

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,
Complainant,

v.

CASCADE NATURAL GAS
CORPORATION,

Respondent.

DOCKET UG-17_____

CASCADE NATURAL GAS CORPORATION

EXHIBIT OF MICHAEL P. PARVINEN

2017 PLANT ADDITIONS

8/31/2017

**Cascade Natural Gas
Summary of Proposed Plant Additions
12 Months ended December 31, 2016**

Line No.	Function	Funding Project - Description	Estimated In-Service Date	Account No.	2017 Total - Figures exported from "Power Plan" the company's budget and plant accounting software	WA Alloc	WA	Proposed Adjustment	Notes
1	Gas Intangible	FP-101472 - UG-PIM Installation	12/31/2017	303.00	225,307.98	77.24%	174,027.88	174,027.88	7
2	Gas Intangible	FP-101481 - UG-GPS Based Leak Survey - Replac	12/31/2017	303.00	296,663.98	77.24%	229,143.26		o
3	Gas Intangible	FP-101510 - UG GMS PURCHASE SOFTWARE	4/30/2015	303.00	2,244.94	77.24%	1,733.99	1,733.99	9
4	Gas Intangible	FP-200028 - UG AUTO TEST CNG DIRECT	12/31/2011	303.00	549.14	77.24%	424.16		o
5	Gas Intangible	FP-200064 - UG-Customer Self-Service Web/TVR	4/30/2018	303.00	309,856.79	77.24%	239,333.38		o
6	Gas Intangible	FP-200663 - UG-GIS Enhancements	12/1/2021	303.00	287,058.23	77.24%	221,723.78	221,723.78	35
7	Gas Intangible	FP-301813 - UG-GAS SCADA System Enhancements	12/31/2019	303.00	90,088.98	77.24%	69,584.73		o
8	Gas Intangible	FP-302571 - UG-CC&B Upgrade to v2.4	7/1/2017	303.00	276,670.29	77.24%	213,700.13	213,700.13	41
9	Gas Intangible	FP-302579 - Upgrade CyberSecurity Environment	7/31/2021	303.00	21,673.94	77.24%	16,740.95	16,740.95	42
10	Gas Intangible	FP-302616 - UG-Taleo-Human Capital Management	12/31/2017	303.00	31,170.10	77.24%	24,075.79	24,075.79	43
11	Gas Intangible	FP-302621 - LV Customer Website	12/31/2014	303.00	(2,301.13)	77.24%	(1,777.39)		o
12	Gas Intangible	FP-311939 - UG-PCAD Upgrade to v6.5	9/30/2017	303.00	159,737.83	77.24%	123,381.50	123,381.50	44
13	Gas Intangible	FP-315501 - UG-JDE Corporate Consolidation	9/1/2017	303.00	132,223.26	77.24%	102,129.25	102,129.25	45
14	Gas Intangible	FP-315524 - UG-PowerPlan Lease Module	9/1/2017	303.00	26,444.66	77.24%	20,425.86	20,425.86	46
15	Gas Intangible	FP-315723 - UG PS&I Enterprise Asset Mgmt CNG	12/31/2017	303.00	5,116.71	PS&I			
16	Total Intangible Plant						1,434,647.26	897,939.12	
17	RESULTS OF OPERATIONS SUMMARY SHEET								
18	Gas Distributor	FP-101170 - MAIN-GROWTH-OREGON			501,998.48				
19	Gas Distributor	FP-101171 - MAIN-REINFORCE-OREGON			37,947.00				
20	Gas Distributor	FP-101172 - MAIN-RELO-REPL-OREGON			396,741.35				
21	Gas Distributor	FP-101173 - R STA-GROWTH-OREGON			69,109.96				
22	Gas Distributor	FP-101175 - R STA-RELO-REPL-OREGON			106,820.25				
23	Gas Distributor	FP-101176 - SERV-GROWTH-OREGON			1,415,548.60				
24	Gas Distributor	FP-101177 - SERV-RELO-REPL-OREGON			255,587.32				
25	Gas Distributor	FP-101178 - STD M&R-GROWTH-OREGON			117,184.45				
