## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-20\_\_\_\_

EXH. CGK-4

CLINT G. KALICH

REPRESENTING AVISTA CORPORATION

Line	Avista Corp.	
No.	Brief Description of CGK-2 Power Supply Adjustment	Workpaper
1	N/A	
2	Short-Term Market. Term financial and physical contracts, plus hour spot transactions. Spot market in proforma are results of Aurora model.	
3	Chelan PUD. Rocky Reach and Rock Island contract expense. Expires 12/31/2040.	Aurora-generated - see CGK-1/CGK-2
4	Douglas PUD. Wells Purchase contract expense. Expires 12/31/2040.	Aurora-generated - see CGK-1/CGK-2
5	Grant PUD. Priest Rapids and Wanapum contract expense. Expires 12/31/2040.	Aurora-generated - see CGK-1/CGK-2
6	Lancaster PPA. Includes Contract costs of capital, operations and maintenance (O&M) and heat rate tracker. Variable O&M based on the generation level determined by Aurora model.	Lancaster PPA - workpaper.xlsx (for PPA energy, capacity & O&M) 2019 Lancaster Invoice Breakdown.xlsx (for heat rate tracker)
7	WNP-3. BPA contract expired 4/30/2019.	Not included in rate period proforma
8	Small Power - Summation of small PURPA power contracts; Pro forma costs are based on 5-year average generation levels and actual pro forma period contract rates.	Small Power 2020.xlsx
9	Stimson. PURPA purchase from cogeneration plant at Plummer, Idaho; based on 5-year average generation levels and priced using actual contract rates.	Stimson Lumber 2020.xlsx
	Spokane Upriver. PURPA purchase from City of Spokane; based on 5-year average of local pumping and generation levels and priced using actual contract rates.	Upriver Gen and Load 2020.xlsx
11	Spokane Waste to Energy. PURPA purchase from City of Spokane; based on 5-year average of generation levels and priced using actual contract rates.	Spokane_Waste_to_Energy 2020.xlsx
12	Palouse Wind. PPA price in pro forma year multiplied by generation. Monthly generation equals the 5-yr average adjusted for curtailment. The hourly shaping methodology uses the 5-yr median energy profile.	Palouse Wind 2020.xlsx
13	Adams-Neilson Solar (Solar Select). Contract purchase based on	Represents the net purchase/sale deal
	output estimated by facility, as project has been in existence only since 2018; priced using actual contract rates.	
14	Rattlesnake Wind. Contract purchase based on output estimated by facility, as project entered commercial service in late 2020; priced using actual contract rates.	Rattlesnake Flats 2020.xlsx
15	Total Account 555	Summarization of lines 2-14.
	N/A	
	N/A Missellansous Transaction Essa Expanse is summation of	Transactions Fees.xlsx
	Miscellaneous Transaction Fees. Expense is summation of transaction fees for CAISO, brokerage fees for electricity and natural gas market transactions, and Canadian Merchandise Processing Fees assessed by the U.S. Government on imported Canadian gas.	
	Other Resource Cost. Actual one-time load curtailment payment to avoid shedding market purchases and/or load shedding during a 2019 system reliability event; set to zero in pro forma.	Not included in rate period proforma. Not a recurring expense.
	Natural Gas Fuel. Purchases to fuel gas-fired generation fleet as	Reclassification - please see
	part of risk management/hedging policy, but then later re-sold (see line 67, Surplus AECO to Malin Transportation) due to changing market conditions (i.e., plant later becomes uneconomic relative to purchasing electricity from the market). Pro forma expense is zero because we do not emulate our hedging program in pro forma modeling.	acccounts 501/547
21	Total Account 557	Summarization of lines 18-22.
	N/A	
23	N/A Kottle Falls Concretion Station Combined wood fuel and patural	Fuel Contol about of this sublish Karri
24	Kettle Falls Generation Station. Combined wood fuel and natural gas expense. Wood fuel expense is based on Aurora model generation multiplied by the latest budget fuel price. Natural gas used for starting the plant is based on 5-year average.	Fuel Costs' sheet of this exhibit, Kettle and Colstrip Fuel 2015 through 2019.xlsx
25	Colstrip. Combined coal and fuel oil expense. Coal expense is based on fixed and variable costs under a long-term contract. The variable portion of coal fuel costs is based on generation levels from the Aurora model. Fuel oil used for starting the plant is based on 5- year average.	Fuel Costs' sheet of this exhibit, Kettle and Colstrip Fuel 2015 through 2019.xlsx
26	Total Account 501.	Summarization of lines 24-25.
27	N/A	
28	N/A	

