#### **BEFORE THE**

## WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

) DOCKET UG-170929
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)
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)
)

#### EXH. BGM-6

**Updated Revenue Requirement Calculations** 

To

# CROSS-ANSWERING TESTIMONY OF BRADLEY G. MULLINS ON BEHALF OF

THE NORTHWEST INDUSTRIAL GAS USERS

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#### **Cascade Natural Gas Corporation**

Gas Revenue Requirement Summary (\$000) 12 Months Ended December 31, 2016 In Thousands

n Inousa	rices		Cascade Filing	(Rev. Req. at NV	VIGU ROR)	NWIGU Propos	sed	
					Rev. Req.			Rev. Req.
	Adj.		Net Oper.		Def. /	Net Oper.		Def. /
Line	No.	Description	Income	Rate Base	(Suf.)	Income	Rate Base	(Suf.)
1	1.00	Per Book Results (Y/E Dec. 2016)	16,605	280,062	6,398	16,605	280,062	6,398
Restating	Adjustmen	ts:						
2	R-1	Weather Normalization Adjustment	3,078	-	(4,954)	2,445	-	(3,936)
3	R-2	Promotional Advertising Adjustment	36	-	(57)	36	-	(57)
4	R-3	Restate Revenue Adjustment	(1,501)	-	2,416	(1,558)	-	2,507
5	R-4	Low-Income Bill Assistance	347	-	(558)	347	-	(558)
6	UTC-6	Restate Wages	-	-	-	(50)	-	81
7		Restated Results	18,563	280,062	3,245	17,824	280,062	4,435
Pro Forn	na Adjustme	ents						
8	P-1	Interest Coordination Adjustment	(275)	-	442	(387)	-	624
9	P-2	Pro Forma Wage Adjustment	(935)	-	1,505	(434)	-	699
10	P-3	Pro Forma Plant Additions	(280)	17,820	2,559	49	4,745	483
11	P-4	Rate Case Costs	(194)	-	312	(61)	-	99
12	P-5	Pro Forma Compliance Department	(182)	-	293	(182)	-	293
13	P-6	MAOP Deferral Amortization	(623)	-	1,004	(275)	-	443
14	P-7	Miscellaneous Charge Changes	(63)	-	102	(63)	-	102
15	P-8	CRM Adjustment	(51)	2,978	434	(51)	2,978	434
16	P-9	Pro Forma Revenue	3,243	-	(5,220)	4,537	-	(7,304)
17	UTC-2	SERP Expense	-	-	-	355	-	(572)
18	UTC-1	Incentive Pay	-	-	-	739	-	(1,190)
19	UTC-5	Employee Arbitration	-	-	-	137	-	(221)
		Pro Forma Results	19,204	300,861	4,674	22,187	287,785	(1,676)
TCJA Ad	justments							
20	TCJA-1	Restate Tax Expense	-	-	-	3,117	-	(4,129)
21	TCJA-2	Excess Deferred Taxes				1,870	935	(2,386)
22	TCJA-3	01/18 - 7/18 TCJA Deferral				1,520	-	(2,014)
23	TCJA-4	TCJA Conversion Factor				-	-	297
24		Total Pro Forma Results (with TCJA)	19,204	300,861	4,674	28,695	288,720	(9,908)
				Check	-		Check	_
			File	ed Deficiency:	\$5,885		Calculated:	(\$9,908)
				ROE Impact:	(1,211)		Check	0
				Check:	(0)			

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#### **Cascade Natural Gas Corporation**

Gas Revenue Requirement Summary (\$000) 12 Months Ended December 31, 2016 In Thousands