26	Gas Distributor	FP-101179 - STD M&R-RELO-REPL-OREGON			478,736.89				
27	Gas Distributor	FP-101180 - IND M&R-GROWTH-OREGON			67,837.54				
28	Gas Distributor	FP-101181 - IND M&R-REMOVE&REPLACE-OREGON			67,075.03				
29	Gas Distributor	FP-101190 - MAIN-GROWTH-WASHINGTON	12/31/2025	376.00	2,410,596.43		2,410,596.43		g
30	Gas Distributor	FP-101191 - MAIN-REINFORCE-WASHINGTON	12/31/2025	376.00	179,391.02		179,391.02	179,391.02	b
31	Gas Distributor	FP-101192 - MAIN-RELO-REPL-WASHINGTON	12/31/2025	376.00	1,473,785.08		1,473,785.08	1,473,785.08	b
32	Gas Distributor	FP-101194 - R STA-GROWTH-WASHINGTON	12/31/2021		32,001.96		32,001.96		g
33	Gas Distributor	FP-101196 - R STA-RELO-REPL-WASHINGTON	12/31/2021	378.00	313,976.76		313,976.76	313,976.76	l
34	Gas Distributor	FP-101197 - SERV-GROWTH-WASHINGTON	12/31/2025	380.00	6,486,162.29		6,486,162.29		g
35	Gas Distributor	FP-101198 - STD M&R-GROWTH-WASHINGTON	12/31/2025	385.00	135,600.54		135,600.54		g
36	Gas Distributor	FP-101199 - STD M&R-RELO-REPL-WASHINGTON	12/31/2025	385.00	868,262.26		868,262.26	868,262.26	l
37	Gas Distributor	FP-101200 - IND M&R-GROWTH-WASHINGTON	12/31/2025	385.00	154,683.71		154,683.71		g
38	Gas Distributor	FP-101201 - IND M&R-REMOVE&REPL-WASHING	12/31/2025	385.00	179,842.47		179,842.47	179,842.47	b
39	Gas Distributor	FP-101210 - PRE-CAP MTR-GROWTH-INTERSTAT	12/31/2025		3,917,050.33	77.24%	3,025,529.67		g
40	Gas Distributor	FP-101259 - PRE-CAP REG-GROWTH-INTERSTAT	12/31/2025		438,738.98	77.24%	338,881.99		g
41	Gas Distributor	FP-101275 - SERV-RELO-REPL-WASHINGTON	12/31/2025	380.00	777,866.77		777,866.77	777,866.77	l
42	Gas Distributor	FP-200080 - RF; 12" STEEL HP SHELTON	9/30/2016	376.00	29,425.54		29,425.54		c
43	Gas Distributor	FP-200122 - RP; R-58, ABERDEEN	12/31/2017	378.00	97,802.71		97,802.71	97,802.71	19
44	Gas Distributor	FP-200162 - RPL; 4" STEEL HP MAIN, PASCO	3/16/2017	376.00	14,172.16		14,172.16		n
45	Gas Distributor	FP-200282 - R STA - SUN RIVER GATE UPGRADE			182,618.15				
46	Gas Distributor	FP-200686 - CRM LONGVIEW PIPE REPLACEMENT	12/1/2021		3,193,165.38		3,193,165.38		c
47	Gas Distributor	FP-200687 - CRM ANACORTES PIPE REPLACEMENT	10/31/2017		2,033,483.75		2,033,483.75		c
48	Gas Distributor	FP-200688 - BEND PIPE REPL			3,030,604.02				
49	Gas Distributor	FP-200689 - MAOP RPL BEND HP LINE #1			65,634.73				
50	Gas Distributor	FP-200691 - CRM REL ZILLAH @ MEYERS BRIDGE	12/31/2016		1,975.03		1,975.03		c
51	Gas Distributor	FP-300346 - CRM/MAOP RPL; 12" STEEL HP, KELS	9/15/2017		1,961,250.95		1,961,250.95		c
52	Gas Distributor	FP-300363 - CRM SHELTON PIPE REPLACEMENT	12/31/2017		1,468,598.73		1,468,598.73		c
53	Gas Distributor	FP-302369 - GB - GROUND BED WASHINGTON	12/31/2025	376.00	245,801.32		245,801.32	245,801.32	24
54	Gas Distributor	FP-302370 - GB - GROUND BED OREGON			175,995.15				
55	Gas Distributor	FP-302588 - HILDEBRAND BLVD 6" HP MAIN	12/31/2017	376.00	1,524,374.00		1,524,374.00	1,524,374.00	20
