

**Exh. AIW-5  
Docket UG-170929  
Witness: Amy I. White**

**BEFORE THE WASHINGTON  
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**CASCADE NATURAL GAS  
CORPORATION,**

**Respondent.**

**DOCKET UG-170929**

**EXHIBIT TO  
TESTIMONY OF**

**Amy I. White**

**ON BEHALF OF STAFF OF  
WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION**

*Staff's Adj. P-6, Staff's Calculation of MAOP Deferral Amortization*

**February 15, 2018**

*Company's Original Workpaper*  
**Cascade Natural Gas Corporation**  
UG 17 \_\_\_\_\_  
MPP WP-1.17  
**MAOP Deferral Amortization**  
**Twelve Months Ended December 31, 2016**

Company's input is in plain font; Staff's work is in italics

<u>Line No.</u>	A	B
1	2016 Actual Deferral [1]	2,219,857
2	2017 Estimated Deferral	5,000,000
3	2018 Estimate through May 31	<u>2,371,011</u>
4	Total Estimated Deferral through 2017	9,590,868
5	Amortization Period (years) <sup>1</sup>	<u>10</u>
6	Annual Amortization	<u><u>\$959,087</u></u>

*Staff's calculation*

		<i>Staff's Allowed Amounts</i>	
	<i>2016 Deferral Allowed</i>	\$	<i>1,554,452</i>
	<i>2017 Deferral Allowed</i>	\$	<i>2,682,629</i>
3	<i>2018 Estimate Allowed</i>	\$	<i>-</i>
	<i>Total Allowed Deferral</i>	\$	<i>4,237,081</i>
	<i>Amortization Period (years)</i>	\$	<i>10</i>
	<i>Annual Amortization</i>	<u><u>\$423,708</u></u>	

7  
8  
9 <sup>1</sup>Remaining period of the program after rate case effective date  
10 Notes:  
11 (1) Cascade Exhibit No. \_\_RP-2, December 2016 MAOP Deferred Costs Balance

**Cascade Natural Gas Corp**  
**Analysis of Company Data Request Responses in DRs 68, 93, 117 and 118**  
**To calculate MAOP adjustment**

Line No.

Company's DR responses are in plain font; Staff's work is in *italics*

**2017 – Actuals & Estimates**

**Staff's Calculation of 2017 Allowed Amount**

**Company's response to staff DR 68**

Sum of Amount			Description	Pipeline classification from Company's DR 118 response	Staff Recommendation	Staff Comment	Allowed	Disallowed
MATERIALS	\$575.14	2" Burbank HP Pressure Test		<i>Pre-Code</i>	<i>allow</i>		\$ 575.14	
MATERIALS	\$1,160.13	4" South Moses Lake HP Pressure Test		<i>Pre-Code</i>	<i>allow</i>		\$ 1,160.13	
MATERIALS	\$10,000	12" Grandview Rd. Line		<i>Post-Code</i>	<i>disallow</i>			\$ 10,000.00
WESCO DISTRIBUTION INC	\$5,602.40	Materials for MAOP Validation			<i>allow</i>		\$ 5,602.40	
PERMIT FEE	\$35.00	Permit Fee for MAOP Validation			<i>allow</i>		\$ 35.00	
BROTHERS PIPELINE CORP	\$11,325.69	Contractor to excavate and verify fittings on 8" & 12" Kitsap Lines		<i>8" line is pre-code; 12" line-post code</i>	<i>allow 34.4%</i>	<i>Per company's 12/31/17 MAOP plan in docket UG-150120, 8" line, 18,760.2 feet, 34.4% of total; 12" line, 15.2 plus 35827.6 feet, 65.6% of total</i>	\$ 3,896.04	\$ 7,429.65
INFRA SOURCE CONST LLC	\$123,224.77	Contractor for 2" Burbank HP and 4" South Moses Lake HP Pressure Tests		<i>pre-code</i>	<i>allow</i>		\$ 123,224.77	
JACOBS CONSULTANCY INC	\$142,541.57	API173 Audit			<i>allow</i>		\$ 142,541.57	
KIEFNER AND ASSOCIATES INC - A	\$40,000*	Material Testing, 8" Bellingham Line, 8" Atalia Line, 6" Wenatchee Line, and 12" Grandview Rd Line		<i>Bellingham/Atalia, pre-code; Wenatchee/Grandview Rd, post-code</i>	<i>allow pre-code only, see calculation below in DR 93 response</i>		\$ 25,995.00	\$ 25,995.00
MISTRAS GROUP INC	\$6,243.02	Non-Destructive Testing and Third-Party Inspection for MAOP Validation			<i>allow</i>		\$6,243.02	
RAWHIDE LEASING	\$45,168.03	Compressed Natural Gas Supply for 2" Burbank HP Pressure Test		<i>Pre-code</i>	<i>allow</i>		\$45,168.03	
SNELSON COMPANIES INC	\$100,000*	MAOP Validation on 16" North Whatcom Valve Settings and 12" Grandview Rd. Line		<i>Both lines are post-code, see below</i>	<i>disallow</i>		\$ -	
ABI SERVICES, LLC	\$846,788.33	In-situ testing for determination of MAOP data gaps.			<i>allow</i>		\$846,788.33	
PARAMETRIX INC	\$400,000*			<i>see calculation below as result of DR 93 responses</i>	<i>allow</i>	<i>all testing was on pre-code pipe</i>	\$ 390,326.00	
DAS-CO OF IDAHO	\$622,733.78				<i>allow</i>		\$622,733.78	
TRC ENVIRONMENTAL CORPORATION	\$1,056,204.56	Records Review and MAOP Validation		<i>per company's pipeline management plan and staff's analysis, 44.3% of pipeline footage is pre-code, 55.7% is post-code; hence, staff will disallow 55.7% of this overarching aggregate expense</i>			\$468,340.06	\$ 587,864.50
<b>Grand Total</b>	<b>\$3,411,602.42</b>						<b>\$ 2,682,629.26</b>	<b>\$ 631,289.16</b>

