. Curtailment - An event when the Company must interrupt service to customers in accordance with Rule 17. A Curtailment event may affect any level of service depending on the severity and geographical scope of the event.

8. Customer Classifications:
   A. Residential - Service to a single family dwelling, two family (duplex) dwelling or to an individual dwelling unit in a multiple family dwelling building for residential purposes including space heating, water heating, and cooking.

      1. Dwelling - A building designed exclusively for housing that contains permanent facilities for sleeping, bathing, and cooking. A dwelling may be a one family home, a duplex, a multiplex, but not including hotel or motel units that have no permanent kitchens.

(continued)

RULE 2
DEFINITIONS

DEFINITIONS (continued)

Customer Classifications (continued)

B. Commercial - Service to a customer engaged in selling, warehousing, or distributing a commodity, in some business activity or in a profession, or in some form of economic or social activity (office, stores, clubs, hotels, etc.) and for purposes that do not come directly under another classification of service.

C. Industrial - Service to a customer engaged in a process which creates or changes raw or unfinished materials into another form or product. (Factories, mills, machine shops, mines, oil wells, refineries, pumping plants, creameries, canning and packing plants, shipyards, etc., i.e., in extractive, fabricating or processing activities).

D. Institutional - Service to a customer of a public character including but not limited to governmental buildings, colleges, schools, hospitals, clinics, institutions for the care or detention of persons, and similar establishments.

E. Interruptible Gas - An interruptible gas service customer is considered "non-core" and receives a reduced rate on natural gas service because this class of customers is the first curtailed when gas supply or distribution is constrained for reasons other than force majeure.

F. Transportation - Transportation customers purchase their own natural gas and procure only distribution services from the Company.

9. Gas Day - A twenty-four hour period beginning daily at 7:00 a.m. Pacific Clock Time (PCT), which is Pacific Standard Time or Daylight Savings Time in Kennewick, Washington, whichever is effective at the time of reference. The Company's Gas Day coincides with the Gas Day established in Northwest Pipeline's tariff, which may change from time to time, upon approval of the Federal Energy Regulatory Commission (FERC).

10. Essential Agricultural Use - When gas is used: (1)for agricultural production, natural fiber production, natural fiber processing, food processing, food quality maintenance, irrigation pumping, crop drying; or (2) As a process fuel or feedstock in the production of fertilizer, agricultural chemicals, animal feed, or food which the Secretary of Agriculture determines is necessary for full food and fiber production.

11. Firm Service - The sale of natural gas on a firm basis where the Company will exercise reasonable diligence to supply and deliver continuous service to customers not receiving interruptible service. See Order of Priority in Rule 17.

(continued)

CASCADE NATURAL GAS CORPORATION

RULE 2
DEFINITIONS

DEFINITIONS (continued)

12. High Priority Use – High priority use is where continuity of gas service is considered in the public's best interest such as gas usage in a residence, school, hospital, or correctional facility, or for police or fire protection.

13. Month - The period of time between and including the date of the current meter read and the date of the prior meter read which is the period upon which the Customer's monthly bill is based. A billing month may be contained within a single calendar month, or may encompass a portion of two separate calendar months.

14. Premise - All of the real property and personal property in use by a single customer on a parcel of land which comprises the site upon which customer facilities are located and to which natural gas service is provided.

15. Tariff - This Tariff, including all schedules, rules, regulations, and rates as they may be modified or amended from time to time.

16. Therm - A unit of heating value equivalent to 100,000 BTUs.

17. WACOG - The Weighted Average Commodity Cost of System Supply Gas (WACOG) reflected in Cascade's tariffs shall be as established by gas cost tracking or other similar filings.

RULE 3
ESTABLISHING SERVICE

REQUIREMENTS FOR ESTABLISHING SERVICES

To establish service with the Company, an applicant must do the following:

1. Provide the Company with: a) the date service is to begin; b) whether the premise has previously received service from the Company; c) the purpose for which the gas is to be used; d) whether the applicant owns or rents the premise; e) the applicable rate schedule; and f) any other information that the Company deems necessary;
2. Establish Identity in accordance with the requirement in Section A below in this Rule; and
3. Establish Credit in accordance with the requirements found in Section B below in this Rule.

By establishing service, a customer agrees to be bound by all the terms and conditions of service as established in the Company Tariff as periodically revised and approved by the Public Utility Commission of Oregon.

A. ESTABLISHING IDENTITY

To establish an account, each applicant, including an applicant for co-customer, is required to provide documentation verifying his/her identity. Cascade may require: a) the name of person responsible; b) name on the account if different; c) birthdate; d) Social Security Number; e) valid Oregon driver's license; f) service address; g) billing address if different; h) telephone numbers where applicant can be reached; and I) other information as deemed necessary by the Company.

If the applicant does not wish to provide his/her Social Security Number or valid driver's license, he/she may provide a valid State or Federal picture identification; a combination of a birth certificate and current school or employer picture identification; the name of another person that can verify the applicant's identity; or other information deemed sufficient by the utility.