56	Gas Distributor	FP-302640 - 6" PILOT ROCK HP REPLACEMENT	12/31/2017	376.00	486,119.83				
57	Gas Distributor	FP-302641 - 4" PILOT ROCK IP REINFORCEMENT	12/31/2017	376.00	562,696.98				
58	Gas Distributor	FP-302648 - SOUTHRIDGE GATE STATION	12/31/2017	378.00	225,397.86		225,397.86	225,397.86	8
59	Gas Distributor	FP-302650 - O-4 UMATILLA			(201.38)				
60	Gas Distributor	FP-302653 - BREMERTON R-64 REPLACE/RELOCA	8/15/2017	376.00	233,140.37		233,140.37	233,140.37	52
61	Gas Distributor	FP-302663 - CRM/MAOP BELLINGHAM RMV BRG	10/31/2017	376.00	78,243.08		78,243.08		c
62	Gas Distributor	FP-302665 - RICHLAND 4" IP CANAL/HWY CROSS	12/31/2016	376.00	76,260.11		76,260.11	76,260.11	39
63	Gas Distributor	FP-302714 - PENDLETON V-23 REPLACEMENT			(8,607.45)				
64	Gas Distributor	FP-303081 - LAND & LAND RIGHTS - WASHINGTON			2,691.00		2,691.00		g
65	Gas Distributor	FP-303142 - PENDLETON PIPE REPLACEMENT			1,194,077.61				
66	Gas Distributor	FP-304020 - BELLINGHAM GATE UPGRADE			259.08		259.08		n
67	Gas Distributor	FP-305740 - CRM College Place CARS Project	9/30/2016	376.00	436.95		436.95		c
68	Gas Distributor	FP-306100 - R-98, STANFIELD			187,728.86				
69	Gas Distributor	FP-306563 - REL/RE N RIM REPLACEMENT REDMOND			(482.29)				
70	Gas Distributor	FP-306982 - CRM VANCE CREEK EXPOSURE REPL	12/31/2016		60,462.07		60,462.07		c
71	Gas Distributor	FP-306983 - CRM CAMP CREEK EXPOSURE REPL	12/31/2016		72,029.71		72,029.71		c
72	Gas Distributor	FP-306984 - STANWOOD REINFORCEMENT			120,165.50				
73	Gas Distributor	FP-306986 - CRM/MAOP 3" BURLINGTON HP LINE	8/31/2017	376.00	1,599,970.19		1,599,970.19		c
74	Gas Distributor	FP-306993 - PORT ORCHARD 4" PE REINFORCEME	12/31/2018	376.00	211,475.36		211,475.36	0.00	o
75	Gas Distributor	FP-306995 - OTHELLO REYNOLDS RD REINFORCI	11/30/2016	376.00	75,902.93		75,902.93	75,902.93	15
76	Gas Distributor	FP-306997 - MAOP 4" MADRAS HP LINE REPLACEMENT			695,800.20				
77	Gas Distributor	FP-306999 - V-13 BREMERTON REPLACEMENT	8/31/2017	376.00	152,136.79		152,136.79	152,136.79	53
78	Gas Distributor	FP-307002 - V-9 ABERDEEN REPLACEMENT	12/31/2016	376.00	2,156.69		2,156.69	2,156.69	16
79	Gas Distributor	FP-307212 - CRM KELS0 GRADE ST BRIDGE RELC	12/31/2017	376.00	46,213.38		46,213.38		c
80	Gas Distributor	FP-307221 - 8" YAKIMA HP PIPELINE			63,769.16		63,769.16		g
81	Gas Distributor	FP-309000 - 4 in Steel IP Bore Columbia Park	1/27/2017	376.00	122,952.92		122,952.92	122,952.92	40
82	Gas Distributor	FP-309001 - CRM 2 IN STEEL IP BORE BELFAIR PL	1/13/2017	376.00	79,350.63		79,350.63		c
83	Gas Distributor	FP-309380 - MN; 6" PE Burlington to Bow	7/31/2016	376.00	9,436.18		9,436.18		n
84	Gas Distributor	FP-311354 - DEEP WELL GB - YAKIMA	12/30/2016	376.00	222.14		222.14	222.14	25
85	Gas Distributor	FP-311357 - DEEP WELL GB - ANACORTES	12/30/2016	376.00	12,699.66		12,699.66	12,699.66	26

