

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

AVISTA Corporation dba Avista Utilities ) ) In the Matter of Avista’s Renewable ) Target in Compliance with ) WAC 480-109-210 ) _____ )	DOCKET NO. UE-190445  COMPLIANCE REPORT OF AVISTA CORPORATION
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**I. BACKGROUND**

The Energy Independence Act (EIA), also known as Initiative Measure No. 937 or I-937, requires utilities with more than 25,000 customers to obtain fifteen percent of their electricity from eligible renewable resources, such as wind and solar generation, by 2020 and undertake cost-effective energy conservation. Per WAC Chapter 480-109-210, “On or before every June 1st, each utility must file an annual renewable portfolio standard report with the commission and the Department of Commerce detailing the resources the utility has acquired or contracted to acquire to meet its renewable resource obligation for the target year.” In compliance with WAC 480-109-210, Avista Corporation (hereinafter Avista or Company) respectfully submits its report demonstrating compliance with the renewable energy component of the EIA.

**II. REQUIRED REPORT CONTENTS CHECKLIST**

A checklist of the required report contents and a table of contents is below.

WAC Citation	Description	Section/Page
480-109-210(2)	The utility's annual load for the prior two years	III/2
480-109-210(2)	The total number of megawatt-hours from eligible renewable resources and/or renewable resource credits the utility needed to meet its annual renewable energy target by January 1 of the target year	IV/3
480-109-210(2)	The amount (in megawatt-hours) of each type of eligible renewable resource used and the amount of renewable energy credits acquired	V/3
480-109-210(2)(a)(iii)	In addition to the total revenue requirement ratio, the utility must report its total incremental cost as a	VI/3

	dollar amount and in dollars per megawatt-hour of renewable energy generated by all eligible renewable resources and multiply the dollars per megawatt-hour cost by the number of megawatt-hours needed for target year compliance.	
480-109-210(2)(b)	State whether the utility is relying upon one of the alternative compliance mechanisms provided in WAC 480-109-220 instead of fully meeting its renewable resource target.	VII/4
480-109-210(2)(c)	Describe the resources that the utility intends to use to meet the renewable resource requirements for the target year.	VIII/5
480-109-210(2)(d)	A list of each eligible renewable resource that serves Washington customers, for which a utility owns the certificates, with an installed capacity greater than twenty-five kilowatts.	IX/5
480-109-210(7)(e)	Five-year evaluation. Any utility using method three shall provide, beginning in its 2019 renewable portfolio standard report and every five years thereafter, an analysis comparing the amount of incremental hydropower the utility reported in every year using method three to the amount of incremental hydropower the utility would have reported over the same period using one of the other two methods.	X/7
480-109-210(2)(e)	If a utility serves retail customers in more than one state, the utility must allocate certificates consistent with the utility's most recent commission-approved interstate cost allocation methodology. The report must show how the utility applied the allocation methodology to arrive at the number of certificates allocated to Washington ratepayers. After documenting the number of certificates allocated to Washington ratepayers, a utility may transfer certificates to or from Washington ratepayers. The report must document the compensation provided to each jurisdiction's ratepayers for such transfers.	XI/9
480-109-210(2)(f)	The number of certificates that it sold, their WREGIS certificate numbers, their source, and the revenues obtained from the sales.	XII/10

### III. ANNUAL LOAD FOR PREVIOUS TWO YEARS

Renewable targets for the compliance year are based on average Washington State retail loads from the two prior years. Avista's annual delivered load to Washington retail customers was

5,817,351 MWh in 2017 and 5,608,062 in 2018. The Company’s average retail load used for 2019 compliance is 5,712,707.

**IV. RENEWABLE ENERGY TARGET**

The following information is for the 2019 compliance year, which has a 9 percent qualified renewable energy target. Avista’s 2019 renewable energy target is 514,144 MWh of qualified renewable generation or renewable energy credits (REC). Table No. 1 below provides details about the Company’s 2019 renewable energy target calculation.

**Table No. 1: Energy Independence Act Renewable Energy Target**

	<b>2017 Actual</b>	<b>2018 Actual</b>	<b>2019 Forecast</b>
<b>Washington Retail Load (MWh)</b>	5,817,351	5,608,062	5,681,927
<b>Target Load (MWh) – Average of prior two years actual loads</b>	5,600,555	5,697,837	5,712,707
<b>RCW 19.285 Requirement</b>	9%	9%	9%
<b>Requirement (MWh)</b>	504,050	512,805	514,144

**V. RENEWABLE ENERGY ACQUIRED TO MEET 2019 RENEWABLE ENERGY TARGET**

Table No. 2 below details Avista’s eligible renewable energy acquired to meet its 2019 renewable energy target. Calculations and further details supporting the figures in Table 2 are included in Appendix A and the supporting documents are in the confidential workpapers supporting this filing.