Once an account is established, at the customer's request, Cascade will restrict access of the account by other individuals through the use of a password.

B. ESTABLISHING CREDIT

Below are the criteria for establishing credit for residential and non-residential customers, respectively. A customer who cannot meet the requirements put forth below must pay a Deposit or provide other security in accordance with the terms and conditions in Rule 4.

(continued)

CASCADE NATURAL GAS CORPORATION

RULE 3
ESTABLISHING SERVICE

ESTABLISHING SERVICE (continued)

B. ESABLISHING CREDIT (continued)

1. **RESIDENTIAL SERVICE**

   Satisfactory credit may be established by any of the following:

   a. Received twelve months of continuous utility service (of same type) in the preceding 24-month period and the utility can verify that the applicant voluntarily terminated service and paid for services as required;

   b. Provides proof of ability to pay by providing either proof of employment during the prior 12-month period, or statement by income provider that applicant has a regular source of income; or

   c. Meets the Commission approved minimum credit requirements based on a third party credit report score or the Company's own credit scoring formula.

2. **NON RESIDENTIAL SERVICE**

   A non-residential applicant may establish credit if either of the following is verified:

   a. The non-residential applicant has received continuous utility service of a type and in quantities similar to the service for which application is made during the 12-month period prior to the date of the credit screen and has not received any notices of disconnection during such period; or

   b. The non-residential applicant is licensed to do business in the state of Oregon and has kept current over the past twelve months on all real estate mortgages or lease agreements, commercial loans, utility bills and trade accounts.

COMPLIANCE TO RULES AND REGULATIONS

By establishing an account, a customer agrees to comply with all the applicable rules and regulations as established in this Tariff as revised from time to time.

RULE 4
CUSTOMER DEPOSITS AND OTHER SECURITY

GENERAL
The Company may require a deposit or other form security from an applicant or customer for reasons set forth in Rule 3 and this Rule.

Paying a deposit or providing some other form of security does not excuse a customer from complying with Cascade's tariffs or other regulations on file with the Commission, such as the obligation to pay bills promptly.

RESIDENTIAL DEPOSITS REQUIREMENTS AND SURETY AGREEMENTS

1. An applicant or customer may be required to pay a deposit when the applicant or customer:
   a. Is unable to establish credit as outlined in Rule 3;
   b. Received the same type of service from any Oregon energy utility within the prior 24 months and owed a balance when service was terminated; or
   c. Was previously terminated for theft of service by any Oregon utility, found to have tampered with the meter, or diverted service.

2. A deposit required under these rules shall not exceed one-sixth the amount of reasonable estimated billing for one year at rates then in effect. This estimate shall be based upon the use of service at the premise during the prior year or upon the type and size of the customer's equipment that will use the service.

3. Any additional or subsequent deposit may be required as a condition of continued service if any of the following are true:

   a. If the customer remodels, adds gas appliances or moves, and the anticipated usage will be at least 20 percent greater than that upon which the prior deposit was based;
   b. The customer gave false information to establish an account and/or credit status; or
   c. The customer has stolen service, tampered with the meter, or diverted service.

4. In lieu of paying a deposit, a residential customer may provide the Company with a written surety agreement from a responsible party. A responsible party must be a current Cascade customer who is able to meet the requirements for establishing credit per Rule 3. The written surety must secure payment equal to two months average usage. If the customer, whose account is secured with a surety agreement, is disconnected for non-payment, the Company may require that the responsible party who signed the surety agreement pay the amount specified in the surety agreement.

(continued)

RULE 4
CUSTOMER DEPOSITS AND OTHER SECURITY

DEPOSIT PAYMENT ARRANGEMENTS FOR RESIDENTIAL SERVICE

1. When Cascade requires a deposit, the customer may pay the deposit in full or elect to pay the deposit in three installments. The first installment is due immediately. The remaining installments are due 30 days and 60 days after the first installment payment. Except for the last payment, installments shall be the greater of $30 or one-third the deposit.

2. Where an installment payment of a deposit is made together with a payment for gas service, the amount paid shall first be applied toward payment of the amount due for deposit.

3. In the event a consumer is required to pay an additional deposit, the customer shall pay within five days one-third of the total deposit, or at least $30, whichever is greater. The remainder of the deposit is due under the terms of Subsection 1. If the customer has an existing deposit installment agreement, the remaining installment payments will be adjusted to include the additional deposit; however, two installment payments cannot be required within the same 30-day period.

4. Where a customer enters into an installment agreement for payment of a deposit under Subsection 1 of these rules, Cascade shall provide written notice explaining its deposit requirements. The notice shall specify the date each installment payment shall be due and shall include a statement printed in boldface type informing the person that service will be disconnected if payment is not received when due. The notice shall also set forth the name and telephone number of the appropriate unit within the Department of Human Services or other agencies which may be able to help the customer obtain financial aid.

5. If a customer fails to abide by the terms of a deposit installment agreement, the Company may disconnect service after a five-day notice. The notice shall contain the information and shall be served in the manner set forth in Rule 5.

