

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UG-20_____

NATURAL GAS REVENUE NORMALIZATION

WORKPAPERS

JOEL C. ANDERSON

REPRESENTING AVISTA CORPORATION

Anderson Workpapers
Natural Gas Revenue Normalization
Docket No. UG-20_____
Table of Contents

Description

Reference No.

NATURAL GAS WEATHER NORMALIZATION

Normalized Natural Gas Usage Monthly Summary	JCA-R-1
WA Natural Gas Revenue Run Billed Usage	JCA-R-2
WA Natural Gas Large Customer Usage	JCA-R-3 – JCA-R-4
WA Natural Gas Unbilled Usage per Books	JCA-R-5
Natural Gas Weather Normalization Load Adjustment.....	JCA-R-6 – JCA-R-11

The electronic version of the natural gas weather normalization work papers can be found within the Knox electric weather normalization files.

Eliminate Adder Schedules

Revenue adjustment work papers associated with the elimination of adder schedules and related amortization expenses are included in the Andrews natural gas Commission Basis work papers for Adjustment 2.11.

Pro Forma Revenue Normalization

Re-pricing of Commission Basis revenue at present rates is calculated in the rate design model. Support for large customer usage is included in the Miller Rate Spread and Rate Design work papers. The preliminary version of the rate design model used to determine this adjustment is included with the Andrews work papers for Adjustment 3.01.

WUTC Docket No. UE-20 ____
 Normalized Usage by Month
 Twelve Months Ended December 31, 2019
 WASHINGTON GAS SYSTEM

	January	February	March	April	May	June	July	August	September	October	November	December	Annual Total
Revenue Run Billed Usage													
Small Service Schedule 101	21,191,020	21,932,388	23,941,573	11,880,515	6,587,647	3,080,580	2,535,596	2,142,554	2,443,888	7,606,581	13,945,184	20,275,965	137,563,491
Large Service Schedule 111/112	7,925,020	8,382,074	8,896,948	5,362,314	3,301,881	2,366,159	1,935,589	1,732,053	1,984,702	3,670,233	5,701,043	7,768,208	59,026,224
Extra Large Service Schedule 121/122	231,362	225,916	234,273	165,411	148,389	(15,471)	108,175	134,709	111,145	168,114	449,639	741,224	2,702,886
Interrupt Service Schedule 131/132	141,224	142,096	133,435	97,799	74,295	52,474	38,600	36,912	11,738	107,004	95,173	62,450	993,200
Transport Service Schedule 146	3,545,563	3,917,949	4,055,434	3,694,851	3,110,140	2,599,480	2,420,678	2,424,503	2,325,589	2,566,070	3,210,635	3,207,391	37,078,283
Special Contract Transport	5,287,101	5,006,272	4,672,829	5,354,778	4,052,325	3,877,775	3,880,400	4,156,934	4,919,734	4,491,986	5,605,803	5,525,094	56,831,031
Total Revenue Run Billed Usage	38,321,290	39,606,695	41,934,493	26,555,668	17,274,677	11,960,997	10,919,037	10,627,666	11,796,796	18,609,989	29,007,477	37,580,332	294,195,115
Adjustments to Revenue Runs													
Schedule 111/112 Adjustments	699,412	723,633	790,216	569,310	363,200	60,335	149,502	163,383	137,254	244,358	501,938	741,224	5,143,765
Schedule 121/122 to 111/112	(231,362)	(225,916)	(234,273)	(165,411)	(148,389)	15,471	(108,175)	(134,709)	(111,145)	(168,114)	(449,639)	(741,224)	(2,702,886)
Schedule 146 to 112 shifting	(468,050)	(497,717)	(555,943)	(403,899)	(214,811)	(75,806)	(41,327)	(28,674)	(26,109)	(76,244)	(52,299)	-	(2,440,879)
Schedule 146 Adjustments	(375,510)	17,076	208,914	581,758	510,719	178,791	(2,275)	97,383	(240,621)	(644,784)	4,649	49,722	385,822
Special Contract Adjustments	78,377	862,739	(573,435)	511,122	272,799	245,786	3,470	(7,006)	(164,070)	(487,738)	(270,687)	(354,468)	116,889
Total Adjustments to Revenue Runs	(375,510)	17,076	208,914	581,758	510,719	178,791	(2,275)	97,383	(240,621)	(644,784)	4,649	49,722	385,822
Net Unbilled Usage													
Small Service Schedule 101	(93,241)	1,486,231	(5,446,055)	(3,192,365)	(2,270,339)	(580,614)	(140,496)	76,639	1,229,004	5,155,347	3,384,088	(650,710)	(1,042,511)
Large Service Schedule 111/112	96,210	621,953	(2,060,505)	(822,261)	(899,239)	49,856	(114,282)	101,369	869,634	1,650,435	820,942	(476,695)	(162,583)
Extra Large Service Schedule 121/122	(42,200)	8,351	(60,022)	(14,015)	(15,288)	(49,537)	57,023	28,693	34,057	55,942	186,983	23,835	213,822
Interrupt Service Schedule 131/132	-	-	-	-	-	-	-	-	-	-	-	-	-
Transport Service Schedule 146	375,510	(17,076)	(208,914)	(581,758)	(510,719)	(178,791)	2,275	(97,383)	240,621	644,784	(4,649)	(49,722)	(385,822)
Special Contract Transport	(78,377)	(862,739)	573,435	(511,122)	(272,799)	(245,786)	(3,470)	7,006	164,070	487,738	270,687	354,468	(116,889)
Net Unbilled Usage	257,902	1,236,720	(7,202,061)	(5,121,521)	(3,968,384)	(1,004,872)	(198,950)	116,324	2,537,386	7,994,246	4,658,051	(798,824)	(1,493,983)
Weather Adjustment													
Small Service Schedule 101	955,672	(5,579,988)	(3,103,187)	647,284	1,858,877	637,272	323,996	486,920	(901,358)	(2,606,962)	(188,880)	3,044,978	(4,425,376)
Large Service Schedule 111/112	297,166	(1,736,842)	(965,494)	233,134	655,578	226,858	112,785	168,868	(312,423)	(912,947)	(66,251)	938,940	(1,360,628)
Extra Large Service Schedule 121/122	407	(2,419)	(1,952)	480	1,349	(469)	165	310	(585)	(1,553)	(137)	2,554	(1,850)
Interrupt Service Schedule 131/132	-	-	-	-	-	-	-	-	-	-	-	-	-
Transport Service Schedule 146	-	-	-	-	-	-	-	-	-	-	-	-	-
Special Contract Transport	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Weather Adjustment	1,253,245	(7,319,249)	(4,070,633)	880,898	2,515,804	863,661	436,946	656,098	(1,214,366)	(3,521,462)	(255,268)	3,986,472	(5,787,854)
Normalized Test Year Usage													
Small Service Schedule 101	22,053,451	17,838,631	15,392,331	9,335,434	6,176,185	3,137,238	2,719,096	2,706,113	2,771,534	10,154,966	17,140,392	22,670,233	132,095,604
Large Service Schedule 111/112	8,976,015	7,996,750	6,599,191	5,328,962	3,407,481	2,653,202	2,140,782	2,194,676	2,712,639	4,706,469	7,144,518	8,998,066	62,858,750
Extra Large Service Schedule 121/122	-	-	-	-	-	-	-	-	-	-	-	-	-
Interrupt Service Schedule 131/132	141,224	142,096	133,435	97,799	74,295	52,474	38,600	36,912	11,738	107,004	95,173	62,450	993,200
Transport Service Schedule 146	3,077,513	3,420,232	3,499,491	3,290,952	2,895,329	2,523,674	2,379,351	2,395,829	2,299,480	2,489,826	3,158,336	3,207,391	34,637,404
Special Contract Transport	5,287,101	5,006,272	4,672,829	5,354,778	4,052,325	3,877,775	3,880,400	4,156,934	4,919,734	4,491,986	5,605,803	5,525,094	56,831,031
Total Normalized Test Year Usage	39,535,304	34,403,981	30,297,278	23,407,925	16,605,615	12,244,363	11,158,228	11,490,465	12,715,125	21,950,251	33,144,222	40,463,234	287,415,989
Residential Usage													
Schedule 101 Customers	164,455	161,561	167,095	163,106	166,886	164,587	165,355	165,693	162,332	169,448	166,729	167,092	1,984,339
Schedule 101 Norm Use/Customer	134	110	92	57	37	19	16	16	17	60	103	136	67
Schedule 132 Usage	141,224	142,096	133,435	97,799	74,295	52,474	38,600	36,912	11,738	107,004	95,173	62,450	993,200
Schedule 132 Customers	2	2	2	2	2	2	2	2	1	3	2	1	23
Non-Residential Group Usage	8,976,015	7,996,750	6,599,191	5,328,962	3,407,481	2,653,202	2,140,782	2,194,676	2,712,639	4,706,469	7,144,518	8,998,066	62,858,750
Non-Residential Group Customers	3,106	3,054	3,160	3,110	3,112	3,091	3,116	3,109	3,044	3,144	3,088	3,132	37,266
Non-Residential Group Norm Use/Cust	2,890	2,618	2,088	1,713	1,095	858	687	706	891	1,497	2,314	2,873	1,687
	13.8%	12.0%	10.5%	8.1%	5.8%	4.3%	3.9%	4.0%	4.4%	7.6%	11.5%	14.1%	100.0%