\*Estimated Amount

*Staff's Total 2017 Expenses allowed*

**2018 – Revised Estimate**

Explanation 1	Sum of Amount	Description	Pipeline classification from Company's response to DR 118	Staff Recommendation	Staff Comment	Allowed	Disallowed
PARAMETRIX INC	\$420,000	In-situ testing for determination of MAOP data gaps.		<i>cannot determine</i>	<i>All 2018 amounts are estimates only</i>	\$ -	
ABI SERVICES, LLC	\$924,000			<i>cannot determine</i>	<i>Staff cannot calculate a known and measurable amount</i>	\$ -	
DAS-CO OF IDAHO	\$1,050,000			<i>cannot determine</i>		\$ -	
PIPELINE CONTRACTOR	\$750,000	8" Central Whatcom HP Line Pressure Test		<i>pre-code</i>		\$ -	
PIPELINE CONTRACTOR	\$250,000	8" Bellingham HP Line Pressure Test		<i>pre-code</i>		\$ -	
PIPELINE CONTRACTOR	\$200,000	4" Sedro Woolley HP Line Pressure Test		<i>pre-code</i>		\$ -	
PIPELINE CONTRACTOR	\$150,000	4" Northwest Pasco HP Line / 4" Glade Road HP Pressure Test		<i>pre-code</i>		\$ -	
PIPELINE CONTRACTOR	\$500,000	4" Othello HP Line Pressure Test		<i>pre-code</i>		\$ -	
PIPELINE CONTRACTOR	\$150,000	9" Elma Rendering Plant HP Line Pressure Test		<i>pre-code</i>		\$ -	
PIPELINE CONTRACTOR	\$200,000	8" March Point HP Line Pressure Test		<i>pre-code</i>		\$ -	
MATERIAL TESTING CONTRACTOR	\$50,000	Material property testing for MAOP validation		<i>pre-code</i>		\$ -	
<b>Grand Total</b>	<b>\$4,644,000</b>					<b>\$ -</b>	

**Company's Response to DR 93**

The company provided information about the asterisked \* estimated charges remaining for 2017 in DR 93. Staff calculates line item allowable amounts in this table.

Line No.	Original Company Estimate			Staff's calculation of allowable 2017 costs								
	Contractor	Est Cost	For	Quote from company	Staff comment	Staff comment	Staff analysis / allowed amount					
1	KIEFNER AND ASSOCIATES INC - A	\$40,000*	Material Testing, 8" Bellingham Line, 8" Attalia Line, 6" Wenatchee Line, and 12" Grandview Rd Line	Kiefner has completed \$24,644.50 for the testing on the 8" Bellingham and 8" Attalia line. Material testing costs are approximately \$9,115 per sample. Kiefner is currently in the process of testing 3 more samples, estimated cost for the remaining testing is approximately \$18,000.	Wenatchee (1973) and Grandview Road are post-code	Disallow half of this materials testing since two of four are post-code	\$	24,645.00				
2												
3												
4												
5												
6	SNELSON COMPANIES INC	\$100,000*	MAOP Validation on 16" North Whatcom Valve Settings and 12" Grandview Rd. Line	* estimated project costs will be between \$50,000 - \$60,000*	Both segments are post-code, per DR 11 8, disallow	Disallow	\$	-				
7	PARAMETRIX INC	\$400,000*	In-situ testing for determination of MAOP data gaps.	Parametrix has completed 2017 work; Estimated cost is \$390,326.03.	Staff has reviewed contract scope of work, all projects pre-code.	Allow	\$	390,326.00				
8	Original estimate for these vendors	\$	540,000					<b>Total Estimated costs allowed</b>	\$	416,321.00		