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12 Months ended December 31, 2016**

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86	Gas Distributor	FP-311358 - DEEP WELL GB - WALLA WALLA	12/30/2016	376.00	2,515.00		2,515.00	2,515.00	27	
87	Gas Distributor	FP-311997 - 0-1 Ontario			75,167.06					
88	Gas Distributor	FP-311999 - 0-1 Mission			5,421.28					
89	Gas Distributor	FP-312000 - 0-2 Terrace Heights	3/17/2017	378.00	13,856.97		13,856.97	13,856.97	37	
90	Gas Distributor	FP-312005 - R-29 Nooksack	9/30/2016	378.00	7,416.25		7,416.25	7,416.25	38	
91	Gas Distributor	FP-312007 - R-19 Kennewick			56,271.17		56,271.17	56,271.17	21	
92	Gas Distributor	FP-312013 - R-9 Weston	12/31/2018	376.00	28.98					
93	Gas Distributor	FP-312014 - R-13 Umatilla			21,581.50					
94	Gas Distributor	FP-312036 - R-51 Pendleton			106,694.22					
95	Gas Distributor	FP-312041 - CRM 6" Nob Hill Replacement			70,579.94					
96	Gas Distributor	FP-312043 - CRM Kenn RR Cross Near Kamiakin			40,308.07					
97	Gas Distributor	FP-312044 - V-12 PORT ORCHARD			101,192.00					
98	Gas Distributor	FP-312076 - 0-2 FINLEY			161,274.82					
99	Gas Distributor	FP-313143 - V-89; Wenatchee 8" isolation valve	8/31/2017	376.00	55,289.36		55,289.36	55,289.36	17	
100	Gas Distributor	FP-313429 - 6" MN FORCED RELOCATE-HWY 372 CASCA			159,546.35				1	
101	Gas Distributor	FP-313621 - FAMILY METER REPLACEMENT	12/31/2017	381.00	1,092,369.62	77.24%	843,746.29	843,746.29	51	
102	Gas Distributor	FP-314402 - FREESTONE BAYSIDE PHASE II	12/31/2016	376.00	12,401.45				g	
103	Gas Distributor	FP-314501 - Replace 844' of steel main	12/31/2016	376.00	111,318.06		111,318.06	111,318.06	32	
104	Gas Distributor	FP-314643 - 2" STL MN, RE 2 REG STATIONS - BEL	7/1/2017	376.00	110,067.30		110,067.30	110,067.30	33	
105	Gas Distributor	FP-314963 - MAOP RPL 8" ANACORTES - SEG. 1815	12/31/2017	376.00	197,834.41		197,834.41	197,834.41	34	
106	Gas Distributor	FP-314964 - MAOP RPL 8" MARCH POINT - 11C114	12/31/2017	376.00	1,042,031.63		1,042,031.63	1,042,031.63	34	
107	Gas Distributor	FP-315022 - R-64 SUNNYSIDE	3/1/2017	378.00	495,943.97		495,943.97		g	
108	Gas Distributor	FP-315122 - 6" 4" & 2" MAIN FOR WEST VILLAGE	10/21/2017	376.00	15,488.34		15,488.34		g	
109	Gas Distributor	FP-315143 - 2000' 6" Southridge Blvd Kennewick	6/30/2017	376.00	238,941.63		238,941.63	238,941.63	2	
110	Gas Distributor	FP-315144 - AUTOZONE CLS 349	12/15/2016	378.00	27,074.82		27,074.82		g	
111	Gas Distributor	FP-315222 - DEEP WELL GB - WENATCHEE			89,991.48		89,991.48	89,991.48	28	
112	Gas Distributor	FP-315223 - DEEP WELL GB - PILOT ROCK			8,977.91					
113	Gas Distributor	FP-315224 - DEEP WELL GB - SHELTON			89,991.48		89,991.48	89,991.48	29	
114	Gas Distributor	FP-315226 - DEEP WELL GB - BAKER CITY			8,903.13					
115	Gas Distributor	FP-315574 - REINFORCEMENT 4" NE BRINSON BLVD			86,664.59					
116	Gas Distributor	FP-315575 - 2" STEEL MAIN - BELLINGHAM	1/30/2017	376.00	14,019.36		14,019.36	14,019.36	6	
117	Gas Distributor	FP-315582 - Legends Casino MN & Reinforcement	12/31/2017	376.00	12,139.85		12,139.85		g	
118	Gas Distributor	FP-315607 - RF; 6" STEEL HP MAIN, KENNWICK/R	10/31/2017	376.00	4,929,287.84		4,929,287.84	4,929,287.84	14	
119	Gas Distributor	FP-315610 - MN 4" PE JOHN STEVENS WAY HOQC	12/31/2016	376.00	17,751.14		17,751.14		g	
120	Gas Distributor	FP-315622 - Redmond R-30 Replacement	12/21/2016	378.00	48,449.38					
121	Gas Distributor	FP-315634 - 2" PE MN - FERNDALE	5/1/2017	376.00	9,676.75		9,676.75		g	
122	Gas Distributor	FP-315637 - 6" 4" 2" 1" PE MN EXT TRIPLE RIDGE	10/25/2017	376.00	69,656.60					
123	Gas Distributor	FP-315638 - IN MN @ BARKLEY DR VALE	7/31/2017	376.00	80,247.55					
124	Gas Distributor	FP-315639 - Main 4", 2" & 1" PE Port Orchard	12/30/2016	376.00	43,202.61		43,202.61		g	
125	Gas Distributor	FP-315641 - CRM Vance Creek Replacement (#2)	12/5/2016	376.00	71,807.03		71,807.03		c	
126	Gas Distributor	FP-315655 - MN 2" PE-32SL Burlington	6/30/2017	376.00	54,822.89		54,822.89		g	
127	Gas Distributor	FP-315668 - 4323' of 2" & 1" pe main Pasco	5/30/2017	376.00	4,634.41		4,634.41		g	
128	Gas Distributor	FP-315671 - INSTALL MAIN WALLA WALLA	1/31/2017	376.00	114,603.67		114,603.67	114,603.67	54	
