

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-19 _____

ELECTRIC REVENUE NORMALIZATION

WORKPAPERS

TARA L. KNOX

REPRESENTING AVISTA CORPORATION

Knox Workpapers
Electric Revenue Normalization
Docket No. UE-19_____
Table of Contents

Description

Reference No.

Weather Normalization

Normalized Electric Usage Monthly Summary	TLK-R-1
WA Electric Revenue Run Billed Usage	TLK-R-2
WA Electric Unbilled Usage per Books	TLK-R-3 – TLK-R-4
WA Electric Meters Billed.....	TLK-R-5
WA Electric Large Customer Usage.....	TLK-R-6
Electric Weather Normalization Calculation	TLK-R-7 – TLK-R-10
Electric Regression Analysis	TLK-R-11 – TLK-R-14
Test Year Actual vs. Normal Heating & Cooling Degree Days	TLK-R-15
Normal Heating and Cooling Degree Days	TLK-R-16 – TLK-R-17
Actual Heating and Cooling Degree Days	TLK-R-18 – TLK-R-19

Eliminate Adder Schedules

Revenue adjustment work papers associated with the elimination of adder schedules and related amortization expenses are included in the Andrews 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 sponsored by Mr. Miller. Support for schedule shifting (if any) and adjustments to large customer usage are included with the Miller electric work papers. The preliminary version of the rate design model used to determine this adjustment is included in the Andrews work papers for Adjustment 3.01.

WUTC Docket No. UE-19
 Normalized Usage by Month
 Twelve Months Ended December 31, 2018
 WASHINGTON ELECTRIC SYSTEM

Revenue Run Billed Usage	January	February	March	April	May	June	July	August	September	October	November	December	Annual Total
Residential Schedule 001/002	290,781,554	227,575,425	233,136,064	195,827,349	159,686,943	149,276,245	162,965,399	205,105,320	165,901,550	149,412,587	181,215,231	245,751,615	2,366,635,282
General Svc Schedule 011/012	64,968,017	55,958,109	55,740,106	50,692,240	46,948,189	46,100,697	48,168,344	55,210,418	48,512,488	45,641,901	47,727,635	57,034,829	622,702,573
Large Gen Svc Schedule 021/022	125,937,053	113,399,610	112,223,930	111,090,734	112,273,215	113,413,112	114,915,540	124,759,437	113,710,883	110,448,176	109,051,287	119,116,948	1,380,339,926
Extra Large Gen Schedule 25	85,895,740	82,389,793	59,452,405	91,719,050	50,375,928	94,067,377	91,430,986	95,462,593	98,727,949	89,411,354	95,120,661	88,922,600	1,022,976,434
Pumping Schedule 31/32	5,199,806	4,295,325	4,226,648	5,323,831	10,126,136	18,516,637	23,083,953	28,015,838	23,798,948	12,939,704	6,282,585	3,998,283	145,807,692
Street and Area Lights	1,677,510	1,505,149	1,474,262	1,503,569	1,565,521	1,544,276	1,517,441	1,578,869	1,535,455	1,534,836	1,517,746	1,587,398	18,542,032
Total Revenue Run Billed Usage	574,459,679	485,123,411	466,253,415	456,156,773	380,975,932	422,918,343	442,081,662	510,132,476	452,187,273	409,388,557	440,915,146	516,411,273	5,557,003,938
Net Unbilled Usage													
Residential Schedule 001/002	(16,807,345)	(11,417,924)	(2,538,576)	(21,339,210)	(11,882,566)	(6,167,987)	22,269,076	(2,879,705)	(26,562,728)	10,771,561	32,345,083	12,693,423	(21,516,898)
General Svc Schedule 011/012	(5,056,613)	226,900	(1,492,318)	(3,135,024)	(94,436)	(612,520)	5,513,065	(3,427,114)	(5,492,340)	4,178,114	5,066,221	(648,853)	(4,974,918)
Large Gen Svc Schedule 021/022	(17,335,146)	2,932,085	(3,284,636)	(1,903,474)	4,768,104	131,589	11,356,739	(11,474,036)	(10,604,470)	11,698,081	8,235,200	(7,362,830)	(12,842,794)
Extra Large Gen Schedule 25	9,694,517	4,244,920	29,856,455	3,968,084	42,504,574	1,641,436	-1,095,411	3,752,803	(8,960,868)	5,368,369	(7,500,338)	4,713,680	90,379,043
Pumping Schedule 31/32	329,032	(115,788)	(137,275)	22,402	930,226	2,217,873	2,033,088	726,896	(1,530,437)	(1,792,052)	(1,310,272)	(1,358,868)	14,825
Street and Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Unbilled Usage	(29,175,555)	(4,129,807)	22,403,650	(22,387,222)	36,225,902	(2,789,609)	42,267,379	(13,301,156)	(53,150,843)	30,224,073	36,835,894	8,036,552	51,059,258
Other Usage Adjustments													
Extra Large Gen Schedule 25	(2,351,888)	424,875	5,841,699	(3,190,697)	1,186,875	(4,277,827)	2,936,196	(487,447)	(355,727)	340,938	1,302,277	(1,160,739)	208,535
Weather Adjustment													
Residential Schedule 001/002	18,971,503	(7,032,417)	(1,444,882)	(357,275)	11,243,016	8,391,924	(18,566,532)	(7,591,998)	6,498,512	1,439,157	2,721,258	15,313,039	29,585,305
General Svc Schedule 011/012	1,930,773	(710,823)	(145,200)	(42,341)	444,874	944,145	(2,529,540)	(1,038,088)	865,276	123,714	198,669	1,536,838	1,578,297
Large Gen Svc Schedule 021/022	991,519	(366,102)	(74,963)	(40,508)	(779,435)	825,754	(2,819,054)	(1,160,154)	980,935	50,179	20,819	778,502	(1,592,508)
Extra Large Gen Schedule 25	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumping Schedule 31/32	-	-	-	-	-	-	-	-	-	-	-	-	-
Street and Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Weather Adjustment	21,893,795	(8,109,342)	(1,665,045)	(440,124)	10,908,455	10,161,823	(23,915,126)	(9,790,240)	8,344,723	1,613,050	2,940,746	17,628,379	29,571,094
Normalized Test Year Usage													
Residential Schedule 001/002	292,945,712	209,125,084	229,152,606	174,130,864	159,047,393	151,500,182	166,667,943	194,633,617	145,837,334	161,623,305	216,281,572	273,758,077	2,374,703,689
General Svc Schedule 011/012	61,842,177	55,474,186	54,102,588	47,514,875	47,298,627	46,432,322	51,151,869	50,745,216	43,885,424	49,943,729	52,992,525	57,922,414	619,305,952
Large Gen Svc Schedule 021/022	109,593,426	115,965,593	108,864,331	109,146,752	116,261,884	114,370,455	123,453,225	112,125,247	104,087,348	122,196,436	117,307,306	112,532,620	1,365,904,624
Extra Large Gen Schedule 25	93,238,369	87,059,588	95,150,559	92,496,437	94,067,377	91,430,986	95,462,593	98,727,949	89,411,354	95,120,661	88,922,600	92,475,541	1,113,564,012
Pumping Schedule 31/32	5,528,838	4,179,537	4,089,373	5,346,233	11,056,362	20,734,510	25,117,041	28,742,734	22,268,511	11,147,652	4,972,313	2,639,415	145,822,517
Street and Area Lights	1,677,510	1,505,149	1,474,262	1,503,569	1,565,521	1,544,276	1,517,441	1,578,869	1,535,455	1,534,836	1,517,746	1,587,398	18,542,032
Total Normalized Test Year Usage	564,826,031	473,309,137	492,833,719	430,138,730	429,297,164	426,012,730	463,370,111	486,553,633	407,025,426	441,566,618	481,994,063	540,915,465	5,637,842,825
Residential Usage	292,945,712	209,125,084	229,152,606	174,130,864	159,047,393	151,500,182	166,667,943	194,633,617	145,837,334	161,623,305	216,281,572	273,758,077	2,374,703,689
Schedule 001 Customers	215,198	214,198	216,045	214,971	215,099	214,829	215,408	215,648	214,122	218,388	216,943	217,126	2,587,975
Schedule 001 Norm Use/Customer	1,361	976	1,061	810	739	774	774	903	681	740	997	1,261	918
Non-Residential Group Usage	176,964,441	175,619,317	167,056,292	162,007,860	174,616,873	181,537,287	199,722,134	191,613,197	170,241,283	183,287,817	175,272,145	173,094,449	2,131,033,094
Non-Residential Group Customers	36,868	36,445	36,552	36,255	36,544	36,486	36,644	36,729	35,718	37,528	36,613	36,651	439,033
Non-Residential Group Norm Use/Cust	4,800	4,819	4,570	4,469	4,778	4,976	5,450	5,217	4,766	4,884	4,787	4,723	4,854
WA Jurisdiction % of Annual Usage	10.0%	8.4%	8.7%	7.6%	7.6%	7.6%	8.2%	8.6%	7.2%	7.8%	8.5%	9.6%	100.0%

Usage Report 12 Month-Ended
 Data Source: Financial Reporting
 Data Updated Daily

Service	Usage Qty	201801	201802	201803	201804	201805	201806	201807	201808	201809	201810	201811	201812	Total
ED	Rate Schedule													
	WA	290,082,618	227,037,506	232,576,105	195,370,733	159,351,282	149,010,189	162,685,831	204,769,911	165,623,441	149,120,500	180,836,658	245,231,487	2,361,696,262
	0001	698,936	537,919	559,959	456,616	335,660	266,056	279,568	335,409	278,109	292,087	378,573	520,128	4,939,020
	0011	57,439,818	49,814,123	49,597,717	45,542,639	42,858,661	42,432,407	44,491,315	51,053,201	44,563,774	41,762,126	43,172,190	50,926,223	563,644,196
	0012	7,528,199	6,143,986	6,142,389	5,149,601	4,089,528	3,668,290	3,677,028	4,157,217	3,968,714	3,879,774	4,555,445	6,108,206	59,059,377
	0021	122,241,828	110,329,898	109,199,871	108,414,515	109,898,845	111,196,835	112,687,625	122,191,477	111,231,103	108,166,166	106,647,355	116,049,950	1,348,255,469
	0022	3,695,225	3,069,712	3,024,059	2,676,219	2,374,370	2,216,277	2,227,915	2,567,960	2,479,780	2,282,010	2,403,933	3,066,998	32,084,457
	0025	85,895,740	82,389,793	59,452,405	91,719,050	50,375,928	94,067,377	91,430,986	95,462,593	98,727,949	89,411,354	95,120,661	88,922,600	1,022,976,434
	0030	8,400	8,140	10,493	672,678	2,875,569	5,388,709	6,825,279	6,313,289	5,757,755	2,982,402	485,647	5,945	31,334,306
	0031	4,871,956	4,012,886	3,933,829	4,293,788	6,634,148	12,227,010	14,748,108	19,821,419	16,784,963	9,329,693	5,515,307	3,736,713	105,909,821
	0032	319,450	274,299	282,326	357,365	616,418	900,918	1,510,566	1,881,130	1,256,230	627,608	281,631	255,625	8,563,565
	0041	3,880	3,513	3,522	3,823	3,734	3,829	3,829	789	6,160	3,688	3,825	3,836	44,156
	0042	838,566	738,160	730,338	749,460	789,058	756,007	744,118	803,309	753,224	782,225	748,764	781,374	9,214,602
	0044	16,765	15,419	15,340	15,992	15,961	15,881	16,000	15,303	21,135	17,249	17,951	18,740	201,737
	0045	38,423	35,770	37,961	35,920	37,106	39,165	31,779	32,524	35,131	33,324	34,997	37,468	429,569
	0046	99,372	89,517	70,893	90,965	95,520	92,417	91,028	93,065	80,169	84,169	96,311	94,370	1,077,786
	0047	441,811	408,058	407,400	390,020	406,204	417,709	411,730	415,332	422,619	401,874	404,826	427,093	4,954,675
	0048	238,693	214,712	208,808	217,388	217,938	219,540	218,956	218,547	217,027	212,308	211,072	224,517	2,619,507
	0058	-	-	-	-	-	-	-	-	-	-	-	-	-
	0058A	-	-	-	-	-	-	-	-	-	-	-	-	-
	0095	-	-	-	-	-	-	-	-	-	-	-	-	-
	0099	-	-	-	-	-	-	-	-	-	-	-	-	-
	025B	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	574,459,679	485,123,411	466,253,415	456,156,773	380,975,932	422,918,343	442,081,662	510,132,476	452,187,273	409,388,557	440,915,146	516,411,273	5,557,003,938