6. Where good cause exists, Cascade may provide more liberal arrangements for payment of deposits than those set forth in this rule. Cascade shall keep a written record of the reasons for such action.

7. Should disconnection for nonpayment of a deposit occur, the person disconnected shall be required to pay the full amount of the deposit, and any applicable reconnection fee, disconnect visit charge, late-payment fee, and one-half the past due amount before service is restored. The balance of the past-due amount shall be paid within 30 days of the date service is restored. A customer may continue with an existing time-payment agreement by paying all past-due installments, along with the full deposit and other applicable fees.

(continued)

RULE 4
CUSTOMER DEPOSITS AND OTHER SECURITY

NONRESIDENTIAL DEPOSIT REQUIREMENTS

1. Deposit Requirement - Nonresidential (Seasonal and Non-seasonal Service). A deposit may be required equal to one-sixth the estimated annual usage at the service address if an applicant or customer:
   a. Does not satisfy the credit-screening criteria set forth in Rule 3.
   b. Owes a bill that is overdue by thirty (30) days or more;
   c. Was previously exempted from paying a deposit based upon false information given at the time of application;
   d. Is involved in a bankruptcy action, liquidation, bulk sale or financial reorganization;
   e. Is adding incremental demand at a premise with an existing service account; or
   f. The non-residential customer is past due on commitments to creditor such as real estate mortgages or lease agreements, commercial loans, other utility bills and trade accounts.

DEPOSIT PAYMENT ARRANGEMENTS FOR NON-RESIDENTIAL SERVICE

1. An applicant for nonresidential service who is required to pay a deposit shall pay the deposit in full prior to receiving service. An applicant for nonresidential service may also fulfill the deposit requirement with an irrevocable letter of credit, surety bond (performance bond) or some other form of guarantee acceptable to the Company.

2. An existing nonresidential customer is considered to be an applicant for purposes of satisfying the deposit requirement. An existing nonresidential customer, if required to pay or supplement a deposit, is required to pay the full amount within 10 days of the date of the notice from the Company that such a deposit is required. This notice will also serve as the notice of disconnection required under OAR 860-021-0505.

3. If service is disconnected for nonpayment of a deposit, the customer disconnected will be required to pay the full amount of the deposit, plus any applicable reconnection fee, disconnect visit charge, late payment fee and past due account balance before service is restored.

INTEREST ON DEPOSITS FOR RESIDENTIAL AND NONRESIDENTIAL SERVICE

1. Unless otherwise specified by the Commission, customer deposits shall accrue interest at a rate based upon the effective interest rate for new issues of one-year Treasury Bills issued during the last week of October as determined by the Commission in Docket No. UM 779. This interest rate, rounded to the nearest percent, shall apply to deposits held during January 1 through December 31 of the subsequent year.

(continued)

RULE 4
CUSTOMER DEPOSITS AND OTHER SECURITY

INTEREST ON DEPOSITS FOR RESIDENTIAL AND NONRESIDENTIAL SERVICE (continued)

2. Upon payment of a deposit, Cascade shall furnish a receipt showing the date, name of the applicant or customer, the service address, the amount of deposit, a statement that the deposit will accrue interest at the rate prescribed by the Commission, and an explanation of the conditions under which the deposit will be refunded.

3. If the deposit is held beyond one year, accrued interest will be paid through a credit to the customer's account. If held less than one year, interest will be prorated. Cascade shall keep a detailed record of each deposit received until the deposit is credited or refunded.

REFUND OF DEPOSITS FOR RESIDENTIAL AND NONRESIDENTIAL SERVICE

1. Upon termination of service, a customer's deposit plus accrued interest, shall first be applied to any unpaid balance on the customer's account and any remaining balance will be refunded to the customer.

2. Cascade may continue holding a deposit until such time as credit is satisfactorily established or reestablished. For purposes of this rule, credit shall be considered to be established or reestablished if one year after a deposit is made:

   a. The account is current;
   b. Not more than two five-day disconnection notices were issued to the customer during the previous 12 months; and
   c. The customer was not disconnected for nonpayment during the previous 12 months.

3. After satisfactory credit has been established or reestablished, the deposit plus any accrued interest shall be promptly credited to the customer's account or refunded at the customer's request.

4. In the event the customer moves to a new address within Cascade's service area, the deposit, plus accrued interest, will be transferred to the new account.

5. Unless otherwise specified by the customer, Cascade shall mail deposit refunds to the customer's last known address. Valid claims for refunds received within one year of the date service was terminated shall be promptly honored. Funds held beyond one year will be disposed of in accordance with ORS 98.316.