129	Gas Distributor	FP-315678 - RE/REL 4" Main IN SUNNYSIDE	6/30/2017	376.00	66,219.94		66,219.94	66,219.94	22	
130	Gas Distributor	FP-315693 - REL MN@NE PURCELL BLVD&NEFF BEND			84,339.57					
131	Gas Distributor	FP-315695 - INSTALL 4" MN COLLEGE PLACE	8/31/2017	376.00	66,030.83		66,030.83		g	
132	Gas Distributor	FP-315709 - RP; ZILLAH 6" TRAN	5/19/2017	367.00	386,079.56		386,079.56	386,079.56	18	
133	Gas Distributor	FP-315710 - YEW ST, PIPE REPLACEMENT	3/6/2017	376.00	311,071.58		311,071.58	311,071.58	1	
134	Gas Distributor	FP-315712 - DEEP WELL GB 1 - BELLINGHAM	5/30/2017	376.00	93,586.34		93,586.34	93,586.34	30	
135	Gas Distributor	FP-315713 - DEEP WELL GB 5 - BELLINGHAM	5/30/2017	376.00	111,119.72		111,119.72	111,119.72	31	
136	Gas Distributor	FP-315714 - INSTALL 2" ST ARO BORE SHELTON	4/30/2017	376.00	170,964.13		170,964.13	170,964.13	36	
137	Gas Distributor	FP-315731 - CRM RPL 2" STL MN - BELLINGHAM	8/15/2017	376.00	216,465.70		216,465.70		c	
138	Gas Distributor	FP-315733 - 3175' pf 2" & 1" PE main Kennewick	7/1/2017	376.00	18,155.80		18,155.80		g	
139	Gas Distributor	FP-315735 - Future Dev. Broadmoor & Burns Pasco	7/1/2017	376.00	638,044.08		638,044.08		g	
140	Gas Distributor	FP-315741 - MN RPL; 8" Kitsap HP Line	7/12/2017	376.00	(139,899.42)		(139,899.42)	(139,899.42)		
141	Gas Distributor	FP-315776 - 2988' of 4" & 1" pe main Sunrise Ke	8/30/2017	376.00	29,030.95		29,030.95		g	
142	Gas Distributor	FP-315802 - WHITE BLUFFS PHASE 4	7/5/2017	376.00	21,653.68		21,653.68		g	
143	Gas Distributor	FP-315827 - 3195' of main into PH-3 Madison Pa	8/1/2017	376.00	31,042.16		31,042.16		g	
144	Gas Distributor	FP-315835 - INSTALL 4" PE MN MOXEE	6/16/2017	376.00	42,007.46		42,007.46		g	
145	Gas Distributor	FP-315843 - McCormick Woods Parcel D Phase II	7/31/2017	376.00	79,620.84		79,620.84		g	
146	Gas Distributor	FP-315850 - Forced MN Reloc@Nels Anderson Bend	12/31/2017	376.00	9,431.85					
147	Gas Distributor	FP-315852 - 5969' & 900' of Main Aple Valley Ke	9/1/2017	376.00	100,383.57		100,383.57		g	
148	Gas Distributor	FP-315854 - CLEARWATER CREEK PHASE 4	8/15/2017	376.00	29,779.09		29,779.09		g	
149	Gas Distributor	FP-315859 - SUNDANCE ESTATES PHASE 1	8/15/2017	376.00	50,911.06		50,911.06		g	
150	Gas Distributor	FP-315861 - 5780' of 2" 640' 1" pe Linda Lov. P	9/30/2017	376.00	93,821.89		93,821.89		g	
151	Gas Distributor	FP-315894 - 10,700' of 6" & 800' 4" Reinforce Pasco	11/30/2017	376.00	718,929.05		718,929.05	718,929.05	23	
152	Gas Distributor	FP-315895 - GRAYHAWK PHASE 2	9/12/2017	376.00	57,652.21		57,652.21		g	
153	Gas Distributor	FP-315901 - 3639' & 180' of main Volterra Dev P	10/30/2017	376.00	74,620.10		74,620.10		g	
154	Gas Distributor	FP-315903 - 4725' & 170' into cherry creek Kenn	11/30/2017	376.00	95,644.22		95,644.22		g	
155	Gas Distributor	FP-315935 - WESTCLIFFE PHASE 15			111,373.23					
156	Gas Transmissi	FP-200076 - MN - HANFORD DOE PRELIMINARY	12/31/2017	376.00	168,689.50		168,689.50		o	
157	Gas Transmissi	FP-309960 - RP 20" HP Anacortes Lateral	11/30/2018	376.00	586,182.69		586,182.69		o	
158	Total Distribution Plant					55,568,344.46		42,871,768.68	16,197,224.66	
159	Gas General	FP-101163 - GP POWER EQUIP - INTERSTATE	12/31/2021	396.00	5,297.22	77.24%	4,091.57		b	
160	Gas General	FP-101164 - General Purpose Communication Equip	12/31/2025	397.00	188,329.04	77.24%	145,465.35		b	
161	Gas General	FP-101184 - GP TRAN. VEHICLE - OREGON			359,433.53					
162	Gas General	FP-101186 - GP POWER EQUIP - OREGON			242,666.03					
163	Gas General	FP-101204 - GP TRAN. VEHICLE - WASHINGTON	12/31/2022	392.00	1,361,049.24		1,361,049.24		b	
164	Gas General	FP-101206 - GP POWER EQUIP - WASHINGTON	12/31/2022	396.00	699,073.53		699,073.53		b	
165	Gas General	FP-101207 - GP COMM EQUIP - WASHINGTON	12/31/2025	397.00	1,059.77		1,059.77		b	
166	Gas General	FP-101213 - GP BUILDINGS - INTERSTATE	12/31/2025	390.00	(1,600.25)	77.24%	(1,236.03)		b	
167	Gas General	FP-101215 - GP TRAN. VEHICLE - INTERSTAT	12/31/2022	392.00	19,795.01	77.24%	15,289.67		b	
168	Gas General	FP-101216 - GP TOOLS - INTERSTATE	12/31/2025	394.00	36,578.77	77.24%	28,253.44		b	
169	Gas General	FP-101218 - GP TOOLS - BEND			26,702.99					