**Table No. 2: Renewable Energy for 2019 Compliance**

	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Water (Qualified Hydroelectric Upgrades)</b>	192,039	192,039	157,657
<b>Wind</b>	206,219	363,962	359,730
<b>Biomass</b>	105,792	94,634	293,462
<b>Total</b>	<b>504,050</b>	<b>650,635</b>	<b>810,849</b>

## **VI. INCREMENTAL COST COMPARED TO ANNUAL RETAIL REVENUE REQUIREMENT**

Avista calculated the incremental cost of investments made to meet WAC 480-109-210(2)(a), by taking the annual levelized revenue requirement (\$/MWh) for each qualifying project compared to the cost of alternative power over the same period. Each qualifying resource is compared to a combined cycle combustion turbine (CCCT). To estimate the annual levelized cost of the CCCT, cost assumptions are used based upon the Integrated Resource Plan (IRP) from the time of the resource decision, with costs split between energy (\$/MWh) and capacity (\$/kW-year). Avista includes any REC sales as a reduction to the incremental cost calculation. The Company also includes an adjustment to account for the value of RECs transferred from Idaho to Washington. The value of RECs is split between the two states based on the Company's Production and Transmission Ratio. The Idaho portion of the qualified renewable energy is transferred to Washington based upon the market value of similar renewable resources. This is consistent with the allocation of REC values between Washington and Idaho for ratemaking purposes. In total, the change in revenue requirement is negative 0.7 percent as reported in Appendix B – Incremental Cost Calculation. Appendices B and C show the calculation of this incremental cost for the qualified renewable resources. The supporting documentation and spreadsheets are located in the confidential work papers for this filing as well. The costs for the solar projects supporting voluntary renewable programs are not included in this cost calculation because the costs and benefits of those projects are paid for by the participants in those programs. The costs in Appendices B and C were calculated using the current corporate tax rates.

## **VII. ALTERNATIVE COMPLIANCE**

WAC 480-109-220 provides three alternatives for meeting renewable resource requirements, including:

- 1) Cost cap;
- 2) Force majeure; and
- 3) No load growth.

Avista is not using an alternative to the renewable resource requirement for its 2019 target as provided for in WAC 480-109-220. The Company is meeting its 2019 renewable energy target

using a combination of renewable energy credits from wind and biomass, plus qualifying hydroelectric plant upgrades.

## VIII. CURRENT YEAR PROGRESS

Avista plans to meet its 2019 renewable energy targets with a combination of the qualified hydroelectric upgrades and other renewable energy certificates from qualifying resources. Table No. 3 below provides a high level summary of the Company's expected 2019 compliance. Appendix A contains more details about this information.

**Table No. 3: 2019 Energy Independence Act Compliance Summary (MWh)**

	<b>2019</b>
<b>EIA Compliance Need</b>	514,144
<b>Eligible Renewable Resources</b>	815,234
<b>Eligible Renewable Resource Sales</b>	4,385
<b>Unrealized Apprentice Credits from REC Sales</b>	0
<b>2019 RECs Applied to 2018</b>	0
<b>Renewable Resource Surplus or Deficit</b>	296,705
<b>Estimated 2020 Surplus Applied to 2019</b>	0
<b>Net 2019 Compliance</b>	296,705

## IX. ELIGIBLE RESOURCES

Table No. 4 shows the WREGIS identification for each of the qualifying resources and projected qualifying generation for the renewable energy resources in place to meet Avista's 2019 renewable energy target. The qualified hydroelectric generation amounts in Table No. 4 are lower than in the 2018 Report because of the Company's request to permanently switch from Hydro Method Three to Hydro Method One as discussed in the next section of this report. Hydro Method Three using the original 10-year data set covering 2002 through 2011 resulted in 192,039 RECs, and Method One is expected to produce 157,658 RECs using actual 2019 data from January through April, and 2018 actual data to estimate the rest of the year. Table No. 4 includes the projected amount of qualifying resources, net of completed and expected 2019 REC sales from Palouse Wind and Kettle Falls. The amount of generation from Kettle Falls shown in Table No. 4 has been reduced by 4.6 percent to account for the expected amount of non-qualifying old growth fuel from Canadian sources. Grant PUD recently started to record the generation from the

Wanapum hydroelectric project in WREGIS. The qualifying incremental hydro generation should be available for Avista’s compliance goals again under WAC 480-109-210 now that Grant PUD has registered the Wanapum Project in WREGIS. The RECs from Wanapum will be recorded in future EIA reports after Grant PUD starts transferring the RECs to Avista. The 150 MW Rattlesnake Wind Project is forecast to enter commercial service in late 2020. The Project likely will be included in next year’s report when more accurate expected generation data is available.