Usage Qty			201901	201902	201903	201904	201905	201906	201907	201908	201909	201910	201911	201912	Total
Service	State Code	Rate Schedule													
WA Sch 101/102			21,191,020	21,932,388	23,941,573	11,880,515	6,587,647	3,080,580	2,535,596	2,142,554	2,443,888	7,606,581	13,945,184	20,275,965	137,563,491
WA Sch 111/112			7,925,020	8,382,074	8,896,948	5,362,314	3,301,881	2,366,159	1,935,589	1,732,053	1,984,702	3,670,233	5,701,043	7,768,208	59,026,224
WA Sch 121/122			231,362	225,916	234,273	165,411	148,389	-15,471	108,175	134,709	111,145	168,114	449,639	741,224	2,702,886
WA Sch 131/132			141,224	142,096	133,435	97,799	74,295	52,474	38,600	36,912	11,738	107,004	95,173	62,450	993,200
WA Sch 146			3,545,563	3,917,949	4,055,434	3,694,851	3,110,140	2,599,480	2,420,678	2,424,503	2,325,589	2,566,070	3,210,635	3,207,391	37,078,283
WA Special Contracts			5,287,101	5,006,272	4,672,829	5,354,778	4,052,325	3,877,775	3,880,400	4,156,934	4,919,734	4,491,986	5,605,803	5,525,094	56,831,031
			38,321,290	39,606,695	41,934,493	26,555,668	17,274,677	11,960,997	10,919,037	10,627,666	11,796,796	18,609,989	29,007,477	37,580,332	294,195,115

ANNUAL USAGE, Sch 121/122

	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19	Dec 19	Total	200 thms/mo #VALUE!	1,000 thms/mo #VALUE!	10,000 thms/mo #VALUE!	25,000 thms/mo #VALUE!	Over thms/mo #VALUE!	
Washington Discontinued in UG-190335																			
Total WA Sch 121/122																			
Revenue Runs														0					
														0					
														0					
														0					
Total WA Sch 121/122	0	0	0	0	0	0	0	0	0	0	0	0	0	0					