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Note:

Explanation and Support

b Blanket work orders. These projects are routine in nature and typically have offsetting benefits. They are not included for recovering except for FP101191, FP-101192, and FP-101201. These three Blanket Funding projects are for forced relocates. A forced relocate is where the city or municipality requires Cascade to move facilities under the franchise agreement.

c Cost Recover Mechanism (CRM). These projects are identified as qualifying for recovery under the and will be included in the annual CRM filing for recovery and are therefore not included in the current docket.

g Growth. These projects are primarily for growth of the system and would have associated offsetting revenue with the investment. These projects are not included in the request for recovery.

o Outside the test year. These projects have an in-service date beyond the end of 2017 and are not included in the request.

n No Support. These projects don't have specific support at the time of filing so they are not included in the request for recovery.

1 These are specifically identified forced relocate projects where the city or municipality has required Cascade to move its facilities for various reasons. Cascade must honor the request to relocate as part of the franchise agreement to operate within the boundary of the city.

2 System betterment to loop the Kennewick system between the new tap on Brinkley to the existing tap on Clearwater and Kellogg

3 These projects are to replace the protection to the pipe to stop or delay corrosion thus increasing the safety and integrity of the pipe.

4 Replace two regulator stations to increase reliability during peak periods.

5 The Pasco reinforcement is required to continue to meet load requirements. The system was in danger of not meeting peak requirements.

6 Aging regulator station needing replacement/retirement for pipeline safety/integrity reasons. Current vault in driveway. Estimated in service 8/25/16.

7 1. Project Description: PIM (Pipeline Integrity Management) is designed to schedule, track, execute and archive field data inspections for a variety of assets and business processes. It is designed to manage compliance activities for assets that are defined and maintained in an ESRI Geo-database, or for assets defined and maintained in the Essentials Asset Register. The Essentials Scheduling and Tracking module is used to manage the compliance activities, while the Essentials Field Manager application provides a set of electronic forms to support the automated (non-paper based) field data capture. Configuration, hardware, and software implementation began in 2011.

2. Need for the project: Implementation of the PIM software transitions O&M record keeping from multiple databases and paper formats to a single operational repository of data and activity at Cascade Natural Gas Company. PIM interfaces with the ESRI GIS, allowing field personnel the opportunity to view O&M record data from the GIS system while in the field. Also, automates scheduling of O&M activities, and provides reporting and notification of activities before they are out of compliance.

Please note that this is a Utility Group wide implementation. Costs are being distributed across all 4 brands.

8 The Southridge Gate Station was installed in 2016 to provide gas to reinforce the existing distribution system. Shortly after being constructed it was discovered that the existing 8" meter at this gate station is sufficient for high flows but does not work for low flows experienced during warmer weather. Replacing the existing 8" meter will allow the gate station to work during both low and high flows.

9 This project was completed in 2016. Costs included in 2017 were lingering costs for an in-service project.B39

10 Cameras for office security thus providing a safe and secure work environment.

11 3 new CGIs to replace broken units.

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Note:Explanation and Support

12 Miscellaneous tool replacements for broken units allowing employees to perform tasks using proper equipment and in a safe manner.

13 Yard improvements required by City of Bellingham due to environmental concerns.

14 The reinforcement addresses the lack of adequate distribution capacity to serve core customers in downtown Richland as the company experienced very low pressure conditions in Richland during extreme cold weather in early January 2017. This reinforcement will also accommodate additional load requested by Lamb Weston.

15 Normal customer loads in Othello, specifically east of S 4th St and south of E Main St are in danger of not being met during winter months. This reinforcement will meet the Company's obligation to service customer requirements.

