BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UG 287

In the Matter of	)
	)
CASCADE NATURAL GAS	)
CORPORATION,	)
	)
Request for a General Rate Revision.	)
	)

OPENING TESTIMONY OF MICHAEL P. GORMAN

ON BEHALF OF NORTHWEST INDUSTRIAL GAS USERS

July 31, 2015

**TABLE OF CONTENTS TO THE
OPENING TESTIMONY OF MICHAEL P. GORMAN**

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017. I am employed by the firm of Brubaker & Associates, Inc. ("BAI"), regulatory and economic consultants with corporate headquarters in Chesterfield, Missouri. My qualifications are provided in Exhibit NWIGU/101.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the Northwest Industrial Gas Users ("NWIGU"). NWIGU is a non-profit association comprised of more than 40 end users of natural gas with major facilities in Oregon, Washington, and Idaho. NWIGU members include diverse industrial and commercial interests, including food processing, pulp and paper, wood products, electric generation, aluminum, steel, chemicals, electronics, aerospace, and health care providers. NWIGU member companies purchase sales and transportation services from Cascade Natural Gas Corporation ("Cascade" or the "Company").

Q. ARE YOU SPONSORING ANY EXHIBITS IN CONNECTION WITH YOUR TESTIMONY?

A. Yes. I am sponsoring Exhibits NWIGU/101 through NWIGU/103.

Q. WHAT IS THE PURPOSE OF YOUR OPENING TESTIMONY IN THIS PROCEEDING?

A. I will respond to the Company's claimed revenue deficiency, class cost of service study, and proposed spread of the revenue deficiency across rate classes in this proceeding.

Q. PLEASE SUMMARIZE YOUR REVENUE REQUIREMENT RECOMMENDATIONS AND FINDINGS.

A. The Company's claimed revenue deficiency of $3.6 million, or 12.51%, on non-gas revenues is significantly overstated. As shown in Table 1 below, the Company overstates its claimed revenue deficiency for at least six issues.

TABLE 1

Revenue Requirement Adjustments
($000)

Description	**Amount**	**Source**
Claimed Revenue Deficiency	$3,623 (12.51%)	
Less Adjustments:		
Prepaid Pension Assets	$ 367.6	CNG/304, Parvinen/Page 2 of 2, Col. k
Labor Additions	607.9	CNG/304, Parvinen/Page 2 of 2, Col. m
Rate Case Expense	121.8	CNG/304, Parvinen/Page 2 of 2, Col. q
Depreciation Rates	487.3	CNG/304, Parvinen/Page 2 of 2, Col. s
Plant Additions	524.1	CNG/304, Parvinen/Page 2 of 2, Col. o
Environmental Remediation	482.4	CNG/304, Parvinen/Page 2 of 2, Col. u
Total	$2,661.0	
Adjusted Revenue Deficiency	$961.0 (3.32%)	

As shown in Table 1 above, the Company's claimed revenue deficiency of $3.6 million should be reduced down to a revenue deficiency of no more than $961,000. I will describe each of these revenue requirement adjustments below.

Q. PLEASE SUMMARIZE YOUR PROPOSAL ON HOW TO SPREAD THE REVENUE DEFICIENCY FOUND JUST AND REASONABLE BY THE COMMISSION IN THIS PROCEEDING.

A. The Company's proposed spread of its revenue deficiency is unjust and unreasonable because it does not base this proposed spread on an accurate class cost of service study. My proposed spread will move each rate class closer to cost of service, while recognizing the limitations on rate adjustments and gradualism in recovering the revenue deficiency. Based on primarily the difference in class cost of service study, I show the Company's proposed spread in Table 2 below, along with my proposed allocation of the revenue deficiency across classes based on the Company's requested revenue deficiency for illustrative purposes only.

TABLE 2

Class Cost of Service Spread

Description	Company Proposed[1] $ Increase	Company Proposed[1] % Increase	Adjusted[2] $ Increase	Adjusted[2] % Increase
Residential (101)	$1,358	8.32%	1,810	11.09%
Commercial Service (104)	1,410	18.77%	1,394	18.55%
Industrial Service (105)	133	28.15%	133	28.15%
Large Volume Service (111)	65	28.15%	65	28.15%
General Distribution (163+164)	646	28.15%	130	5.68%
Interruptible (170)	11	3.13%	19	5.68%
Special Contracts (900)	0	0.0%	71	4.0%*
System Total	$3,623	12.51%	$3,623	12.51%

Sources and Note:

[1]CNG/501, Amen/Page 2 of 2.
[2]NWIGU/102, Gorman/Page 1 of 2.
*Based on two years of Consumer Price Index ("CPI") price adjustments.

Q. IN YOUR TABLE 2 ABOVE, YOU NOTE AN INCREASE FOR SPECIAL CONTRACTS CUSTOMERS OF 4%. IS THAT BASED ON A PROPOSAL TO MOVE THEM CLOSER TO COST OF SERVICE IN THIS PROCEEDING?

A. No. As I understand it, the Special Contracts tariffs have specific contract provisions which allow Cascade to adjust these customers' prices outside of a rate case. Based on the tariff rates for Special Contracts Schedule No. 201, the contracts generally read as follows:

> Beginning October 1, 1996 and each October 1 thereafter for the duration of the contract, the Commodity Rate shall be escalated by the percentage change in the Consumer Price Index for the "All Urban Customers – U.S. City Average – All Items," for the twelve months ending on the immediately prior July 1.

Based on this provision, it is my understanding that Cascade can increase rates to the Special Contracts customers each July 1 in an amount equal to the Consumer Price Index ("CPI"). As such, the increase in revenues for the Special Contracts customers listed in Table 2 above is based on this contract provision. I have projected that the CPI will increase by 4% from the 2014 test year to 2016, the rate-effective year. This assumes that rates in this proceeding will be in effect around year-end 2015 and therefore the revenues collected by these customers will increase, and support Cascade's revenue deficiency claim in this proceeding.

Importantly, it is not my position that the Special Contracts customers' rates should be increased beyond the terms and conditions specified in the customers' special contracts.

Q. PLEASE SUMMARIZE YOUR PROPOSED ADJUSTMENTS TO THE COMPANY'S CLASS COST OF SERVICE STUDY.

A. The Company's class cost of service study is based on the Long Run Incremental Cost ("LRIC") methodology that has been used to support rate settlements for both Avista and Northwest Natural Gas Company ("Northwest Natural") in recent rate proceedings.[1/] Hence, the general structure of the Company's cost of service study is reasonable. However, I will propose two correcting adjustments to the Company's cost study. First, I make adjustments to the LRIC cost of meters for several large customers. The Company's LRIC cost for meters is substantially higher than that used in Avista and

[1/] UG 284, Avista Utilities and UG 221, Northwest Natural Gas Company.

Northwest Natural cases, and substantially higher than a reasonable estimate of the incremental cost of meters for its large customers. Second, for the core main costs that are spread on volume, I propose to allocate those main costs across all rate classes. This will result in a more accurate measurement of each class's cost of service. The Company did not include volume for the Special Contracts class in this core main cost allocation. Therefore, Cascade did not accurately measure its cost of service for each rate class.