Run Date: Jan 8, 2019

Billed Usage

WA Sch 1/2	290,781,554	227,575,425	233,136,064	195,827,349	159,686,943	149,276,245	162,965,399	205,105,320	165,901,550	149,412,587	181,215,231	245,751,615	2,366,635,282
WA Sch 11/12	64,968,017	55,958,109	55,740,106	50,692,240	46,948,189	46,100,697	48,168,344	55,210,418	48,512,488	45,641,901	47,727,635	57,034,429	622,702,573
WA Sch 21/22	125,937,053	113,399,610	112,223,930	111,090,734	112,273,215	113,413,112	114,915,540	124,759,437	113,710,883	110,448,176	109,051,287	119,116,948	1,380,339,926
WA Sch 25	85,895,740	82,389,793	59,452,405	91,719,050	50,375,928	94,067,377	91,430,986	95,462,593	98,727,949	89,411,354	95,120,661	88,922,600	1,022,976,434
WA Sch 30/31/32	5,199,806	4,295,325	4,226,648	5,323,831	10,126,136	18,516,637	23,083,953	28,015,838	23,798,948	12,939,704	6,282,585	3,998,283	145,807,692
WA St & Area Lights	1,677,510	1,505,149	1,474,262	1,503,569	1,565,521	1,544,276	1,517,441	1,578,869	1,535,455	1,534,836	1,517,746	1,587,398	18,542,032

Unbilled Usage 12 Month-Ended
 Data Source: Financial Reporting
 Data Updated Daily

Service	State Code	Usage Qty	201801	201802	201803	201804	201805	201806	201807	201808	201809	201810	201811	201812	Total
ED	WA	Rate Sch	Journal Source												
		0001	REVUNBLER	-148,528,721	0	-120,366,856	-117,838,911	0	0	0	0	5,524,283	0	0	-381,210,205
			REVUNBLE	120,366,856	117,838,911	0	0	0	0	0	-5,524,283	0	0	0	232,681,484
			Total	-148,528,721	120,366,856	-2,527,945	-117,838,911	0	0	0	0	5,524,283	0	0	-148,528,721
		0002	REVUNBLER	-351,593	0	0	0	0	0	0	0	0	0	0	-351,593
			Total	-351,593	0	0	0	0	0	0	0	0	0	0	-351,593
		001	REVUNBLE	131,744,919	0	96,562,318	84,716,237	78,586,377	100,822,517	103,479,910	71,433,400	82,163,972	114,430,432	127,093,842	991,033,924
			REVUNBLER	-131,744,919	-131,744,919	0	-96,562,318	-84,716,237	-78,586,377	-100,822,517	-103,479,910	-71,433,400	-82,163,972	-114,430,432	-863,940,082
			Total	131,744,919	-131,744,919	0	96,562,318	-6,129,860	22,236,140	2,657,393	-32,046,510	10,730,572	32,266,460	12,663,410	127,093,842
		0011	REVUNBLER	-30,705,832	0	0	0	0	0	0	0	0	0	0	-30,705,832
			Total	-30,705,832	0	0	0	0	0	0	0	0	0	0	-30,705,832
		0012	REVUNBLER	-3,711,265	0	0	0	0	0	-2,278,873	0	0	0	0	-5,990,138
			REVUNBLE	0	0	0	0	0	2,278,873	0	0	0	0	0	2,278,873
			Total	-3,711,265	0	0	0	0	2,278,873	-2,278,873	0	0	0	0	-3,711,265
		002	REVUNBLE	328,050	288,189	277,558	214,941	178,456	140,329	173,265	160,450	119,949	160,938	239,561	2,551,260
			REVUNBLER	-328,050	-288,189	-277,558	-214,941	-178,456	-140,329	-173,265	-160,450	-119,949	-160,938	-239,561	-2,281,686
			Total	328,050	-39,861	-10,631	-62,617	-36,485	32,936	-12,815	-40,501	40,989	78,623	30,013	269,574
		0021	REVUNBLER	-72,193,864	0	0	-3,854,976	0	0	0	0	0	0	0	-76,048,840
			REVUNBLE	0	0	3,854,976	0	0	0	0	0	0	0	0	3,854,976
			Total	-72,193,864	0	3,854,976	-3,854,976	0	0	0	0	0	0	0	-72,193,864
		0022	REVUNBLER	-1,992,363	0	0	0	0	0	0	0	0	0	0	-1,992,363
			Total	-1,992,363	0	0	0	0	0	0	0	0	0	0	-1,992,363
		0025	REVUNBLE	11,830,759	0	0	5,446,758	0	0	0	0	0	0	0	17,277,517
			REVUNBLER	-2,136,242	-11,830,759	0	-5,446,758	0	0	0	0	0	0	0	-19,413,759
			Total	9,694,517	-11,830,759	0	5,446,758	0	0	0	0	0	0	0	-2,136,242
		0031	REVUNBLER	-1,679,835	0	0	0	0	0	0	0	0	0	0	-1,679,835
			Total	-1,679,835	0	0	0	0	0	0	0	0	0	0	-1,679,835
		0032	REVUNBLER	-156,264	0	0	0	0	0	0	0	0	0	0	-156,264
			Total	-156,264	0	0	0	0	0	0	0	0	0	0	-156,264
		011	REVUNBLE	25,948,763	26,321,244	24,980,245	22,407,616	22,691,377	22,318,280	27,487,278	24,350,340	19,139,293	22,887,083	27,208,344	292,016,257
			REVUNBLER	-25,948,763	-26,321,244	-24,980,245	-22,407,616	-22,691,377	-22,318,280	-27,487,278	-24,350,340	-19,139,293	-22,887,083	-27,208,344	-265,739,863
			Total	25,948,763	372,481	-1,340,999	-2,572,629	283,761	-373,097	5,168,998	-3,136,938	5,211,047	3,747,790	4,321,261	26,276,394
		012	REVUNBLE	3,411,721	3,266,140	3,114,821	2,552,426	2,174,229	1,934,806	1,988,697	1,707,404	2,137,728	2,882,688	3,165,785	28,336,445
			REVUNBLER	-3,411,721	-3,266,140	-3,114,821	-2,552,426	-2,174,229	-1,934,806	-1,988,697	-1,707,404	-2,137,728	-2,882,688	-3,165,785	-25,170,660
			Total	3,411,721	-145,581	-151,319	-562,395	-378,197	-239,423	1,988,697	-281,293	430,324	744,960	283,097	695,610,609
		021	REVUNBLE	55,178,026	58,150,096	51,101,564	53,278,541	58,100,808	58,325,794	69,470,717	58,149,012	47,703,446	67,185,053	59,753,857	695,610,609
			REVUNBLER	-55,178,026	-58,150,096	-51,101,564	-53,278,541	-58,100,808	-69,470,717	-58,149,012	-47,703,446	-67,185,053	-59,753,857	-67,185,053	-635,856,749
			Total	55,178,026	2,972,070	-7,048,532	2,176,977	4,822,267	224,986	11,144,923	-11,321,705	-10,445,566	11,510,246	7,971,361	59,753,857
		022	REVUNBLE	1,673,055	1,633,070	1,541,990	1,316,515	1,262,352	1,380,771	1,228,440	1,069,536	1,257,371	1,521,210	1,589,576	16,642,841
			REVUNBLER	-1,673,055	-1,633,070	-1,541,990	-1,316,515	-1,262,352	-1,380,771	-1,228,440	-1,069,536	-1,257,371	-1,521,210	-1,589,576	-15,053,265
			Total	1,673,055	-39,985	-91,080	-225,475	-54,163	211,816	-152,331	-158,904	187,835	263,839	68,366	1,589,576
		031	REVUNBLE	2,033,911	1,921,259	1,788,709	1,826,999	2,683,359	4,808,391	6,510,007	7,219,225	5,938,288	4,288,578	3,070,656	1,728,595
			Total	2,033,911	1,921,259	1,788,709	1,826,999	2,683,359	4,808,391	6,510,007	7,219,225	5,938,288	4,288,578	3,070,656	1,728,595

Unbilled Usage 12 Month-Ended
 Data Source: Financial Reporting
 Data Updated Daily

Service	State Code	Usage Qty	Rate Sch	Journal Source	201801	201802	201803	201804	201805	201806	201807	201808	201809	201810	201811	201812	Total
				REVUNBLER		-2,033,911	-1,921,259	-1,788,709	-1,826,999	-2,683,359	-4,808,391	-6,510,007	-7,219,225	-5,938,288	-4,288,578	-3,070,656	
				Total	2,033,911	-112,652	-132,550	38,290	856,360	2,125,032	1,701,616	709,218	-1,280,937	-1,649,710	-1,217,922	-1,342,061	-42,089,382
	032			REVUNBLE	131,220	128,084	123,359	107,471	181,337	274,178	605,650	623,328	373,828	231,486	139,136	122,329	
				REVUNBLER	-131,220	-128,084	-123,359	-107,471	-181,337	-274,178	-605,650	-623,328	-373,828	-231,486	-139,136	-122,329	
				Total	131,220	-3,136	-4,725	-15,888	73,866	92,841	331,472	17,678	-249,500	-142,342	-92,350	-16,807	122,329
	025			REVUNBLE		16,075,679	45,932,134	44,453,460	92,404,792	94,046,228	95,141,639	98,894,442	89,933,574	95,301,943	87,801,605	92,515,285	852,500,781
				REVUNBLER		-16,075,679	-45,932,134	-44,453,460	-92,404,792	-94,046,228	-95,141,639	-98,894,442	-89,933,574	-95,301,943	-87,801,605	-92,515,285	-759,985,496
				Total	16,075,679	29,856,455	-1,478,674	1,641,436	1,095,411	3,752,803	-8,960,868	5,368,369	-7,500,338	30,224,073	36,835,894	8,036,552	51,059,258
				Total	-29,175,555	-4,129,807	22,403,650	-22,387,222	36,225,902	-2,789,609	42,267,379	-13,301,156	-53,150,843	30,224,073	36,835,894	8,036,552	51,059,258