ANNUAL USAGE, Sch 132

	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19	Dec 19	12-mo ended Total	10,000 thms/mo	25,000 thms/mo	50,000 thms/mo	Over thms/mo
Washington	72,561	82,354	62,156	45,351	40,061	28,786	28,243	23,806	-	84,296	54,159	-	521,773	100,000	148,806	167,441	105,525
	68,663	59,742	71,280	52,448	34,234	23,689	10,356	13,106	11,738	22,708	41,014	62,450	471,428	120,000	136,597	150,248	64,583
Revenue Runs	141,224	142,096	133,435	97,799	74,295	52,475	38,599	36,912	11,738	107,004	95,173	62,450	993,200	220,000	285,403	317,689	170,108
	141,224	142,096	133,435	97,799	74,295	52,474	38,600	36,912	11,738	107,004	95,173	62,450	993,200				
Total WA Sch 132	141,224	142,096	133,435	97,799	74,295	52,474	38,600	36,912	11,738	107,004	95,173	62,450	993,200				993,200
	0	0	0	0	0	0	0	0	0	0	0	0	0				

ANNUAL USAGE, Sch 148

	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19	Dec 19	12-mo ended Total
Washington	2,327,028	2,165,034	2,118,541	2,272,185	1,984,568	1,866,186	1,809,837	1,872,170	1,899,436	1,909,441	1,901,257	2,120,127	24,245,810
	522,394	568,799	508,451	273,898	537,508	571,198	556,999	532,355	536,866	520,901	562,339	501,596	6,193,304
	188,660	186,906	175,067	195,356	178,676	175,167	168,457	175,314	171,206	168,075	172,900	176,363	2,132,147
	488,805	547,793	301,654	485,201	400,777	483,711	453,723	447,677	442,839	450,425	449,474	467,047	5,419,126
	1,381,050	1,361,028	985,387	1,313,866	881,821	660,073	521,533	479,531	463,738	629,185	1,084,806	1,171,447	10,933,465
Total WA Sch 148	4,907,937	4,829,560	4,089,100	4,540,506	3,983,350	3,756,335	3,510,549	3,507,047	3,514,085	3,678,027	4,170,776	4,436,580	48,923,852
Revenue Runs	4,907,937	4,829,560	4,089,100	4,540,506	3,983,350	3,756,335	3,510,549	3,507,047	3,514,085	3,678,027	4,170,776	4,436,580	48,923,852

ANNUAL USAGE, Sch 147

	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19	Dec 19	12-mo ended Total
Washington	311,015	144,011	442,892	580,076	64,826	121,440	283,349	514,383	1,055,696	554,725	1,038,228	690,584	5,801,225
	68,149	32,701	140,837	234,196	4,149	-	86,502	135,504	349,953	259,234	396,799	397,930	2,105,954
Total WA Sch 147	379,164	176,712	583,729	814,272	68,975	121,440	369,851	649,887	1,405,649	813,959	1,435,027	1,088,514	7,907,179
Revenue Runs	379,164	176,712	583,729	814,272	68,975	121,440	369,851	649,887	1,405,649	813,959	1,435,027	1,088,514	7,907,179

Gas Revenue Usage Report by Location Twelve Months Ended for Report Date : '12/31/2019'

Revenue | Jurisdiction:WA

Source Id	Rate Schedule Num	Unbilled Usage												12 Month Total
		201901	201902	201903	201904	201905	201906	201907	201908	201909	201910	201911	201912	
REVUNBL	101	11,324,273	12,810,504	7,364,449	4,172,084	1,901,745	1,321,131	1,180,635	1,257,274	2,486,278	7,641,625	11,025,713	10,375,003	72,860,714
	111	4,053,424	4,671,541	2,618,736	1,797,571	899,949	949,948	835,623	936,252	1,802,326	3,448,041	4,267,717	3,794,161	30,075,289
	112	9,263	13,099	5,399	4,303	2,686	2,543	2,586	3,326	6,886	11,606	12,872	9,733	84,302
	121	92,544	99,707	50,802	41,565	31,269	(17,856)	36,777	64,354	87,993	138,127	147,373	104,730	877,385
	122	31,328	32,516	21,399	16,621	11,629	11,217	13,607	14,723	25,141	30,949	208,686	275,164	692,980
	146	3,917,947	3,900,871	3,691,957	3,110,199	2,599,480	2,420,689	2,422,964	2,325,581	2,566,202	3,210,986	3,206,337	3,156,615	36,529,828
	147													
	148	4,829,560	3,966,821	4,540,256	4,029,134	3,756,335	3,510,549	3,507,079	3,514,085	3,678,155	4,165,893	4,436,580	4,791,048	48,725,495
	Total for REVUNBL-G	24,258,339	25,495,059	18,292,998	13,171,477	9,203,093	8,198,221	7,999,271	8,115,595	10,652,981	18,647,227	23,305,278	22,506,454	189,845,993
REVUNBL	101	(11,417,514)	(11,324,273)	(12,810,504)	(7,364,449)	(4,172,084)	(1,901,745)	(1,321,131)	(1,180,635)	(1,257,274)	(2,486,278)	(7,641,625)	(11,025,713)	(73,903,225)
	111	(3,956,196)	(4,053,424)	(4,671,541)	(2,618,736)	(1,797,571)	(899,949)	(949,948)	(835,623)	(936,252)	(1,802,326)	(3,448,041)	(4,267,717)	(30,237,324)
	112	(10,281)	(9,263)	(13,099)	(5,399)	(4,303)	(2,686)	(2,543)	(2,586)	(3,326)	(6,886)	(11,606)	(12,872)	(84,850)
	121	(134,000)	(92,544)	(99,707)	(50,802)	(41,565)	(31,269)	17,856	(36,777)	(64,354)	(87,993)	(138,127)	(147,373)	(906,655)
	122	(32,072)	(31,328)	(32,516)	(21,399)	(16,621)	(11,629)	(11,217)	(13,607)	(14,723)	(25,141)	(30,949)	(208,686)	(449,888)
	146	(3,542,437)	(3,917,947)	(3,900,871)	(3,691,957)	(3,110,199)	(2,599,480)	(2,420,689)	(2,422,964)	(2,325,581)	(2,566,202)	(3,210,986)	(3,206,337)	(36,915,650)
	147													
	148	(4,907,937)	(4,829,560)	(3,966,821)	(4,540,256)	(4,029,134)	(3,756,335)	(3,510,549)	(3,507,079)	(3,514,085)	(3,678,155)	(4,165,893)	(4,436,580)	(48,842,384)
	Total for REVUNBL-GR	(24,000,437)	(24,258,339)	(25,495,059)	(18,292,998)	(13,171,477)	(9,203,093)	(8,198,221)	(7,999,271)	(8,115,595)	(10,652,981)	(18,647,227)	(23,305,278)	(191,339,976)
Total for WA		257,902	1,236,720	(7,202,061)	(5,121,521)	(3,968,384)	(1,004,872)	(198,950)	116,324	2,537,386	7,994,246	4,658,051	(798,824)	(1,493,983)
	101	(93,241)	1,486,231	(5,446,055)	(3,192,365)	(2,270,339)	(580,614)	(140,496)	76,639	1,229,004	5,155,347	3,384,088	(650,710)	(1,042,511)
	111	96,210	621,953	(2,060,505)	(822,261)	(899,239)	49,856	(114,282)	101,369	869,634	1,650,435	820,942	(476,695)	(162,583)
	121	(42,200)	8,351	(60,022)	(14,015)	(15,288)	(49,537)	57,023	28,693	34,057	55,942	186,983	23,835	213,822
	146	375,510	(17,076)	(208,914)	(581,758)	(510,719)	(178,791)	2,275	(97,383)	240,621	644,784	(4,649)	(49,722)	(385,822)
	147	-	-	-	-	-	-	-	-	-	-	-	-	-
	148	(78,377)	(862,739)	573,435	(511,122)	(272,799)	(245,786)	(3,470)	7,006	164,070	487,738	270,687	354,468	(116,889)
Total		257,902	1,236,720	(7,202,061)	(5,121,521)	(3,968,384)	(1,004,872)	(198,950)	116,324	2,537,386	7,994,246	4,658,051	(798,824)	(1,493,983)