While I understand there are limitations on adjusting the Company's rates for the Special Contracts customers, that does not justify distorting the class cost of service study when initially measuring and comparing each class's cost of service to the approved rates. This is a critical first step in deciding how to allocate a revenue deficiency, if any, for each rate class, including the Special Contracts class, and the remaining rate classes. I will go into more detail in my revisions to the Company's class cost of service study and development of my adjusted spread of the Company's claimed revenue deficiency later in this testimony.

Q. ARE YOU PROPOSING A SPREAD OF YOUR ADJUSTED REVENUE DEFICIENCY FOR CASCADE?

A. Yes. Based on my corrections to the Company's claimed revenue deficiency, I propose a revenue spread as outlined in Table 3 below.

TABLE 3

Class Cost of Service Spread

	Gorman Proposed[1]	
Description	**$ Increase**	**% Increase**
Residential (101)	541	3.3%
Commercial Service (104)	249	3.3%
Industrial Service (105)	35	7.5%
Large Volume Service (111)	17	7.5%
General Distribution (163+164)	40	1.7%
Interruptible (170)	6	1.7%
Special Contracts (900)	71	4.0%
System Total	$961	3.32%

Source:
[1]NWIGU/103, Gorman/Page 1 of 2.

This alternative spread consistent with the adjusted spread as shown in Table 3 above, is based on corrections to the Company's class cost of service study and a more equitable allocation of the claimed revenue deficiency in this proceeding.

I. REVENUE REQUIREMENT ADJUSTMENTS

Q. WILL YOU PLEASE EXPLAIN YOUR PROPOSED ADJUSTMENTS TO THE COMPANY'S CLAIMED REVENUE DEFICIENCY?

A. Yes. I will explain each of the six adjustments I propose to the Company's claimed revenue deficiency. The total of these revenue requirement adjustments will reduce the Company's claimed revenue deficiency of $3.622 million by $2.661 million. This leaves an adjusted revenue deficiency of $961,000.

I.A. Prepaid Pension Asset

Q. WILL YOU PLEASE DESCRIBE YOUR PROPOSED ADJUSTMENT TO THE COMPANY'S CLAIMED REVENUE DEFICIENCY BASED ON A PREPAID PENSION ASSET?

A. The Company is proposing to include in its rate base a prepaid pension asset of $2.873 million. The existence of this prepaid pension asset increases the Company's claimed revenue deficiency by $367.64 thousand (CNG/304, Parvinen/Page 1, Column k).

The Company states that it is including this prepaid pension asset net of deferred taxes based on the positions of the Joint Utilities in Docket UM 1633, which Cascade states have not yet been resolved. The Company's inclusion of this prepaid pension asset before the issues in UM 1633 have been resolved is inappropriate, is not just and reasonable, and therefore the cost should be removed. (CNG/300, Parvinen/6, lines 18-21).

Q. DO YOU BELIEVE A PREPAID PENSION ASSET SHOULD BE USED TO INCREASE THE COMPANY'S CLAIMED REVENUE DEFICIENCY IN THIS PROCEEDING?

A. No. The Company's prepaid pension asset is necessary to bring its pension trust fund more in line with its pension obligation. The Company has not shown that the reason the prepaid pension contribution was necessary is because of inadequate pension trust funding from prior periods. Further, the Company has not shown that the pension expense receipts from customers in the past have not been adequate to fully reimburse Cascade for this pension trust contribution.

As such, including the prepaid pension asset may essentially be requiring customers to pay a return on Cascade's pension trust contributions which was funded by customers via past payments of Cascade's recovery of pension expense in its retail rates.

Therefore, the Company's proposal to include this prepaid pension asset in its cost of service has not been shown to be just and reasonable, and may be punitive to customers to the extent they have already fully compensated the Company for its annual pension costs including its contributions to its pension trust fund.

I.B. Labor Additions

Q. PLEASE DESCRIBE YOUR PROPOSED ADJUSTMENT FOR THE LABOR ADDITIONS.

A. The Company is proposing to increase its revenue deficiency by $607,983 to reflect planned additions to its labor force. (CNG/300, Parvinen/7 and CNG/304, Parvinen/Page 2 of 2, Column m). At page 7 of Mr. Parvinen's testimony, he states the Company included an additional labor expense for planned additions to the workforce. He states that the Company plans on adding these new employees before the rate-effective date.

Q. IS THE LABOR ADDITIONS ADJUSTMENT REASONABLE?

A. No. The increased labor expense is not known and measurable because the employees have not been hired and are not part of the test year labor cost. Therefore, I propose it be removed from this rate case as a not known and measurable cost of service item.

Q. IS IT KNOWN AND MEASURABLE THAT CASCADE'S LABOR EXPENSE WILL INCREASE POST-2014 TEST YEAR?

A. No. While it is possible that Cascade may add employees to its payroll after the test year, it is also equally possible that Cascade will lose existing employees either to termination, leaving their positions or retirement. The post-test year additions of labor positions may not increase Cascade's labor cost within the test year. Rather, it may simply replace a reduction to the test year labor expense. The labor additions are simply not a known and measurable increase to Cascade's test year labor expense. Therefore, this labor additions adjustment is not a known and measurable change to Cascade's test year cost of service and should not be allowed.

I.C. Rate Case Expense

Q. PLEASE DESCRIBE YOUR ADJUSTMENT CONCERNING THE COMPANY'S RATE CASE EXPENSE.

A. Mr. Parvinen states at page 11 of his testimony that the Company is including rate case cost associated with this General Rate Case filing. He states that the net income impact is $111,877 and revenue impact of $191,748 (CNG/304, Parvinen/Page 2 of 2, Column q).

Q. IS THE COMPANY'S PROPOSED RATE CASE EXPENSE REASONABLE?

A. No. The Company has included all of its rate case in the test year. This will allow it to recover this rate case expense in only one year. The Company has not filed a rate case for many years, and Cascade has not indicated that it plans on making annual rate case filings. Therefore, it would be more appropriate to amortize its rate case expense over the period the rates determined in this proceeding are expected to be in effect. For example, if these rates are expected to be in effect for three years, then the rate case expense should be amortized over a three-year period.

Q. HAS CASCADE PROVIDED ANY INFORMATION THAT SUGGESTS IT WILL BE MAKING ANNUAL RATE CASE FILINGS?

A. Not to my knowledge.

Q. HAS CASCADE OFFERED ANY REGULATORY MECHANISMS THAT WOULD ALLOW IT TO DEFER MAKING ANNUAL RATE CASE FILINGS?

A. Yes. Cascade is proposing to implement a pipeline cost recovery mechanism ("CRM") that will allow for rate changes in between rate cases. This type of mechanism, if approved, would allow Cascade to defer or lengthen the amount of time in between rate cases.

Q. WHAT IS YOUR PROPOSAL?

A. I recommend Cascade's rate case expense be amortized over at least a three-year period. This assumes that Cascade will file rate cases about every three years. This is a conservative estimate recognizing that Cascade has not filed a rate case for approximately 20 years, and it is proposing a CRM that, if approved, would allow it to delay rate case filings going forward.

Q. HOW DOES YOUR PROPOSED AMORTIZATION OF THE RATE CASE EXPENSE IN THIS PROCEEDING IMPACT CASCADE'S CLAIMED REVENUE DEFICIENCY?

A. It reduces the revenue deficiency by $121,832. Amortizing rate case expense over a three-year period will reduce the Company's $191,748 rate case revenue requirement to $63,916 and, thus, reduce its claimed revenue deficiency by $121,832.