16 Exposures to the 8" Grays Harbor HP Line running from the McCleary gate to Aberdeen have been exposed at the Camp Creek and Vance Creek crossings, thereby prompting the replacement of the pipeline in these areas. In conjunction with this project, the current vaulted valve station V-9, V-37, and V-38 is located in the intersection of two logging roads and therefore subject to logging vehicle traffic. It has been in service since 1965. This project is done to provide safe reliable service.

17 This project consists of installing an 8 inch valve with a high-head extension for accessibility, in-line with the already existing line. This will allow sections 1 and 2 to be shut down independently from one another. This allows for a controlled safe operation particularly during wildland fires that have endangered the area in recent past.

18 Yakima County informed Cascade Natural Gas of construction plans for a Cheyne Road improvement project located in rural Yakima County about 2 miles north of the city of Zillah. The improvement project parallels the existing 6-inch Toppenish-Zillah line where a 400 foot segment of 6-inch pipeline will have to be replaced and lowered to meet the minimum cover requirements.

19 The effects of flooding on the regulator has lead to numerous operating issues that could be preventable. The city of Aberdeen has proposed to install a flood wall that is in close proximity to the current regulator. In the installation of the city's flood wall the regulator will have to be replaced due to its proximity to the flood wall. This project will provide safe and reliable operations especially during flood conditions.

20 The Hildebrand Blvd. 6" HP Main (Project) will provide additional natural gas capacity as necessary to reinforce Cascade's natural gas distribution infrastructure. The project also provides looping capabilities thus increasing reliability to other sections of the distribution system.

21 Replace the existing regulator with an updated station that is above ground and in an area that has minimal to no risk. The existing regulator station is subject to damage and is no longer supported. The project will assure continued safe and reliable service.

22 It was discovered that a warehouse expansion built over a 4-inch intermediate pressure line. Due to safety concerns and code violations Cascade is obligated to relocate the line to a safe location.

23 This project reinforces the Pasco system due to the heavy loads and interruptions that occurred in January 2017 to maintain minimal operating pressures. This project will provide necessary capacity to reinforce the distribution infrastructure.

24 Blanket Funding Project for Corrosion Control projects less than \$50,000. These projects are required to maintain and expand our existing cathodic protection systems to provide cathodic protection to underground steel structures to prevent external corrosion and maintain the integrity of our buried facilities.

25 New deep well groundbed in Yakima to supplement our existing cathodic protection system in Yakima. Deep well groundbeds are a method for providing cathodic protection to underground steel structures to prevent external

26 New deep well groundbed in Anacortes to supplement our existing cathodic protection system in Anacortes. Deep well groundbeds are a method for providing cathodic protection to underground steel structures to prevent external corrosion and maintain the integrity of our buried facilities.

27 New deep well groundbed in Walla Walla to replace an existing deep well that failed. Deep well groundbeds are a method for providing cathodic protection to underground steel structures to prevent external corrosion and maintain the integrity of our buried facilities.

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Note:Explanation and Support

- 28 New deep well groundbed in Wenatchee to supplement our existing cathodic protection system in Wenatchee. Deep well groundbeds are a method for providing cathodic protection to underground steel structures to prevent external corrosion and maintain the integrity of our buried facilities.
- 29 New deep well groundbed in Shelton to supplement our existing cathodic protection system in Shelton. Deep well groundbeds are a method for providing cathodic protection to underground steel structures to prevent external corrosion and maintain the integrity of our buried facilities.
- 30 New deep well groundbed in Bellingham to replace an existing deep well that failed. Deep well groundbeds are a method for providing cathodic protection to underground steel structures to prevent external corrosion and maintain the integrity of our buried facilities.
- 31 New deep well groundbed in Bellingham to replace an existing deep well that failed. Deep well groundbeds are a method for providing cathodic protection to underground steel structures to prevent external corrosion and maintain the integrity of our buried facilities.
- 32 Replace 844' of 1 1/4" steel main with new 2" PE main due to corrosion.
- 33 New 2" IP Steel main and retirement of 2 regulator stations at Short Street Bellingham for continued reliable and safe service.
- 34 Replacement of 8" March Point H.P. Line Segment 11C1144-1. This segment is part of the MAOP Validation Plan. This project will replace the section of the 8" March Point Transmission Line that passes beneath WA-20 and will replace the section between the existing Shell meter set and the existing Tesoro meter set. This project will validate missing MAOP on the 8" March Point Line, replace a 1957 pipeline with some history of external corrosion, and replace a shorted casing crossing WA-20. This project is broken into two phases, the first phase, between the Shell meter set and Tesoro Meter set, is scheduled for 2017 and the second phase, WA-20 crossing, will be completed in 2018. Completion of the first phase of this project is dependent on receiving permitting to allow for completion of phase 1 by the end of 2017. Each phase will be placed in service and provide service to customers independent of each other.
1. Project Description: The GIS Enhancements project is designed to augment and enhance the current GIS deployment. A base configuration of GIS was deployed at CNG in the past few years but additional functionality has been required to meet the increasing needs of the business. We are implementing a repository to store as-builts and project related paperwork (allowing us to view this data from GIS). We are purchasing additional GIS licenses and tools to meet the growing demand for GIS data.
2. Need for the Project: Numerous business systems now interface or require information from CNG's GIS system. Additionally, many regulatory reports are completed using information from GIS. We need to continue to enhance this system to meet the needs of the various departments at CNG. We are also enhancing the Landbase components within the environment to increase spatial accuracy.
- 35 3. Contingencies: Cascade Natural Gas will continue to use the existing system until the enhancements can be completed.
5. Reconciliation with Prior Budget: This is the continuation of the multi-year project; prior phases have been implemented. We will continue to update our CNGC landbase, enhance the existing GIS web tools, and add necessary tools to create a highly effective GIS system. Additionally a number of GIS related PHMSA regulations are on the horizon which will require new components.
- Please note that this is a Utility Group wide implementation. Costs are being distributed across all 4 brands.
- 36 Installation of a new 2" main along Shelton Matlock Rd. in Shelton. Installation of new main was required due to retirement and removal of R-13 and underground vault due to maintenance reasons. This regulator station has been written up on different maintenance issues dating back to 2011. This project eliminated a regulator that was in poor condition.