12.2019	Total	January	February	March	April	May	June	July	August	September	October	November	December
Normal DDH	6,513	1,103	915	775	542	298	137	26	30	158	534	863	1,132
Actual DDH	6,748	1,052	1,218	938	500	180	96	8	3	209	697	875	972
DDH Adjustment to Normal	-235	51	-303	-163	42	118	41	18	27	-51	-163	-12	160

Rate Group

WA Res Sched 101	-3,700,254	801,385	-4,675,837	-2,602,571	556,636	1,601,925	548,638	273,995	411,853	-761,951	-2,247,062	-162,745	2,555,480
No of Cust	153,136	152,262	149,533	154,716	150,948	154,620	152,408	153,138	153,459	150,304	157,012	154,466	154,765
Usage/DDH		0.1032	0.1032	0.1032	0.0878	0.0878	0.0878	0.0994	0.0994	0.0994	0.0878	0.0878	0.1032
WA Com Sched 101	-717,319	152,508	-894,162	-495,086	89,553	253,875	87,609	49,082	73,744	-136,943	-355,590	-25,826	483,917
No of Cust	12,130	12,092	11,933	12,282	12,060	12,169	12,086	12,119	12,139	11,934	12,339	12,173	12,230
Usage/DDH		0.2473	0.2473	0.2473	0.1768	0.1768	0.1768	0.2250	0.2250	0.2250	0.1768	0.1768	0.2473
WA Ind Sched 101	-7,803	1,779	-9,989	-5,530	1,095	3,077	1,025	919	1,323	-2,464	-4,310	-309	5,581
No of Cust	72	73	69	71	72	72	69	74	71	70	73	71	73
Usage/DDH		0.4778	0.4778	0.4778	0.3622	0.3622	0.3622	0.6903	0.6903	0.6903	0.3622	0.3622	0.4778
WA Res Sched 111	-57,062	12,788	-73,462	-41,549	9,869	27,635	9,699	0	0	0	-39,712	-2,716	40,386
No of Cust	299	302	292	307	299	298	301	300	299	289	310	288	304
Usage/DDH		0.8303	0.8303	0.8303	0.7859	0.7859	0.7859	0.0000	0.0000	0.0000	0.7859	0.7859	0.8303
WA Com Sched 111	-1,271,012	277,033	-1,620,507	-900,058	218,130	613,516	212,234	112,785	168,868	-312,423	-854,006	-62,094	875,510
No of Cust	2,723	2,722	2,680	2,767	2,726	2,729	2,717	2,732	2,727	2,671	2,750	2,716	2,742
Usage/DDH		1.9956	1.9956	1.9956	1.9052	1.9052	1.9052	2.2935	2.2935	2.2935	1.9052	1.9052	1.9956
WA Ind Sched 111	-32,554	7,345	-42,873	-23,887	5,135	14,427	4,925	0	0	0	-19,229	-1,441	23,044
No of Cust	57	57	56	58	57	57	56	57	55	57	55	56	57
Usage/DDH		2.5267	2.5267	2.5267	2.1449	2.1449	2.1449	0.0000	0.0000	0.0000	2.1449	2.1449	2.5267
WA Com Sched 121	-1,850	407	-2,419	-1,952	480	1,349	-469	165	310	-585	-1,553	-137	2,554
No of Cust	4	4	4	6	6	6	-6	4	5	5	5	6	8
Usage/DDH		1.9956	1.9956	1.9956	1.9052	1.9052	1.9052	2.2935	2.2935	2.2935	1.9052	1.9052	1.9956
ID Res Sched 101	-1,686,777	365,709	-2,172,055	-1,170,125	279,093	785,066	272,541	121,366	182,508	-345,273	-1,096,977	-80,907	1,172,277
No of Cust	76,580	76,042	76,018	76,126	76,205	76,297	76,231	76,446	76,639	76,758	77,178	77,319	77,696
Usage/DDH		0.0943	0.0943	0.0943	0.0872	0.0872	0.0872	0.0882	0.0882	0.0882	0.0872	0.0872	0.0943
ID Com Sched 101	-339,365	74,206	-436,987	-234,741	52,726	148,462	51,112	23,506	35,159	-66,128	-206,428	-15,104	234,852
No of Cust	7,724	7,723	7,655	7,644	7,735	7,752	7,681	7,741	7,719	7,686	7,803	7,755	7,791
Usage/DDH		0.1884	0.1884	0.1884	0.1623	0.1623	0.1623	0.1687	0.1687	0.1687	0.1623	0.1623	0.1884
ID Ind Sched 101	-4,448	983	-5,730	-3,024	692	1,944	663	405	608	-1,082	-2,635	-183	2,911
No of Cust	52	54	53	52	53	53	52	52	52	49	52	49	51
Usage/DDH		0.3568	0.3568	0.3568	0.3109	0.3109	0.3109	0.4331	0.4331	0.4331	0.3109	0.3109	0.3568
ID Res Sched 111	-17,944	3,704	-22,415	-11,948	2,846	7,639	2,654	2,154	3,232	-6,104	-10,650	-784	11,728
No of Cust	108	107	109	108	112	107	107	108	108	108	108	108	108
Usage/DDH		0.6787	0.6787	0.6787	0.6050	0.6050	0.6050	1.1082	1.1082	1.1082	0.6050	0.6050	0.6787

