

**AVISTA UTILITIES**

2019 Washington REC Filing

**REDACTED**

**WORKPAPERS**

March 29, 2019

**REC Revenues Rebate Allocation - Generation Level Consumption**

DESCRIPTION	TOTAL	RESIDENTIAL SCHEDULE 1, 2	GENERAL SVC. SCH. 11,12	LG. GEN. SVC. SCH. 21,22	EX LG GEN SVC SCHEDULE 25	PUMPING SCH. 30, 31, 32	ST & AREA LTG SCH. 41-48	
Line No. A	B	C	D	E	F	H	I	J
1 <b>Generation Allocated</b>								
2 Total Generation Percentage	100.00%	41.96%	11.07%	25.00%	19.19%	2.37%	0.41%	(1)
3 Total Rebate Amount (Grossed Up)	\$ (1,436,018)	\$ (602,550)	\$ (158,998)	\$ (358,938)	\$ (275,577)	\$ (34,057)	\$ (5,899)	
4 Annual Load (Rate Year)	5,759,155,532	2,409,536,208	633,219,816	1,403,726,212	1,157,453,102	142,112,812	13,107,381	(2)
5 Cents Per kWh Rate		\$ (0.00025)	\$ (0.00025)	\$ (0.00026)	\$ (0.00024)	\$ (0.00024)	\$ (0.00045)	
6 Total Bills	3,065,149	2,616,675	395,604	22,869	276	29,725		
7 Avg Monthly Credit Per Customer		\$ (0.23)	\$ (0.40)	\$ (15.70)	\$ (999.01)	\$ (1.15)		
8 Avg Annual Credit Per Customer		\$ (2.76)	\$ (4.82)	\$ (188.34)	\$ (11,988.10)	\$ (13.75)		
9								
10 Proposed Cents per kWh Rate		\$ (0.00025)	\$ (0.00025)	\$ (0.00026)	\$ (0.00024)	\$ (0.00024)	\$ (0.00045)	
11 Present Cents per kWh Rate		\$ (0.00034)	\$ (0.00036)	\$ (0.00036)	\$ (0.00035)	\$ (0.00037)	\$ (0.00048)	
12 Difference in Rate		\$ 0.00009	\$ 0.00011	\$ 0.00010	\$ 0.00011	\$ 0.00013	\$ 0.00003	
13 Change in Revenue	\$ 581,071	\$ 216,692	\$ 68,961	\$ 146,403	\$ 129,532	\$ 19,090	\$ 393	

Present Billed Revenue	\$ 511,823,000	\$ 221,982,000	\$ 75,758,000	\$ 129,514,000	\$ 66,316,000	\$ 11,110,000	\$ 7,143,000
Billed Percentage Change	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.01%
Residential Bill Impact (918 kWh's)		\$ 0.08000					
Residential Bill Percentage Change		0.1%					

- (1) UE-170485 Cost of Service Study  
E02 Generation Allocator
- (2) July 1, 2018 through June 30, 2019 Forecasted Loads (input)

<u>Present Bill</u>	
Basic Charge	\$ 9.00
1st 800 kWhs	\$ 0.07708
Next 700 kWhs	\$ 0.08940
Bill at 938 kWhs	\$ 81.21
Less Bill Impact	\$ 0.08
Proposed Bill after Rate Adjustment	\$ 81.29

Gray shaded box is Confidential per WAC-480-07-160

aMW	Rate	2927 Total	743 Mar-19	720 Apr-19	744 May-19	720 Jun-19
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<b>System Total</b>		<b>(\$468,320)</b>				
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<b>PT Ratio</b>			65.73%	65.73%	65.73%	65.73%
			\$78,140	\$92,285	\$78,245	\$75,721

<b>Washington Share</b>	UE-170485	<b>65.73%</b>	-\$78,140	-\$92,285	-\$78,245	-\$75,721
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Gross Up Factor	UE-170485	0.953323	0.953323	0.953323	0.953323	0.953323
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<b>Grossed Up Revenue Requirement</b>		<b>(\$340,274)</b>	<b>(\$81,966)</b>	<b>(\$96,803)</b>	<b>(\$82,076)</b>	<b>(\$79,428)</b>
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Proposed Bill after Rate Adjustment