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- 37 This project replaced the 900 gallon below ground odorant storage tank at Terrace Heights in Yakima, WA with a
500 gallon above ground storage tank. The gages on the 900 gallon below ground tank were broken and
replacement gages could not be sourced due to the age of the tank. As-built drawings for the original 900 gallon
below ground tank could not be located, the oldest as-built that was found for this facility showed the tank as
existing. The company that CNG contracts with to supply odorant indicated they would not continue to fill the tank
unless there were working gages present.
- 38 Construct/install new regulator station R-173 in Nooksack. This is a replacement for the existing station R-29.
This project was to replace an above ground crossing in Kennewick on Columbia Park Drive. This was a district
39 identified project to address a short due to metal on metal on the hangers that could not be inspected. The project
results in pipe that is properly located and properly protected to reduce corrosion.
- 40 District identified project to remove short pipe on bridge over canal.
1. Project Description: CC&B is the new customer information system selected for all utilities part of the Utility
Group. Implementation began in 2007 and completed in 2015 with all utilities sharing costs across the entire
41 project. CNG went live in 2010, MDU in 2013, GPNG in 2015 and IGC in 2015. The version 2.2 was the version
implemented for all four brands
2. Need for the project: We need to upgrade to a supported release of CC&B which also provides for updated
technical tools and positions in a favorably to migrate to new releases in future years.
Implement, enhance and upgrade overall CyberSecurity footprint to protect Personal Identifiable Information (PII)
42 and company assets. These funds represent our need to keep on top of CyberSecurity threats that are constantly
changing, requiring constant monitoring and flexibility to react quickly.
Implement the Taleo HR onboarding module and recruiting. This phase will eliminate the Utility Group from using
43 the in-house developed and maintained application for recruiting and onboarding. There is a possibility that this
project will be delayed until 2018.
Upgrade the existing PragmaCAD system for field deployment, management and scheduling to v6.5. This project is
44 complete. Please note that this is a Utility Group wide implementation. Costs are being distributed across all 4
brands.
- 45 This project was in service in 2016. 2017 costs were lingering costs not posted until after project went into service.
- 46 This project was in service in 2016. 2017 costs were lingering costs not posted until after project went into service.
This funding project supports the continual refreshing of the Computer Server and Network hardware supporting
47 the operations of the Data Center located at the Cascade Natural Gas General Office in Kennewick.
- 48 Annual replacement of computing devices and peripherals supporting the office environment and also includes the
replacement for Toughbook laptops in the field for mobile field work.
- 49 Bulk Purchase of Sensit Portable Methane Detectors for all Service Mechanics. Approx. 87 Units to perform leak
investigation with survey function.
ThoughtSpot is a business-intelligence search-driven analytics software application. It presents a search-based
interface for users to explore and visualize data. The application is hosted on a dedicated appliance that uses an in-
50 memory engine that indexes all of the searchable data with machine-learning algorithms that increase performance
and ease-of-use. ThoughtSpot provides the ability for non-technical employees to conduct self-service relational
type data analysis searches.
Please note that this is a Utility Group wide implementation. Costs are being distributed across all 4 brands.
- 51 This project replaces meters from a family that was discovered to be out of compliance of WAC 480-90-338, during
meter testing in compliance with WAC 480-90-348. The project is scheduled to be completed by the end of 2017.
- 52 Replace a regulator station to place above ground due to flooding of a vault and deterioration of the valve.
- 53 Replace an intermediate pressure valve due to corrosion and operational concerns.
- 54 Replace 800' of 4" pipe for a reinforcement to provide reliable service during peak periods.