

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Investigation of AVISTA CORPORATION d/b/a AVISTA UTILITIES,
PUGET SOUND ENERGY, and PACIFIC POWER LIGHT COMPANY
Regarding Prudency of Outage and Replacement Power Costs

DOCKET UE-190882

AVI ALLISON ON BEHALF OF PUBLIC COUNSEL UNIT

EXHIBIT AA-5C

Avista Supplemental Response to Public Counsel Data Request No. 113, Attachments B and C
(Dockets UE-190334, UG-190335, and UE-190222)

January 10, 2020

DESIGNATED **AVISTA** CONFIDENTIAL PER PROTECTIVE ORDER IN DOCKET
UE-190882

PUBLIC VERSION

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	08/28/2019
CASE NO.:	UE-190334 & UG-190335	WITNESS:	Heather Rosentrater
REQUESTER:	Public Counsel	RESPONDER:	Thomas C Dempsey
TYPE:	Data Request	DEPT:	GPSS
REQUEST NO.:	PC – 113C Supplemental	TELEPHONE:	(509) 495-4960
		EMAIL:	tom.dempsey@avistacorp.com

REQUEST:

For each of the Company's thermal generating units, please provide the following historical hourly data for 2018. If not available on an hourly basis, explain why and provide at the most granular temporal resolution available:

- a) Net generation, Avista ownership share (MWh)
- b) Fuel costs (\$/MWh)
- c) Production costs (\$/MWh)
- d) Locational marginal price (\$/MWh)
- e) Particulate matter emissions rate (lb/MMBtu)
- f) Commitment status (e.g., must-run, outage)
- g) Basis for commitment status (e.g., economic dispatch, reliability)

SUPPLEMENTAL RESPONSE: (August 28, 2019)

The attachment provided is **CONFIDENTIAL SUBJECT TO GENERAL PROTECTIVE ORDER**.

e) Please see PC-DR-113 Supplemental Attachment A an environmental report for Coyote Springs 2 for 2018.

Please see "PC-DR-113 Supplemental Attachment B - Hourly Generation Supplement.xlsx". Avista tracks total hourly generation (all owners) for Colstrip Unit 3&4 individually. Avista also tracks combined 3&4 generation for its share. The referenced attachment uses a formula to calculate Avista's share of the units individually based on this data and is provided in columns G and H.

Please see the attached revision to Attachment B titled "PC-DR-113C Supplemental Confidential Attachment A - Fuel Production Variable Costs 2018 Rev 1.xlsx". In this spreadsheet, Avista has added two subsections- one for Colstrip 3 and one for Colstrip 4. These subsections reflect individual monthly generation and fuel consumption. Avista does not track non-fuel O&M at the unit level.

RESPONSE:

Please see Avista's **CONFIDENTIAL** response to data request no. PC – 113C. Please note that Avista's response to PC – 113C is **Confidential per Protective Order in UTC Dockets UE-190334 and UG-190335**.

For items "a" through "d", please see "PC_DR_113C Confidential Attachment B Fuel Production Variable Costs 2018.xlsx". The first tab labeled "Instructions" provides information regarding the data as well as

assumptions and clarifications. The second tab labeled “Data Table” provides the responses. Please note that column “B” in that spreadsheet denotes which rows correspond to which sub-item of this data request.

- a) Please see “PC_DR_113 Attachment A Hourly Generation”. This data is also included on a monthly level in “PC_DR_113C Confidential Attachment B Fuel Production Variable Costs 2018.xlsx”.
- b) Avista does not track hourly fuel costs; monthly fuel costs are recorded to the general ledger by FERC account. Please see PC_DR_113C Confidential Attachment B for a summary of monthly costs.
- c) For the purposes of this response, “production costs” include fixed and variable O&M but exclude fuel costs (fuel costs are noted separately). Avista does not track hourly production costs; annual or monthly production costs are provided where applicable.
- d) Avista is a vertically integrated utility that does not currently participate in a centrally run organized market and LMP’s are not calculated.
- e) Avista does not track particulate emissions on an hourly basis. See “PC_DR_113 Attachment C 2018 Particulate Emissions.xlsx” This attachment does not currently contain information on Coyote Springs II. We will supplement this data response when the data is available.
- f) See below
- g) See below

Avista does not document unit commitment status other than planned or unplanned outages. Avista commits its thermal resources based on availability, Avista obligations (load, contracts, and compliance with reliability standards) and market price. When a thermal resource is on a planned or unplanned outage the resource is unavailable for commitment and dispatch.