In Thousa	nds		Imm and of NIVII	CII A dimeter anto			
			Pre-Tax	GU Adjustments		Rev. Req.	
	Adj.		Net Oper.	Net Oper.		Def. /	
Line	Auj. No.	Description	Income	Income	Rate Base	(Suf.)	NWIGU Position
Line	110.	Description	Income	Income	Kate Base	(Sul.)	INVIGO FOSITION
1	1.00	Per Book Results (Y/E Dec. 2016)					
Restating	Adjustment	ts:					
2	R-1	Weather Normalization Adjustment	-	(633)	-	1,019	Adopt Staff
3	R-2	Promotional Advertising Adjustment	-	-	-	-	No Position
4	R-3	Restate Revenue Adjustment	-	(56)	-	91	Adopt Staff
5	R-4	Low-Income Bill Assistance	-	-	-	-	No Position
6	UTC-6	Restate Wages	(77)	(50)	-	81	
7		Restated Results	(77)	(739)	-	1,190	
Pro Forn	na Adjustme	nts_					
8	P-1	Interest Coordination Adjustment	-	(113)	-	181	Updated
9	P-2	Pro Forma Wage Adjustment	769	500	-	(805)	No Position
10	P-3	Pro Forma Plant Additions	506	329	(13,076)	(2,076)	Contested
11	P-4	Rate Case Costs	204	133	-	(214)	Contested
12	P-5	Pro Forma Compliance Department	-	-	-	-	No Position
13	P-6	MAOP Deferral Amortization	535	348	-	(560)	No Position
14	P-7	Miscellaneous Charge Changes	-	-	-	-	No Position
15	P-8	CRM Adjustment	-	-	-	-	No Position
16	P-9	Pro Forma Revenue	-	1,295	-	(2,084)	Adopt Staff
17	UTC-2	SERP Expense	547	355	-	(572)	Proposed
18	UTC-1	Incentive Pay	1,137	739	-	(1,190)	Proposed
19	UTC-5	Employee Arbitration	211	137	-	(221)	Proposed
		Pro Forma Results	3,832	2,984	(13,076)	(6,350)	
TCJA Ad	justments						
20	TCJA-1	Restate Tax Expense	-	3,117	-	(4,129)	New
21	TCJA-2	Excess Deferred Taxes	-	1,870	935	(2,386)	New
22	TCJA-3	01/18 - 7/18 TCJA Deferral	1,925	1,520	-	(2,014)	New
23	TCJA-4	TCJA Conversion Factor	-	-	-	297	New
24		Total Pro Forma Results (with TCJA)	5,757	9,492	(12,140)	(14,582)	

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#### **Cascade Natural Gas Corporation**

Results of Operations Summary 12 Months Ended December 31, 2016 Whole Dollars

		12/31/2016 Results Per Books	NWIGU Adjustments	Test Year Adjusted Total	Revenue Increase / (Decrease)	Results After Revenue Adjustment
		(1)	(2)	(3)	(4)	(5)
	Operating Revenues					
1	Natural Gas Sales	182,902,833	12,168,129	195,070,962	(9,907,827)	185,163,135
2	Gas Transportation Revenue	21,216,454	1,787,452	23,003,907	-	23,003,907
3	Other Operating Revenues	1,011,375	87,366	1,098,741		1,098,741
4	REVENUES	205,130,662	14,042,947	219,173,609	(9,907,827)	209,265,782
	Operating Expenses					
5	Nat. Gas/Production Costs	103,593,865	4,981,076	108,574,941		108,574,941
6	Revenue Taxes	16,946,341	569,020	17,515,361	(401,465)	17,113,896
7	Production	518,989	7,924	526,913		526,913
8	Distribution	16,326,277	1,035,790	17,362,068		17,362,068
9	Customer Accounts	6,383,108	97,959	6,481,068	(37,581)	6,443,487
10	Customer Service	824,096	(533,333)	290,762		290,762
11	Sales	4,917	(4,917)	-		-
12	Administrative and General	16,459,958	(1,545,904)	14,914,054		14,914,054
13	Depreciation & Amortization	19,218,442	137,956	19,356,398		19,356,398
14	Regulatory Debits		(1,924,600)	(1,924,600)		(1,924,600)
15	Taxes Other Than Income	4,095,634	112,695	4,208,328		4,208,328
16	State & Federal Income Taxes	4,154,374	888,653	5,043,027	(1,988,444)	3,054,583
17	EDFIT Amort	-	(1,870,216)	(1,870,216)		(1,870,216)
18	<b>Total Operating Expenses</b>	188,526,000	1,952,104	190,478,104	(2,427,490)	188,050,614
19	<b>Net Operating Revenues</b>	16,604,662	12,090,843	28,695,505	(7,480,337)	21,215,168
	Rate Base					
20	Total Plant in Service	677,314,165	7,819,297	685,133,462		685,133,462
21	Total Accumulated Depreciation	(345,424,355)	(68,978)	(345,493,333)		(345,493,333)
22	Customer Adv. For Construction	(3,771,590)	-	(3,771,590)		(3,771,590)
23	Deferred Accumulated Income Taxes	(73,667,038)	(39,814,867)	(113,481,905)		(113,481,905)
24	EDFIT	-	40,722,804	40,722,804		40,722,804
25	Working Capital Allowance	25,610,870	-	25,610,870		25,610,870
26	TOTAL RATE BASE	280,062,051	8,658,255	288,720,307	-	288,720,307
27	Rate of Return	5.93%		9.94%		7.35%
	Rev. Req. Def	6,397,810	(15,171,847)	(9,907,827)		