<u>I.D. Planned Depreciation Rate Filing</u>

Q. PLEASE DESCRIBE YOUR PROPOSED ADJUSTMENTS TO THE COMPANY'S REVENUE DEFICIENCY BASED ON ITS PLANNED DEPRECIATION RATE FILING.

A. The Company states that it plans to file for new depreciation rates in April 2015 (Parvinen/11). He states the new depreciation rates will reduce income by $284,333, which increases the claimed revenue requirement by $487,323 (CNG/304, Parvinen/Page 2 of 2, Column s). This adjustment has been removed as a not known and measurable expense change. This reduces the claimed revenue deficiency by $487,323.

Q. DO YOU BELIEVE IT IS APPROPRIATE TO RECOGNIZE AN INCREASE IN DEPRECIATION EXPENSE IF THE COMPANY PLANS TO FILE FOR NEW DEPRECIATION RATES?

A. No. Depreciation rate filings may show that the existing rates exceed reasonable recovery of the life of the largely new investments being made by Cascade in this proceeding, less salvage adjustments. Indeed, new mains generally have longer expected life than the mains being replaced, and salvage adjustments generally may be the same or less than they have been in existing rates. Hence, if Cascade files for new depreciation rates it is just as likely that its depreciation rates will be reduced, rather than increase, as implied by Cascade's adjustment. Therefore, this proposed adjustment in depreciation expense implies approval of higher depreciation rates, which is not a known and measurable change to Cascade's cost of service. Therefore, this proposed adjustment should be denied.

Q. HOW DOES REJECTION OF THE COMPANY'S ADJUSTMENT FOR NEW DEPRECIATION RATES IMPACT ITS CLAIMED REVENUE DEFICIENCY?

A. Rejecting the Company's proposed increase in its depreciation expense assuming its proposed depreciation rate filing is approved, will reduce its claimed revenue deficiency by $487,323.

<u>I.E. Plant Additions</u>

Q. PLEASE DESCRIBE CASCADE'S PROPOSAL TO INCREASE ITS COST OF SERVICE FOR 2015 PLANT ADDITIONS.

A. Cascade states that it is including $12.0 million of plant additions in 2015 relative to the base period of 2014. Mr. Parvinen states these plant additions reflect replacement of existing facilities which do not generate additional revenues.

Mr. Parvinen's schedules show an increase in rate base of $11.75 million, and accumulated depreciation expense on the 2015 plant additions of $568,710 and deferred tax of $13,364.

Mr. Parvinen developed the rate base adjustment by reflecting plant additions of $12.0 million, reflecting one-half year of the 2015 incremental depreciation expense specific to these plant additions, along with accumulated deferred income taxes related to the timing difference of book depreciation and tax depreciation. (CNG/304, Parvinen/Page 2 of 2, Column o).

Q. IS MR. PARVINEN'S 2015 PLANT ADDITIONS TEST YEAR COST OF SERVICE ADJUSTMENT REASONABLE?

A. No. Mr. Parvinen's proposed 2015 plant additions adjustment is not balanced and does not consider both increases and decreases to Cascade's post-test year net plant in-service. Specifically, rate base will be changed based on increases in plant in-service after the test year, but will also be decreased by an increase in accumulated depreciation after the end of the 2014 test year. Hence, the net change in net plant and rate base after the test year must reflect both 2015 plant additions and the post-2014 increase in accumulated depreciation.

Q. PLEASE EXPLAIN HOW MR. PARVINEN'S 2015 PLANT ADDITIONS CAN BE ADJUSTED TO REFLECT A MORE ACCURATE PROJECTED CHANGE IN CASCADE'S NET PLANT IN-SERVICE BASED ON ALL THE FACTORS WHICH WILL CHANGE ITS RATE BASE IN 2015?

A. Mr. Parvinen's 2015 plant adjustment increases rate base by $11.745 million as shown below in my Table 4 outlining Mr. Parvinen's plant additions to rate base. However, as shown under Column 4, I show the necessary adjustment to the Company's proposed test year rate base additions to reflect the build-up of accumulated depreciation in 2015 based on depreciation expense recovered in 2014.

Based on this revision to the Company's proposed adjustment to rate base for post-test year 2015 plant additions, I recommend that the Company's post-test year adjustment be reflected to include both increases and decreases to rate base. This results in a $4.88 million reduction to the Company's claimed change in rate base based on post-test year actions.

TABLE 4

2015 Post-Test Year
Plant Additions Rate Base Adjustment
(000)

	Per Cascade			**Additional Post-Test Year Adj.**	
Description	**2014 Rate Base[1] (1)**	**2015 Plant Additions[2] (2)**	**Adj. Rate Base[3] (3)**	**Adjustment[4] (4)**	**2015 Rate Base[5] (5)**
Plant in Service	$180,947	$12,043	$192,990		$192,990
Accumulated Depr.	(85,852)	(284)	(86,136)	(4,880)	(91,016)
CIAC 0					0
Cust. Adv. for Constr.	(538)		(538)		(538)
Def. Acc. Inc. Taxes	(25,740)	(13)	(25,753)		(25,753)
Deferred Debits	0				0
Working Capital Allow.	2,199		2,199		2,199
Total Rate Base	$71,016	$11,745	$82,761	$(4,880)	$77,881

Sources:
[1]CNGC/301, Parvinen/Page 1, Col. 1.
[2]CNGC/304, Parvinen/Page 2, Col. o.
[3]Sum Cols 1-2.
[4]CNGC/301, Parvinen/Page 1, Col. 1.
[5]Sum Cols 3-4.

Mr. Parvinen's 2015 plant additions adjustment to rate base and the claimed revenue deficiency must be corrected to reflect increases and decreases in rate base for the post-test year period. This would require recognizing the $12 million plant investments noted by Mr. Parvinen in this adjustment but also recognized a $4.88 million increase in accumulated depreciation in 2015, relative to the 2014 test year, caused by the Company's collection of $4.88 million of depreciation expense in 2014 from customers.

Hence, the net increase in net plant for 2015, relative to the 2014 test year, would be to reflect plant additions of $12 million to account for Mr. Parvinen's incremental depreciation and deferred taxes, but also recognized an increase to 2014 accumulated depreciation of $4.88 million funded by depreciation expense recovered in 2014. This results in an incremental rate base adjustment of $6.865 million, rather than Mr. Parvinen's estimated rate base adjustment of $11.745 million.

Q. WITH YOUR ADJUSTMENT TO MR. PARVINEN'S PROPOSED 2015 PLANT IN-SERVICE ADJUSTMENT, HOW DOES THAT IMPACT THE COMPANY'S CLAIMED REVENUE DEFICIENCY?

A. An adjustment to rate base of $4.88 million will lower Cascade's revenue requirement by $524,100 based on a reduction of operating income and related income tax expense.

I.F. Environmental Remediation Expenses

Q. PLEASE DESCRIBE YOUR ADJUSTMENT BASED ON ENVIRONMENTAL REMEDIATION EXPENSES.

A. The Company proposes to increase its revenue requirement by $482,405 to reflect environmental remediation costs. (CNG/304, Parvinen/Page 2 of 2, Column u).

Mr. Parvinen describes these environmental remediation costs at pages 25-28 of his testimony. His testimony demonstrates that these costs largely do not relate to the provision of gas service for Cascade and therefore it is not clear whether or not these costs are appropriate to be recovered from retail customers. The Company's proposal for environmental remediation costs also includes deferred costs from prior periods.