Thermal resources are committed and optimized on a day ahead basis based on reliability needs, plant costs and Mid-C prices. Each thermal resource has a fuel price, startup cost, and heat rate curve and is compared to the day ahead Mid-C traded products. The thermal resource will be committed if the price of the Mid-C products are higher than the commitment cost of the resource. The resource will be committed to serve Avista’s obligations and/or committed to sell into the market.

Thermal resources are then re optimized in the hour ahead and/or balance of the day time horizon based on actual system conditions and Mid-C market prices. This re optimization takes into account resource availability (planned or forced outages), resource characteristics (startup time, ramp rate, minimum load level etc.) market liquidity, market prices, fuel price, fuel availability, and reliability needs. Thermal plants are directed to commit or de commit based on the real time decisions and transactions.

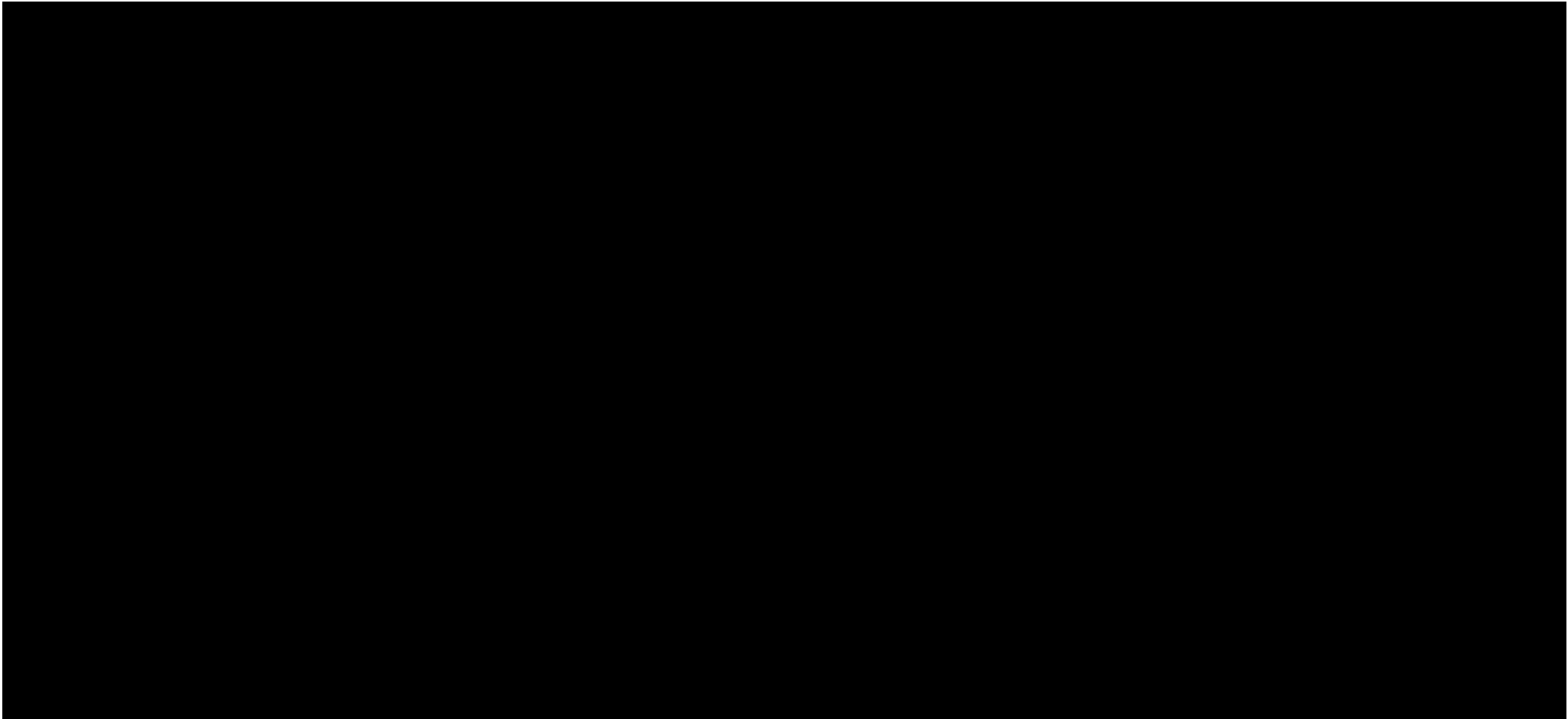
Confidential Attachment B

Designated **AVISTA** Confidential in its Entirety



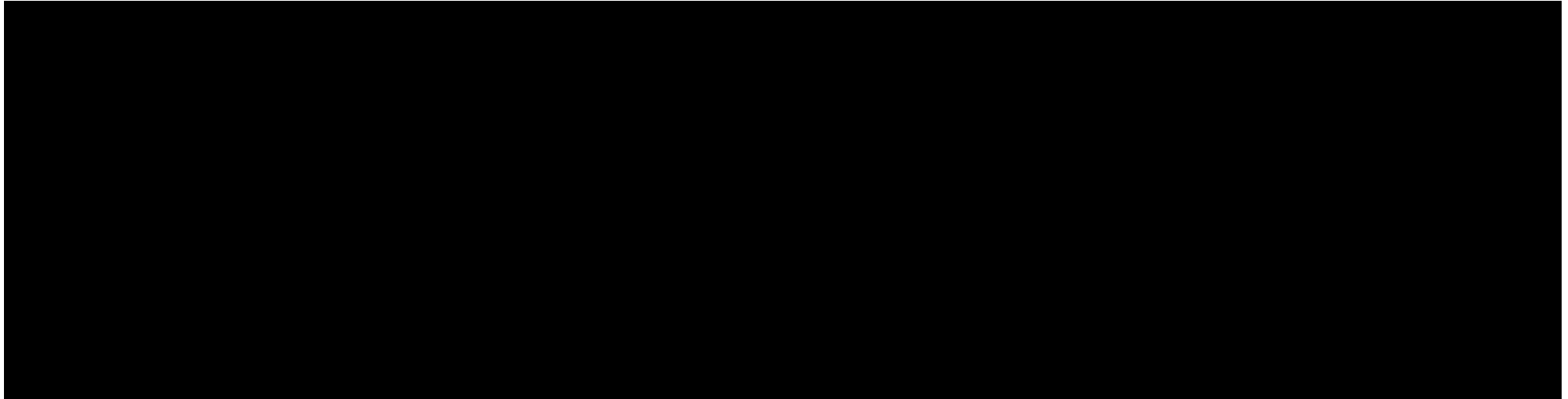
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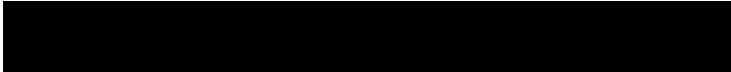


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Attachment C

Particulate Emission RATES, 2018

	PM, lb/mmbtu	Source
Rathdrum CT	0.010	EPA CAMD, PM EF from original PTC
Boulder Park	0.053	Permitted limit from SCAPCA NOC 1091
NECT	0.014	Source Test Report, 2019 Emission Compliance Tests, Avista Corporation, NECT, Spokane WA, Montrose Air Quality, May 2019, average for both units