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Cascade Natural Gas
Revenue Requirement Calculation
12 Months ended December 31, 2016

12 Months ended December 31, 2016 Whole Dollars

1	Adjusted Rate Base	288,720,307
2	Rate of Return	7.3480000%
3	Required Return (ln 1 x ln 2)	\$21,215,168
4	Adjusted Net Income	\$28,695,505
5	Required Net Income Increase (ln 3 - ln 4)	-\$7,480,337
6	Conversion Factor	0.75499
7	Revenue Increase Required (ln 5 / ln 6)	-\$9,907,827
8	Test Year Adjusted Revenue	\$219,173,609
9	Overall Revenue Increase	-4.5205%

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## **Cascade Natural Gas Corporation**

Conversion Factor Calculation Twelve Months Ended December 31, 2016

_	Filed	Per TCJA
Revenues	1.00000	1.00000
Operating Revenue Deductions		
Uncollectible Accounts	0.00379	0.00379
State B&O Tax	0.03852	0.03852
UTC Fees	0.00200	0.00200
Interest expense		
State Taxable Income	0.95569	0.95569
State Income Tax	0.00000	0.00000
Federal Taxable Income	0.95569	0.95569
Federal Income Tax @ 35%, 21%	0.33449	0.20069
Total Income Taxes	0.33449	0.20069
Total Revenue Sensitive Costs	0.37880	0.24501
Conversion Factor	0.62120	0.75499
Conversion I actor	0.02120	0.75477
Combo-State & Federal Income Tax		
State	0.00000	0.00000
Federal	0.35000	0.21000
State and Federal Effective Tax Rate	35.0%	21.0%

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## **Cascade Natural Gas Corporation**

Cost of Capital Calculation

Twelve Months Ended December 31, 2016

# NWIGU

	A	В	C	D
Line No:	COST OF CAPITAL - Company	% of CAPITAL	COST	WEIGHTED
				COST
1	Long Term Debt	50.00%	5.295%	2.648%
2	Preferred Stock	0.00%	0.000%	0.000%
3	Common Equity	50.00%	9.400%	4.700%
4	Total	100.00%		7.348%

#### Cascade, As Filed

Line No:	COST OF CAPITAL - Company	% of CAPITAL	COST	WEIGHTED
				COST
1	Long Term Debt	50.00%	5.295%	2.648%
2	Preferred Stock	0.00%	0.000%	0.000%
3	Common Equity	50.00%	9.900%	4.950%
4	Total	100.00%		7.598%

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**Cascade Natural Gas Corporation** 

Revenue Requirement Adjustment Detail Twelve Months Ended December 31, 2016

#### 1 Operating Revenues

- 2 Natural Gas Sales
- 3 Gas Transportation Revenue
- 4 Other Operating Revenues
- 5 Total Gross Revenues

#### **Operating Expenses**

- 6 Nat. Gas/Production Costs
- 7 Revenue Taxes
- 8 Production
- 9 Distribution
- 10 Customer Accounts
- 11 Customer Service
- 12 Sales
- 13 Administrative and General
- 14 Depreciation & Amortization
- 15 Regulatory Debits
- 16 Taxes Other Than Income
- 17 State & Federal Income Taxes
- 18 EDFIT Amort
- 19 Total Operating Expenses
- 20 Net Operating Revenues

#### 21 Rate Base

- 22 Total Plant in Service
- 23 Total Accumulated Depreciation
- 24 Customer Adv. For Construction
- 25 Deferred Accumulated Income Taxes
- 26 EDFIT
- 27 Working Capital Allowance
- 28 Total Rate Base
- 29 Revenue Requirement Impact