RULE 5
DISCONTINUATION OF SERVICE

GROUNDS FOR DISCONNECTING GAS SERVICE

Gas service may be disconnected:

a) When the applicant or customer fails to pay a deposit or make payments in accordance with the terms of a deposit payment arrangement as outlined in Rule 4;

b) When the applicant or customer provides false identification to establish service, continue service, or verify identity;

c) When the customer fails to pay Oregon tariff or price-listed charges due for services rendered.

d) When the customer fails to abide by the terms of a time-payment agreement;

e) When the customer requests Cascade disconnect service or close an account or when a co-customer fails to reapply for service within 20 days after a joint account is closed by the other co-customer, so long as the Company has provided a notice of pending disconnection;

f) When the customer does not cooperate in providing access to the meter;

g) When facilities provided are unsafe or do not comply with state and municipal codes governing service or the utility's rules and regulations;

h) When there is evidence of meter-tampering, diverting service, or other theft of service;

i) When dangerous or emergency conditions exist at the service premises under OAR 860-021-0315; or

j) When the Commission approves the disconnection of service.

VOLUNTARY DISCONNECTION

Every customer who is about to vacate any premise supplied with gas service, or who for any reason wishes to have such service discontinued, shall give five days' notice to the Company in advance of specified date of discontinuance of service. Until the Company has such notice, the customer shall be held responsible for all service rendered.

(continued)

RULE 5
DISCONTINUATION OF SERVICE

EMERGENCY DISCONNECTION
In emergencies endangering life or property, a utility may terminate service without following the procedures set forth in this rule. However, Cascade shall immediately thereafter notify the Commission. In such cases, where the necessity for emergency termination was through no fault of the customer, there will be no charge made for restoration of service.

DISCONNECTION OF SERVICE ON WEEKENDS AND HOLIDAYS
Gas service shall not be disconnected for nonpayment on or the day prior to a weekend or a state or utility-recognized holiday.

NOTICE OF PENDING DISCONNECTION OF RESIDENTIAL SERVICE

1. Notice requirements are waived where safety concerns, or meter tampering, diverting of service, or other theft of service is detected. When a written notice is given under these rules:

    a. The notice shall contain multilingual information as required by Commission rules and be served on the customer's designated representative, if any;

    b. If Cascade's records show that the billing address is different from the service address, and Cascade has reason to believe the address is occupied by someone other than the customer, Cascade shall provide a five-day notice to both the occupants of the service address and to the customer's mailing address. The notice may be addressed to "tenant" or "occupant." The envelope shall bear a bold notice stating "Important notice regarding continuance of gas service" or similar words. The notice to occupants may not include the dollar amount owing.

    c. When Cascade's records show service is to a master-metered multi-family dwelling (including rooming houses), Cascade must notify the Commission's Consumer Services Section at least five business days prior to disconnecting the service. Cascade will use reasonable efforts to notify occupants of the impending disconnection and alternatives available to them.

2. The notice shall be printed in **bold face type** and shall state in easy to understand language:

    a. The reason for the proposed disconnection;

    b. The earliest date for disconnection;

    b. An explanation of the Commission's complaint process and toll-free number; and

(continued)

RULE 5
DISCONTINUATION OF SERVICE

NOTICE OF PENDING DISCONNECTION OF RESIDENTIAL SERVICE (continued)

c. If the disconnection is for nonpayment of services rendered, including failure to abide by a time payment agreement, the notice must also state:

1. The amount to be paid to avoid disconnection;

2. An explanation of the time payment agreement provisions of OAR 860-021-0415;

3. An explanation of the medical certificate provisions of OAR 860-021-0410; and

4. The name and telephone number of the appropriate unit of the Department of Human Services or other agencies that may be able to provide financial assistance.

At least 15 days before Cascade disconnects a residential customer for nonpayment of services rendered, Cascade will provide written notice to the customer. A 15-day notice is not required when disconnection is for:

a) Providing false identification to establish service, continue service, or verify identity;

b) Meter tampering diverting service, or other theft; or

c) The existence of unsafe conditions.

4. A notice of disconnection may not be sent prior to the due date for payment of a bill.

5. Cascade may serve the 15-day notice of disconnection in person or send it by first class mail to the last known address of the customer. Service is complete on the date of personal delivery or the day after notification is postmarked.

(continued)

RULE 5
DISCONTINUATION OF SERVICE

NOTICE OF PENDING DISCONNECTION OF RESIDENTIAL SERVICE (continued)

6. At least five business days before the proposed disconnection date, Cascade must mail or deliver a written disconnection notice to the customer.

   a. The disconnection notice shall inform the person that service will be disconnected on or after a specific date and shall explain the alternatives and assistance that might be available.

   b. If notification is made by delivery to the residence, Cascade shall attempt personal contact. If personal contact cannot be made with the customer or an adult resident, Cascade shall leave the notice in a conspicuous place at the residence.

7. On the day that Cascade expects to disconnect service and prior to disconnection, Cascade will make a good faith effort to personally contact the customer or an adult at the residence scheduled to be disconnected.

   a. If the contact is made, Cascade shall advise the person of the proposed disconnection;

   b. If contact is not made, Cascade must leave a notice in a conspicuous place at the residence informing the customer that service has been, or is about to be, disconnected.

8. Where personal contact is made by the Company under this rule, and the circumstances are such that a reasonable person would conclude that the customer does not understand the consequences of disconnection, the Company must:

   a. Notify the Department of Human Services and the Commission; and

   b. Delay the proposed disconnection date for five additional business days.