**Table No. 4: Renewable Energy for 2019 Compliance Net of REC Sales**

<b>WREGIS Generation Unit ID</b>	<b>Generator Plant – Unit Name</b>	<b>Quantity (MWh)</b>
W1560	Cabinet Gorge Unit 2	20,505
W1561	Cabinet Gorge Unit 3	19,534
W1562	Cabinet Gorge Unit 4	18,144
W130 / W797	Kettle Falls	293,462
W2102	Little Falls Unit 4	760
W2103	Long Lake Unit 3	8,209
W216	Nine Mile Unit 1	8,605
W283	Nine Mile Unit 2	5,213
W1530	Noxon Rapids Unit 1	27,032
W1552	Noxon Rapids Unit 2	6,725
W1554	Noxon Rapids Unit 3	24,079
W1555	Noxon Rapids Unit 4	18,851
W2906	Palouse Wind	359,730
<b>Total</b>		<b>810,849</b>

Energy generated by the Kettle Falls Generating Station became qualified biomass energy under the EIA beginning January 1, 2016. All United States sourced wood waste fuel used at the Kettle Falls Generating Station satisfies the requirements to be “biomass energy” under the EIA, in part because old growth timber is not harvested in any of the applicable areas of the United States. Avista engaged an independent entity, KPMG, to review the sources of Canadian wood waste fuel supply serving the Kettle Falls Generating Station in order to determine the amount of biomass energy that is supplied from Canadian sources. The work papers contain a calculation of the amount of qualifying biomass energy generated by the Kettle Falls Generating Station, and Appendix D – Biomass Methodology Report shows the calculation of the Canadian wood waste fuel component that satisfies the requirements to be “biomass energy”.

There are three additional solar projects listed in Appendix A because they are eligible resources under the EIA. However, the Boulder Community Solar, Rathdrum Solar and Adams-Neilson Solar Farm projects are assigned to the Buck-A-Block, Community Solar and Solar Select voluntary renewable programs. All RECs currently generated by these three resources are retired on behalf of the customers who voluntarily choose to participate in these programs.

**X. HYDRO METHODOLOGY AND FIVE-YEAR EVALUATION**

WAC 480-109-200(7)(e) requires any utility using Hydro Method Three to calculate the amount of qualified incremental hydroelectric generation to perform “an analysis comparing the amount of incremental hydropower the utility reported in every year using Method Three to the amount of incremental hydropower the utility would have reported over the same period using one of the other two methods” beginning in the 2019 report and every five years thereafter. Avista, in consultation with Commission Staff, has analyzed and compared the differences between Hydro Method Three and Hydro Method One for 2012 through 2018. Table No. 5 shows the results of this analysis.

**Table No. 5: Hydro Method One vs. Method Three for 2012 – 2018**

<b>Year</b>	<b>Total Hydro (MWh)</b>	<b>Clark Fork (MWh)</b>	<b>Spokane (MWh)</b>
<b>2012</b>	198,245	159,965	38,280
<b>2013</b>	141,150	116,707	24,443
<b>2014</b>	185,040	154,460	30,581
<b>2015</b>	114,409	88,159	26,250
<b>2016</b>	138,916	100,115	38,800
<b>2017</b>	196,388	160,361	36,027
<b>2018</b>	188,916	146,880	42,036
<b>Method Three (Average 2002-2011)</b>	192,039	151,030	41,009

Table No. 6 shows the results for the incremental hydro calculation using Method One for each qualifying hydro unit on the Clark Fork River for 2012 through 2018. Table No. 7 shows the Hydro Method One calculations for the qualifying Spokane River units. The original Method Three calculation had been performed using an older hydro model which the Company no longer uses or keeps updated. Based on the difficulties with maintaining the old model, and the increased

amount of qualifying renewables obtained, the benefits of using Hydro Method Three are no longer as compelling. For these reasons, along with the discussions with Commission Staff concerning the incremental hydro methodology review, Avista proposes to move to Hydro Method One going forward for EIA compliance.

**Table No. 6: Incremental Clark Fork Hydro Method One by Qualifying Unit 2012 – 2018**

<b>Year</b>	<b>Cabinet Gorge #3</b>	<b>Cabinet Gorge #2</b>	<b>Cabinet Gorge #4</b>	<b>Noxon Rapids #1</b>	<b>Noxon Rapids #3</b>	<b>Noxon Rapids #2</b>	<b>Noxon Rapids #4</b>
<b>2012</b>	25,652	29,256	21,957	25,428	28,266	8,588	20,818
<b>2013</b>	18,503	19,901	20,531	18,711	19,987	6,460	12,614
<b>2014</b>	24,340	33,057	19,268	26,328	25,772	8,105	17,590
<b>2015</b>	7,045	7,631	19,799	17,049	19,748	7,657	9,230
<b>2016</b>	14,629	12,190	17,313	19,569	18,716	4,973	12,726
<b>2017</b>	27,011	36,736	25,883	23,156	25,534	9,730	12,312
<b>2018</b>	23,703	25,420	23,270	24,624	24,051	8,882	16,929
<b>Method 3</b>	45,808	29,008	20,517	21,435	14,529	7,709	12,024