**Company's Response to Staff DR 117**

			2016 LTD	2016 LTD	2016 LTD	2016 LTD	2016 LTD	2016 LTD		
15	Post-Code	1823	2046	WA MAOP Regulatory Asset	-	-	\$360,156.63	\$106,757.94	\$57,914.24	\$9,777.03
16	Pre-Code	1823	2046	WA MAOP Regulatory Asset	-	-	\$1,054,828.39	\$393,622.54	\$114,116.94	\$20,340.15
17	Pre/Post-Code	1823	2046	WA MAOP Deferred Costs	-	-	\$89,169.45	-	-	-
18	Post-Code	1860	20479	WA MAOP Deferred Costs	\$383,909.69	\$373,224.65	-	-	-	-
19	Pre-Code	1860	20479	WA MAOP Deferred Costs	\$1,330,189.40	\$1,309,135.08	-	-	-	-
20	Pre/Post-Code	1860	20479	WA MAOP Deferred Costs	\$505,758.00	\$147,224.53	-	-	-	-
21	<b>Total</b>				<b>\$2,219,857.09</b>	<b>\$1,829,584.26</b>	<b>\$1,504,154.47</b>	<b>\$500,380.48</b>	<b>\$172,031.18</b>	<b>\$30,117.18</b>

**Staff's analysis of Allowable Amounts from the \$2,219,857 2016 Actual Costs**

	Allowed	Disallowed	Total
24		\$	383,909.69
25	\$	1,330,189.40	\$
26	\$	224,262.17	\$
27	\$	1,554,451.57	\$

Note: Staff has analyzed the pipeline installation dates and lineal footages in Exh AIW-10 extracted from company's MAOP plan. Post-code pipe should all be documented already. Staff will disallow 55.7 percent of aggregate expenses such as documentation audits, based on the overall percentage of pipeline footage, as they are related to documenting post-code pipe. Staff feels this is being conservative and generous to the company as a case could be made to disallow 84.3% of these aggregate expenses based on the number of pipeline segments.

Pipeline classification	Feet	Pct of total feet
Pre-code	1,403,100.00	44.3%
Post-code	1,761,183.30	55.7%
<b>Total</b>	<b>3,164,283.30</b>	<b>100.0%</b>

Source: Staff Exh. AIW-10, tab Pipeline Analysis Summary.

**Company's response to staff DR118**

For each location/project listed in the Company responses above, please provide the following information:

Project	Work Order Number(s) as found in Company's MAOP Determination and Validation Plan filed December 2017	For Each Work Order Number, is this project working on pre-code or post-code pipe?
<b>2017 projects</b>		
2" Burbank HP Pressure Test	12301	Pre-Code
4" South Moses Lake HP Pressure Test	14455	Pre-Code
12" Grandview Rd. Line	26956	Post-Code
8" Kitsap Lines	20C6308	Pre-Code
12" Kitsap Lines	44000, 44000-T	Post-Code
4" South Moses Lake HP Pressure Test	14455	Pre-Code
8" Bellingham Line	Line 1-1	Pre-Code
8" Attalia Line	01C4776	Pre-Code
6" Wenatchee Line	2912	Pre-Code
12" Grandview Rd Line	26956	Post-Code
MAOP Validation on 16" North Whatcom Valve Settings	18794	Post-Code
MAOP Validation on 12" Grandview Rd. Line	26956	Post-Code
<b>2018 projects</b>		
8" Central Whatcom HP Line Pressure Test	14C1344	Pre-Code
8" Bellingham HP Line Pressure Test	Line 1-1	Pre-Code
4" Sedro Woolley HP Line Pressure Test	14788	Pre-Code
4" Northwest Pasco HP Line /	11097 (1)	Pre-Code
4" Glade Road HP Pressure Test	11097 (2)	Pre-Code
4" Othello HP Line Pressure Test	59C7038	Pre-Code
2" Elma Rendering Plant HP Line Pressure Test	78C7902	Pre-Code
8" March Point HP Line Pressure Test	11C1144, 11C5628, 2080	Pre-Code

This table is included to show the company's response to questions regarding the status of pipelines undergoing testing and repair.