Coyote Springs 2		
KFGS Hogged Fuel Boiler	0.018	Source Test Report, 2016 Emission Compliance Tests, Avista Corporation, Kettle Falls Generating Station, Station, Kettle Falls, Washington. The Avogadro Group, LLC. April 2016
KFCT	0.006	Source Test Report, 2016 Emission Compliance Tests, Avista Corporation, Kettle Falls Generating Station, Station, Kettle Falls, Washington. The Avogadro Group, LLC. April 2016
Colstrip 3&4		Received form Gordon Criswell on 8/9/2019
		Unit 3
		- 2/7/18 - 0.027 lb/mmbtu
		- 6/21/18 - 0.043 lb/mmbtu
		- 9/11/18 - 0.024 lb/mmbtu
		- 11/13/18 - 0.019 lb/mmbtu
		- 12/11/18 - 0.017 lb/mmbtu
		Unit 4
		- 2/7/18 - 0.034 lb/mmbtu
		- 6/26/18 - 0.051 lb/mmbtu
		- 9/6/18 - 0.021 lb/mmbtu
		- 9/26/18 - 0.025 lb/mmbtu
		- 11/15/18 - 0.016 lb/mmbtu
		- 12/13/18 - 0.021 lb/mmbtu

Particulate Emissions

	lb	Heat Input (mmbtu)	lb/mmbtu 2018
Rathdrum CT	14938	1463845	0.010 EPA CAMD, PM EF from original PTC
Boulder Park			Permitted limit from SCAPA NOC 1091
NECT			Source Test Report, 2019 Emission Compliance Tests, Avista Corporation, NECT, Spokane WA, Montrose Air Quality, May 2019, average
Coyote Springs 2			
KFGS Hogged Fuel Boiler			0.018 Source Test Report, 2016 Emission Compliance Tests, Avista Corporation, Kettle Falls Generating Station, Station, Kettle Falls, Washing
KFCT	629.8994	97326.36	0.006 Source Test Report, 2016 Emission Compliance Tests, Avista Corporation, Kettle Falls Generating Station, Station, Kettle Falls, Washing

e for both units

ton. The Avogadro Group, LLC. April 2016

ton. The Avogadro Group, LLC. April 2016