	12.2019	Total	January	February	March	April	May	June	July	August	September	October	November	December
ID Com Sched 111		-473,020	100,581	-597,131	-321,701	71,301	199,878	69,244	36,644	54,684	-103,215	-280,790	-20,612	318,097
No of Cust		1,363	1,362	1,361	1,363	1,358	1,355	1,351	1,365	1,358	1,357	1,378	1,374	1,373
Usage/DDH			1,4480	1,4480	1,4480	1,2501	1,2501	1,2501	1,4914	1,4914	1,4914	1,2501	1,2501	1,4480
ID Ind Sched 111		-22,521	5,051	-29,221	-16,145	3,227	9,801	3,065	0	0	0	-13,200	-947	15,848
No of Cust		38	38	37	38	37	40	36	40	37	37	39	38	38
Usage/DDH			2,6065	2,6065	2,6065	2,0765	2,0765	2,0765	0,0000	0,0000	0,0000	2,0765	2,0765	2,6065
WA subtotal		-5,787,854	1,253,245	-7,319,249	-4,070,633	880,898	2,515,804	863,661	436,946	656,098	-1,214,366	-3,521,462	-255,268	3,986,472
ID subtotal		-2,544,075	550,234	-3,263,539	-1,757,684	409,885	1,152,790	399,279	184,075	276,191	-521,802	-1,610,680	-118,537	1,755,713
Summarize by Schedule														
WA 101		-4,425,376	955,672	-5,579,988	-3,103,187	647,284	1,858,877	637,272	323,996	486,920	-901,358	-2,606,962	-188,880	3,044,978
WA 111		-1,360,628	297,166	-1,736,842	-965,494	233,134	655,578	226,858	112,785	168,868	-312,423	-912,947	-66,251	938,940
WA 121		-1,850	407	-2,419	-1,952	480	1,349	-469	165	310	-585	-1,553	-137	2,554
ID 101		-2,030,590	440,898	-2,614,772	-1,407,890	332,511	935,472	324,316	145,277	218,275	-412,483	-1,306,040	-96,194	1,410,040
ID 111		-513,485	109,336	-648,767	-349,794	77,374	217,318	74,963	38,798	57,916	-109,319	-304,640	-22,343	345,673