Run Date: Jan 9, 2019

Page 2 of 4

Unbilled Usage

WA Sch 1/2	-16,807,345	-11,417,924	-2,538,576	-21,339,210	-11,882,566	-6,167,987	22,269,076	-2,879,705	-26,562,728	10,771,561	32,345,063	12,693,423	-21,516,898
WA Sch 11/12	-5,056,613	226,900	-1,492,318	-3,135,024	-94,436	-612,520	5,513,065	-3,427,114	-5,492,340	4,178,114	5,066,221	-648,853	-4,974,918
WA Sch 21/22	-17,335,146	2,932,085	-3,284,636	-1,903,474	4,768,104	131,589	11,356,739	-11,474,036	-10,604,470	11,698,081	8,235,200	-7,362,830	-12,842,794
WA Sch 25	9,694,517	4,244,920	29,856,455	3,968,084	42,504,574	1,641,436	1,095,411	3,752,803	-8,960,868	5,368,369	-7,500,338	4,713,680	90,379,043
WA Sch 30/31/32	329,032	-115,788	-137,275	22,402	930,226	2,217,873	2,033,088	726,896	-1,530,437	-1,792,052	-1,310,272	-1,358,868	14,825
WA St & Area Lights	0	0	0	0	0	0	0	0	0	0	0	0	0

Meters Report 12 Month-Ended

Data Source: Financial Reporting
Data Updated Daily

Service	State Code	Meter Qty	201801	201802	201803	201804	201805	201806	201807	201808	201809	201810	201811	201812	Total
ED	WA														
			Rate Schedule												
		0001	214,784	213,790	215,639	214,565	214,700	214,425	215,008	215,250	213,728	217,990	216,566	216,760	2,583,205
		0002	414	408	406	406	399	404	400	398	394	398	377	366	4,770
		0011	22,901	22,712	22,750	22,562	22,741	22,732	22,723	22,870	22,047	23,411	22,734	22,730	273,913
		0012	9,566	9,369	9,436	9,385	9,435	9,406	9,565	9,482	9,398	9,672	9,573	9,600	113,887
		0021	1,866	1,856	1,867	1,842	1,856	1,853	1,845	1,857	1,810	1,891	1,819	1,857	22,219
		0022	48	47	47	47	49	48	47	47	49	49	46	44	568
		0025	21	22	22	22	4	23	23	23	23	23	23	23	253
		0030	49	49	48	48	50	49	50	50	49	52	51	46	591
		0031	1,245	1,200	1,195	1,192	1,203	1,202	1,200	1,214	1,181	1,228	1,189	1,180	14,429
		0032	1,193	1,212	1,209	1,179	1,210	1,196	1,214	1,209	1,184	1,225	1,201	1,194	14,426
		0041	3	6	6	6	6	6	6	-5	7	5	5	5	56
		0042	354	342	349	350	349	349	352	354	347	354	350	357	4,207
		0044	12	12	12	12	12	12	12	10	14	12	12	12	144
		0045	9	9	9	9	9	9	9	9	7	9	9	9	106
		0046	49	49	49	49	49	49	49	48	46	49	49	49	584
		0047	0	0	0	0	0	0	0	0	0	0	0	0	0
		0048	0	0	0	0	0	0	0	0	0	0	0	0	0
		0058	0	0	0	0	0	0	0	0	0	0	0	0	0
		0058A	0	0	0	0	0	0	0	0	0	0	0	0	0
		0095	0	0	0	0	0	0	0	0	0	0	0	0	0
		0099	0	0	0	0	0	0	0	0	0	0	0	0	0
		025B	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	252,514	251,083	253,044	251,675	252,072	251,763	252,503	252,816	250,284	256,368	254,004	254,232	3,032,358

Billed Customers

WA Sch 1/2	215,198	214,198	216,045	214,971	215,099	214,829	215,408	215,648	214,122	218,388	216,943	217,126	2,587,975
WA Sch 11/12	32,467	32,081	32,186	31,947	32,176	32,138	32,288	32,352	31,445	33,083	32,307	32,330	386,800
WA Sch 21/22	1,914	1,903	1,914	1,889	1,905	1,901	1,892	1,904	1,859	1,940	1,865	1,901	22,787
WA Sch 25	21	22	22	23	4	23	23	23	23	23	23	23	253
WA Sch 30/31/32	2,487	2,461	2,452	2,419	2,463	2,447	2,464	2,473	2,414	2,505	2,441	2,420	29,446
WA St & Area Lights	427	418	425	426	425	425	428	416	421	429	425	432	5,097

Washington Schedule 25 Billing Determinants

KWHs	Jan 18	Feb 18	Mar 18	Apr 18	May 18	Jun 18	Jul 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	12-mo Ended Total
1	5,417,357	5,209,483	5,598,083	5,938,930	6,179,069	5,771,216	6,205,584	6,286,132	5,214,997	6,027,206	4,774,253	6,083,616	68,705,927
22	606,597	661,977	727,160	697,581	691,018	762,334	723,050	817,499	511,734	638,428	649,174	720,994	8,207,546
23	979,474	895,377	951,957	876,397	896,024	891,303	781,784	831,365	779,045	873,928	836,098	812,217	10,404,969
2	3,098,710	2,900,940	3,192,966	3,000,358	2,990,820	2,914,699	2,818,183	2,977,010	2,712,146	2,877,664	2,753,625	1,593,640	33,830,761
3	1,451,407	1,330,052	1,413,395	1,259,812	1,296,068	1,267,048	1,254,392	1,297,139	1,191,800	1,372,032	1,325,176	1,396,155	15,854,476
4	1,294,329	1,157,306	1,248,465	1,205,774	1,278,665	1,238,120	1,324,371	1,312,517	1,250,367	1,238,767	1,209,573	1,305,220	15,063,473
5	1,680,174	1,550,972	1,669,355	1,622,051	1,666,864	1,912,079	2,179,710	2,106,808	1,816,311	1,649,124	1,620,303	1,705,474	21,479,225
6	2,251,094	2,295,040	2,148,289	2,103,293	1,859,382	1,633,699	1,985,696	2,040,340	2,035,250	2,111,894	2,195,715	2,199,177	24,858,869
7	1,342,431	1,273,124	1,374,677	1,291,710	1,411,495	1,389,839	1,540,083	1,508,025	1,332,346	1,140,910	1,106,405	1,156,737	16,067,781
8	1,108,779	1,009,331	1,067,136	1,043,343	1,082,596	1,052,801	1,056,594	1,131,644	982,224	1,076,834	959,767	904,653	12,455,703
9	42,113,570	38,726,690	42,012,008	40,858,220	39,613,368	39,658,628	40,571,988	41,162,272	38,387,778	41,469,272	39,553,724	41,299,864	485,427,382
10	5,475,880	3,225,600	5,302,937	5,139,876	5,546,520	4,880,064	4,436,116	5,475,225	4,745,651	5,373,593	4,515,265	4,882,490	58,999,217
11	2,675,148	4,832,542	5,366,178	5,075,286	5,759,634	4,983,580	4,542,300	5,232,987	5,027,002	5,821,581	5,324,021	5,382,110	60,022,368
12	3,200,690	2,917,421	3,190,862	3,189,856	4,044,789	3,911,494	4,551,246	4,441,298	3,624,860	3,239,193	3,056,115	3,093,192	42,461,016
13	911,570	817,297	882,349	881,156	1,073,816	1,046,600	1,202,605	1,199,814	978,220	934,645	858,442	887,576	11,674,089
14	889,757	844,967	962,325	864,949	926,184	881,078	904,692	991,965	957,685	1,042,831	790,021	875,426	10,931,880
15	1,270,193	1,112,622	1,160,410	1,219,999	1,452,465	1,443,086	1,530,123	1,495,053	1,277,090	1,209,802	1,110,094	1,091,280	15,372,216
16	2,358,093	2,190,658	2,360,406	2,160,110	1,789,183	2,045,484	1,923,790	1,989,926	1,954,490	2,159,164	2,107,381	2,255,610	25,294,296
17	2,503,934	2,509,035	2,568,546	2,359,706	2,259,538	2,136,456	2,168,320	2,295,686	2,237,127	2,436,683	2,370,693	2,555,655	28,401,380
18	4,357,473	3,896,860	3,695,622	3,595,240	4,259,323	4,201,313	5,094,661	5,131,098	4,086,204	3,815,254	3,722,507	3,968,525	49,824,081
19	3,294,921	2,987,091	3,210,346	3,063,409	2,906,194	2,811,337	2,954,351	2,975,448	2,907,106	3,094,039	3,162,176	3,309,638	36,686,055
20	2,586,336	2,474,712	2,788,048	2,708,744	2,555,544	2,409,704	2,499,608	2,613,272	2,564,312	2,750,072	2,713,584	2,854,344	31,518,880
21	2,369,853	2,230,491	2,259,040	2,340,638	2,228,817	2,189,023	3,213,347	3,415,423	2,857,607	2,567,746	2,208,489	2,141,950	30,022,423
Schedule 25 Total	93,238,369	87,059,588	95,150,558	92,496,437	94,067,377	91,430,986	95,462,593	98,727,949	89,411,354	95,120,661	88,922,600	92,475,541	1,113,564,012
Revenue Run Total	85,895,740	82,389,793	59,452,405	91,719,050	50,375,928	94,067,377	91,430,986	95,462,593	98,727,949	89,411,354	95,120,661	88,922,600	1,022,976,434
Booked Unbilled Reversal	(2,136,242)	(11,830,759)	(16,075,679)	(45,932,134)	(49,900,218)	(92,404,792)	(94,046,228)	(95,141,639)	(98,894,442)	(89,933,574)	(95,301,943)	(87,801,605)	(779,399,255)
Gross Booked Unbilled	11,830,759	16,075,679	45,932,134	49,900,218	92,404,792	94,046,228	95,141,639	98,894,442	89,933,574	95,301,943	87,801,605	92,515,285	869,778,298
Gross Unbilled True-up	-	424,875	6,266,574	3,075,877	4,262,752	(15,075)	2,921,121	2,433,674	2,077,947	2,418,885	3,721,162	2,560,423	30,148,215
Unbilled Reversal True-up	(2,351,888)	-	(424,875)	(6,266,574)	(3,075,877)	(4,262,752)	15,075	(2,921,121)	(2,433,674)	(2,077,947)	(3,721,162)	(2,560,423)	(29,939,680)
Adj Revenue Runs, Sch 25	93,238,369	87,059,588	95,150,559	92,496,437	94,067,377	91,430,986	95,462,593	98,727,949	89,411,354	95,120,661	88,922,600	92,475,541	1,113,564,012
			0	0	0	0	0	0	0	0	0	0	0

12.2018		January	February	March	April	May	June	July	August	September	October	November	December
Total	6,520	1,105	914	772	542	304	136	27	30	160	529	864	1,137
Normal DDH	6,064	960	968	783	543	125	103	15	24	169	517	836	1,021
Actual DDH	456	145	-54	-11	-1	179	33	12	6	-9	12	28	116
Normal DDC	495	0	0	0	0	14	51	209	180	40	1	0	0
Actual DDC	573	0	0	0	1	37	31	280	209	15	0	0	0
Unbilled DDC	-78	0	0	0	-1	-23	20	-71	-29	25	1	0	0