(continued)

RULE 5
DISCONTINUATION OF SERVICE

NOTICE OF PENDING DISCONNECTION OF RESIDENTIAL SERVICE (continued)

9. Where personal contact is made, the representative of the Company making contact shall be empowered to accept reasonable partial payment of the overdue balance in accordance with the time payment provisions.

10. Cascade must document its effort to provide notice and shall make the documentation available to the customer and the Commission upon request.

EMERGENCY MEDICAL CERTIFICATE FOR RESIDENTIAL SERVICE

1. Cascade shall not disconnect residential service if the customer submits certification from a qualified medical professional stating that disconnection would significantly endanger the physical health of the customer or a member of the customer's household. "Qualified medical professional" means a licensed physician, nurse-practitioner, or physician's assistant authorized to diagnose and treat the medical condition described without direct supervision by a physician.

2. An oral certification must be confirmed in writing within 14 days by the qualified medical professional prescribing medical care. Written certification must include:

   a. The name of the person to whom the certificate applies and relationship to the customer;

   b. A complete description of the health condition;

   c. An explanation how the health of the person will be significantly endangered by the termination of service;

   d. A statement indicating how long the health condition is expected to last;

   e. A statement specifying the particular type of utility service required (e.g. gas for heating); and

   f. The signature of the qualified medical professional prescribing medical care.

3. An emergency medical certificate shall be valid only for the length of time the health endangerment is certified to exist, but no longer than six months without renewal when the certificate is issued for a non-specific chronic illness or no longer than twelve months without renewal when the certificate is issued for a specific chronic illness. At least 15 days before the certificate's expiration date, Cascade will give the customer written notice of the date the certificate expires unless it is renewed with Cascade before that day arrives.

(continued)

RULE 5
DISCONTINUATION OF SERVICE

EMERGENCY MEDICAL CERTIFICATE FOR RESIDENTIAL SERVICE (continued)

4. A customer submitting a medical certificate is not excused from paying for gas service.

   a. Customers are required to enter into a written time-payment agreement with Cascade where an overdue balance exists. Terms of the time-payment agreement shall be those set forth in this Rule 5 or other terms as agreed upon in writing between the parties.

   b. Where financial hardship can be shown, a customer with a medical certificate shall be permitted to renegotiate the terms of a time-payment agreement with Cascade.

   c. Time-payment arrangements in effect when a medical certificate terminates remain in effect for the balance then owing. If a customer fails to pay charges incurred after the certificate terminates, standard time-payment provisions (Rule 5) will apply to payment of the arrearage incurred after the medical certificate expires. The terms of the medical certificate time-payment plan continue to apply to the arrearage accrued during the disability.

5. If a medical certificate customer fails to enter into a written time-payment agreement within 20 days of filing the certificate or to abide by its terms, Cascade shall notify the Commission's Consumer Services Section of its intent to disconnect service and the reason for the disconnection. Cascade may disconnect service after providing a notice 15 days in advance of disconnection for nonpayment, or five days before disconnection for failure to enter into a written time-payment agreement. The notice shall comply with the requirements of Part I, Subsection 2, except that Subsection e shall not apply. A hearing may thereafter be held to determine whether Cascade should be permitted to disconnect service to the customer.

6. Cascade may verify the accuracy of a medical certificate. If Cascade believes a customer does not qualify, or no longer qualifies for a medical certificate, Cascade may apply to the Commission for permission to disconnect the customer's service.

TIME-PAYMENT AGREEEMENTS FOR RESIDENTIAL SERVICE (NON MEDICAL CERTIFICATE CUSTOMERS)

1. Cascade will not disconnect residential service for nonpayment if a customer enters into a written time-payment plan. Cascade will offer customers a choice of payment agreements. At a minimum, the customer may choose between a levelized payment plan and an equal payment arrearages plan.

(continued)

CASCADE NATURAL GAS CORPORATION

RULE 5
DISCONTINUATION OF SERVICE

TIME-PAYMENT AGREEEMENTS FOR RESIDENTAIL SERVICE (NON MEDICAL CERTIFICATE CUSTOMERS) (continued)

2. A customer who selects a levelized-payment plan will pay a down payment equal to the average annual bill including the account balance, divided by twelve, and a like payment each month for eleven months thereafter.

   a. Cascade shall periodically review the monthly installment plan. If necessary, due to changing rates or variations in the amount of service used by the customer, the installment amount may be adjusted to bring the account into balance within the time period specified in the original agreement.

   b. If a customer changes service address at any time during the period of a time-payment agreement, provided that payments are then current and the customer pays other tariff charges associated with the change in residence, Cascade shall recalculate the customer's deposit and/or monthly installment. The recalculated amount shall reflect the balance of the account at the previous service address and the average annual bill at the new service address for the months remaining in the original time-payment agreement. When installments on a time-payment agreement have not been kept current, a customer shall be required to pay all past-due installments, together with any other applicable charges before service is provided at the new residence.