Contested		Contested	
Weather	Promotional	Restate	Low-Income
Normalization	Advertising	Revenue	Bill
Adjustment	Adjustment	Adjustment	Assistance
R-1	R-2	R-3	R-4
\$ 12,463,455.49		\$ (5,477,134.53)	
		(346,009)	
\$12,463,455	\$0	(\$5,823,143)	
\$4,313,453		. , , ,	
0.150.002		(2.160.026)	
8,150,003		(3,168,926)	
505,019		(235,954)	
\$47,274		(\$22,087)	(500,000)
	(4,917)		(533,333)
	(49,800)		
	(43,800)		
1,316,406	19,151	(838,662)	186,667
10,018,702	(35,566)	(4,265,629)	(346,667)
\$2,444,754	\$35,566	(\$1,557,514)	\$346,667
\$0	\$0	\$0	\$0
φυ	ΨΟ	ΨΟ	ψ0
(\$3,935,556)	(\$57,253)	\$2,507,281	(\$558,063)

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#### **Cascade Natural Gas Corporation**

		Contested
		Restate
		Wages
		UTC-6
1	<b>Operating Revenues</b>	
2	Natural Gas Sales	
3	Gas Transportation Revenue	
4	Other Operating Revenues	
5	Total Gross Revenues	
3	Total Gloss Revenues	
	Operating Expenses	
6	Nat. Gas/Production Costs	
7	Revenue Taxes	
8	Production	
9	Distribution	67,687
10	Customer Accounts	3,804
11	Customer Service	0
12	Sales	
13	Administrative and General	63
14	Depreciation & Amortization	
15	Regulatory Debits	
16	Taxes Other Than Income	5,474
17	State & Federal Income Taxes	(26,960
18	EDFIT Amort	
19	<b>Total Operating Expenses</b>	50,068
20	Net Operating Revenues	(\$50,068
21	Rate Base	
22	Total Plant in Service	
23	Total Accumulated Depreciation	
24	Customer Adv. For Construction	
25	Deferred Accumulated Income Taxes	
26	EDFIT	
27	Working Capital Allowance	
28	Total Rate Base	\$0
20		400 700
29	Revenue Requirement Impact	\$80,599

	Contested	Contested
Interest	Pro Forma	Pro Forma
Coordination	Wage	Plant
Adjustment	Adjustment	Additions
P-1	P-2	P-3
		199,944
фо	фо	ф100 044
\$0	\$0	\$199,944
		8,102
	7,924	
	360,633	
	40,890	\$758
	220,903	
		59,945
	38,061	56,021
387,344	(233,944)	26,291
387,344	434,468	151,117
(\$387,344)	(\$434,468)	\$48,826
(\$367,344)	(\$454, <del>4</del> 00)	φ+0,020
		4,795,619
		(29,973)
		( - , - , - )
		(20,981)
\$0	\$0	\$4,744,665
\$623,546	\$699,404	\$482,636

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#### **Cascade Natural Gas Corporation**

		Contested		Contested	
		Rate Case	Pro Forma	MAOP	Miscellaneous
		Costs	Compliance	Deferral	Charge
			Department	Amortization	Changes
		P-4	P-5	P-6	P-7
1	Operating Revenues				
2	Natural Gas Sales	\$0			\$0
3	Gas Transportation Revenue	0			0
4	Other Operating Revenues	0			(101,645)
5	<b>Total Gross Revenues</b>	\$0			(\$101,645)
	Operating Expenses				
6	Nat. Gas/Production Costs				
7	Revenue Taxes				(4,119)
8	Production				
9	Distribution		183,762	423,708	
10	Customer Accounts				(\$386)
11	Customer Service				
12	Sales				
13	Administrative and General	94,439	82,693		
14	Depreciation & Amortization				
15	Regulatory Debits				
16	Taxes Other Than Income		13,139		
17	State & Federal Income Taxes	(33,054)	(97,858)	(148,298)	(33,999)
18	EDFIT Amort				
19	<b>Total Operating Expenses</b>	61,386	181,736	275,410	(38,503)
20	<b>Net Operating Revenues</b>	(\$61,386)	(\$181,736)	(\$275,410)	(\$63,142)
21	Rate Base				
22	Total Plant in Service				
23	Total Accumulated Depreciation				
24	Customer Adv. For Construction				
25	Deferred Accumulated Income Taxes				
26	EDFIT				
27	Working Capital Allowance				
28	Total Rate Base	\$0			\$0
29	Revenue Requirement Impact	\$98,818	\$292,558	\$443,354	\$101,645

Exhibit BGM-6

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# **Cascade Natural Gas Corporation**