Line	Avista Corp.	147 1
No.	Brief Description of CGK-2 Power Supply Adjustment	Workpaper
29	Coyote Springs 2 Combined Cycle Combustion Turbine. Natural gas cost based on Aurora model dispatch priced first at its location, but then reduced to AECO basin prices where long-term contract	'Fuel Costs' sheet of this exhibit
	transportation rights exist. See testimony and workpapers for more detail on this calculation.	
	Lancaster Combined Cycle Combustion Turbine. Natural gas cost based on Aurora model dispatch priced first at its location, but then reduced to AECO basin prices where long-term contract transportation rights exist. See testimony and workpapers for more detail on this calculation.	'Fuel Costs' sheet of this exhibit
31	TC Energy Pipleline. Costs related to firm natural gas pipeline capacity on TC Energy pipeline between AECO and Kingsgate. Used for our Lancaster and Coyote Springs 2 plants. Variable charges are billed at tariffed rates based on the generation level determined by Aurora model.	Natural Gas Transporation Contracts.xlsx
	Williams Northwest Pipeline. Costs related to use of the Williams Northwest pipeline. Used for our Boulder Park, Northeast, and Kettle Falls CT plants. Charges are billed at tariffed rates based on the generation level determined by Aurora model.	Natural Gas Transporation Contracts.xlsx
	Rathdrum Combustion Turbine. Natural gas cost based on Aurora model dispatch priced first at its location, but then reduced to AECO basin prices where long-term contract transportation rights exist. See testimony and workpapers for more detail on this calculation.	'Fuel Costs' sheet of this exhibit
34	Northeast Combustion Turbine. Natural gas cost based on Aurora model dispatch priced first at its location, but then reduced to AECO basin prices where long-term contract transportation rights exist. See testimony and workpapers for more detail on this calculation.	'Fuel Costs' sheet of this exhibit
35	Boulder Park Engines. Natural gas cost based on Aurora model dispatch priced first at its location, but then reduced to AECO basin prices where long-term contract transportation rights exist. See testimony and workpapers for more detail on this calculation.	'Fuel Costs' sheet of this exhibit
36	Kettle Falls Combustion Turbine. Natural gas cost based on Aurora model dispatch priced first at its location, but then reduced to AECO basin prices where long-term contract transportation rights exist. See testimony and workpapers for more detail on this calculation.	'Fuel Costs' sheet of this exhibit
37	Total Account 547	Summarization of lines 29-36.
38	N/A	
39		
<u>40</u> 41	WNP-3. Contract expired June 30, 2019. Short-Term Purchases. Set to zero in proforma reflecting additional 50 MW long-term Point-to-Point contract purchase from BPA for Coyote Springs 2 accounted for in line 48.	Not included in rate period pro forma. Not included in rate period pro forma
	BPA Point-to-Point for Colstrip, Coyote Springs 2, and Lancaster. Proforma expense is based on contracted capacity at tariffed rate. Includes additional 50 MW contract for Coyote Springs 2.	Transmission Expense - Account 565.xlsx
	BPA Townsend to Garrison. Fixed fee contract with BPA for transmission of Colstrip power from Townsend to Garrison.	Transmission Expense - Account 565.xlsx
	Avista on BPA Borderlines. Purchase for serving Avista load in 3rd- party service area. 5-year average of actual expense priced at proforma year tariffed rate.	BPA Borderline.xlsx
45	Kootenai for Worley. Purchase for serving Avista load in 3rd-party service area. Pro forma expense is based on contracted capacity at tariffed rate.	Transmission Expense - Account 565.xlsx
	Sagle for Northern Lights. Purchase for serving Avista load in 3rd- party service area. Pro forma expense is based on contracted capacity at tariffed rate.	Transmission Expense - Account 565.xlsx
	Northwestern for Colstrip. Purchase on Northwestern for Colstrip generation above 196-MW BPA Townsend to Garrison contract. 2019 test year expense used instead of 5-year average due to lower cost of serving Nichols Pumping contract after closure of Colstrip Units 1&2.	Transmission Expense - Account 565.xlsx
	Portland General Electric John Day to COB. Purchase of Southern Interntie rights from John Day substation to California-Oregon border. Proforma expense priced at pro forma year tariffed rate.	Transmission Expense - Account 565.xlsx
49	Total Account 565.	Summarization of lines 41-48.
50	N/A	
51	Total Expense - Sum of Accounts 555, 557, 501, 547, 565.	
52	N/A	

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53	N/A		
54	Short-Term Market. Term financial and physical contracts, plus hourly spot transactions. Spot market in pro forma are results of Aurora model.	Aurora-generated - see CGK-1/CGK-2	
55	Nichols Pumping. Sale of energy for water pumping loads of Colstrip Units 3 and 4; contract price is Mid-C index less \$0.50/MWh. Lower revenue due to reduction in pumping load with closure of Units 1&2.	Aurora-generated - see CGK-1/CGK-2	
56	Sovereign/Kaiser Services. Sale of balancing area services to Kaiser's Trentwood plant. Based on test year actuals.	N/A	
57	Energy America. Contract expired 12/31/2019.	Not included in rate period proforma	
58	Morgan Stanley. Index contract with no net power supply expense. Refer to testimony for additional detail.	Not included in rate period proforma	
59	Douglas PUD. Contract has no direct power supply impact. Reflected in beneficial impact on shape of portfolio hydro operations in Aurora model.	Not included in rate period proforma	
60	Pend Oreille PUD. Sale of balancing area services to Pend Oreille PUD. Contract expires 9/30/2021.	Not included in rate period proforma	
61	CAISO Market Sales. Revenues from power sales to CAISO. New market opportunity since previous case. 3-year average since inception of opportunity with phase out and ultimate expiration of Energy America contract.	CAISO Mkt Sales.xlsx	
62	Total Account 447.	Summarization of lines 54-61.	
63	N/A		
64	N/A		
65	Non-WA EIA REC Sales. Idaho share of REC sales. These are not included in base power supply expenses and are tracked and rebated annually.	Not included in rate period proforma. Included in annual REC filing.	
66	AECO; 5-year average.	Natural Gas Liquids.xlsx	
67	Surplus AECO to Malin Transportation. Test year value includes resale of purchases made to fuel gas-fired generation fleet as part of risk management/hedging policy (see line 20, Natural Gas Fuel Purchases) due to changing market conditions (i.e., plant later becomes uneconomic relative to purchasing electricity from the market). Pro forma value reflects only revenue received from buying AECO gas and selling it at Malin using firm transportation rights surplus to Avista gas plant use.	'Fuel Costs' and 'Gas Contracts MTM' sheets of this exhibit	
68	Total Account 456.	Summarization of lines 65-67.	
69	N/A		
70	Total Revenue - Sum of Accounts 447, 456.		
71	N/A		
72	Total Net Expense - Total expense minus total revenue.		