Rate Group

WA Res Sched 1	29,585,305	18,971,503	-7,032,417	-1,444,882	-357,275	11,243,016	8,391,924	-18,566,532	-7,591,998	6,498,512	1,439,157	2,721,258	15,313,039
No of Cust	215,661	215,194	214,194	216,041	214,967	215,095	214,825	215,404	215,645	214,119	218,385	216,937	217,120
Usage/DDH	0.608	0.608	0.608	0.608	0.448	0.448	0.448	0.000	0.000	0.000	0.448	0.448	0.608
Usage/DDC	0.000	0.000	0.000	0.000	1.214	1.214	1.214	1.214	1.214	1.214	1.214	1.214	0.000
WA Res Sched 11	926,791	452,138	-164,914	-33,834	-6,447	354,030	161,503	-287,236	-116,303	99,373	34,729	70,756	362,996
No of Cust	9,490	9,565	9,368	9,435	9,384	9,434	9,405	9,564	9,481	9,397	9,671	9,572	9,599
Usage/DDH	0.326	0.326	0.326	0.326	0.264	0.264	0.264	0.000	0.000	0.000	0.264	0.264	0.326
Usage/DDC	0.000	0.000	0.000	0.000	0.423	0.423	0.423	0.423	0.423	0.423	0.423	0.423	0.000
WA Com Sched 11	591,182	1,449,281	-535,408	-109,244	-35,624	71,683	775,708	-2,232,177	-917,681	762,507	87,246	124,347	1,150,544
No of Cust	22,557	22,716	22,534	22,571	22,377	22,556	22,549	22,537	22,684	21,864	23,210	22,543	22,542
Usage/DDH	0.440	0.440	0.440	0.440	0.197	0.197	0.197	0.000	0.000	0.000	0.197	0.197	0.440
Usage/DDC	0.000	0.000	0.000	0.000	1.395	1.395	1.395	1.395	1.395	1.395	1.395	1.395	0.000
WA Ind Sched 11	60,324	29,354	-10,501	-2,122	-270	19,161	6,934	-10,127	-4,104	3,396	1,739	3,566	23,298
No of Cust	126	127	122	121	127	126	125	126	125	120	133	128	126
Usage/DDH	1.594	1.594	1.594	1.594	0.995	0.995	0.995	0.000	0.000	0.000	0.995	0.995	1.594
Usage/DDC	0.000	0.000	0.000	0.000	1.132	1.132	1.132	1.132	1.132	1.132	1.132	1.132	0.000
WA Res Sched 21	225,385	148,777	-54,252	-11,051	-2,879	90,956	68,892	-150,472	-61,460	55,238	11,714	20,819	109,103
No of Cust	47	48	47	47	47	49	48	47	47	49	49	46	44
Usage/DDH	21.376	21.376	21.376	21.376	16.164	16.164	16.164	0.000	0.000	0.000	16.164	16.164	21.376
Usage/DDC	0.000	0.000	0.000	0.000	45.092	45.092	45.092	45.092	45.092	45.092	45.092	45.092	0.000
WA Com Sched 21	-1,886,536	790,739	-293,650	-60,157	-37,629	-870,391	756,862	-2,668,582	-1,098,694	925,697	38,465	0	630,804
No of Cust	1,761	1,770	1,765	1,775	1,754	1,764	1,764	1,752	1,766	1,726	1,793	1,734	1,765
Usage/DDH	3.081	3.081	3.081	3.081	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.081
Usage/DDC	0.000	0.000	0.000	0.000	21.453	21.453	21.453	21.453	21.453	21.453	21.453	21.453	0.000
WA Ind Sched 21	68,643	52,003	-18,200	-3,755	0	0	0	0	0	0	0	0	38,595
No of Cust	77	83	78	79	75	79	75	79	77	71	81	75	77
Usage/DDH	4.321	4.321	4.321	4.321	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.321
Usage/DDC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

12.2018

	Total	January	February	March	April	May	June	July	August	September	October	November	December
ID Res Sched 1	16,755,498	9,268,696	-3,450,152	-703,489	-155,370	6,390,820	3,747,841	-7,549,185	-3,091,284	2,671,464	705,338	1,399,364	7,521,455
No of Cust	107,925	107,432	107,381	107,485	107,448	107,481	107,428	107,727	108,000	108,266	108,597	108,883	108,975
Usage/DDH	0.595	0.595	0.595	0.595	0.459	0.459	0.459	0.000	0.000	0.000	0.459	0.459	0.595
Usage/DDC	0.000	0.000	0.000	0.000	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.000
ID Res Sched 11	370,026	181,932	-67,641	-13,804	-1,939	122,113	49,474	-79,334	-32,632	28,162	11,237	23,669	148,789
No of Cust	5,427	5,385	5,376	5,386	5,386	5,397	5,384	5,398	5,436	5,442	5,500	5,525	5,505
Usage/DDH	0.233	0.233	0.233	0.233	0.153	0.153	0.153	0.000	0.000	0.000	0.153	0.153	0.233
Usage/DDC	0.000	0.000	0.000	0.000	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.000
ID Com Sched 11	483,012	1,094,906	-410,246	-83,694	-28,583	95,808	622,193	-1,769,060	-722,123	621,705	70,384	105,108	886,614
No of Cust	16,037	15,897	15,994	16,018	16,004	16,000	16,057	16,044	16,034	16,013	16,184	16,111	16,091
Usage/DDH	0.475	0.475	0.475	0.475	0.233	0.233	0.233	0.000	0.000	0.000	0.233	0.233	0.475
Usage/DDC	0.000	0.000	0.000	0.000	1.553	1.553	1.553	1.553	1.553	1.553	1.553	1.553	0.000
ID Ind Sched 11	22,240	14,415	-5,368	-1,059	-233	7,629	5,360	-11,744	-4,876	4,169	943	1,838	11,166
No of Cust	123	126	126	122	123	122	120	121	123	122	123	125	122
Usage/DDH	0.789	0.789	0.789	0.789	0.525	0.525	0.525	0.000	0.000	0.000	0.525	0.525	0.789
Usage/DDC	0.000	0.000	0.000	0.000	1.367	1.367	1.367	1.367	1.367	1.367	1.367	1.367	0.000
ID Res Sched 21	48,888	35,306	-14,792	-3,013	-610	14,016	14,003	-33,447	-12,902	12,431	2,018	4,103	31,775
No of Cust	18	16	18	18	18	18	18	18	17	19	17	19	18
Usage/DDH	15,218	15,218	15,218	15,218	7,713	7,713	7,713	0.000	0.000	0.000	7,713	7,713	15,218
Usage/DDC	0.000	0.000	0.000	0.000	26.171	26.171	26.171	26.171	26.171	26.171	26.171	26.171	0.000
ID Com Sched 21	-796,753	602,053	-222,904	-45,673	-20,475	-473,684	410,296	-1,448,017	-593,187	505,859	20,455	0	468,524
No of Cust	1,019	1,028	1,022	1,028	1,022	1,028	1,024	1,018	1,021	1,010	1,021	1,008	1,000
Usage/DDH	4.039	4.039	4.039	4.039	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.039
Usage/DDC	0.000	0.000	0.000	0.000	20.034	20.034	20.034	20.034	20.034	20.034	20.034	20.034	0.000
ID Ind Sched 21	504,038	204,832	-80,161	-15,012	-957	174,117	31,565	0	0	0	11,478	25,420	152,756
No of Cust	59	59	62	57	59	60	59	59	60	58	59	56	55
Usage/DDH	23,943	23,943	23,943	23,943	16,212	16,212	16,212	0.000	0.000	0.000	16,212	16,212	23,943
Usage/DDC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Electric Adjustment	46,958,043	33,295,935	-12,360,606	-2,530,789	-648,291	17,239,274	15,042,555	-34,805,913	-14,247,244	12,188,513	2,434,903	4,500,248	26,849,458
WA subtotal	29,571,094	21,893,795	-8,109,342	-1,665,045	-440,124	10,908,455	10,161,823	-23,915,126	-9,790,240	8,344,723	1,613,050	2,940,746	17,628,379
ID subtotal	17,386,949	11,402,140	-4,251,264	-865,744	-208,167	6,330,819	4,880,732	-10,890,787	-4,457,004	3,843,790	821,853	1,559,502	9,221,079
Summarize by Schedule													
WA Sch 1	29,585,305	18,971,503	-7,032,417	-1,444,882	-357,275	11,243,016	8,391,924	-18,566,532	-7,591,998	6,498,512	1,439,157	2,721,258	15,313,039
WA Sch 11	1,578,297	1,930,773	-710,823	-145,200	-42,341	444,874	944,145	-2,529,540	-1,038,088	865,276	123,714	198,669	1,536,838
WA Sch 21	-1,592,508	991,519	-366,102	-74,963	-40,508	-779,435	825,754	-2,819,054	-1,160,154	980,935	50,179	20,819	778,502
ID Sch 1	16,755,498	9,268,696	-3,450,152	-703,489	-155,370	6,390,820	3,747,841	-7,549,185	-3,091,284	2,671,464	705,338	1,399,364	7,521,455
ID Sch 11	875,278	1,291,253	-483,255	-98,557	-30,755	225,550	677,027	-1,860,138	-759,631	654,036	82,564	130,615	1,046,569
ID Sch 21	-243,827	842,191	-317,857	-63,698	-22,042	-285,551	455,864	-1,481,464	-606,089	518,290	33,951	29,523	653,055