			Contested	New	New
		CRM	Pro Forma	SERP	Incentive
		Adjustment	Revenue	Expense	Pay
		P-8	P-9	UTC-2	UTC-1
1	Operating Revenues				
2	Natural Gas Sales		\$5,181,808	\$0	\$0
3	Gas Transportation Revenue		1,933,517	0	0
4	Other Operating Revenues		189,011	0	0
5	<b>Total Gross Revenues</b>		\$7,304,336	\$0	\$0
	0 4 7				
_	Operating Expenses				
6	Nat. Gas/Production Costs		205.052		
7	Revenue Taxes		295,972		
8	Production				
9	Distribution				
10	Customer Accounts	\$0	\$27,706		
11	Customer Service				
12	Sales				
13	Administrative and General			(546,651)	(1,136,795)
14	Depreciation & Amortization	78,011			
15	Regulatory Debits				
16	Taxes Other Than Income				
17	State & Federal Income Taxes	(27,304)	2,443,230	191,328	397,878
18	EDFIT Amort				
19	<b>Total Operating Expenses</b>	50,707	2,766,908	(355,323)	(738,917)
20	<b>Net Operating Revenues</b>	(\$50,707)	\$4,537,428	\$355,323	\$738,917
21					
22	Total Plant in Service	3,023,678			
23	Total Accumulated Depreciation	(39,005)			
24	Customer Adv. For Construction				
25	Deferred Accumulated Income Taxes	(6,191)			
26	EDFIT				
27	Working Capital Allowance				
28	Total Rate Base	\$2,978,481	\$0	\$0	\$0
29	Revenue Requirement Impact	\$433,946	(\$7,304,336)	(\$571,998)	(\$1,189,505)

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## **Cascade Natural Gas Corporation**

		New
		Employee
		Arbitration
		LITO 5
		UTC-5
1	<b>Operating Revenues</b>	
2	Natural Gas Sales	\$0
3	Gas Transportation Revenue	0
4	Other Operating Revenues	0
5	Total Gross Revenues	\$0
	Operating Expenses	
6	Nat. Gas/Production Costs	
7	Revenue Taxes	
8	Production	
9	Distribution	
10	Customer Accounts	
11	Customer Service	
12	Sales	
13	Administrative and General	(210,756
14	Depreciation & Amortization	
15	Regulatory Debits	
16	Taxes Other Than Income	
17	State & Federal Income Taxes	73,765
18	EDFIT Amort	
19	<b>Total Operating Expenses</b>	(136,991
20	<b>Net Operating Revenues</b>	\$136,991
21	Rate Base	
22	Total Plant in Service	
23	Total Accumulated Depreciation	
24	Customer Adv. For Construction	
25	Deferred Accumulated Income Taxes	
26	EDFIT	
27	Working Capital Allowance	
28	Total Rate Base	\$0
29	Revenue Requirement Impact	(\$220,528
_,	Actoriae Acquirement Impact	(Ψ220,320

New	New	New
Restate	Excess	01/18 - 7/18
Tax	Deferred	TCJA
Expense	Taxes	Deferral
TCJA-1	TCJA-2	TCJA-3
\$0	\$0	\$0
0	0	0
0	0	0
\$0	\$0	\$0
		(1.024.600)
		(1,924,600)
(3,117,496)	0	404,166
(3,117,470)	(1,870,216)	404,100
(3,117,496)	(1,870,216)	(1,520,434)
\$3,117,496	\$1,870,216	\$1,520,434
Ψυ,111,100	\$1,070, <del>2</del> 10	\$1,020,10T
	(39,787,695)	
	40,722,804	
	-,,- 0 1	
\$0	\$935,108	\$0
	. , ,	
(\$4,129,173)	(\$2,386,122)	(\$2,013,839)

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#### **Cascade Natural Gas Corporation**