12.2019	Total	January	February	March	April	May	June	July	August	September	October	November	December
Weather Adjustment Revenue													
WA 101	(\$3,175,654)	\$670,452	(\$3,914,641)	(\$2,177,041)	\$454,102	\$1,304,095	\$447,078	\$227,299	\$341,599	(\$632,348)	(\$1,828,914)	(\$127,811)	\$2,060,476
WA 111	(\$754,316)	\$160,158	(\$936,071)	(\$520,353)	\$125,648	\$353,324	\$122,265	\$60,785	\$91,011	(\$168,380)	(\$492,033)	(\$34,111)	\$483,441
WA 121	(\$876)	\$180	(\$1,069)	(\$863)	\$212	\$596	(\$207)	\$73	\$137	(\$259)	(\$687)	(\$57)	\$1,068
Total Revenue Adjustment	(\$3,930,846)	\$830,790	(\$4,851,781)	(\$2,698,257)	\$579,962	\$1,658,015	\$569,136	\$288,157	\$432,747	(\$800,987)	(\$2,321,634)	(\$161,979)	\$2,544,985
Decoupling Revenue Offset													
WA 101	(\$1,837,326)	\$396,776	(\$2,316,699)	(\$1,288,381)	\$268,739	\$771,769	\$264,583	\$134,517	\$202,159	(\$374,226)	(\$1,082,358)	(\$78,419)	\$1,264,214
WA 111	(\$357,941)	\$78,175	(\$456,911)	(\$253,993)	\$61,331	\$172,463	\$59,680	\$29,670	\$44,424	(\$82,189)	(\$240,169)	(\$17,429)	\$247,007
WA 121	(\$307)	\$68	(\$402)	(\$325)	\$80	\$224	(\$78)	\$27	\$52	(\$97)	(\$258)	(\$23)	\$425
Total WA	(\$2,195,574)	\$475,019	(\$2,774,012)	(\$1,542,699)	\$330,150	\$944,456	\$324,185	\$164,214	\$246,635	(\$456,512)	(\$1,322,785)	(\$95,871)	\$1,511,646
Revenue Related Expenses	\$100,267	0.045668	Decoupling Mechanism revenue conversion factor										
Decoupling Adjustment	\$2,095,307	\$78,243	(\$457,313)	(\$254,318)	\$61,411	\$172,687	\$59,602	\$29,697	\$44,476				
Revenue not captured in Decoupling													
WA 101	(\$1,338,328)	\$273,676	(\$1,597,942)	(\$888,660)	\$185,363	\$532,326	\$182,495	\$92,782	\$139,440	(\$258,122)	(\$746,556)	(\$49,392)	\$796,262
WA 111	(\$396,375)	\$81,983	(\$479,160)	(\$266,360)	\$64,317	\$180,861	\$62,585	\$31,115	\$46,587	(\$86,191)	(\$251,864)	(\$16,682)	\$236,434
WA 121	(\$569)	\$112	(\$667)	(\$538)	\$132	\$372	(\$129)	\$46	\$85	(\$162)	(\$429)	(\$34)	\$643
Total WA	(\$1,735,272)	\$355,771	(\$2,077,769)	(\$1,155,558)	\$249,812	\$713,559	\$244,951	\$123,943	\$186,112	(\$344,475)	(\$998,849)	(\$66,108)	\$1,033,339
ID 101	(\$1,510,916)	\$322,393	(\$1,911,974)	(\$1,029,477)	\$243,139	\$684,036	\$237,146	\$106,229	\$159,607	(\$301,616)	(\$955,003)	(\$68,428)	\$1,003,032
ID 111	(\$250,561)	\$51,984	(\$308,456)	(\$166,310)	\$36,787	\$103,324	\$35,641	\$18,447	\$27,536	(\$51,976)	(\$144,841)	(\$10,179)	\$157,482
Total Revenue Adjustment	(\$1,761,477)	\$374,377	(\$2,220,430)	(\$1,195,787)	\$279,926	\$787,360	\$272,787	\$124,676	\$187,143	(\$353,592)	(\$1,099,844)	(\$78,607)	\$1,160,514
FCA Revenue Offset													
ID 101	(\$943,352)	\$204,828	(\$1,214,745)	(\$654,063)	\$154,475	\$434,592	\$150,667	\$67,491	\$101,404	(\$191,627)	(\$606,747)	(\$44,689)	\$655,062
ID 111	(\$107,216)	\$22,829	(\$135,463)	(\$73,037)	\$16,156	\$45,376	\$15,652	\$8,101	\$12,093	(\$22,826)	(\$63,609)	(\$4,665)	\$72,177
Total ID	(\$1,050,568)	\$227,657	(\$1,350,208)	(\$727,100)	\$170,631	\$479,968	\$166,319	\$75,592	\$113,497	(\$214,453)	(\$670,356)	(\$49,354)	\$727,239
Revenue Related Expenses	\$6,070	0.005778	Fixed Cost Adjustment Mechanism revenue conversion factor										
FCA Adjustment	\$1,044,498	\$22,829	(\$135,463)	(\$73,037)	\$16,156	\$45,376	\$15,652						
Revenue not captured in Decoupling													
ID 101	(\$567,564)	\$117,565	(\$697,229)	(\$375,414)	\$88,664	\$249,444	\$86,479	\$38,738	\$58,203	(\$109,989)	(\$348,256)	(\$23,739)	\$347,970
ID 111	(\$143,345)	\$29,155	(\$172,993)	(\$93,273)	\$20,631	\$57,948	\$19,989	\$10,346	\$15,443	(\$29,150)	(\$81,232)	(\$5,514)	\$85,305
Total ID	(\$710,909)	\$146,720	(\$870,222)	(\$468,687)	\$109,295	\$307,392	\$106,468	\$49,084	\$73,646	(\$139,139)	(\$429,488)	(\$29,253)	\$433,275
Weather Adjustment Gas Cost Expense													
WA 101	(\$1,276,113)	\$260,956	(\$1,523,672)	(\$847,356)	\$176,747	\$507,585	\$174,013	\$88,470	\$132,958	(\$246,125)	(\$711,857)	(\$47,097)	\$759,265
WA 111	(\$377,889)	\$78,164	(\$456,842)	(\$253,954)	\$61,321	\$172,437	\$59,670	\$29,666	\$44,417	(\$82,177)	(\$240,132)	(\$15,908)	\$225,449
WA 121	(\$541)	\$107	(\$636)	(\$513)	\$126	\$355	(\$123)	\$43	\$82	(\$154)	(\$408)	(\$33)	\$613
Total Gas Cost Adjustment	(\$1,654,543)	\$339,227	(\$1,981,150)	(\$1,101,823)	\$238,194	\$680,377	\$233,560	\$118,179	\$177,457	(\$328,456)	(\$952,397)	(\$63,038)	\$985,327
GTI Gas Expense Adjustment	(\$2,598)	\$562	(\$3,283)	(\$1,826)	\$393	\$1,123	\$386	\$195	\$293	(\$543)	(\$1,573)	(\$114)	\$1,789
ID 101	(\$564,270)	\$116,882	(\$693,176)	(\$373,232)	\$88,149	\$247,994	\$85,976	\$38,513	\$57,865	(\$109,349)	(\$346,231)	(\$23,600)	\$345,939
ID 111	(\$142,513)	\$28,985	(\$171,988)	(\$92,730)	\$20,512	\$57,611	\$19,873	\$10,285	\$15,354	(\$28,980)	(\$80,760)	(\$5,482)	\$84,807
Total Gas Cost Adjustment	(\$706,783)	\$145,867	(\$865,164)	(\$465,962)	\$108,661	\$305,605	\$105,849	\$48,798	\$73,219	(\$138,329)	(\$426,991)	(\$29,082)	\$430,746
GTI Gas Expense Adjustment	(\$1,017)	\$220	(\$1,305)	(\$703)	\$164	\$461	\$160	\$74	\$110	(\$209)	(\$644)	(\$47)	\$702
Margin	(\$81,240)	\$16,615	(\$97,089)	(\$53,931)	\$11,695	\$33,385	\$11,464	\$5,781	\$8,679	(\$16,077)	(\$46,732)	(\$3,080)	\$48,050