Gray shaded box is Confidential per WAC-480-07-160

aMW	Rate	8784 Total	744 Jul-19	744 Aug-19	720 Sep-19	744 Oct-19	721 Nov-19	744 Dec-19	744 Jan-20	696 Feb-20	743 Mar-20	720 Apr-20	744 May-20	720 Jun-20
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<b>System Total</b>		<b>(\$1,426,440)</b>												
<b>PT Ratio</b>	UE-170485	<b>65.73%</b>	\$88,026	\$88,026	\$85,186	\$88,026	\$85,304	\$88,026	\$68,464	\$64,047	\$68,372	\$79,402	\$68,464	\$66,256
<b>Washington Share</b>		<b>(\$937,599)</b>												
Forecast End of June Balance		<b>(\$416,180)</b>												
<b>REC Balance to be Recovered</b>		<b>(\$1,353,779)</b>												
<b>Forecasted Interest Calculation</b>		<b>(\$15,210)</b>												
<b>Total REC Balance to be Recovered</b>		<b>(\$1,368,989)</b>												
Gross Up Factor	UE-170485	<b>0.953323</b>												
<b>Grossed Up Revenue Requirement</b>		<b>(\$1,436,018)</b>												

Proposed Bill after Rate Adjustment

	2018	2019		2019		2019		2019		2019		2019		2019		2019		2019		2019		2019		2019		2019		2020		2020		2020		2020		2020				
	End December	End January	End February	End March	End April	End May	End June	End July	End August	End September	End October	End November	End December	End January	End February	End March	End April	End May	End June	End July	End August	End September	End October	End November	End December	End January	End February	End March	End April	End May	End June	End July	End August	End September	End October	End November	End December			
Expected net elec REC Amortization credit	\$ -	\$ (182,008)	\$ (171,867)	\$ (160,388)	\$ (143,830)	\$ (142,782)	\$ (141,865)	\$ (118,678)	\$ (114,395)	\$ (103,213)	\$ (107,767)	\$ (119,565)	\$ (136,022)	\$ (133,007)	\$ (115,418)	\$ (115,651)	\$ (103,139)	\$ (101,208)	\$ (100,925)	\$ (100,925)																				
Forecast Annual REC Sales	\$ -	\$ 93,629	\$ 68,407	\$ 78,140	\$ 92,285	\$ 78,245	\$ 75,721	\$ 88,026	\$ 88,026	\$ 85,186	\$ 88,026	\$ 85,304	\$ 88,026	\$ 68,464	\$ 64,047	\$ 68,372	\$ 79,402	\$ 68,464	\$ 66,256	\$ 66,256																				
Net change in balance	\$ -	\$ (88,379)	\$ (103,460)	\$ (82,248)	\$ (51,545)	\$ (64,537)	\$ (66,144)	\$ (30,652)	\$ (26,369)	\$ (18,027)	\$ (19,742)	\$ (34,261)	\$ (47,997)	\$ (64,542)	\$ (51,370)	\$ (47,279)	\$ (23,737)	\$ (32,744)	\$ (34,670)	\$ (34,670)																				
Cumulative Balance (Before Interest)	\$ -	\$ 763,374	\$ 659,914	\$ 577,666	\$ 526,121	\$ 461,583	\$ 395,440	\$ 385,528	\$ 359,158	\$ 341,131	\$ 321,390	\$ 287,129	\$ 239,132	\$ 186,199	\$ 134,829	\$ 87,550	\$ 63,813	\$ 31,069	\$ (3,600)	\$ (3,600)																				
Interest	\$ -	\$ 4,637	\$ 4,086	\$ 3,553	\$ 3,169	\$ 2,836	\$ 2,460	\$ 2,302	\$ 2,138	\$ 2,010	\$ 1,902	\$ 1,747	\$ 1,511	\$ 1,254	\$ 922	\$ 638	\$ 435	\$ 272	\$ 79	\$ 79																				
REC Revenue Balance	\$ 851,753	\$ 768,011	\$ 668,637	\$ 589,941	\$ 541,565	\$ 479,863	\$ 416,180	\$ 387,829	\$ 363,598	\$ 347,581	\$ 329,741	\$ 297,228	\$ 250,742	\$ 187,454	\$ 137,005	\$ 90,364	\$ 67,062	\$ 34,591	\$ (0)	\$ (0)																				

Projected end of June 2018 Balance	\$ 416,180
July 2018 - June 2019 REC Revenue Forecast	\$ 937,599
July 2018 - June 2019 Amortization Credit	\$ (1,368,989)
Interest on Previous Months Balance	\$ 15,210
Total Projected REC Balance as of June 2017	\$ -

UE-170485  
May 1st

Per rate order, REC rate is after tax cost of capital	<b>6.890%</b>
The monthly rate is:	0.0057417