3. A customer who selects an equal payment arrearages plan will pay a down payment equal to one-twelfth the amount owed for past gas service (including the overdue amount and any amounts owed for a current bill or a bill being prepared but not yet delivered to the customer). Each month, for the next eleven months, an amount equal to the down payment will be added to, and payable with, the current charges due for service. If a customer changes service address at any time during the period of an arrearages payment plan, the plan continues. However, the customer must pay any past-due charges and all other applicable charges before Cascade provides service at the new address.

4. Cascade and the customer may agree in writing to an alternate payment arrangement, provided Cascade first informs the customer of the availability of the payment terms set forth in this rule.

5. If a customer fails to abide by the time-payment agreement, Cascade may disconnect service after serving 15 days' notice.

(continued)

CASCADE NATURAL GAS CORPORATION

RULE 5
DISCONTINUATION OF SERVICE

FIELD VISIT CHARGE
A Field Visit Charge as established in Schedule 200 may be charged whenever Cascade is required to visit a residential service address for the purpose of disconnecting or reconnecting service, but due to the customer's action, is unable to complete the reconnect or disconnect.

LATE PAYMENT CHARGE
A Late-Payment Charge as established in Schedule 200 will be applied to overdue account balances, both residential and nonresidential, at the time of preparing the subsequent month's bill. The Late-Payment Charge may not be applied to time-payment or equal-payment accounts that are current, and will be applied only to accounts that have an overdue balance greater than $200. The Commission will determine the Late-Payment Charge by surveying prevailing market rates for late-payment charges of commercial enterprises. The Commission will notify Cascade by November 15 of each year what rate may be used to determine late-payment charges on overdue customer accounts during the following calendar year. The current late-payment rate and the conditions for its application to customer accounts shall be specified on the gas bill.

RULE 6
BILLING

GENERAL

Gas consumed, as indicated by meter readings, will be billed to customers as promptly as possible after reading dates, at approximately thirty day intervals, computed per applicable filed tariff rates. Bills will be due and payable fifteen days after they are rendered.

When an under- or overbilling occurs, Cascade shall provide written notice to the customer detailing the circumstances, period of time, and amount of adjustment. The exception to these provisions is if issuing a correction is uneconomical in the sole view of the Company.

1. Underbillings: For underbillings, the Company may issue a bill correction if the error occurred within the prior twelve month period ending on the date on which the customer or former customer was last billed. The Company will not issue billing corrections for underbillings in excess of two years (twenty-four months). However, if an underbilling is a result of fraud, tampering, diversion, theft, misinformation, false information or other unlawful conduct on the part of the customer or former customer, the Company may collect full payment for any amount owed without limitation.

   Where a Customer is required to repay an underbilling, the Customer shall be entitled to enter into a time payment agreement without regard to whether the customer already participates in such an agreement. If the customer and Cascade cannot agree upon payment terms, the Commission shall establish terms and conditions to govern the repayment obligation. Cascade shall provide written notice advising the customer of the opportunity to enter into a time payment agreement and of the Commission's appeal and complaint process.

2. Overbillings: For overbillings, the Company will issue a credit for amounts previously overbilled within the prior twelve month period ending on the date on which the customer or former customer was last overbilled. The Company will not issue credits for amounts overbilled for more than three years (thirty-six months) before the date the energy utility discovered the overbilling.

No billing adjustment shall be required if a gas meter registers less than two percent error under conditions of normal operation.

Bills will show dates of readings, readings at beginning of period and end of period, the number of cubic feet, therms, or other units of measurement of gas consumed, the tariff schedule code applicable, the delinquent date of bill, and the amount of the bill. Any estimated reading shall be clearly noted on the bill.

Cascade should make reasonable efforts to prepare opening and closing bills from actual meter readings.

(continued)

RULE 6
BILLING

TRANSFER BILLINGS

If Cascade identifies that a customer owes Cascade a balance from the customer's prior account for Oregon service, Cascade may transfer the amount to the customer's current account after giving the customer notice of the transfer, the amount due under the prior account, the period of time during which the balance was incurred and the service address under which the bill was incurred. The notice must also meet the provisions for notifications as established in Rule 5. If the bill is identified at the time a customer changes residences, the provisions of this rule apply.

If the customer has six months or more remaining on a time-payment agreement, the installment amount will be adjusted in order to bring the account into balance within the time period specified in the original agreement. If the customer has less than six months remaining on a time-payment agreement, Cascade will recalculate the agreement to bring the account into balance within 12 months. The customer must pay any past due time-payment installments before Cascade adjusts or recalculates the agreement. Cascade may make more liberal payment arrangements for customers on medical certificates who cannot reasonably be expected to pay the outstanding balance in the time otherwise applicable under this rule.

BUDGET PAYMENT PLAN FOR PAYMENTS OF GAS BILLS

The budget payment plan for payment of gas bills averages a residential customer's monthly payments for gas service for a period of no less than twelve months. The budget payment plan is available to residential customers who have no outstanding balance with the Company.