		New	
		TCJA	Total
		Conversion	Adjustments
		Factor	
		TCJA-4	
1	<b>Operating Revenues</b>		
2	Natural Gas Sales		12,168,129
3	Gas Transportation Revenue		1,787,452
4	Other Operating Revenues		87,366
5	<b>Total Gross Revenues</b>		\$14,042,947
	Operating Expenses		
6	Nat. Gas/Production Costs		\$4,981,076
7	Revenue Taxes		\$569,020
8	Production		\$7,924
9	Distribution		\$1,035,790
10	Customer Accounts		\$97,959
11	Customer Service		(\$533,333)
12	Sales		(\$4,917)
13	Administrative and General		(\$1,545,904)
14	Depreciation & Amortization		\$137,956
15	Regulatory Debits		(\$1,924,600)
16	Taxes Other Than Income		\$112,695
17	State & Federal Income Taxes	0	\$888,653
18	EDFIT Amort		(\$1,870,216)
19	<b>Total Operating Expenses</b>	0	\$1,952,104
20	<b>Net Operating Revenues</b>		\$12,090,843
21	Rate Base		
22	Total Plant in Service		\$7,819,297
23	Total Accumulated Depreciation		(\$68,978)
24	Customer Adv. For Construction		\$0
25	Deferred Accumulated Income Taxes		(\$39,814,867)
26	EDFIT		\$40,722,804
27	Working Capital Allowance		\$0
28	Total Rate Base		\$8,658,255
			+ = , = = = , = = =
29	Revenue Requirement Impact	\$296,949	(\$15,171,847)

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#### **Cascade Natural Gas Corporation**

P-3: Post-Test Period, Pro Forma Capital Additions Twelve Months Ended December 31, 2016

		Cascade		NWIGU	Impact of Adjustment
Plant in Service	(,z)	18,072,320	(,y)	4,795,619	(13,276,701)
Property Tax Rate		1.168%		1.168%	
Property Tax Expense		211,115		56,021	(155,094)
Depreciation Rate		2.273%		1.250%	
Depreciation Expense		410,853		59,945	(350,908)
Accumulated Depreciation		205,427		29,973	(175,454)
Tax Depreciation Rate		3.75%		3.75%	
Tax Depreciation Expense		677,712		179,836	(497,876)
Accumulated Tax Depreciation		338,856		89,918	(248,938)
Book-Tax Difference		133,429		59,945	(73,484)
ADIT		46,700		20,981	(25,719)
Pre-Tax NOI		621,968		115,966	(506,002)
Rate Base		17,820,193		4,744,665	(13,075,527)

Notes

<sup>(</sup>z') Per Parvinen, Exh. MPP-6

<sup>(</sup>y') Actual Plant in Service for the Richland Project per Response to Public Counsel Data Request 45

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#### **Cascade Natural Gas Corporation**

P-4: Rate Case Costs Pro Forma Adjustment Twelve Months Ended December 31, 2016

	A		В		C		D	
Line No.	Vendor		2017 est.		2016		Average	
1	Concentrix	\$	27,313.75	\$	5,656.80	\$	16,485.28	
2	Black & Veatch	\$	219,901.15	\$	66,715.92	\$	143,308.54	
3	McDowell Rackner	\$	51,296.74	\$	37,260.18	\$	44,278.46	
4	Rate Case Costs	\$	298,511.64	\$	109,632.90	\$	204,072.27	
5		Less 20	16 Actual Expens	e		\$	109,632.90	
6	Adjustment					\$	94,439.37	

#### **Cascade Natural Gas Corporation**

TCJA-1: Tax Expense Restated at 21% Rate Twelve Months Ended December 31, 2016 Whole Dollars