12.2019		Total	January	February	March	April	May	June	July	August	September	October	November	December	
Weighted Block Rate Calculation															
WS weighted block Effective Rate by Month (Excluding prior deferral amortization Sch 155, decoupling surcharge Sch 159, and public purpose tariff rider Sch 191)															
WA 101		0.69741	0.70155	0.70155	0.70155	0.70155	0.70155	0.70155	0.70155	0.70155	0.70155	0.70155	0.67668	0.67668	
WA 111		0.53494	0.53895	0.53895	0.53895	0.53895	0.53895	0.53895	0.53895	0.53895	0.53895	0.53895	0.51488	0.51488	
WA 121		0.43812	0.44211	0.44211	0.44211	0.44211	0.44211	0.44211	0.44211	0.44211	0.44211	0.44211	0.41818	0.41818	
ID 101		0.72791	0.73122	0.73122	0.73122	0.73122	0.73122	0.73122	0.73122	0.73122	0.73122	0.73122	0.71135	0.71135	
ID 111		0.47214	0.47545	0.47545	0.47545	0.47545	0.47545	0.47545	0.47545	0.47545	0.47545	0.47545	0.45558	0.45558	
Effective WACOG by Month															
WA 101		0.26911	0.27306	0.27306	0.27306	0.27306	0.27306	0.27306	0.27306	0.27306	0.27306	0.27306	0.24935	0.24935	
WA 111		0.25921	0.26303	0.26303	0.26303	0.26303	0.26303	0.26303	0.26303	0.26303	0.26303	0.26303	0.24011	0.24011	
WA 121		0.25912	0.26292	0.26292	0.26292	0.26292	0.26292	0.26292	0.26292	0.26292	0.26292	0.26292	0.24011	0.24011	
ID 101		0.26181	0.26510	0.2651	0.2651	0.2651	0.2651	0.2651	0.2651	0.2651	0.2651	0.2651	0.24534	0.24534	
ID 111		0.26181	0.26510	0.2651	0.2651	0.2651	0.2651	0.2651	0.2651	0.2651	0.2651	0.2651	0.24534	0.24534	
WA Schedule 101	17 GRC Block Usage, Bills, & Baseload			Baseload Usage	Percentage	WS Usage	Percentage						5/1/2018	11/1/2018	11/2019
	Block 1	70,235,875		24,017,006	100.00%	46,218,869	56.43%						0.36723	0.36723	0.36723
	Block 2	35,679,397			0.00%	35,679,397	43.57%						0.47729	0.47729	0.47729
		105,915,272		24,017,006	100.00%	81,898,266	100.00%						0.41518	0.41518	0.41518
		1,847,462	13	24,017,006	100.00%					Gas Cost Rev			0.28488	0.28637	0.26150
										Gas Cost Exp			0.27180	0.27306	0.24935
										GTI Exp Rate			0.00047	0.00047	0.00047
WA Schedule 111															
	Block 1	5,785,416		5,785,416	33.67%	0	0.00%						0.48625	0.48625	0.48625
	Block 2	14,299,409		11,398,727	66.33%	2,900,682	11.13%						0.33354	0.33354	0.33354
	Block 3	23,171,235		0	0.00%	23,171,235	88.87%						0.25424	0.25424	0.25424
		43,256,060		17,184,143	100.00%	26,071,917	100.00%						0.26307	0.26307	0.26307
		32,983	521	17,184,143						Gas Cost Rev			0.27568	0.27588	0.25181
										Gas Cost Exp			0.26301	0.26303	0.24011
										GTI Exp Rate			0.00038	0.00038	0.00038
WA Schedule 121															
	Block 1	135,553		135,553	4.39%	0	0.00%						0.48088	0.48088	0.48088
	Block 2	135,553		135,553	4.39%	0	0.00%						0.34850	0.34850	0.34850
	Block 3	2,127,460		2,127,460	68.84%	0	0.00%						0.26767	0.26767	0.26767
	Block 4	953,143		692,067	22.39%	261,076	30.80%						0.21692	0.21692	0.21692
	Block 5	586,572		0	0.00%	586,572	69.20%						0.14387	0.14387	0.14387
		3,938,281		3,090,633	100.01%	847,648	100.00%						0.16637	0.16637	0.16637
		273	11,321	3,090,633						Gas Cost Rev			0.28163	0.27574	0.25181
										Gas Cost Exp			0.26869	0.26292	0.24011
										GTI Exp Rate			0.00031	0.00031	0.00031
ID Schedule 101													1/1/2019	11/1/2018	11/1/2019
	Block 1	all therms											0.46457	0.44815	0.46457
										Gas Cost Rev			0.26665	0.26665	0.24678
										Gas Cost Exp			0.26510	0.26510	0.24534
										GTI Exp Rate			0.00040	0.00040	0.00040
ID Schedule 111	17 GRC Block Usage, Bills, & Baseload														
	Block 1	2,975,097		2,975,097	24.57%	0	0.00%						0.51193	0.49511	0.51193
	Block 2	6,965,891		6,965,891	57.52%	0	0.00%						0.30505	0.30366	0.30505
	Block 3	8,708,834		2,169,482	17.91%	6,539,352	75.53%						0.22220	0.22127	0.22220
	Block 4	2,118,897		0	0.00%	2,118,897	24.47%						0.16742	0.16680	0.16742
		20,768,719		12,110,470	100.00%	8,658,249	100.00%						0.20880	0.20794	0.20880
		17,057	710	12,110,470						Gas Cost Rev			0.26665	0.26665	0.24678
										Gas Cost Exp			0.26510	0.26510	0.24534
										GTI Exp Rate			0.00040	0.00040	0.00040