Prep by: _____ Ist Review: _____

Date: 4/25/2019 Mgr. Review: _____

12.2018

Revenue Adjustment	Total	January	February	March	April	May	June	July	August	September	October	November	December
WA Sch 1	\$2,716,626	\$1,719,956	(\$637,559)	(\$130,993)	(\$32,391)	\$1,039,192	\$775,666	(\$1,716,105)	(\$701,728)	\$600,657	\$133,021	\$251,526	\$1,415,384
WA Sch 11	\$131,203	\$160,216	(\$58,984)	(\$12,049)	(\$3,513)	\$37,107	\$78,751	(\$210,989)	(\$86,587)	\$72,173	\$10,319	\$16,571	\$128,188
WA Sch 21	(\$102,857)	\$62,862	(\$23,211)	(\$4,753)	(\$2,568)	(\$50,118)	\$53,096	(\$181,265)	(\$74,598)	\$63,074	\$3,227	\$1,339	\$50,058
Total WA	\$2,744,972	\$1,943,034	(\$719,754)	(\$147,795)	(\$38,472)	\$1,026,181	\$907,513	(\$2,108,359)	(\$862,913)	\$735,904	\$146,567	\$269,436	\$1,593,630
Decoupling Revenue Offset	62%	65%	64%	65%	67%	62%	68%	70%	70%	69%	66%	65%	66%
WA Sch 1	\$2,180,760	\$1,408,634	0.01641	0.01641	0.01641	0.01900	0.01900	0.01900	0.01900	0.01900	0.01900	0.01900	0.01900
WA Sch 11	\$103,889	\$128,532	(\$47,319)	(\$9,666)	(\$2,818)	\$28,654	\$60,812	(\$162,928)	(\$66,863)	\$477,185	\$105,677	\$199,822	\$1,124,436
WA Sch 21	(\$71,279)	\$46,591	(\$17,203)	(\$3,523)	(\$1,903)	(\$35,309)	\$37,407	(\$127,703)	(\$52,555)	\$44,436	\$2,274	\$943	\$35,266
Total WA	\$2,213,370	\$1,583,757	(\$586,679)	(\$120,471)	(\$31,249)	\$818,920	\$714,438	(\$1,653,972)	(\$676,898)	\$577,354	\$115,919	\$213,561	\$1,258,690
Revenue Related Expenses	(\$103,313)	0.046677	Decoupling Mechanism revenue conversion factor										
Decoupling Adjustment	(\$2,110,057)												
Revenue not captured in Decoupling													
WA Sch 1	\$535,866	\$311,322	(\$115,402)	(\$23,711)	(\$5,863)	\$213,617	\$159,447	(\$352,764)	(\$144,248)	\$123,472	\$27,344	\$51,704	\$290,948
WA Sch 11	\$27,314	\$31,684	(\$11,665)	(\$2,383)	(\$695)	\$8,453	\$17,939	(\$48,061)	(\$19,724)	\$16,440	\$2,351	\$3,775	\$29,200
WA Sch 21	(\$31,578)	\$16,271	(\$6,008)	(\$1,230)	(\$665)	(\$14,809)	\$15,689	(\$53,562)	(\$22,043)	\$18,638	\$953	\$396	\$14,792
Total WA	\$531,602	\$359,277	(\$133,075)	(\$27,324)	(\$7,223)	\$207,261	\$193,075	(\$454,387)	(\$186,015)	\$158,550	\$30,648	\$55,875	\$334,940
ID Sch 1	\$1,642,887	\$924,738	(\$344,222)	(\$70,187)	(\$15,501)	\$637,612	\$353,946	(\$712,945)	(\$291,941)	\$252,293	\$66,612	\$132,156	\$710,326
ID Sch 11	\$65,005	\$95,656	(\$35,800)	(\$7,301)	(\$2,278)	\$16,709	\$46,309	(\$127,233)	(\$51,959)	\$44,736	\$5,647	\$8,934	\$71,585
ID Sch 21	(\$12,086)	\$47,887	(\$18,073)	(\$3,622)	(\$1,253)	(\$16,236)	\$23,878	(\$77,599)	(\$31,747)	\$27,148	\$1,778	\$1,546	\$34,207
Total ID	\$1,695,806	\$1,068,281	(\$398,095)	(\$81,110)	(\$19,032)	\$638,085	\$424,133	(\$917,777)	(\$375,647)	\$324,177	\$74,037	\$142,636	\$816,118
FCA Revenue Offset	38%	35%	36%	35%	33%	38%	32%	30%	30%	31%	34%	35%	34%
ID Sch 1	\$1,226,011	\$694,133	0.02488	0.02488	0.02488	0.02488	0.02488	0.02488	0.02488	0.02488	0.02488	0.02488	0.02488
ID Sch 11	\$43,228	\$63,530	(\$23,777)	(\$4,849)	(\$1,513)	\$11,097	\$29,465	(\$80,953)	(\$33,059)	\$28,464	\$3,593	\$5,684	\$45,546
ID Sch 21	(\$6,021)	\$26,933	(\$10,165)	(\$2,037)	(\$705)	(\$9,131)	\$12,536	(\$40,740)	(\$16,668)	\$14,253	\$933	\$811	\$17,959
Total ID	\$1,263,218	\$784,596	(\$292,324)	(\$59,570)	(\$13,853)	\$480,574	\$302,701	(\$646,814)	(\$264,757)	\$228,544	\$53,589	\$103,835	\$586,697
Revenue Related Expenses	(\$7,375)	0.005838	Fixed Cost Adjustment Mechanism revenue conversion factor										
FCA Adjustment	(\$1,255,843)												
Revenue not captured in FCA													
ID Sch 1	\$416,876	\$230,605	(\$85,840)	(\$17,503)	(\$3,866)	\$159,004	\$93,246	(\$187,824)	(\$76,911)	\$66,466	\$17,549	\$34,816	\$187,134
ID Sch 11	\$21,777	\$32,126	(\$12,023)	(\$2,452)	(\$765)	\$5,612	\$16,844	(\$46,280)	(\$18,900)	\$16,272	\$2,054	\$3,250	\$26,039
ID Sch 21	(\$6,065)	\$20,954	(\$7,908)	(\$1,585)	(\$548)	(\$7,105)	\$11,342	(\$36,859)	(\$15,079)	\$12,895	\$845	\$735	\$16,248
Total ID	\$432,588	\$283,685	(\$105,771)	(\$21,540)	(\$5,179)	\$157,511	\$121,432	(\$270,963)	(\$110,890)	\$95,633	\$20,448	\$38,801	\$229,421
Total Revenue	\$4,440,778	\$3,011,315	(\$1,117,849)	(\$228,905)	(\$57,504)	\$1,664,266	\$1,331,646	(\$3,026,136)	(\$1,238,560)	\$1,060,081	\$220,604	\$412,072	\$2,409,748
WA ERM RRC	\$506,919	\$342,857	(\$126,992)	(\$26,075)	(\$6,892)	\$197,552	\$184,031	(\$433,103)	(\$177,301)	\$151,123	\$29,212	\$53,257	\$319,250
ID PCA LCAR	\$429,978	\$281,975	(\$105,134)	(\$21,410)	(\$5,148)	\$156,561	\$120,701	(\$269,329)	(\$110,222)	\$95,057	\$20,324	\$38,566	\$228,037
Total Expense	\$936,897	\$624,832	(\$232,126)	(\$47,485)	(\$12,040)	\$354,113	\$304,732	(\$702,432)	(\$287,523)	\$246,180	\$49,536	\$91,823	\$547,287
Estimated Margin	\$27,293	\$18,130	(\$6,720)	(\$1,379)	(\$362)	\$10,659	\$9,775	(\$22,918)	(\$9,382)	\$8,003	\$1,560	\$2,853	\$17,074

Prep by: _____ 1st Review: _____

Date: 4/25/2019 Mgr. Review: _____

12.2018		Total	January	February	March	April	May	June	July	August	September	October	November	December
Weighted Block Rate Calculation														
WS weighted block Base Rates (Excluding Adder Schedules ERM, BPA Res.X, and PP Rider)														
WA Sch 1			0.09066	0.09066	0.09066	0.09066	0.09243	0.09243	0.09243	0.09243	0.09243	0.09243	0.09243	0.09243
WA Sch 11			0.08298	0.08298	0.08298	0.08298	0.08341	0.08341	0.08341	0.08341	0.08341	0.08341	0.08341	0.08341
WA Sch 21			0.06340	0.06340	0.06340	0.06340	0.06430	0.06430	0.06430	0.06430	0.06430	0.06430	0.06430	0.06430
ERM RRC			0.01566	0.01566	0.01566	0.01566	0.01811	0.01811	0.01811	0.01811	0.01811	0.01811	0.01811	0.01811
WS weighted block Base Rates (Excluding Adder Schedules PCA, BPA Res.X, SIT, and PP Rider)														
ID Sch 1			0.09977	0.09977	0.09977	0.09977	0.09977	0.09444	0.09444	0.09444	0.09444	0.09444	0.09444	0.09444
ID Sch 11			0.07408	0.07408	0.07408	0.07408	0.07408	0.0684	0.0684	0.0684	0.0684	0.0684	0.0684	0.0684
ID Sch 21			0.05686	0.05686	0.05686	0.05686	0.05686	0.05238	0.05238	0.05238	0.05238	0.05238	0.05238	0.05238
WA Schedule 1			0.02473	0.02473	0.02473	0.02473	0.02473	0.02473	0.02473	0.02473	0.02473	0.02473	0.02473	0.02473
Block 1	17 GRC Block Usage, Bills & Baseload		Percentage	WS Usage Percentage	Percentage	WS Usage Percentage	Percentage	WS Usage Percentage	Percentage	WS Usage Percentage	Percentage	WS Usage Percentage	Percentage	WS Usage Percentage
Block 2		1,563,076,768	100.00%	21,833,716	100.00%	21,833,716	3.00%	0.07525	0.07525	0.07390	0.07390	0.07533	0.07533	0.07533
Block 3		458,131,072	0.00%	458,131,072	0.00%	458,131,072	62.95%	0.08755	0.08755	0.08598	0.08598	0.08765	0.08765	0.08765
		2,269,061,504	100.00%	727,818,452	100.00%	727,818,452	34.05%	0.10264	0.10264	0.10080	0.10080	0.10276	0.10276	0.10276
		2,518,371	612	1,541,243,052	612	1,541,243,052	100.00%	9.405¢	9.405¢	9.237¢	9.237¢	9.243¢	9.243¢	9.243¢
WA Schedule 11														
Block 1		419,807,178	81.44%	0	0.00%	0	0.00%	0.11507	0.11507	0.11293	0.11293	0.11349	0.11349	0.11349
Block 2		192,006,796	18.56%	96,340,346	100.00%	96,340,346	100.00%	0.08455	0.08455	0.08298	0.08298	0.08341	0.08341	0.08341
		611,813,974	100.00%	96,340,346	100.00%	96,340,346	100.00%	8.455¢	8.455¢	8.298¢	8.298¢	8.341¢	8.341¢	8.341¢
WA Schedule 21														
Block 1		1,239,435,303	93.57%	0	0.00%	0	0.00%	0.07240	0.07240	0.07089	0.07089	0.07189	0.07189	0.07189
Block 2		158,308,533	6.43%	73,164,492	100.00%	73,164,492	100.00%	0.06475	0.06475	0.06340	0.06340	0.06430	0.06430	0.06430
		1,397,743,836	100.00%	73,164,492	100.00%	73,164,492	100.00%	6.475	6.475	6.06340	6.06340	6.430¢	6.430¢	6.430¢
		22,836	58,004	1,324,579,344	58,004	1,324,579,344	100.00%	0.02012	0.02012	0.01566	0.01566	0.01811	0.01811	0.01811
ID Schedule 1														
Block 1	17 GRC Block Usage, Bills & Baseload		ERM RRC rate	Decoupling RRA rate	ERM RRC rate	Decoupling RRA rate	ERM RRC rate	Decoupling RRA rate	ERM RRC rate	Decoupling RRA rate	ERM RRC rate	Decoupling RRA rate	ERM RRC rate	Decoupling RRA rate
Block 2		631,683,680	84.52%	0	0.00%	0	0.00%	0.08935	0.08935	0.08402	0.08402	0.08449	0.08449	0.08449
		466,874,373	15.48%	351,152,801	100.00%	351,152,801	100.00%	0.09977	0.09977	0.09444	0.09444	0.09434	0.09434	0.09434
		1,098,558,053	100.00%	351,152,801	100.00%	351,152,801	100.00%	9.977¢	9.977¢	9.444¢	9.444¢	9.434¢	9.434¢	9.434¢
		1,258,258	594	747,405,252	594	747,405,252	100.00%	0.07240	0.07240	0.07089	0.07089	0.07189	0.07189	0.07189
ID Schedule 11														
Block 1		262,422,258	89.18%	0	0.00%	0	0.00%	0.10217	0.10217	0.09649	0.09649	0.09704	0.09704	0.09704
Block 2		95,790,406	10.82%	63,953,908	100.00%	63,953,908	100.00%	0.07408	0.07408	0.06840	0.06840	0.07216	0.07216	0.07216
		358,212,664	100.00%	63,953,908	100.00%	63,953,908	100.00%	7.408¢	7.408¢	6.840¢	6.840¢	7.216¢	7.216¢	7.216¢
		252,366	1,166	294,258,756	1,166	294,258,756	100.00%	0.06662	0.06662	0.06214	0.06214	0.06322	0.06322	0.06322
ID Schedule 21														
Block 1		595,628,304	88.83%	0	0.00%	0	0.00%	0.05686	0.05686	0.05238	0.05238	0.05396	0.05396	0.05396
Block 2		52,010,569	11.17%	-22,892,513	100.00%	-22,892,513	100.00%	0.05686	0.05686	0.05238	0.05238	0.05396	0.05396	0.05396
		647,638,873	100.00%	-22,892,513	100.00%	-22,892,513	100.00%	5.396¢	5.396¢	5.000¢	5.000¢	5.396¢	5.396¢	5.396¢
		13,657	49,098	670,531,386	49,098	670,531,386	100.00%	0.02473	0.02473	0.02473	0.02473	0.02473	0.02473	0.02473
								0.02488	0.02488	0.02488	0.02488	0.02488	0.02488	0.02488