(Formulas from kWh Forecast)

Forecasted Usage	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Residential Schedule 001/002	213,189,988	171,239,526	156,633,831	149,456,365	189,507,782	181,237,255	157,509,658	177,655,073	226,767,970	284,367,831	274,552,124	224,184,036	216,125,615	172,859,653	156,163,072	148,606,138
General Svc Schedule 011/012	53,996,794	47,147,306	46,784,327	45,995,023	55,730,097	52,439,509	46,755,389	49,803,171	54,640,288	62,136,234	61,451,231	53,294,681	54,801,839	47,989,202	47,289,475	46,888,699
Large Gen Svc Schedule 021/022	115,724,794	107,885,928	112,569,079	111,472,365	131,131,589	122,691,987	111,985,721	117,654,949	118,120,437	124,860,688	121,450,854	107,463,411	115,718,843	108,097,800	112,197,705	112,352,228
Extra Large Gen Schedule 25	92,097,651	95,221,310	95,100,347	96,298,346	95,172,588	98,510,934	99,552,848	97,226,893	97,496,206	94,747,019	96,078,946	95,498,895	93,581,313	96,541,916	95,760,797	97,284,748
Pumping Schedule 31/32	4,880,223	7,812,410	14,167,602	18,953,843	26,565,133	25,736,674	17,900,667	9,861,524	4,583,509	4,022,075	4,079,879	3,920,155	4,923,533	7,659,570	13,855,126	19,004,966
Street and Area Lights	1,244,745	1,228,321	1,181,518	1,071,855	1,219,306	1,138,300	1,135,399	1,146,617	1,058,997	1,154,062	1,163,620	1,044,351	1,015,460	999,105	952,177	1,079,988
<b>Total Forecasted Usage</b>	<b>481,134,195</b>	<b>430,534,802</b>	<b>426,436,705</b>	<b>423,247,797</b>	<b>499,326,497</b>	<b>481,754,660</b>	<b>434,839,682</b>	<b>453,348,227</b>	<b>502,667,406</b>	<b>571,287,909</b>	<b>558,776,654</b>	<b>485,405,529</b>	<b>486,166,604</b>	<b>434,147,245</b>	<b>426,218,353</b>	<b>425,216,767</b>

REC Revenue Amortization Rates	Present								Proposed							
Residential Schedule 001/002	-0.00034	-0.00034	-0.00034	-0.00034	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025
General Svc Schedule 011/012	-0.00036	-0.00036	-0.00036	-0.00036	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025	-0.00025
Large Gen Svc Schedule 021/022	-0.00036	-0.00036	-0.00036	-0.00036	-0.00026	-0.00026	-0.00026	-0.00026	-0.00026	-0.00026	-0.00026	-0.00026	-0.00026	-0.00026	-0.00026	-0.00026
Extra Large Gen Schedule 25	-0.00035	-0.00035	-0.00035	-0.00035	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024
Pumping Schedule 31/32	-0.00037	-0.00037	-0.00037	-0.00037	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024	-0.00024
Street and Area Lights	-0.00048	-0.00048	-0.00048	-0.00048	-0.00045	-0.00045	-0.00045	-0.00045	-0.00045	-0.00045	-0.00045	-0.00045	-0.00045	-0.00045	-0.00045	-0.00045