Summarize No of Customers by Code

		201901	201902	201903	201904	201905	201906	201907	201908	201909	201910	201911	201912
WA Residential Sch 101	WR101	152,262	149,533	154,716	150,948	154,620	152,408	153,138	153,459	150,304	157,012	154,466	154,765
WA Commercial Sch 101	WC101	12,092	11,933	12,282	12,060	12,169	12,086	12,119	12,139	11,934	12,339	12,173	12,230
WA Industrial Sch 101	WI101	73	69	71	72	72	69	74	71	70	73	71	73
WA Total Sch 101	WT101	164,455	161,561	167,095	163,106	166,886	164,587	165,355	165,693	162,332	169,448	166,729	167,092
WA Residential Sch 111	WR111	302	292	307	299	298	301	300	299	289	310	288	304
WA Commercial Sch 111	WC111	2,722	2,680	2,767	2,726	2,729	2,717	2,732	2,727	2,671	2,750	2,716	2,742
WA Industrial Sch 111	WI111	57	56	58	57	57	56	57	55	57	55	56	57
WA Total Sch 111	WT111	3,100	3,048	3,152	3,102	3,104	3,095	3,110	3,102	3,037	3,137	3,081	3,124
WA Residential 121	WR121	-	-	-	-	-	-	-	-	-	-	-	-
WA Commercial Sch 121	WC121	4	4	6	6	6	(6)	4	5	5	5	6	8
WA Industrial Sch 121	WI121	-	-	-	-	-	-	-	-	-	-	-	-
WA Total Sch 121	WT121	4	4	6	6	6	(6)	4	5	5	5	6	8
WA Total Sch 131	WT131	2	2	2	2	2	2	2	2	1	3	2	1
		-	-	-	-	-	-	-	-	-	-	-	-
ID Residential Sch 101	IR101	76,042	76,018	76,126	76,205	76,297	76,231	76,446	76,639	76,758	77,178	77,319	77,696
ID Commercial Sch 101	IC101	7,723	7,655	7,644	7,735	7,752	7,681	7,741	7,719	7,686	7,803	7,755	7,791
ID Industrial Sch 101	II101	54	53	52	53	53	52	52	52	49	52	49	51
ID Total Sch 101	IT101	83,824	83,731	83,827	83,998	84,107	83,969	84,244	84,415	84,498	85,038	85,128	85,543
ID Residential Sch 111	IR111	107	109	108	112	107	107	108	108	108	108	108	108
ID Commercial Sch 111	IC111	1,362	1,361	1,363	1,358	1,355	1,351	1,365	1,358	1,357	1,378	1,374	1,373
ID Industrial Sch 111	II111	38	37	38	37	40	36	40	37	37	39	38	38
ID Total Sch 111	IT111	1,511	1,511	1,513	1,511	1,506	1,498	1,517	1,507	1,506	1,529	1,524	1,523
ID Commercial Sch 121	IC121	-	-	-	-	-	-	-	-	-	-	-	-
ID Industrial Sch 121	II121	-	-	-	-	-	-	-	-	-	-	-	-
ID Total Sch 121	IT121	-	-	-	-	-	-	-	-	-	-	-	-
ID Total Sch 131	IT131	-	-	-	-	-	-	-	-	-	-	-	-

Weather Sensitivity Regression Summary for January 2009 through 2018

Adj R ²	Dependent Variable	Summer Mo Heating Jul, Aug, Sep	Shoulder Mo Heating Apr, May, Jun, Oct, Nov	Winter Mo Heating Dec, Jan, Feb, Mar	Usage/Cust Base Load	Usage/Cust 2018 Low	Durbin Watson Test Result
Washington Gas							
0.991	WR101	0.0994	0.0878	0.1032	9	13	No Autocorrelation
0.983	WC101	0.2250	0.1768	0.2473	0	11	No Autocorrelation
0.963	WI101	0.6903	0.3622	0.4778	-38	5	Corrected with AR(1)
0.990	WT101	0.1142	0.0953	0.1153	8	13	No Autocorrelation
0.959	WR111	0.0000	0.7859	0.8303	488	320	Corrected with AR(1)
0.992	WC111	2.2935	1.9052	1.9956	483	562	Corrected with AR(1),(2),(3)
0.858	WI111	0.0000	2.1449	2.5267	2,246	2,196	Corrected with AR(1),(2)
0.991	WT111	2.2429	1.7790	1.8827	507	568	Corrected with AR(1),(2),(3)
0.992	WC121	2.2935	1.9052	1.9956	483	562	combined with 111
0.991	WT121	2.2429	1.7790	1.8827	507	568	combined with 111
Idaho Gas							
0.995	IR101	0.0882	0.0872	0.0943	9	13	Corrected with AR(1),(2)
0.981	IC101	0.1687	0.1623	0.1884	0	10	Corrected with AR(1),(2)
0.965	II101	0.4331	0.3109	0.3568	-27	6	Corrected with AR(1),(3)
0.993	IT101	0.0995	0.0929	0.1042	7	12	Corrected with AR(1),(2)
0.973	IR111	1.1082	0.6050	0.6787	231	229	Corrected with AR(1)
0.977	IC111	1.4914	1.2501	1.4480	592	635	Corrected with AR(1),(2)
0.671	II111	0.0000	2.0765	2.6065	4,133	4,076	Corrected with AR(1),(2)
0.977	IT111	1.4853	1.2863	1.4262	636	692	Corrected with AR(1)

Dependent Variable Name Code

<i>1st letter</i>	<i>2nd letter</i>	<i>Numerical reference</i>
W = Washington Jurisdiction	R = Residential Class	Rate Schedule
I = Idaho Jurisdiction	C = Commercial Class	
	I = Industrial Class	
	T = Total Schedule	

Prep by: _____ 1st Review: _____