Prep by: _____ 1st Review: _____

Date: 4/25/2019 Mgr. Review: _____

Weather Sensitivity Regression Summary for January 2007 through December 2016

Adj R ²	Dependent Variable	Shoulder Mo. Heating	Winter Mo Heating	Shoulder Mo Cooling	Summer Mo Cooling	Usage/Cust Base Load	Usage/Cust 2016 Low	Durbin Watson test results
		Apr, May, Jun, Oct, Nov	Dec, Jan, Feb, Mar	Apr, May, Oct, Nov	Jun, Jul, Aug, Sep			
Washington Electric								
0.960	WR1	0.448	0.608	1.214	1.214	600	703	No Autocorrelation
0.942	WR11	0.264	0.326	0.423	0.423	364	407	Corrected with AR(1)
0.916	WC11	0.197	0.440	1.395	1.395	1,851	1,863	Corrected with AR(1),(2)
0.952	WT11	0.995	1.594	1.132	1.132	3,316	3,708	Corrected with AR(1),(2)
0.918	WT11	0.187	0.396	1.036	1.036	1,437	1,453	Corrected with AR(1),(2)
0.890	WR21	16.164	21.376	45.092	45.092	44,336	42,888	Corrected with AR(1),(2)
0.956	WC21	0.000	3.081	21.453	21.453	57,833	55,067	Corrected with AR(1),(2)
0.881	WT21	0.000	4.321	0.000	0.000	105,245	87,859	Corrected with AR(1),(3)
0.956	WT21	0.000	3.422	20.980	20.980	59,700	56,587	Corrected with AR(1),(2)

Idaho Electric								
0.971	IR1	0.459	0.595	0.987	0.987	576	685	No Autocorrelation
0.940	IR11	0.153	0.233	0.207	0.207	282	294	Corrected with AR(1)
0.857	IC11	0.233	0.475	1.553	1.553	1,510	1,532	No Autocorrelation
0.751	II11	0.525	0.789	1.367	1.367	2,668	2,598	Corrected with AR(1)
0.874	IT11	0.214	0.420	1.197	1.197	1,217	1,242	Corrected with AR(1)
0.874	IR21	7.713	15.218	26.171	26.171	28,945	28,764	Corrected with AR(1)
0.878	IC21	0.000	4.039	20.034	20.034	44,500	41,063	Corrected with AR(1)
0.669	II21	16.212	23.943	0.000	0.000	114,455	69,361	Corrected with AR(1),(2)
0.873	IT21	1.882	5.174	20.170	20.170	48,140	43,852	Corrected with AR(1)

Dependent Variable Name Code

1st letter
 W = Washington Jurisdiction
 I = Idaho Jurisdiction

2nd letter
 R = Residential Class
 C = Commercial Class
 I = Industrial Class

Numerical reference
 Rate Schedule

Dependent Variable: WR1
 Method: Stepwise Regression
 Date: 04/12/18 Time: 09:30
 Sample: 2007M01 2016M12
 Included observations: 120
 No always included regressors
 Number of search regressors: 11
 Selection method: Stepwise backwards
 Stopping criterion: tstat forwards/backwards = 2/2

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
C	671.00854	16.53349	40.58481	3.27E-69
WADDH*WINTER	0.6093999	0.0157946	38.58277	6.78E-67
WADDH*SHOULDER	0.4544593	0.0284293	15.98562	8.81E-31
WADDC*SUMMER	1.2377795	0.0865185	14.30653	4.02E-27
JUNE	136.75128	19.893232	6.874261	3.61E-10
@TREND	-0.6332172	0.1110878	-5.70015	9.69E-08
WADDC*SHOULDER*YEAR	0.1521803	0.0700816	2.171473	0.0319861
R-squared	0.9651049	Mean dependent var	978.68333	
Adjusted R-squared	0.963252	S.D. dependent var	217.35325	
S.E. of regression	41.666105	Akaike info criterion	10.353816	
Sum squared resid	196175.27	Schwarz criterion	10.516419	
Log likelihood	-6.14E+02	Hannan-Quinn criter.	10.41985	
F-statistic	5.21E+02	Durbin-Watson stat	2.1137938	
Prob(F-statistic)	7.27E-80			

Selection Summary

Removed WADDH*SHOULDER*YEAR
 Removed WADDC*SHOULDER
 Removed WADDC*SUMMER*YEAR
 Removed WADDH*WINTER*YEAR

*Note: p-values and subsequent tests do not account for stepwise selection.

Dependent Variable: WR11
 Method: ARMA Maximum Likelihood (OPG - BHHH)
 Date: 04/12/18 Time: 09:35
 Sample: 2007M01 2016M12
 Included observations: 120
 Convergence achieved after 13 iterations
 Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	325.8200555	11.053846	29.4757186	1.35E-54
@TREND	0.607627527	0.110449	5.50143279	2.41E-07
JUNE	48.72217953	16.374034	2.97557574	3.58E-03
WADDH*WINTER	0.290146075	0.0101118	28.6938634	1.93E-53
WADDH*SHOULDER	0.203275888	0.0169729	11.976517	8.85E-22
WADDC*SUMMER	0.260563612	0.0664646	3.92033722	1.53E-04
AR(1)	0.296784053	0.1069882	2.7739888	0.006489
SIGMASQ	749.617317	107.58339	6.96777932	2.34E-10
R-squared	0.945444629	Mean dependent var	508.075	
Adjusted R-squared	0.942034918	S.D. dependent var	117.7113	
S.E. of regression	28.34010252	Akaike info criterion	9.591542	
Sum squared resid	89954.07804	Schwarz criterion	9.777374	
Log likelihood	-5.67E+02	Hannan-Quinn criter.	9.667009	
F-statistic	2.77E+02	Durbin-Watson stat	2.011089	
Prob(F-statistic)	1.22E-67			

Inverted AR Roots
 0.3

Dependent Variable: WI11
 Method: ARMA Maximum Likelihood (OPG - BHHH)
 Date: 04/12/18 Time: 10:28
 Sample: 2007M01 2016M12
 Included observations: 120
 Convergence achieved after 16 iterations
 Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1432.670042	242.59358	5.90563876	3.91E-08
@TREND	16.81228612	3.212559	5.23330029	7.95E-07
WADDH*WINTER	1.009545473	0.1173014	8.60642146	5.62E-14
WADDH*SHOULDER	0.948342523	0.1309739	7.24069607	6.21E-11
WADDH*SUMMER	0.925093048	0.300685	3.07661868	2.64E-03
WADDH*WINTER*YEAR	0.055474791	0.0157716	3.51739248	6.33E-04
AR(1)	0.508100271	0.1008425	5.0385252	1.83E-06
AR(2)	0.336837922	0.1185415	2.84151955	0.005344
SIGMASQ	37340.64613	4809.3915	7.76411026	4.39E-12
R-squared	0.954345014	Mean dependent var		3052.517
Adjusted R-squared	0.951054565	S.D. dependent var		908.1633
S.E. of regression	200.9185559	Akaike info criterion		13.52509
Sum squared resid	4.48E+06	Schwarz criterion		13.73415
Log likelihood	-8.03E+02	Hannan-Quinn criter.		13.60999
F-statistic	290.0348514	Durbin-Watson stat		1.934538
Prob(F-statistic)	1.10E-70			

Dependent Variable: WC11
 Method: ARMA Maximum Likelihood (OPG - BHHH)
 Date: 04/12/18 Time: 10:19
 Sample: 2007M01 2016M12
 Included observations: 120
 Convergence achieved after 10 iterations
 Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1230.7483	53.610794	22.9571	9.30E-44
@TREND	5.078518	0.6993316	7.26196	5.78E-11
JUNE	123.28385	36.801501	3.349968	1.11E-03
WADDH*WINTER	0.4831395	0.0326334	14.80505	6.08E-28
WADDH*SHOULDER	0.2797844	0.0516508	5.416842	3.61E-07
WADDH*SUMMER	1.5910218	0.1748476	9.099478	4.51E-15
WADDH*SHOULDER*YEAR	0.3646835	0.1431831	2.546973	1.22E-02
AR(1)	0.4717918	0.1015864	4.64424	9.51E-06
AR(2)	0.2907059	0.0993526	2.926	0.0041718
SIGMASQ	5690.8406	740.65164	7.683559	6.91E-12
R-squared	0.9226041	Mean dependent var		1820.0917
Adjusted R-squared	0.9162717	S.D. dependent var		272.29921
S.E. of regression	7.88E+01	Akaike info criterion		11.657497
Sum squared resid	6.83E+05	Schwarz criterion		11.889788
Log likelihood	-6.89E+02	Hannan-Quinn criter.		11.751831
F-statistic	145.69599	Durbin-Watson stat		2.1069794
Prob(F-statistic)	7.01E-57			

Dependent Variable: WR21
 Method: ARMA Maximum Likelihood (OPG - BHHH)
 Date: 04/12/18 Time: 10:40
 Sample: 2007M01 2016M12
 Included observations: 120
 Convergence achieved after 9 iterations
 Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	25273.718	3384.5034	7.46748184	1.98E-11
@TREND	177.0760125	38.846014	4.55840886	1.33E-05
JUNE	6562.357503	1406.3404	4.66626537	8.62E-06
WADDH*WINTER	20.37692229	1.4245125	14.3044883	6.06E-27
WADDH*SHOULDER	14.76250834	2.2927306	6.43883262	3.18E-09
WADDH*SUMMER	38.43425991	7.7067871	4.98706652	2.28E-06
AR(1)	0.509047968	0.0968503	5.25602671	7.20E-07
AR(2)	0.244506664	0.112009	2.18291971	0.031148
SIGMASQ	12005020.77	1433516.4	8.37452655	1.88E-13
R-squared	8.91E-01	Mean dependent var		47167.78
Adjusted R-squared	0.88304058	S.D. dependent var		10533.99
S.E. of regression	3602.554765	Akaike info criterion		19.29478
Sum squared resid	1.44E+09	Schwarz criterion		19.50384
Log likelihood	-1148.68697	Hannan-Quinn criter.		19.37968
F-statistic	1.13E+02	Durbin-Watson stat		2.061124
Prob(F-statistic)	8.94E-50			
Inverted AR Roots	0.81	-0.3		

Dependent Variable: WT11
 Method: ARMA Maximum Likelihood (OPG - BHHH)
 Date: 04/12/18 Time: 10:32
 Sample: 2007M01 2016M12
 Included observations: 120
 Convergence achieved after 9 iterations
 Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	972.94623	43.266435	22.48732	6.08E-43
@TREND	3.7612227	0.5779468	6.507905	2.34E-09
JUNE	101.12282	30.259371	3.341868	1.14E-03
WADDH*WINTER	0.4328126	0.0251667	17.19781	5.87E-33
WADDH*SHOULDER	0.2585738	0.04018	6.435388	3.31E-09
WADDH*SUMMER	1.2083584	0.1379882	8.75697	2.71E-14
WADDH*SHOULDER*YEAR	0.2824983	0.1241885	2.274753	2.49E-02
AR(1)	0.4550997	0.1038338	4.382965	2.69E-05
AR(2)	0.3133819	0.1055165	2.969981	0.003657
SIGMASQ	3637.1025	468.97298	7.755463	4.79E-12
R-squared	0.924569	Mean dependent var		1445.05
Adjusted R-squared	0.9183974	S.D. dependent var		220.50075
S.E. of regression	6.30E+01	Akaike info criterion		11.210031
Sum squared resid	436452.31	Schwarz criterion		11.442322
Log likelihood	-6.63E+02	Hannan-Quinn criter.		11.304365
F-statistic	1.50E+02	Durbin-Watson stat		2.1199942
Prob(F-statistic)	1.72E-57			
Inverted AR Roots	0.83	-0.38		