Q. IS THE COMPANY'S PROPOSAL FOR RECOVERING THESE ENVIRONMENTAL REMEDIATION COSTS REASONABLE?

A. No. Mr. Parvinen has not established why it is reasonable and prudent for the Company to include these environmental remediation costs in its retail cost of service. These costs simply are not related to provisions of gas service to its Oregon retail customers. Therefore, these costs should not be included in its rate structure.

Further, the Company's proposal to include deferred costs in this test year rate-setting adjustment is imbalanced and should be denied.

The Company has not shown if the Commission has given it authority to defer these environmental remediation expenses, nor has it shown that it needed to define these costs in prior periods in order to recover its cost of service. Mr. Parvinen states that the Company did not experience an earnings surplus during the deferred time period. However, the Company has also not established that expensing these costs, rather than deferring them, would have resulted in an earnings shortfall.

For all these reasons, the Company's claimed recovery of environmental remediation expense has not been shown to be appropriate from retail customers, and the Company has inflated the environmental remediation costs to include deferrals of cost incurred prior to the test year when its revenue collection may have already been capable of providing recovery of the costs.

Q. DO YOU RECOMMEND THE COMPANY'S ENVIRONMENTAL REMEDIATION EXPENSE BE INCLUDED IN ITS COST OF SERVICE?

A. No. For the reasons stated above, the Company's proposal for an environmental remediation cost recovery of $482,405 should be denied.

II. CASCADE PROPOSED REVENUE SPREAD

Q. HOW IS THE COMPANY PROPOSING TO SPREAD THE CLAIMED REVENUE DEFICIENCY IN THIS PROCEEDING?

A. The Company's proposed revenue spread is developed by Cascade witness Ronald Amen on his Exhibit CNG/501. As shown on that exhibit, Mr. Amen produces the Company's class cost of service study, and then uses those results to produce a two-step determination of the revenue spread of the Company's revenue requirement in this proceeding. Based on this process, Mr. Amen proposes the revenue spread shown below in Table 5.

TABLE 5

Company Proposed Revenue Spread
($000)

Description	Rate Schedule	Revenue Increase	% Increase
Residential 101		$1,358	8.32%
Commercial Service	104	1,410	18.77%
Industrial Service	105	133.1	28.15%
Large Volume Service	111	65.0	28.15%
General Distribution	163/164	646.3	28.15%
Interruptible 170		10.7	3.13%
Special Contracts	900	0	0%
Total System		$3,623	12.51%

Source: Amen Exhibit CNG/501.

Q. IS MR. AMEN'S PROPOSED SPREAD OF THE REVENUE DEFICIENCY REASONABLE?

A. No. There are several deficiencies or errors in Mr. Amen's cost of service study. Correcting this cost of service study results in the following proposed spread of the revenue deficiency in this proceeding, using the Company's claimed revenue deficiency for illustrative purposes only.

TABLE 6

Corrected Revenue Spread
(Company Claimed Deficiency)
($000)

Description	**Rate Schedule**	**Revenue Increase**	**% Increase**
Residential 1	01	$1,810	11.09%
Commercial Service	104	1,394	18.55%
Industrial Service	105	133	28.15%
Large Volume Service	111	65	28.15%
General Distribution	163/164	130	5.68%
Interruptible 170		19	5.68%
Special Contracts	900	71	4.0%*
Total System	111, 163/164, 170 and 900	$3,623	12.51%

Source: Exhibit NWIGU/102, Gorman/Page 1 of 2.

*Based on two years of CPI changes.

Q. PLEASE DESCRIBE YOUR PROPOSED CORRECTIONS TO MR. AMEN'S CLASS COST OF SERVICE STUDY.

A. I propose two corrections to Mr. Amen's class cost of service study. These include the following:

1. His LRIC projected meter costs for large customers are overstated. Using inflated LRIC meter costs inflates his cost of service for Rate Schedules 111, 163/164, 170 and 900, and therefore overstates the revenue requirement for these classes.

2. Mr. Amen does not properly allocate the Company's cost of service across all rate classes based on their load characteristics that cause Cascade to incur cost to serve those classes. Mr. Amen develops his volumetric allocation of core main costs by excluding the volume used for Special Contracts customers. This distorts the allocation of approximately $11.6 million of the Company's total revenue requirement. Hence, before any recognition is made of limitations in rate adjustments, Mr. Amen has simply not accurately measured Cascade's cost of service for each of the rate classes.

Q. WHY DO YOU BELIEVE CASCADE HAS UNDERSTATED ITS LRIC METER COSTS TO ITS LARGE CUSTOMERS?

A. Mr. Amen's allocation of LRIC meter costs is on its face highly questionable. For example, for Rate Schedules 163 and 164, Mr. Amen notes that there are 32 customer accounts for the system of 69,254, or about 0.05% of all customer accounts on the system. However, in allocating incremental costs of meters, Mr. Amen has allocated $2.4 million out of $23.8 million of total meter and regulator investment cost to this same rate class, or 10.1%. There is an obvious imbalance in his determination of meter costs for this rate class.

A more detailed review shows more reasons to question the accuracy of Mr. Amen's LRIC for meters and regulators. The accuracy is highly questionable when you compare his cost relative to other large customer classes served by Cascade, and compared to costs used by other Oregon utilities in conducting LRIC gas cost of service studies. Specifically, I compared Cascade's meter regulator costs to those used by Avista and Northwest Natural in recent gas cost of service studies using an LRIC methodology to gain support by all parties in those rate cases. This comparison is shown in Table 7 below.

TABLE 7

Meter Cost Comparison

Description	**Rate Class**	**Rate Schedule**	**Meter Cost**
Cascade:[1]			
Industrial		105	$5,944
Lg	Volume	111	33,417
Gen.	Distribution	163/164	75,516
Interruptible		170	135,029
Special	Contracts	900	167,448
Avista Oregon[2]			$8,902
Northwest Natural[3]			$5,334

Sources:
[1]Amen CNG/502, line 17 ÷ line 3 (for specific rate schedule)
[2]UG 284, Avista Utilities, Exhibit No. 801; Miller/Avista Incremental Investment Costs.
[3]UG 221, NWN/1101, Feingold/9, Incremental customer-related distribution costs, meters and regulators.

As shown in the table above, Cascade's LRIC meter costs for its Classes 111, 163, 164, 170 and 900 are substantially higher than Cascade's own meter cost estimate for its Class 105 customers. Cascade's meter costs for its Class 105 customers is in turn more consistent with the LRIC meter cost estimates used by Avista and Northwest Natural in their LRIC gas cost of service studies. Further, a review of Mr. Amen's testimony failed to produce any support for his LRIC cost estimates for meters for these rate classes.

Q. HOW DO YOU PROPOSE TO CORRECT MR. AMEN'S LRIC COSTS TO REFLECT A MORE REASONABLE LRIC METER COST ESTIMATE?

A. Mr. Amen's meter cost estimates for these rate classes appear to be overstated by a factor of 10. Therefore, I adjusted his LRIC meter cost estimate by a factor of 1/10, to produce

LRIC meter costs that are more in line with his estimate for Cascade's Schedule 105, and the meter cost estimates made by Avista and Northwest Natural.