Gross REC Revenue Amortization Credit	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Residential Schedule 001	\$ (72,485)	\$ (58,221)	\$ (53,256)	\$ (50,815)	\$ (47,390)	\$ (45,322)	\$ (39,388)	\$ (44,426)	\$ (56,708)	\$ (71,112)	\$ (68,657)	\$ (56,061)	\$ (54,046)	\$ (43,227)	\$ (39,052)	\$ (37,162)
General Svc Schedule 011/012	\$ (19,439)	\$ (16,973)	\$ (16,842)	\$ (16,558)	\$ (13,994)	\$ (13,167)	\$ (11,740)	\$ (12,505)	\$ (13,720)	\$ (15,602)	\$ (15,430)	\$ (13,382)	\$ (13,760)	\$ (12,050)	\$ (11,874)	\$ (11,774)
Large Gen Svc Schedule 021/022	\$ (41,661)	\$ (38,839)	\$ (40,525)	\$ (40,130)	\$ (33,531)	\$ (31,373)	\$ (28,635)	\$ (30,085)	\$ (30,204)	\$ (31,927)	\$ (31,055)	\$ (27,479)	\$ (29,590)	\$ (27,641)	\$ (28,689)	\$ (28,729)
Extra Large Gen Schedule 25	\$ (32,234)	\$ (33,327)	\$ (33,285)	\$ (33,704)	\$ (22,660)	\$ (23,454)	\$ (23,702)	\$ (23,149)	\$ (23,213)	\$ (22,558)	\$ (22,875)	\$ (22,737)	\$ (22,281)	\$ (22,986)	\$ (22,800)	\$ (23,162)
Pumping Schedule 31/32	\$ (1,825)	\$ (2,922)	\$ (5,298)	\$ (7,088)	\$ (6,366)	\$ (6,168)	\$ (4,290)	\$ (2,363)	\$ (1,098)	\$ (964)	\$ (978)	\$ (939)	\$ (1,180)	\$ (1,836)	\$ (3,320)	\$ (4,554)
Street and Area Lights	\$ (597)	\$ (590)	\$ (567)	\$ (514)	\$ (549)	\$ (512)	\$ (511)	\$ (516)	\$ (477)	\$ (519)	\$ (524)	\$ (470)	\$ (457)	\$ (450)	\$ (428)	\$ (486)
<b>Total</b>	<b>\$ (168,241)</b>	<b>\$ (150,872)</b>	<b>\$ (149,773)</b>	<b>\$ (148,811)</b>	<b>\$ (124,489)</b>	<b>\$ (119,996)</b>	<b>\$ (108,267)</b>	<b>\$ (113,044)</b>	<b>\$ (125,419)</b>	<b>\$ (142,682)</b>	<b>\$ (139,519)</b>	<b>\$ (121,069)</b>	<b>\$ (121,314)</b>	<b>\$ (108,188)</b>	<b>\$ (106,163)</b>	<b>\$ (105,867)</b>

Net REC Revenue Amortization Credit	0.953323	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Residential Schedule 001	\$ (69,101)	\$ (55,504)	\$ (50,770)	\$ (48,443)	\$ (45,178)	\$ (43,206)	\$ (37,550)	\$ (42,352)	\$ (54,061)	\$ (67,792)	\$ (65,452)	\$ (53,445)	\$ (51,524)	\$ (41,209)	\$ (37,229)	\$ (35,427)	
General Svc Schedule 011/012	\$ (18,531)	\$ (16,181)	\$ (16,056)	\$ (15,785)	\$ (13,340)	\$ (12,553)	\$ (11,192)	\$ (11,922)	\$ (13,079)	\$ (14,874)	\$ (14,710)	\$ (12,757)	\$ (13,118)	\$ (11,487)	\$ (11,320)	\$ (11,224)	
Large Gen Svc Schedule 021/022	\$ (39,716)	\$ (37,026)	\$ (38,633)	\$ (38,257)	\$ (31,966)	\$ (29,908)	\$ (27,299)	\$ (28,681)	\$ (28,794)	\$ (30,437)	\$ (29,606)	\$ (26,196)	\$ (28,209)	\$ (26,351)	\$ (27,350)	\$ (27,388)	
Extra Large Gen Schedule 25	\$ (30,730)	\$ (31,772)	\$ (31,731)	\$ (32,131)	\$ (21,602)	\$ (22,360)	\$ (22,596)	\$ (22,068)	\$ (22,129)	\$ (21,505)	\$ (21,808)	\$ (21,676)	\$ (21,241)	\$ (21,913)	\$ (21,735)	\$ (22,081)	
Pumping Schedule 31/32	\$ (1,740)	\$ (2,785)	\$ (5,051)	\$ (6,757)	\$ (6,069)	\$ (5,880)	\$ (4,090)	\$ (2,253)	\$ (1,047)	\$ (919)	\$ (932)	\$ (896)	\$ (1,125)	\$ (1,750)	\$ (3,165)	\$ (4,342)	
Street and Area Lights	\$ (570)	\$ (562)	\$ (541)	\$ (490)	\$ (523)	\$ (488)	\$ (487)	\$ (492)	\$ (454)	\$ (495)	\$ (499)	\$ (448)	\$ (436)	\$ (429)	\$ (408)	\$ (463)	
<b>Total</b>	<b>\$ (160,388)</b>	<b>\$ (143,830)</b>	<b>\$ (142,782)</b>	<b>\$ (141,865)</b>	<b>\$ (118,678)</b>	<b>\$ (114,395)</b>	<b>\$ (103,213)</b>	<b>\$ (107,767)</b>	<b>\$ (119,565)</b>	<b>\$ (136,022)</b>	<b>\$ (133,007)</b>	<b>\$ (115,418)</b>	<b>\$ (115,651)</b>	<b>\$ (103,139)</b>	<b>\$ (101,208)</b>	<b>\$ (100,925)</b>	