Dependent Variable: WC21
 Method: ARMA Maximum Likelihood (OPG - BHHH)
 Date: 04/12/18 Time: 10:44
 Sample: 2007M01 2016M12
 Included observations: 120
 Convergence achieved after 10 iterations
 Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	31913.312	2165.302	14.73831	6.83E-28
@TREND	224.28345	29.845776	7.514747	1.56E-11
JUNE	2354.1351	676.98138	3.4774	0.0007239
WADDH*WINTER	3.1984443	0.4558925	7.015786	1.90E-10
WADDC*SUMMER	23.615911	3.576319	6.603413	1.44E-09
WADDC*SHOULDER*YEAR	8.0574714	3.0364876	2.65355	0.0091338
AR(1)	0.6638822	0.1099433	6.038404	2.11E-08
AR(2)	0.2175546	0.1052349	2.067323	0.0410291
SIGMASQ	3425587.7	419604.95	8.16384	5.62E-13
R-squared	0.9615666	Mean dependent var	47252.692	
Adjusted R-squared	0.9587966	S.D. dependent var	9480.4769	
S.E. of regression	1924.4059	Akaike info criterion	18.046074	
Sum squared resid	411070524	Schwarz criterion	18.255136	
Log likelihood	-1073.7644	Hannan-Quinn criter.	18.130975	
F-statistic	347.13895	Durbin-Watson stat	2.0569486	
Prob(F-statistic)	7.98E-75			

Inverted AR Roots 0.9 -0.24

Dependent Variable: WT31
 Method: ARMA Maximum Likelihood (OPG - BHHH)
 Date: 04/12/18 Time: 11:55
 Sample: 2007M01 2016M12
 Included observations: 120
 Convergence achieved after 17 iterations
 Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4306.1742	364.98761	11.79814	1.55E-21
WADDC	7.2932558	1.7766453	4.105071	7.59E-05
AR(1)	1.3692592	0.0753178	18.17975	1.30E-35
AR(2)	-0.7090186	0.0707431	-10.02245	2.26E-17
SIGMASQ	1323526.8	197041.04	6.717011	7.44E-10
R-squared	0.8728746	Mean dependent var	4644.0417	
Adjusted R-squared	0.8684529	S.D. dependent var	3.24E+03	
S.E. of regression	1175.19	Akaike info criterion	17.037222	
Sum squared resid	158823214	Schwarz criterion	17.153368	
Log likelihood	-1.02E+03	Hannan-Quinn criter.	17.084389	
F-statistic	197.4047	Durbin-Watson stat	2.1086616	
Prob(F-statistic)	1.59E-50			

Inverted AR Roots .68+ .49i .68-.49i

Dependent Variable: WT21
 Method: ARMA Maximum Likelihood (OPG - BHHH)
 Date: 04/12/18 Time: 10:48
 Sample: 2007M01 2016M12
 Included observations: 120
 Convergence achieved after 13 iterations
 Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	33170.46716	2403.422	13.8013494	7.81E-26
@TREND	230.1218835	32.383605	7.10612319	1.22E-10
JUNE	2320.049579	701.11511	3.30908511	1.26E-03
WADDH*WINTER	3.533793377	0.4349467	8.12465884	6.88E-13
WADDC*SUMMER	22.97742906	3.7511865	6.12537632	1.40E-08
WADDC*SHOULDER*YEAR	7.527532806	3.0660061	2.45515914	0.015634
AR(1)	0.677645852	0.1041324	6.50754262	2.28E-09
AR(2)	0.211802477	0.1010946	2.09509167	0.038437
SIGMASQ	3685326.519	475399.61	7.75206045	4.67E-12
R-squared	0.961021785	Mean dependent var	48842.43	
Adjusted R-squared	0.958212544	S.D. dependent var	9764.368	
S.E. of regression	2.00E+03	Akaike info criterion	18.11971	
Sum squared resid	4.42E+08	Schwarz criterion	18.32877	
Log likelihood	-1078.18262	Hannan-Quinn criter.	18.20461	
F-statistic	342.0930681	Durbin-Watson stat	2.040622	
Prob(F-statistic)	1.74E-74			

Inverted AR Roots 0.91 -0.23

Dependent Variable: W121
 Method: ARMA Maximum Likelihood (OPG - BHHH)
 Date: 04/12/18 Time: 10:52
 Sample: 2007M01 2016M12
 Included observations: 120
 Convergence achieved after 16 iterations
 Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	63974.2643	5803.9136	11.0226079	1.02E-19
@TREND	370.1274837	69.38134	5.3346834	4.86E-07
WADDH*WINTER	5.660738946	1.368545	4.13631926	6.74E-05
AR(1)	0.815105642	0.0733356	11.1147359	6.18E-20
SIGMASQ	31894910.43	3367034.3	9.4727014	4.39E-16
R-squared	0.868098218	Mean dependent var	86837.02	
Adjusted R-squared	0.86351033	S.D. dependent var	15615.38	
S.E. of regression	5769.024672	Akaike info criterion	20.20827	
Sum squared resid	3827389251	Schwarz criterion	20.32441	
Log likelihood	-1207.49596	Hannan-Quinn criter.	20.25543	
F-statistic	189.2152123	Durbin-Watson stat	1.945623	
Prob(F-statistic)	1.32E-49			

Inverted AR Roots 0.82

AVISTA UTILITIES
Weather Normalization
Degree Day Comparison

Twelve Months Ended December 31, 2018

CALENDAR MONTHLY DDH & DDC	1989 - 2018		1989 - 2018		ADJUSTMENT		ADJUSTMENT	
	ACTUAL DDH	DDC	30 YEAR AVG DDH	DDC	NORM - ACT DDH	DDC	NORM - ACT DDH	DDC
Jan - 18	960	0	1,105	0	145	0	145	0
Feb - 18	968	0	914	0	-54	0	-54	0
Mar - 18	783	0	772	0	-11	0	-11	0
Apr - 18	543	1	542	0	-1	-1	-1	-1
May - 18	125	37	304	14	179	179	179	-23
Jun - 18	103	31	136	51	33	33	33	20
Jul - 18	15	280	27	209	12	12	12	-71
Aug - 18	24	209	30	180	6	6	6	-29
Sep - 18	169	15	160	40	-9	25	-9	25
Oct - 18	517	0	529	1	12	1	12	1
Nov - 18	836	0	864	0	28	0	28	0
Dec - 18	1,021	0	1,137	0	116	0	116	0
	6,064	573	6,520	495	456	-78	456	-78

Heating Season Adjustment
Summer Season Adjustment

447
-78

Spokane AP Weather Station
Heating Degree Day History

		July	August	September	October	November	December	January	February	March	April	May	June	Total
1	2017 - 2018	0	3	166	560	811	1,179	960	968	783	543	125	103	6,201
2	2016 - 2017	20	10	158	508	637	1,289	1,379	992	741	556	272	66	6,628
3	2015 - 2016	5	11	197	322	899	1,054	1,048	753	683	308	198	110	5,588
4	2014 - 2015	7	5	94	357	906	991	1,049	713	597	519	157	25	5,420
5	2013 - 2014	0	7	160	590	898	1,213	1,090	1,085	780	537	227	106	6,693
6	2012 - 2013	20	14	68	504	779	1,040	1,243	869	730	561	272	140	6,240
7	2011 - 2012	40	8	99	516	890	1,118	1,078	930	809	494	345	175	6,502
8	2010 - 2011	48	47	158	472	948	1,096	1,103	1,006	790	698	401	192	6,959
9	2009 - 2010	17	23	103	668	834	1,252	919	751	733	538	420	190	6,448
10	2008 - 2009	8	52	142	529	785	1,328	1,204	957	936	586	303	93	6,923
11	2007 - 2008	0	27	194	553	894	1,126	1,243	952	880	683	274	176	7,002
12	2006 - 2007	8	30	170	552	865	1,122	1,243	864	685	548	270	136	6,493
13	2005 - 2006	11	22	229	489	919	1,258	905	949	812	525	301	104	6,524
14	2004 - 2005	16	34	204	480	857	1,020	1,128	842	711	503	260	166	6,221
15	2003 - 2004	9	1	151	418	1,056	1,083	1,193	945	668	455	315	131	6,425
16	2002 - 2003	28	26	219	678	839	962	957	885	745	588	365	90	6,382
17	2001 - 2002	33	20	100	588	744	1,136	1,063	934	938	581	412	137	6,686
18	2000 - 2001	51	43	285	572	1,134	1,245	1,168	1,060	795	634	320	201	7,508
19	1999 - 2000	75	36	181	540	703	1,030	1,143	908	799	496	363	142	6,416
20	1998 - 1999	0	20	101	565	748	1,119	1,010	836	769	594	448	186	6,396
21	1997 - 1998	35	15	116	549	785	1,098	1,058	747	721	505	276	90	5,995
22	1996 - 1997	35	49	281	603	949	1,241	1,130	928	794	642	264	154	7,070
23	1995 - 1996	21	88	146	648	742	1,120	1,217	1,045	880	556	471	143	7,077
24	1994 - 1995	26	13	81	558	970	1,071	1,045	771	771	578	262	170	6,316
25	1993 - 1994	151	83	217	457	1,063	1,051	904	998	713	469	262	160	6,528
26	1992 - 1993	32	60	232	481	916	1,297	1,331	1,102	834	578	192	165	7,220
27	1991 - 1992	15	16	108	574	918	992	1,024	750	598	477	206	61	5,739
28	1990 - 1991	37	42	54	610	774	1,356	1,212	716	866	568	406	248	6,889
29	1989 - 1990	22	76	149	554	805	1,048	976	968	739	454	373	166	6,330
30	1988 - 1989	47	16	240	361	856	1,171	1,113	1,205	873	473	364	65	6,784
	1989 - 2018 30-Year Average	27	30	160	529	864	1,137	1,105	914	772	542	304	136	6,520