			Tax Expense at 35% Rate		Taxable Income			Restated Tax Exp. at 21% Rate				
			·			Current	Book Tax					TCJA-1
			Current Tax	Deferred Tax	Total Tax	Taxable	Difference	Total Taxable	Current Tax	Deferred Tax	Total Tax	Restating
Line	Adj. No	Description	Expense	Expense	Expense (,z)	Income	Amount	Income	Expense	Expense	Expense	Adjustment
			(a)	(b)	(c)	(d) = (a)/35%	(e)=(b)/35%	(f)=(c)/35%	(g)=(d)*21%	(h)=(e)*21%	(i)=(f)*21%	(j) = (c) - (i)
1		Per Books	3,159,842	1,031,914	4,191,757	9,028,121	2,948,326	11,976,448	1,895,905	619,149	2,515,054	(1,676,703)
2	R-1	Weather Normalization Adjustment	1,316,406	-	1,316,406	3,761,159	-	3,761,159	789,843	-	789,843	(526,562)
3	R-2	Promotional Advertising Adjustment	19,151	-	19,151	54,718	-	54,718	11,491	-	11,491	(7,661)
4	R-3	Restate Revenue Adjustment	(838,662)	-	(838,662)	(2,396,176)	-	(2,396,176)	(503,197)	-	(503,197)	335,465
5	R-4	Low-Income Bill Assistance	186,667	-	186,667	533,333	-	533,333	112,000	-	112,000	(74,667)
6	UTC-6	Restate Wages	(26,960)	-	(26,960)	(77,027)	-	(77,027)	(16,176)	-	(16,176)	10,784
7	P-1	Interest Coordination Adjustment	387,344	-	387,344	1,106,698	-	1,106,698	232,407	-	232,407	(154,938)
8	P-2	Pro Forma Wage Adjustment	(233,944)	-	(233,944)	(668,412)	-	(668,412)	(140,366)	-	(140,366)	93,578
9	P-3	Pro Forma Plant Additions	26,291	-	26,291	75,118	-	75,118	15,775	-	15,775	(10,516)
10	P-4	Rate Case Costs	(33,054)	-	(33,054)	(94,439)	-	(94,439)	(19,832)	-	(19,832)	13,222
11	P-5	Pro Forma Compliance Department	(97,858)	-	(97,858)	(279,594)	-	(279,594)	(58,715)	-	(58,715)	39,143
12	P-6	MAOP Deferral Amortization	(148,298)	-	(148,298)	(423,708)	-	(423,708)	(88,979)	-	(88,979)	59,319
13	P-7	Miscellaneous Charge Changes	(33,999)	-	(33,999)	(97,141)	-	(97,141)	(20,400)	-	(20,400)	13,600
14	P-8	CRM Adjustment	(27,304)	-	(27,304)	(78,011)	-	(78,011)	(16,382)	-	(16,382)	10,922
15	P-9	Pro Forma Revenue	2,443,230	-	2,443,230	6,980,658	-	6,980,658	1,465,938	-	1,465,938	(977,292)
16	UTC-2	SERP Expense	191,328	-	191,328	546,651	-	546,651	114,797	-	114,797	(76,531)
17	UTC-1	Incentive Pay	397,878	-	397,878	1,136,795	-	1,136,795	238,727	-	238,727	(159,151)
18	UTC-5	Employee Arbitration	73,765	-	73,765	210,756	-	210,756	44,259	-	44,259	(29,506)
19		Total Pro Forma	6,761,825	1,031,914	7,793,739	19,319,500	2,948,326	22,267,827	4,057,095	619,149	4,676,244	(3,117,496)

(z') Excluding ITC Amortization

20

#### **Cascade Natural Gas Corporation**

TCJA-2: Excess Deferred Federal Income Taxes Twelve Months Ended December 31, 2016 Whole Dollars

Line	Book Tax Difference	ADIT at 35% Tax Rate (a)	Cum. Book Tax Difference (b) = (a) / 35%	Revalue ADIT at 21% Tax Rate (c) = (b) * 21%	EDFIT Balance (d) = (a) - (c)	_	Amort. Rate (e)	EDFIT Amort $(f) = (d) * (e)$
1	ACRS/MACRS Depreciation	(73,443,638)	(209,838,966)	(44,066,183)	(29,377,455)	(,z)	2.83%	(829,972.21)
2	Debt Refinancing	(223,400)	(638,285)	(134,040)	(89,360)	(,y)	10.00%	(8,936.00)
3	Working Capital - Other	(25,775,029)	(73,642,939)	(15,465,017)	(10,310,011)	(,x)	10.00%	(1,031,001)
4	Total Per Results	(99,442,067)	(284,120,190)	(59,665,240)	(39,776,827)			(1,869,909)
5	P-3: Pro Forma Capital	(20,981)	(59,945)	(12,588)	(8,392)	(,z)	2.83%	(237.10)
6	P-8: CRM Adjustment	(6,191)	(17,689)	(3,715)	(2,476)	(,z)	2.83%	(69.96)
7	Total Pro-Forma	(99,469,238)	(284,197,824)	(59,681,543)	(39,787,695)			(1,870,216)
	Notes							

 9
 Plant In Service
 685,133,462.04

 10
 Depreciation Expense
 19,356,398.48

 11
 Composite Rate
 2.83%

(z') Calculated as follows

- 12 (y') Timing of reversal unknown. Assumed 10% corresponding to a 10 year bond life. Impact is immaterial.
- 13 (x') Original Balance Included in Results Calculated as follows