**Table No. 7: Incremental Spokane Hydro Method One by Qualifying Unit 2012 – 2018**

<b>Year</b>	<b>Long Lake #3</b>	<b>Little Falls #4</b>	<b>Nine Mile #1</b>	<b>Nine Mile #2</b>
<b>2012</b>	12,825	2,250	12,654	10,551
<b>2013</b>	8,797	1,622	9,185	4,840
<b>2014</b>	11,108	1,393	10,409	7,670
<b>2015</b>	8,877	1,821	9,624	5,928
<b>2016</b>	14,444	1,052	14,089	9,215
<b>2017</b>	12,769	2,095	11,604	9,559
<b>2018</b>	13,676	1,846	14,521	11,992
<b>Method 3</b>	14,197	4,862	8,804	13,146

Table No. 8 shows the results of the 2019 Method One hydro calculation using actual 2019 data for January through April, and 2018 actual data for May through December. This is the data used to complete Appendix A –Compliance Report Spreadsheet for 2019, and the 2020 hydro numbers were estimated using the Method One averages for 2012 through 2019. The full year of actual hydro numbers will be submitted and used for the 2019 final compliance submission in two-



years. The Company requests that the Commission approve the permanent move to using Hydro Method One instead of Hydro Method Three for Avista’s 2019 and future EIA reporting and compliance.

**Table No. 8: 2019 Qualifying Hydro Method One**

<b>Qualifying Hydro Unit</b>	<b>Incremental MWh</b>
<b>Cabinet Gorge #3</b>	19,534
<b>Cabinet Gorge #2</b>	20,505
<b>Cabinet Gorge #4</b>	18,144
<b>Noxon Rapids #1</b>	27,032
<b>Noxon Rapids #3</b>	24,079
<b>Noxon Rapids #2</b>	6,725
<b>Noxon Rapids #4</b>	18,851
<b>Long Lake #3</b>	8,209
<b>Little Falls #4</b>	760
<b>Nine Mile #1</b>	8,605
<b>Nine Mile #2</b>	5,213
<b>2019 Total</b>	157,658

## **XI. MULTISTATE ALLOCATIONS**

All of the associated RECs from generation eligible for the EIA are assigned to Washington customers, and Idaho customers are compensated for the cost of those RECs. The Company includes an adjustment to account for the value of RECs transferred from Idaho to Washington. The value of RECs is split between the two states based on the Production and Transmission Ratio. The Idaho portion of the qualified renewable energy is transferred to Washington based upon the market value of similar renewable resources. This is consistent with the allocation of REC values between Washington and Idaho for ratemaking purposes.

## XII. SALES

Table No. 9 summarizes Avista's system-wide REC revenues by source and by vintage from January 1, 2017 through May 6, 2019. Any additional REC revenues that occur during the rest of 2019 will be included in the 2020 report.

**Table No. 9: REC Sales through May 6, 2019**

Source	WREGIS #	2017 Vintage	2018 Vintage	2019 Vintage	Total REC Revenue
<b>Kettle Falls</b>	<b>W130 / W797</b>	\$1,349,115	\$1,387,208	\$38,680	<b>\$2,775,003</b>
<b>Palouse Wind</b>	<b>W2906</b>	\$152,706	\$37,844	\$0	<b>\$190,550</b>
<b>Totals</b>		<b>\$1,501,821</b>	<b>\$1,425,052</b>	<b>\$38,680</b>	<b>\$2,965,553</b>

## XIII. APPENDICES

The following appendices provide details about the eligible renewable resources Avista used to meet its renewable energy goals under the Energy Independence Act.

**Appendix A:** Compliance Report Spreadsheet

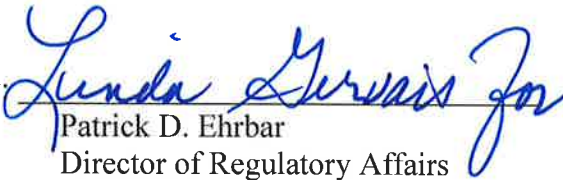
**Appendix B:** Incremental Cost Calculations

**Appendix C:** Department of Commerce Workbook

**Appendix D:** Biomass Methodology Report

RESPECTFULLY SUBMITTED this 19<sup>th</sup> day of June 2019.

AVISTA CORPORATION

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