Prep by: _____ 1st Review: _____

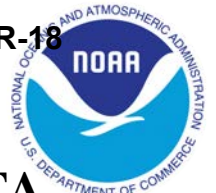
Date: 4/25/2019 Mgr. Review: _____

Spokane AP Weather Station
Cooling Degree Day History

Cooling Season	January	February	March	April	May	June	July	August	September	October	November	December	Total												
	1	2018	0	0	0	1	37	31	280	209	15	0	0	573											
2	2017	0	0	0	0	35	86	303	281	89	0	0	794												
3	2016	0	0	0	6	6	114	152	209	7	0	0	494												
4	2015	0	0	0	32	225	300	251	20	20	0	0	828												
5	2014	0	0	0	6	14	348	238	47	1	0	0	654												
6	2013	0	0	0	30	48	284	239	108	0	0	0	709												
7	2012	0	0	0	8	20	251	227	27	0	0	0	535												
8	2011	0	0	0	5	18	103	195	105	0	0	0	426												
9	2010	0	0	0	4	19	178	165	10	4	0	0	380												
10	2009	0	0	0	23	47	245	196	78	0	0	0	589												
11	2008	0	0	0	27	60	182	176	29	4	0	0	478												
12	2007	0	0	0	7	56	338	143	32	0	0	0	576												
13	2006	0	0	0	41	66	285	161	62	0	0	0	615												
14	2005	0	0	0	13	32	179	174	11	0	0	0	409												
15	2004	0	0	0	0	96	249	225	1	0	0	0	571												
16	2003	0	0	0	12	58	266	174	66	2	0	0	578												
17	2002	0	0	0	0	63	231	81	30	0	0	0	405												
18	2001	0	0	0	29	19	146	213	54	0	0	0	461												
19	2000	0	0	0	0	29	146	129	16	0	0	0	320												
20	1999	0	0	0	7	41	118	210	14	0	0	0	390												
21	1998	0	0	0	6	22	325	234	110	0	0	0	697												
22	1997	0	0	0	14	9	122	209	30	6	0	0	390												
23	1996	0	0	0	0	16	198	150	17	0	0	0	381												
24	1995	0	0	0	14	29	119	59	38	0	0	0	259												
25	1994	0	0	0	9	37	280	159	43	0	0	0	528												
26	1993	0	0	0	36	27	11	64	34	0	0	0	172												
27	1992	0	0	0	25	159	124	209	11	8	0	0	536												
28	1991	0	0	0	0	0	139	187	20	0	0	0	346												
29	1990	0	0	0	0	42	213	157	68	0	0	0	480												
30	1989	0	0	0	0	49	145	78	9	0	0	0	281												
1987 - 2016 30-Year Average													0	0	0	0	14	51	209	180	40	1	0	0	495



TLK-R-18

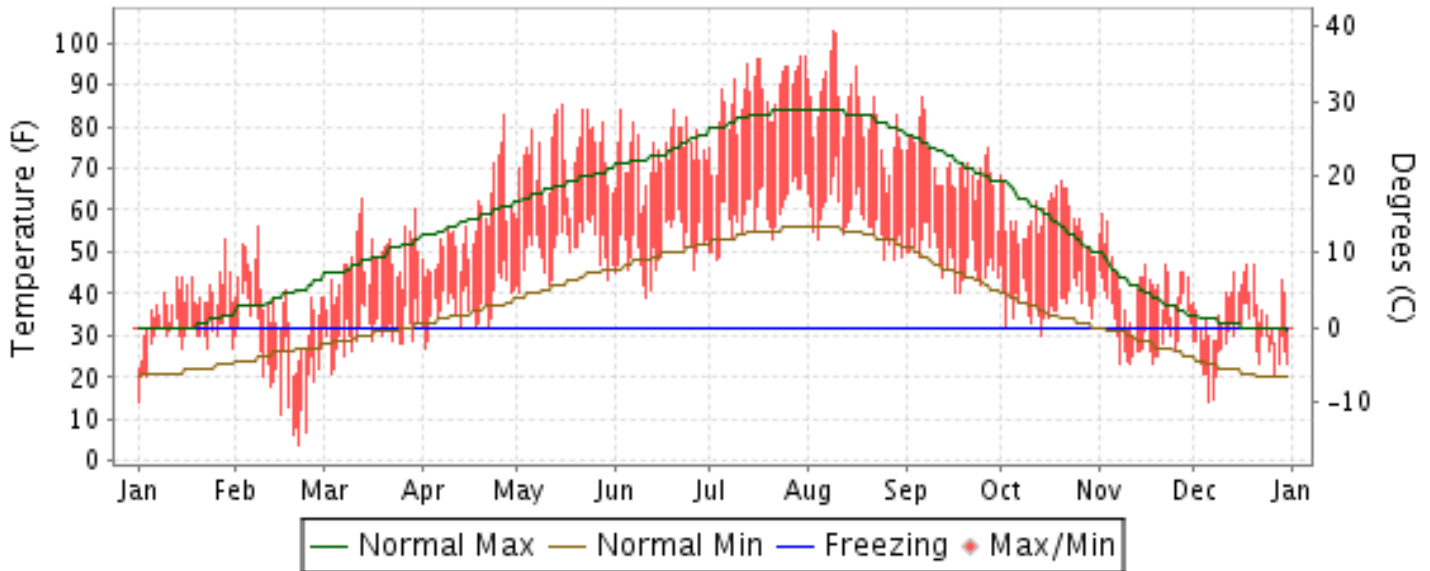


2018 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

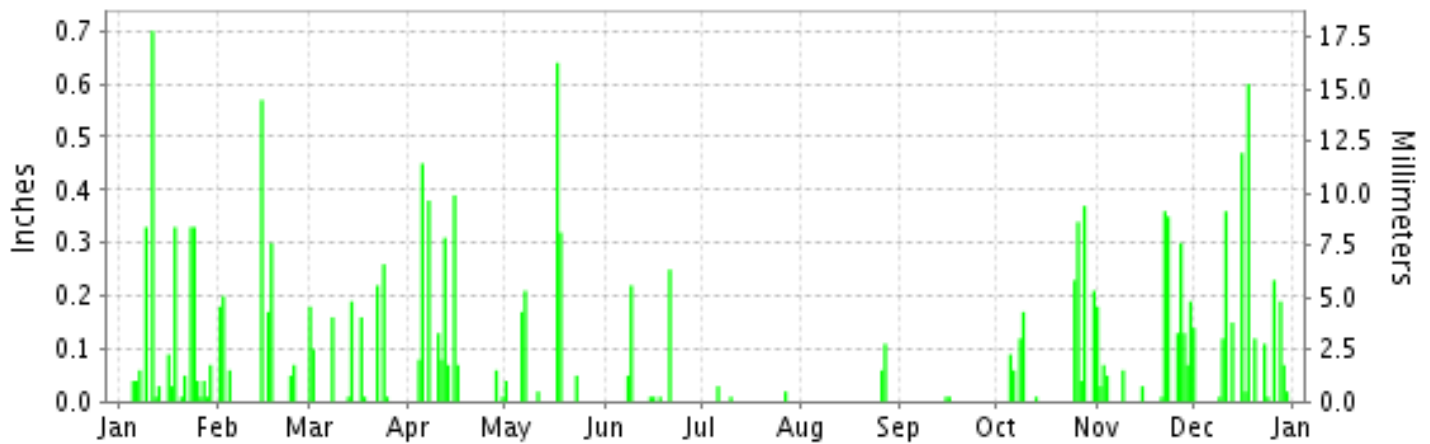
ISSN 0198-5485

SPOKANE, WASHINGTON (KGEG)

Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

NATIONAL CENTERS for ENVIRONMENTAL INFORMATION (NCEI) ASHEVILLE, NORTH CAROLINA

Mary S. Wohlgenant
DIRECTOR
NCEI

HEATING DEGREE DAYS (base 65°F) 2018 SPOKANE (KGE)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1989-90	22	76	149	554	805	1048	976	968	739	454	373	166	6330
1990-91	37	42	54	610	774	1356	1212	716	866	568	406	248	6889
1991-92	15	16	108	574	918	992	1024	750	598	477	206	61	5739
1992-93	32	60	232	481	916	1297	1331	1102	834	578	192	165	7220
1993-94	151	83	217	457	1063	1051	904	998	713	469	262	160	6528
1994-95	26	13	81	558	970	1071	1045	771	771	578	262	170	6316
1995-96	21	88	146	648	742	1120	1217	1045	880	556	471	143	7077
1996-97	35	49	281	603	949	1241	1130	928	794	642	264	154	7070
1997-98	35	15	116	549	785	1098	1058	747	721	505	276	90	5995
1998-99	0	20	101	565	748	1119	1010	836	769	594	448	186	6396
1999-00	75	36	181	540	703	1030	1143	908	799	496	363	142	6416
2000-01	51	43	285	572	1134	1245	1168	1060	795	634	320	201	7508
2001-02	33	20	100	588	744	1136	1063	934	938	581	412	137	6686
2002-03	28	26	219	678	839	962	957	885	745	588	365	90	6382
2003-04	9	1	151	418	1056	1083	1193	945	668	455	315	131	6425
2004-05	16	34	204	480	857	1020	1128	842	711	503	260	166	6221
2005-06	11	22	229	489	919	1258	905	949	812	525	301	104	6524
2006-07	8	30	170	552	865	1122	1243	864	685	548	270	136	6493
2007-08	0	27	194	553	894	1126	1243	952	880	683	274	176	7002
2008-09	8	52	142	529	785	1328	1204	957	936	586	303	93	6923
2009-10	17	23	103	668	834	1252	919	751	733	538	420	190	6448
2010-11	48	47	158	472	948	1096	1103	1006	790	698	401	192	6959
2011-12	40	8	99	516	890	1118	1078	930	809	494	345	175	6502
2012-13	20	14	68	504	779	1040	1243	869	730	561	272	140	6240
2013-14	0	7	160	590	898	1213	1090	1085	780	537	227	106	6693
2014-15	7	5	94	357	906	991	1049	713	597	519	157	25	5420
2015-16	5	11	197	322	899	1054	1048	753	683	308	198	110	5588
2016-17	20	10	158	508	637	1289	1379	992	741	556	272	66	6628
2017-18	0	3	166	560	811	1179	960	968	783	543	125	103	6201
2018-	15	24	169	517	836	1021							

WBAN : 24157

COOLING DEGREE DAYS (base 65°F) 2018 SPOKANE (KGE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1989	0	0	0	0	0	49	145	78	9	0	0	0	281
1990	0	0	0	0	0	42	213	157	68	0	0	0	480
1991	0	0	0	0	0	0	139	187	20	0	0	0	346
1992	0	0	0	0	25	159	124	209	11	8	0	0	536
1993	0	0	0	0	36	27	11	64	34	0	0	0	172
1994	0	0	0	0	9	37	280	159	43	0	0	0	528
1995	0	0	0	0	14	29	119	59	38	0	0	0	259
1996	0	0	0	0	0	16	198	150	17	0	0	0	381
1997	0	0	0	0	14	9	122	209	30	6	0	0	390
1998	0	0	0	0	6	22	325	234	110	0	0	0	697
1999	0	0	0	0	7	41	118	210	14	0	0	0	390
2000	0	0	0	0	0	29	146	129	16	0	0	0	320
2001	0	0	0	0	29	19	146	213	54	0	0	0	461
2002	0	0	0	0	0	63	231	81	30	0	0	0	405
2003	0	0	0	0	12	58	266	174	66	2	0	0	578
2004	0	0	0	0	0	96	249	225	1	0	0	0	571
2005	0	0	0	0	13	32	179	174	11	0	0	0	409
2006	0	0	0	0	41	66	285	161	62	0	0	0	615
2007	0	0	0	0	7	56	338	143	32	0	0	0	576
2008	0	0	0	0	27	60	182	176	29	4	0	0	478
2009	0	0	0	0	23	47	245	196	78	0	0	0	589
2010	0	0	0	0	4	19	178	165	10	4	0	0	380
2011	0	0	0	0	5	18	103	195	105	0	0	0	426
2012	0	0	0	2	8	20	251	227	27	0	0	0	535
2013	0	0	0	0	30	48	284	239	108	0	0	0	709
2014	0	0	0	0	6	14	348	238	47	1	0	0	654
2015	0	0	0	0	32	225	300	251	20	0	0	0	828
2016	0	0	0	6	6	114	152	209	7	0	0	0	494
2017	0	0	0	0	35	86	303	281	89	0	0	0	794
2018	0	0	0	1	37	31	280	209	15	0	0	0	573