At the request of a residential customer with satisfactory credit and no balance outstanding, the Company will estimate the customer's annual billing for gas service, based on the previous twelve months' usage. The estimated amount will then be divided by twelve. The resultant amount, rounded to the next full dollar, shall be the amount the customer will pay in lieu of the regular monthly billing for each month of the budget payment plan period. At the end of the plan year, any outstanding debit or credit balances will be rolled into the estimated usage for the following plan year and will be reflected in that year's monthly budget payment plan amount. Credit balances will be refunded to the customer if the customer specifically requests a refund.

For each succeeding annual budget payment period the Company will re-estimate the amount of the customer's bills for service for the ensuing period and so advise the customer. Unless the customer advises the Company to the contrary, such new monthly budget payment installments will be used for the ensuing payment period. If the customer requests to leave the plan, any debit balance will be due and payable under the regular terms of payment for gas service; credit balances may be applied to future gas bills or, if the customer so requests, refunded to the customer.

(continued)

RULE 6
BILLING

BUDGET PAYMENT PLAN FOR PAYMENTS OF GAS BILLS (continued)
During each budget payment plan period the customer shall be entitled to receive gas service so long as the customer pays each monthly budget payment plan installment as it becomes due. If a customer fails to comply with the terms of this plan, the budget payment plan will be discontinued and the customer will be billed monthly on the basis of actual usage. If a customer fails to comply with the terms of this plan, and has a debit balance, customer may be subject to disconnection of service under Rule 5.

For each billing period the customer will receive a bill showing the amount of gas used during the billing period, the charge for such gas used, the balance of account and the amount of the current month's budget payment plan installment.

Any estimates furnished by the Company in connection with such budget payment plan shall not be construed as a guarantee or assurance that the total actual charges will not exceed the estimates. The Company may at any time submit a revised estimate to the customer and require that the customer pay the revised monthly budget payment plan installment as a condition to the continuation of the budget payment plan for that customer.

Such estimates or any revising thereof shall apply only to the premise then occupied by the customer. If the customer vacates such premise and moves to a different premise served by Cascade, the amount of the budget payment will be re-estimated and the customer will be advised of the change. If the customer will not desire natural gas service from Cascade at the new premise, the budget payment plan shall immediately terminate and any amount payable from the customer will be due and payable under the regular terms of payment for gas service; any amount due the customer by the Company shall be refunded.

RETURNED PAYMENT FEE
The Company will charge a Returned Payment Fee, as established in Schedule 200, for any payment returned unpaid.

CONVERSION OF METER MEASUREMENTS TO THERMS
All meter measurements for gas service shall be converted to a therm basis for billing purposes. Such conversion shall be based on the temperature of the gas, the absolute pressure of the gas, and the measured heating values at standard conditions of the gas received from the pipeline supplier(s).

(continued)

RULE 6
BILLING

CONVERSION OF METER MEASUREMENTS TO THERMS (continued)

In cases where meters are not mechanically or electronically corrected for temperature, monthly temperature correction factors (Heat Value Multiplier) will be used to determine customer billing therms. The Heat Value Multiplier is calculated as the current pipeline heating value times a temperature factor of 520, divided by the sum of 460 and the published 30-year normal average temperature data.

In cases where meters are not mechanically or electronically corrected for pressure, a Pressure Factor will be used to determine customer billing therms. The Pressure Factor equals the sum of individual customer delivery pressure and the following applicable atmospheric pressure, both divided by 14.73 psi, (atmospheric pressure at sea level).

Town	Atmospheric Pressure, psi
Athena	13.86
Baker	13.03
Bend	12.95
Boardman	14.61
Chemult	12.42
Crescent	12.59
Gilchrist	12.59
Hermiston	14.50
Huntington	13.67
Irrigon	14.58
Madras	13.60
McNary	14.50
Milton-Freewater	14.21
Mission	14.11
Nyssa	13.63
Ontario	13.65
Pendleton	14.19
Pilot Rock	13.90
Prineville	13.30
Redmond	13.24
Stanfield	14.43
Sunriver	12.70
Umatilla	14.58
Vale	13.60
Weston	13.87

RULE 17
ORDER OF PRIORITY FOR GAS SERVICE

GENERAL

The Company will exercise reasonable diligence to supply and deliver continuous natural gas service to all customers receiving firm service, as defined in Rule 2.

Should the Company's supply of gas or capacity be insufficient at any time or any location, for reasons other than force majeure (as defined in Company's Rule 16) to meet the full requirements of all customers, the Company will curtail service to customers in the inverse order of order of priority listed hereinafter. Such curtailment, when required, will be imposed to protect continuity of service first, to firm service customers, and more generally, to customers having a higher service priority.