Q. DID YOU CORRECT MR. AMEN'S CLASS COST OF SERVICE STUDY TO REFLECT THESE ADJUSTMENTS?

A. Yes. This is shown in my Exhibit NWIGU/102, page 2. As shown in this exhibit on lines 19 through 27, I have adjusted the LRIC cost for large meters for larger customers, and to spread pipeline costs based on all volume and demand billing units for each of the rate classes. This produces an undistorted cost of service for each rate class.

Q. PLEASE DESCRIBE HOW YOU PROPOSE TO SPREAD THE COMPANY'S CLAIMED REVENUE DEFICIENCY IN THIS PROCEEDING.

A. My proposed spread of the revenue deficiency is very similar to Mr. Amen's. I followed the following steps in producing my proposed revenue spread:

1. I compared the current revenues to the class cost of service study to determine the amount of rate increase necessary to bring each rate class up to cost of service.
2. I recognized certain classes that have limits and adjustments to rates and considered these rate limits in allocating additional revenues to those classes. Specifically, the Special Contracts rates have tariff provisions which allow for rate adjustments equal to only the CPI rate. Hence, I made CPI rate adjustments for 2015 and 2016 (the rate-effective year) to reflect increased revenues from this rate class.
3. I did not propose to reduce rates that are measured to be above cost of service.
4. Using this methodology as a general guide, and the effort to move each rate class to produce the revenue deficiency, I arrived to what I believe to be a reasonable spread across rate classes. My final spread, however, was tempered by ensuring that no rate class got more than a 2.25x system average increase. This last step was designed in order to ensure that no rate class got an extraordinary increase in this proceeding, and therefore was maintained reasonably close within a range of the system average increase.

Q. BASED ON THIS METHODOLOGY, WHAT IS YOUR PROPOSED SPREAD FOR EACH RATE CLASS?

A. My proposed rate spread reflecting the Company's claimed revenue deficiency for illustrative purposes only, is shown on my Exhibit NWIGU/103 and summarized in Table 8 below.

TABLE 8

Class Cost of Service Spread

Description	**Gorman Proposed[1]** $ **Increase**	% **Increase**	**Index**
Residential (101)	541	3.32%	1.0
Commercial Service (104)	249	3.32%	1.0
Industrial Service (105)	35	7.47%	2.25
Large Volume Service (111)	17	7.47%	2.25
General Distribution (163+164)	40	1.75%	0.53
Interruptible (170)	6	1.75%	0.53
Special Contracts (900)	71	4.00%	1.21
System Total	$961.0	3.32%	

Source:
[1]NWIGU/103, Gorman/Page 1 of 2.

As shown on Exhibit NWIGU/103 and Table 8, no class received more than a 2.25x system average increase, and the Special Contracts customers' rates were increased by two years of CPI rate increases.[2]

[2] Based on *The Blue Chip Financial Forecasts*, July 2, 2015, CPI was assumed to be approximately 2% in 2015 and 2% in 2016. This produced a two-year inflation to the rates under this class of around 4%.

As shown on page 1 of that exhibit, I show the proposed spread of my estimated revenue deficiency of $961,000. The same steps were used to produce this rate spread along with limitations on increases to any specific rate class for gradualism, and no rate class would get a rate decrease.

III. PIPELINE COST RECOVERY MECHANISM ("CRM")

Q. IS THE COMPANY PROPOSING TO IMPLEMENT A CRM IN THIS PROCEEDING?

A. Yes. The Company states that the CRM will provide timely recovery of costs incurred to promote safety and reliability of Cascade's distribution system. These costs will reflect incremental revenue requirement for pipeline costs that are not revenue producing investments.[3/] The Company claims that a CRM is necessary to provide Cascade full recovery of its costs of providing safe and reliable service, and will defer the need for frequent rate filings needed to produce rate support for the Distribution Integrity Management Plan ("DIMP").

Q. PLEASE DESCRIBE HOW THE COMPANY PROPOSES TO PRODUCE CHARGES UNDER THE CRM.

A. As described by Mr. Parvinen at pages 28-32 of his testimony and as developed on his Exhibit CNG/311, Cascade proposes to develop a revenue requirement for incremental plant additions categorized as replacement projects. Those plant additions then will be adjusted for depreciation in the year incurred, deferred taxes related to the recorded depreciation in the year incurred, to develop a rate base component of the plant investment. The revenue requirement then is based on a rate of return, related income tax expense, and depreciation expense related to those plant investments. That revenue

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3/ CNG/300 at Parvinen/28.

requirement then will be spread across rate classes using the main incremental investment allocation of the utility's most recently approved class cost of service study. The class allocated share will then be stated into a volumetric charge for all customers within each rate class.

Q. IS THE COMPANY'S CRM AS DESCRIBED REASONABLE?

A. No. The Company has not established that a CRM is needed in order to provide it an ability to adjust its rates to fully recover its cost of service. Pipeline safety trackers such as the CRM should be reserved for extraordinary investments, and only if the Company can show that the traditional regulatory process is inadequate to recover these costs. No showing has been made here. The Company's claim for a CRM to eliminate the need for more frequent rate cases may benefit the Company by accelerating and simplifying its ability to increase rates. But, simple and accelerated rate change authorization is detrimental to customers' interest because rates can be increased using trackers without a full review of the Company's costs and revenues. As such, these tracker mechanisms represent extraordinary regulatory procedures which tilt the balance in favor of investors by eliminating the utility's need to prove a rate increase is justified. For these reasons the proposed CRM should be rejected.

Q. IF THE COMMISSION APPROVES THE PROPOSED CRM, SHOULD MODIFICATIONS BE MADE TO CASCADE'S PROPOSAL?

A. Yes. The following modifications should be made to Cascade's proposed CRM if the Commission decides one is appropriate and balanced from both investor and customer perspectives. These modifications include the following:

1. If the CRM is implemented, Cascade should be obligated to make a base rate filing at least every three years. The annual rate changes produced through the CRM may produce revenues that allow Cascade to more than recover its cost of service. Hence,

a regular calibration of its base rates is necessary to ensure that the CRM mechanism does not create unnecessary and unjustified rate burdens on customers.

2. The CRM should have a sunset provision. Cascade claims the need for an increase right now because it is replacing non-revenue producing investments. Cascade should demonstrate that those capital investment obligations are limiting its ability to timely adjust rates to recover its cost of service. Importantly, Cascade has not provided this proof in this case.

   Nevertheless, sunset provisions should be imposed on Cascade so it is obligated to come in and prove its current traditional regulatory mechanisms are not adequate to allow it to adjust rates to fully recover its cost of service after the CRM is in effect for a reasonable period. Initially, I propose a sunset provision of three years. If the Commission approves the CRM, it will terminate in three years, unless Cascade proves it is in the public interest to continue the CRM.

3. The CRM should be limited to only qualifying investments that are non-revenue producing as the Company asserts is the purpose of the CRM. This should require the Company to identify specific Federal Energy Regulatory Commission ("FERC") accounts that will be designated as qualifying investments that are non-revenue producing, and should qualify to be recovered in the CRM.

4. The revenue requirement of these qualifying CRM investments then should be adjusted to reflect a roll-forward of accumulated depreciation that is recovered in base rates for the specified FERC accounts. This will recognize the incremental capital investment made by Cascade is offset by recovery of embedded plant investment recorded in the designed FERC accounts.