14	Non-Plant ADIT from Working Capital WP	(36,963,320)
15		
16	Total Book Investments	\$364,902,038
17	Rate Base Investments	\$254,451,182
18	Ratio	70%
19	Non-Plant ADIT Included in Results	(25,775,029)

20 Proposing a 10-year amortization for these unprotected EDFIT Balances included in working capital

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#### **Cascade Natural Gas Corporation**

TCJA-3: Calculation of the Deferral Related to Excess Taxes Collected in Rates Over the Period January 1, 2018 through July 31, 2018 In Thousands

#### Line

1 Restating Adjustment Calculation Using Gross-up Method:		
2 Rate Base	12/31/2016 Per Books	280,062
3 Equity %		50.00%
4 Equity Portion of Rate Base	Line 2 * Line 3	140,031
5 Return On Equity		9.40%
6 Pretax Return On Equity (35% Rate)	Line 5 * (1 - 35%)	14.46%
7 Pretax Equity Returns Required (35% Rate)	Line 4 * Line 5	20,250.64
8 Pretax Return on Equity (21% Rate)	Line 7 * (1 - 21%)	11.90%
9 Pretax Equity Return (21% Rate)	Line * Line 7	16,661.92
10 Annual Equity Return Differential (35% to 21% Rate)	Line 9 * Line	(3,589)

11 Monthly Deferral Calculation	_	1/1/2018	2/1/2018	3/1/2018	4/1/2018	5/1/2018	6/1/2018	7/1/2018
12 Monthly Return Diff. at Restated 21 % Tax Rate	Line 10 / 12	299	299	299	299	299	299	299
13 Monthly EDFIT Amortization	Tab 11	156	156	156	156	156	156	156
14 Monthly EDFIT Amortization (Pretax)	Line 13 / (1-21%)	197	197	197	197	197	197	197
15 Total Deferred Amounts	Line 13 + Line 14	496	496	496	496	496	496	496
16 Carrying Charge (Per Mo. at Pre-tax ROR)		0.72%	0.72%	0.72%	0.72%	0.72%	0.72%	0.72%
17 Balance								
18 Beginning Balance		-	496	993	1,489	1,985	2,482	2,978
19 Deferral	Line 15	496	496	496	496	496	496	496
20 Interest	Line 16 * (Line 17 + Line 18 / 2)	2	5	9	12	16	20	23
21 Ending Balance	∑ Lines 18:20	496	993	1,489	1,985	2,482	2,978	3,474.382

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#### **Cascade Natural Gas Corporation**

TCJA-3: Deferral Amortization for Excess Taxes Collected in Rates Over the Period January 1, 2018 through July 31, 2018 In Thousands

Month	Beg Balance	Amortization	Interest	Interest	Ending Balance	
= // /00/10		(100)	Rate			=
5/1/2018	3,474	(160)	0.72%	27	3,341	
6/1/2018	3,341	(160)	0.72%	26	3,207	
7/1/2018	3,207	(160)	0.72%	25	3,072	
8/1/2018	3,072	(160)	0.72%	24	2,936	
9/1/2018	2,936	(160)	0.72%	23	2,799	
10/1/2018	2,799	(160)	0.72%	22	2,661	
11/1/2018	2,661	(160)	0.72%	21	2,522	
12/1/2018	2,522	(160)	0.72%	20	2,382	
1/1/2019	2,382	(160)	0.72%	19	2,241	
2/1/2019	2,241	(160)	0.72%	18	2,099	
3/1/2019	2,099	(160)	0.72%	17	1,956	
4/1/2019	1,956	(160)	0.72%	16	1,812	
5/1/2019	1,812	(160)	0.72%	15	1,666	
6/1/2019	1,666	(160)	0.72%	14	1,520	
7/1/2019	1,520	(160)	0.72%	13	1,373	
8/1/2019	1,373	(160)	0.72%	12	1,225	
9/1/2019	1,225	(160)	0.72%	11	1,076	
10/1/2019	1,076	(160)	0.72%	10	925	
11/1/2019	925	(160)	0.72%	9	774	
12/1/2019	774	(160)	0.72%	8	621	
1/1/2020	621	(160)	0.72%	7	468	
2/1/2020	468	(160)	0.72%	6	313	
3/1/2020	313	(160)	0.72%	5	157	
4/1/2020	157	(160)	0.72%	3	0	<-Goal Seek to Zero

Annual Amortization (Pre-tax):

(1,925)