ORDER OF PRIORITY

1. Residential customers.

2. Firm Service Commercial and institutional customers as follows:
   a. Commercial and institutional customers served under Rate Schedules 104 and 105;
   b. Commercial or institutional customers served on other firm service rate schedules;
   c. Agricultural service customers including customers who use gas for agricultural production, natural fiber production or processing, food processing, food quality maintenance, and irrigation pumping, and where gas is used as a process fuel or feedstock in the production of fertilizer, agricultural chemicals, animal feed, or food; and
   d. High priority use customers where the continuity of gas service is considered in the public's best interest such as gas usage in a school, hospital, correctional facility or for police or fire protection.

3. Firm Service Industrial customers using gas as feedstock in a process in which natural gas is used as a raw material and as plant protection requirements of lower priority customers.

4. Firm Service Industrial customers with consumption of less than 1,000 therms per day.

5. Firm Service Industrial customers with consumption of more than 1,000 therms per day but less than 10,000 therms per day.

6. Industrial customers with consumption of more than 10,000 therms per day, including customers receiving service on Schedule 201, Special Contracts.

7. General distribution system interruptible transportation service customers.

8. Customers receiving interruptible natural gas service.

(continued)

SCHEDULE 170
INTERRUPTIBLE SERVICE

ANNUAL DEFICIENCY BILL

In the event a customer purchases less than the annual minimum quantity, as defined in the contract, the customer shall be charged an Annual Deficiency Bill. Annual Deficiency Bill shall be calculated by multiplying the difference between the Annual Minimum Quantity and the therms actually taken (Deficiency Therms) times the difference between the commodity rate in this Rate Schedule 170, as modified by any applicable rate adjustments, and the weighted average commodity cost of system supply gas as such costs are reflected in the Company's tariffs. If the Company curtailed or interrupted service, the Annual Minimum Quantity shall be reduced by a fraction, the numerator of which is the actual number of days or fraction thereof, service was curtailed and the denominator of which is 365.

CURTAILMENT

Service under this schedule is subject to curtailment as established in Rule 17. Customer usage of gas above the amount authorized by the Company during a curtailment period shall be considered an unauthorized overrun volume. The overrun charge that will be applied during any overrun entitlement period will equal the greater of $1.00 per therm or 150% of the highest midpoint price for the day at NW Wyoming Pool, NW south of Green River, Stanfield Oregon, NW Canadian Border (Sumas), Kern River Opal, or El Paso Bondad supply pricing points (as published in "Gas Daily"), converted from dollars per dekatherms to dollars per therm by dividing by ten. The overrun charge will be in addition to the incremental costs of any supplemental gas supplies the Company may have had to purchase to cover such unauthorized use, in addition to the regular charges incurred in the Rate section of this Schedule and any other charges incurred per the terms and conditions established in this Schedule. The payment of an overrun penalty shall not under any circumstances be considered as giving customer the right to take unauthorized overrun gas or to exclude any other remedies which may be available to the Company to prevent such overrun. The charge that will apply during any underrun entitlement period will be $1.00 per therm for any underrun imbalances.

SPECIAL TERMS AND CONDITIONS

Service under this schedule shall be rendered through one or more meters at a single point of delivery and may at the Company's option be rendered in conjunction with firm service to said customer.

GENERAL TERMS

Service under this rate schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this rate schedule apply to service under this rate schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

CASCADE NATURAL GAS CORPORATION

SCHEDULE 200
VARIOUS MISCELLANEOUS CHARGES

APPLICABILITY

This schedule sets forth the provisions for various charges throughout these rules and regulations. The name and amount of the charges are listed below. The rules or rate schedules to which each charge applies are in parenthesis.

I. Reconnection Charge (Rule 5)

a. Standard, 8 a.m. and 5 p.m., Monday through Friday, excluding holidays $32.00

b. After Hours between 5 p.m. and 9 p.m., Monday through Friday $50.00

c. Same Business Day or on a Saturday, Sunday or holidays $100.00

A reconnection charge will be required for reestablishment of service at the same address for the same person taking service, if service was disconnected at the customer's request or if it was disconnected involuntarily for reasons other than for Company initiated safety or maintenance.

II. Deposit for Meter Test - (Rule 8) $50.00

III. Field Visit Charge- (Rule 5) $10.00

A field visit charge may be assessed whenever Cascade visits a customer's address for the purpose of disconnecting service or reconnecting service and due to the customer's action is unable to complete the disconnection or reconnection.

IV. Late Payment Charge – (Rule 5) 0.3% annualized interest

A late payment charge at a rate determined by the Commission based upon a survey of prevailing market rates will be charged to the customer's current bill when the customer has a prior balance owing of $200 or more.

V. Returned Payment Charge - (Rule 6) $10.00

A returned check fee of ten dollars ($10.00) may apply for any payment returned unpaid.

VI. Residential Excess Flow Valves – (Rule 9)

a. Installation of an Excess Flow Valve: $38.00

The customer will be responsible for any maintenance or replacement costs that may be incurred due to the excess flow value. Such cost shall be based upon time and materials.

b. Modifying an Existing Service Line:

- Time of Construction Crew up to $220.00 per hour
- Cost of Materials required to open and close service connection trench, including asphalt replacement, if any.
- Installation of the Excess Flow Valve $38.00