5. The Company's proposed intra-class cost recovery of CRM investments on a dollars per volumetric basis should be denied. Instead, the CRM should be a percent of non-gas bill. This will ensure that the proper cost allocation of Cascade's costs is reasonably allocated to customers within each rate class function.

Q. CAN YOU PROVIDE SOME DETAIL DESCRIBING YOUR PROPOSED REVISIONS TO THE COMPANY'S PROPOSED CRM MECHANISM?

A. Yes. Referring to Mr. Parvinen's CNG/311, he develops a rate base value of the qualifying CRM investments by considering only depreciation expense applicable to the incremental CRM investment. This is not appropriate and will overstate the Company's net plant investment over time because it is not recognizing that incremental plant investments are offset by recurring depreciation expense receipts in measuring change to total "net" plant. Hence, it does not properly measure the Company's net plant investment for these qualifying pipeline replacement costs.

To correct this, line 13 of Mr. Parvinen's CNG/311, should include both one-half year of the depreciation expense associated with the incremental plant investment, plus a full year of the depreciation expense that aligns with the qualifying CRM plant investments recovered by the Company in the prior year, less the amount included in base rates in the Company's most recent rate case filing.

For example, if the Company had accumulated depreciation reserved for CRM qualifying plant accounts of $1,000 in its last rate case, and at the end of the following year the first year accumulated depreciation on qualifying CRM increased to $1,100, then the additional $100 of accumulated depreciation should be recognized in the CRM in order to estimate the incremental "net" plant value of qualifying CRM investments. This will ensure that the Company is allowed to earn a fair return on its net plant investment for CRM qualifying investments, which includes its invested capital recovered in base rates, and its invested capital recovered in the CRM surcharge.

Without this important adjustment in developing the revenue requirement in the CRM, customers will be exposed to paying higher rates than necessary to provide the Company the full revenue requirement attributable to its net plant in-service for CRM qualifying investments, which will result in the combination of base rates and CRM surcharges not being just and reasonable.

Q. DOES THIS CONCLUDE YOUR OPENING TESTIMONY?

A. Yes, it does.

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UG 287

In the Matter of	)
	)
CASCADE NATURAL GAS CORPORATION,	)
	)
	)
Request for a General Rate Revision.	)
	)

EXHIBIT NWIGU/101

QUALIFICATIONS OF MICHAEL P. GORMAN

July 31, 2015

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a Managing Principal with Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from Southern Illinois University, and in 1986, I received a Masters Degree in Business Administration with a concentration in Finance from the University of Illinois at Springfield. I have also completed several graduate level economics courses.

In August of 1983, I accepted an analyst position with the Illinois Commerce Commission ("ICC"). In this position, I performed a variety of analyses for both formal and informal investigations before the ICC, including: marginal cost of energy, central dispatch, avoided cost of energy, annual system production costs, and working capital. In October of 1986, I was promoted to the position of Senior Analyst. In this position, I assumed the additional responsibilities of technical leader on projects, and my areas of responsibility were expanded to include utility financial modeling and financial analyses.

In 1987, I was promoted to Director of the Financial Analysis Department. In this position, I was responsible for all financial analyses conducted by the Staff. Among other things, I conducted analyses and sponsored testimony before the ICC on rate of return, financial integrity, financial modeling and related issues. I also supervised the development of all Staff analyses and testimony on these same issues. In addition, I supervised the Staff's review and recommendations to the Commission concerning utility plans to issue debt and equity securities.

In August of 1989, I accepted a position with Merrill-Lynch as a financial consultant. After receiving all required securities licenses, I worked with individual investors and small businesses in evaluating and selecting investments suitable to their requirements.

In September of 1990, I accepted a position with Drazen-Brubaker & Associates, Inc. ("DBA"). In April 1995, the firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA principals and Staff. Since 1990, I have performed various analyses and sponsored testimony on cost of capital, cost/benefits of utility mergers and acquisitions, utility reorganizations, level of operating expenses and rate base, cost of service studies, and analyses relating to industrial jobs and economic development. I also participated in a study used to revise the financial policy for the municipal utility in Kansas City, Kansas.

At BAI, I also have extensive experience working with large energy users to distribute and critically evaluate responses to requests for proposals ("RFPs") for electric, steam, and gas energy supply from competitive energy suppliers. These analyses include the evaluation of gas supply and delivery charges, cogeneration and/or combined cycle unit feasibility studies, and the evaluation of third-party asset/supply management agreements. I have participated in rate cases on rate design and class cost of service for electric, natural gas, water and wastewater utilities. I have also analyzed commodity pricing indices and forward pricing methods for third party supply agreements, and have also conducted regional electric market price forecasts.

In addition to our main office in St. Louis, the firm also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

A Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of service and other issues before the Federal Energy Regulatory Commission and numerous state regulatory commissions including: Arkansas, Arizona, California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Missouri, Montana, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and before the provincial regulatory boards in Alberta and Nova Scotia, Canada. I have also sponsored testimony before the Board of Public Utilities in Kansas City, Kansas; presented rate setting position reports to the regulatory board of the municipal utility in Austin, Texas, and Salt River Project, Arizona, on behalf of industrial customers; and negotiated rate disputes for industrial customers of the Municipal Electric Authority of Georgia in the LaGrange, Georgia district.

Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR ORGANIZATIONS TO WHICH YOU BELONG.

A I earned the designation of Chartered Financial Analyst ("CFA") from the CFA Institute. The CFA charter was awarded after successfully completing three examinations which covered the subject areas of financial accounting, economics, fixed income and equity valuation and professional and ethical conduct. I am a member of the CFA Institute's Financial Analyst Society.

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UG 287

In the Matter of	)
	)
CASCADE NATURAL GAS	)
CORPORATION,	)
	)
Request for a General Rate Revision.	)
	)

EXHIBIT NWIGU/102

LONG RUN INCREMENTAL COST (LRIC) STUDY
DEVELOPMENT OF ADJUSTED NON-GAS REVENUE CLASS INCREASES

July 31, 2015

Cascade Natural Gas Corp.
Oregon Jurisdiction
Docket No. UG 287

Long Run Incremental Cost (LRIC) Study
Development of Adjusted Non-Gas Revenue Class Increases

			Long Run Incremental Cost (LRIC) Study Results				**Step 1**		**Step 2**					**Step 3**		
Line	Rate Class		Non-Gas Revenue @ Current Rates	Revenue Requirement	Non-Gas Revenue Increase	Percent Increase	Adjustment to Class Increases	Increase to Current Revenue	Shortfall Spread	New Revenue Increase	Increase Amount	Increase Percent	Return Index	Increase Revenue	Increase Percent	Return Index
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Residential	101	$16,312,863	$16,801,484	$488,621	3.00%	$16,801,484	$488,621	$953,827	$17,755,311	$1,442,448	8.84%	0.71	$1,809,733	11.09%	0.89
2	Commercial	104	7,513,446	8,257,847	744,401	9.91%	$8,257,847	$744,401	$468,801	$8,726,648	$1,213,202	16.15%	1.29	$1,393,721	18.55%	1.48
3	Industrial	105	472,884	967,044	494,160	104.50%	$967,044	$494,160	$54,899	$1,021,943	$549,059	116.11%	9.28	$133,127	28.15%	2.25
4	Lg Volume	111	230,926	404,828	173,902	75.31%	$404,828	$173,902	$22,982	$427,810	$196,884	85.26%	6.81	$65,011	28.15%	2.25
5	Gen. Distribution	163+164	2,295,862	1,823,890	(471,972)	-20.56%	2,295,862	$0	$130,337	$2,426,199	$130,337	5.68%	0.45	$130,337	5.68%	0.45
6	Interruptible	170	340,717	228,266	(112,451)	-33.00%	340,717	$0	$19,343	$360,060	$19,343	5.68%	0.45	$19,343	5.68%	0.45
7	Special Contracts	900	1,787,429	4,093,538	2,306,109	129.02%	1,858,926	$71,497	$0	$1,858,926	$71,497	4.00%	0.32	$71,497	4.00%	0.32
8	Total		$28,954,127	**$32,576,897**	$3,622,770	**12.51%**	$30,926,708	$1,972,581	$1,650,189	$32,576,897	$3,622,770	12.51%	1.00	$3,622,770	12.51%	1.00