**Load**

(Calendar Energy Usage by Rate Scheduled)

	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Total
WA001/WA002	213,189,988	171,239,526	156,633,831	149,456,365	189,507,782	181,237,255	157,509,658	177,655,073	226,767,970	284,367,831	274,552,124	224,184,036	216,125,615	172,859,653	156,163,072	148,606,138	2,409,536,208
WA011	48,272,611	42,495,411	42,493,743	42,045,281	51,154,775	48,074,661	42,654,988	45,121,283	48,931,123	55,042,379	54,302,272	47,276,769	48,911,917	43,192,523	42,908,265	42,789,653	570,360,607
WA012	5,724,183	4,651,896	4,290,584	3,949,742	4,575,323	4,364,848	4,100,402	4,681,888	5,709,164	7,093,855	7,148,959	6,017,912	5,889,922	4,796,679	4,381,210	4,099,047	62,859,209
WA021	112,945,884	105,471,433	110,218,481	109,250,433	128,491,792	120,191,278	109,720,522	115,223,979	115,405,119	121,649,762	118,225,383	104,700,897	112,942,725	105,706,339	109,879,460	110,126,577	1,372,263,833
WA022	2,778,911	2,414,495	2,350,598	2,221,932	2,639,798	2,500,710	2,265,198	2,430,970	2,715,317	3,210,927	3,225,471	2,762,514	2,776,118	2,391,461	2,318,245	2,225,651	31,462,379
WA025	92,097,651	95,221,310	95,100,347	96,298,346	95,172,588	98,510,934	99,552,848	97,226,893	97,496,206	94,747,019	96,078,946	95,498,895	93,581,313	96,541,916	95,760,797	97,284,748	1,157,453,102
WA031	4,601,847	7,353,679	13,405,806	17,798,717	24,781,787	24,118,655	16,874,406	9,308,590	4,294,915	3,737,319	3,784,591	3,665,620	4,647,080	7,211,406	13,109,325	17,860,336	133,394,029
WA032	278,375	458,731	761,796	1,155,126	1,783,346	1,618,020	1,026,262	552,933	288,594	284,757	295,288	254,535	276,453	448,164	745,802	1,144,629	8,718,783
WA04X	1,244,745	1,228,321	1,181,518	1,071,855	1,219,306	1,138,300	1,135,399	1,146,617	1,058,997	1,154,062	1,163,620	1,044,351	1,015,460	999,105	952,177	1,079,988	13,107,381
Total	481,134,195	430,534,802	426,436,705	423,247,797	499,326,497	481,754,660	434,839,682	453,348,227	502,667,406	571,287,909	558,776,654	485,405,529	486,166,604	434,147,245	426,218,353	425,216,767	5,759,155,532

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**Bills**

(Total Customers by Rate Schedule)

	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Total
WA001	217,768	216,936	217,365	216,228	217,064	216,842	217,510	218,588	218,524	219,540	218,232	218,666	218,348	218,086	218,090	217,185	2,616,675
WA011	22,969	22,928	22,975	22,962	22,966	23,005	23,002	23,083	23,073	23,167	23,152	23,234	23,203	23,204	23,227	23,225	277,547
WA012	9,678	9,685	9,697	9,712	9,726	9,757	9,773	9,807	9,816	9,850	9,860	9,877	9,883	9,892	9,902	9,914	118,057
WA021	1,860	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,858	1,860	1,859	1,859	1,859	1,859	1,859	1,859	22,312
WA022	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	46	557
WA025	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	276
WA031	1,249	1,246	1,256	1,275	1,261	1,263	1,261	1,270	1,271	1,254	1,260	1,261	1,267	1,262	1,260	1,278	15,167
WA032	1,215	\$ 1,208.01630	1,214	1,216	1,201	1,217	1,225	1,212	1,222	1,215	1,211	1,218	1,207	1,211	1,212	1,207	14,558
WA04X	433	\$ 434.83140	435	435	435	435	437	436	435	437	437	437	437	437	438	438	5,239
Total	255,242	254,367	254,872	253,757	254,582	254,449	255,138	256,326	256,270	257,393	256,081	256,622	256,274	256,021	256,058	255,175	3,070,387

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