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

			101	104	105	111	163+164	170	900
			Residential	Commercial	Industrial	Large Volume	General		Special
Line #	**Description**	**Total**	**Service**	**Service**	**Service**	**Service**	**Distribution**	**Interruptible**	**Contracts**
			core	core	core	core	non-core	core	non-core
1	Billing Determinants								
2	Peak Day Forecast	83,138	46,988	32,086	2,617	1,447	0	0	0
3	Customer Count	69,254	59,252	9,839	111	13	32	4	4
4	Throughput	33,745,469	3,944,203	2,790,590	253,388	157,985	3,478,380	276,803	22,844,121
5									
6	**O&M Costs**								
7	Gas Supply Related								
8	Gas Planning	$ 26,165	$ 11,922	$ 8,191	$ 681	$ 386	$ 640	$ 143	$ 4,201
9	Gas Supply	$ 44,079	$ 17,347	$ 12,273	$ 1,114	$ 695	$ 1,511	$ 1,217	$ 9,922
10	Gas Control	$ 95,077	$ 37,043	$ 26,208	$ 2,380	$ 1,484	$ 12,058	$ 2,600	$ 13,305
11	Customer Related								
12	Meter Reading	$ 253,003	$ 211,393	$ 35,101	$ 396	$ 1,499	$ 3,691	$ 461	$ 461
13	Customer Acct records & collect.	$ 1,229,953	$ 1,048,824	$ 174,154	$ 1,964	$ 230	$ 3,825	$ 478	$ 478
14	Billing Postage & Printing	$ 346,211	$ 296,208	$ 49,184	$ 555	$ 65	$ 160	$ 20	$ 20
15	Uncollectible	$ 278,894	$ 226,650	$ 52,214	$ 30	$ -	$ -	$ -	$ -
16	**Subtotal: O&M Costs**	**$ 2,273,382**	**$ 1,849,385**	**$ 357,326**	**$ 7,120**	**$ 4,359**	**$ 21,884**	**$ 4,920**	**$ 28,388**
17									
18	**Customer Investment Carrying Costs**								
19	Meter	$ 2,935,074	$ 1,600,768	$ 1,179,345	$ 95,899	$ 6,318	$ 35,146	$ 7,856	$ 9,742
20	Service	$ 12,417,164	$ 10,226,363	$ 1,885,694	$ 51,727	$ 16,710	$ 177,124	$ 46,631	$ 12,914
21	Mains	$ 11,632,431	$ 4,526,025	$ 1,085,696	$ 921,423	$ 241,753	$ 2,758,597	$ 382,489	$ 1,716,447
22	**Subtotal: Customer Investment Costs**	**$ 26,984,669**	**$ 16,353,156**	**$ 4,150,736**	**$ 1,069,050**	**$ 264,781**	**$ 2,970,867**	**$ 436,976**	**$ 1,739,103**
23									
24	**System Core Main Carrying Costs**								
25	Capacity	$ 37,706,253	$ 21,302,440	$ 14,546,501	$ 1,186,418	$ 655,982	$ -	$ -	$ 14,912
26									
27	Commodity	$ 12,881,733	$ 1,675,488	$ 1,185,436	$ 107,639	$ 67,111	$ 1,477,607	$ 117,585	$ 8,250,866
28	**Subtotal: System Core Main Costs**	**$ 50,587,986**	**$ 22,977,928**	**$ 15,731,937**	**$ 1,294,056**	**$ 723,094**	**$ 1,477,607**	**$ 117,585**	**$ 8,265,778**
29									
30	**LRIC - Distribution**	**$ 79,846,037**	**$ 41,180,470**	**$ 20,239,999**	**$ 2,370,226**	**$ 992,234**	**$ 4,470,358**	**$ 559,481**	**$ 10,033,269**
31									
32	Fuctional Cost Assignment by LRIC								
33	Scheduling & Planning	$ 165,321	$ 66,311	$ 46,673	$ 4,176	$ 2,565	$ 14,208	$ 3,960	$ 27,428
34	Meter Reading, Billing etc.	$ 2,108,061	$ 1,783,074	$ 310,653	$ 2,944	$ 1,795	$ 7,676	$ 960	$ 960
35	Meters, Services & Mains extensions	$ 26,984,669	$ 16,353,156	$ 4,150,736	$ 1,069,050	$ 264,781	$ 2,970,867	$ 436,976	$ 1,739,103
36	Sysctem Core Mains	$ 50,587,986	$ 22,977,928	$ 15,731,937	$ 1,294,056	$ 723,094	$ 1,477,607	$ 117,585	$ 8,265,778
37	**Total**	**$ 79,846,037**	**$ 41,180,470**	**$ 20,239,999**	**$ 2,370,226**	**$ 992,234**	**$ 4,470,358**	**$ 559,481**	**$ 10,033,269**
38									
39	Non-Gas Revenue at Current Rates	$ 28,954,127	**$ 16,312,863**	**$ 7,513,446**	**$ 472,884**	**$ 230,926**	**$ 2,295,862**	**$ 340,717**	**$ 1,787,429**
40	Proposed Increase	**$ 3,622,770**							
41	**LRIC Based Non-gas Rev Req.**	**$ 32,576,897**	$ 16,801,484	$ 8,257,847	$ 967,044	$ 404,828	$ 1,823,890	$ 228,266	$ 4,093,538
42	Revenue to Cost Ratio		0.97	0.91	0.49	0.57	1.26	1.49	0.44
43									
44	Incremental Non-gas Revenue Req.	$ 3,622,770	$ 488,621	$ 744,401	$ 494,160	$ 173,902	$ (471,972)	$ (112,451)	$ 2,306,109

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UG 287

In the Matter of	)
	)
CASCADE NATURAL GAS	)
CORPORATION,	)
	)
Request for a General Rate Revision.	)
	)

EXHIBIT NWIGU/103

LONG RUN INCREMENTAL COST (LRIC) STUDY
REVISED REVENUE DEFICIENCY SCENARIO
DEVELOPMENT OF ADJUSTED NON-GAS REVENUE CLASS INCREASES

July 31, 2015

Cascade Natural Gas Corp.
Oregon Jurisdiction
Docket No. UG 287

Long Run Incremental Cost (LRIC) Study
Revised Revenue Deficiency Scenario
Development of Adjusted Non-Gas Revenue Class Increases

			Long Run Incremental Cost (LRIC) Study Results				**Step 1**		**Step 2**					**Step 3**		
											Increase			Increase		
Line	Rate Class		Non-Gas Revenue @ Current Rates	Revenue Requirement	Non-Gas Revenue Increase	Percent Increase	Adjustment to Class Increases	Increase to Current Revenue	Excess Spread	New Revenue Increase	Amount	Percent	Return Index	Revenue	Percent	Return Index
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Residential	101	$16,312,863	$15,428,680	($884,183)	-5.42%	$16,312,863	$0	$154,873	$16,467,736	$154,873	0.95%	0.29	$541,431	3.32%	1.00
2	Commercial	104	7,513,446	7,583,121	69,675	0.93%	$7,583,121	$69,675	$71,993	$7,655,114	$141,668	1.89%	0.57	$249,375	3.32%	1.00
3	Industrial	105	472,884	888,029	415,145	87.79%	$888,029	$415,145	$8,431	$896,460	$423,576	89.57%	26.99	$35,314	7.47%	2.25
4	Lg Volume	111	230,926	371,750	140,825	60.98%	$371,750	$140,825	$3,529	$375,280	$144,354	62.51%	18.83	$17,245	7.47%	2.25
5	Gen. Distribution	163+164	2,295,862	1,674,865	(620,997)	-27.05%	$2,295,862	$0	$21,797	$2,317,659	$21,797	0.95%	0.29	$40,175	1.75%	0.53
6	Interruptible	170	340,717	209,615	(131,102)	-38.48%	$340,717	$0	$3,235	$343,952	$3,235	0.95%	0.29	$5,962	1.75%	0.53
7	Special Contracts	900	1,787,429	$3,759,066	1,971,637	110.31%	1,858,926	$71,497	$0	$1,858,926	$71,497	4.00%	1.21	$71,497	4.00%	1.21
8	Total		$28,954,127	**$29,915,127**	$961,000	**3.32%**	$29,651,269	$697,142	$263,858	$29,915,127	$961,000	3.32%	1.00	$961,000	3.32%	1.00

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

Line #	Description	Total	101 Residential Service core	104 Commercial Service core	105 Industrial Service core	111 Large Volume Service core	163+164 General Distribution non-core	170 Interruptible core	900 Special Contracts non-core
1	Billing Determinants								
2	Peak Day Forecast	83,138	46,988	32,086	2,617	1,447	0	0	0
3	Customer Count	69,254	59,252	9,839	111	13	32	4	4
4	Throughput	33,745,469	3,944,203	2,790,590	253,388	157,985	3,478,380	276,803	22,844,121
5									
6	**O&M Costs**								
7	Gas Supply Related								
8	Gas Planning	$ 26,165	$ 11,922	$ 8,191	$ 681	$ 386	$ 640	$ 143	$ 4,201
9	Gas Supply	$ 44,079	$ 17,347	$ 12,273	$ 1,114	$ 695	$ 1,511	$ 1,217	$ 9,922
10	Gas Control	$ 95,077	$ 37,043	$ 26,208	$ 2,380	$ 1,484	$ 12,058	$ 2,600	$ 13,305
11	Customer Related								
12	Meter Reading	$ 253,003	$ 211,393	$ 35,101	$ 396	$ 1,499	$ 3,691	$ 461	$ 461
13	Customer Acct records & collect.	$ 1,229,953	$ 1,048,824	$ 174,154	$ 1,964	$ 230	$ 3,825	$ 478	$ 478
14	Billing Postage & Printing	$ 346,211	$ 296,208	$ 49,184	$ 555	$ 65	$ 160	$ 20	$ 20
15	Uncollectible	$ 278,894	$ 226,650	$ 52,214	$ 30	$ -	$ -	$ -	$ -
16	**Subtotal: O&M Costs**	**$ 2,273,382**	**$ 1,849,385**	**$ 357,326**	**$ 7,120**	**$ 4,359**	**$ 21,884**	**$ 4,920**	**$ 28,388**
17									
18	**Customer Investment Carrying Costs**								
19	Meter	$ 2,935,074	$ 1,600,768	$ 1,179,345	$ 95,899	$ 6,318	$ 35,146	$ 7,856	$ 9,742
20	Service	$ 12,417,164	$ 10,226,363	$ 1,885,694	$ 51,727	$ 16,710	$ 177,124	$ 46,631	$ 12,914
21	Mains	$ 11,632,431	$ 4,526,025	$ 1,085,696	$ 921,423	$ 241,753	$ 2,758,597	$ 382,489	$ 1,716,447
22	**Subtotal: Customer Investment Costs**	**$ 26,984,669**	**$ 16,353,156**	**$ 4,150,736**	**$ 1,069,050**	**$ 264,781**	**$ 2,970,867**	**$ 436,976**	**$ 1,739,103**
23									
24	**System Core Main Carrying Costs**								
25	Capacity	$ 37,706,253	$ 21,302,440	$ 14,546,501	$ 1,186,418	$ 655,982	$ -	$ -	$ 14,912
26									
27	Commodity	$ 12,881,733	$ 1,675,488	$ 1,185,436	$ 107,639	$ 67,111	$ 1,477,607	$ 117,585	$ 8,250,866
28	**Subtotal: System Core Main Costs**	**$ 50,587,986**	**$ 22,977,928**	**$ 15,731,937**	**$ 1,294,056**	**$ 723,094**	**$ 1,477,607**	**$ 117,585**	**$ 8,265,778**
29									
30	**LRIC - Distribution**	**$ 79,846,037**	**$ 41,180,470**	**$ 20,239,999**	**$ 2,370,226**	**$ 992,234**	**$ 4,470,358**	**$ 559,481**	**$ 10,033,269**
31									
32	Fuctional Cost Assignment by LRIC								
33	Scheduling & Planning	$ 165,321	$ 66,311	$ 46,673	$ 4,176	$ 2,565	$ 14,208	$ 3,960	$ 27,428
34	Meter Reading, Billing etc.	$ 2,108,061	$ 1,783,074	$ 310,653	$ 2,944	$ 1,795	$ 7,676	$ 960	$ 960
35	Meters, Services & Mains extensions	$ 26,984,669	$ 16,353,156	$ 4,150,736	$ 1,069,050	$ 264,781	$ 2,970,867	$ 436,976	$ 1,739,103
36	Sysctem Core Mains	$ 50,587,986	$ 22,977,928	$ 15,731,937	$ 1,294,056	$ 723,094	$ 1,477,607	$ 117,585	$ 8,265,778
37	**Total**	**$ 79,846,037**	**$ 41,180,470**	**$ 20,239,999**	**$ 2,370,226**	**$ 992,234**	**$ 4,470,358**	**$ 559,481**	**$ 10,033,269**
39	Non-Gas Revenue at Current Rates	$ 28,954,127	**$ 16,312,863**	**$ 7,513,446**	**$ 472,884**	**$ 230,926**	**$ 2,295,862**	**$ 340,717**	**$ 1,787,429**
40	Proposed Increase	**$ 961,000**							
41	**LRIC Based Non-gas Rev Req.**	**$ 29,915,127**	$ 15,428,680	$ 7,583,121	$ 888,029	$ 371,750	$ 1,674,865	$ 209,615	$ 3,759,066
42	Revenue to Cost Ratio		1.06	0.99	0.53	0.62	1.37	1.63	0.48
43									
44	Incremental Non-gas Revenue Req.	$ 961,000	$ (884,183)	$ 69,675	$ 415,145	$ 140,825	$ (620,997)	$ (131,102)	$ 1,971,637