Exh. DCG-19
Dockets UE-200900, UG-200901,
UE-200894
Witness: David C. Gomez

## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

DOCKETS UE-200900, UG-200901, UE-200894 (Consolidated)

Complainant,

v.

AVISTA CORPORATION, d/b/a AVISTA UTILITIES,

Respondent.

EXHIBIT TO TESTIMONY OF

David C. Gomez

## STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Avista's Non-Confidential Response to UTC Staff Data Request No. 132C, First Supplemental Response, SmartBurn Strategic Decision

**April 21, 2021** 

# AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION: WASHINGTON DATE PREPARED: 03/19/2021

CASE NO.: UE-200900 & UG-200901 WITNESS: Jason R. Thackston REQUESTER: UTC Staff RESPONDER: TYPE: Data Request DEPT: GPSS/Env Compliance

REQUEST NO.: Staff – 132C Supplemental 1 TELEPHONE: (509) 495-4960

EMAIL: tom.dempsey@avistacorp.com

SUBJECT: Re: Capital Additions - Test Year

**REQUEST:** 

In his prefiled direct testimony, Avista Witness Thackston states:

The installation of SmartBurn on Units 3 and 4 was a strategic decision to meet expected and ongoing economic and regulatory purposes that are not well-defined and subject to change. <u>The decision to install SmartBurn occurred in 2012</u>, so the information and expectations at that time need to be considered when evaluating this capital spending decision.

Exh. JRT-1T 59:9-12 (emphasis added). Please identify the date(s) of the Colstrip Unit 3 and 4 Project Committee (Project Committee) meeting where the "strategic decision" was made by the owners to install SmartBurn in Colstrip Units 3 and 4. If this strategic decision was made by the owners without a proposal being brought before the Project Committee in accordance with the Colstrip Unit 3 & 4 Ownership and Operation Agreement, explain why. If this decision was made by the owners as part of a proposal brought before the Project Committee in accordance with the Colstrip Unit 3 & 4 Ownership and Operation Agreement, please provide:

- The actual proposal(s) for installation of SmartBurn on Units 3 and 4 brought before the Project Committee, as well as and including any minutes, correspondence, attachments, documents, analysis, Capital Authorization hurtle rate analysis sheets, cost benefit analysis, emission targets, or any other material considered by the Project Committee regarding SmartBurn;
- A description of how the proposal(s) for installation of SmartBurn on Units 3 and 4 was brought before the Project Committee meeting, i.e., how the proposal was brought to a vote of the Project Committee in accordance with Colstrip Unit 3 & 4 Ownership and Operating Agreement Sections 10 and 17 including the name of the owners who fulfilled the "two other Committee member" requirement required to advance a proposal to a vote;
- The Project Committee minutes containing the results of the vote; name of owners in favor and those against. Provide copies of and explain any owner challenges presented before the Project Committee and its outcome, i.e., Colstrip Power Plant Unit 3 2017 Overhaul Challenge Review Meeting dated April 20, 2017; and
- The emission control evaluations submitted by Talen to the U.S. EPA for Colstrip Units 3 & 4 along with contemporaneous documentation (including a list of participants and dates) which memorializes the meeting with U.S. EPA Region 8 and where Talen concluded "that emission controls were not needed at Colstrip." (Exh. JRT-1T at 60:10-16). Please explain and provide all contemporaneous documentation which shows how the emission control evaluations and Talen's conclusion factored into the Colstrip Unit 3 and 4 owners' "strategic decision" to install SmartBurn in Units 3 and 4.

If Avista does not know the exact date and/or cannot produce the specific Project Committee proposal(s)

that memorialize Talen and the Colstrip Unit 3 and 4 owners' strategic decision to install SmartBurn on Units 3 and 4, please explain why.

### **RESPONSE:**

Staff-DR-132C – Confidential Attachments are **Confidential per Protective Order in UTC Dockets UE-200900 and UG-200901**.

The referenced statement "The decision to install SmartBurn occurred in 2012" represents the beginning of a multiple year decision process to install the SmartBurn technology on Units 3 and 4. After the EPA FIP was issued in September 2012, the decision was made to include SmartBurn in the 5-year Capital budget. These long-range budgets are considered a planning tool for all types of projects that develop in more detail over time as more accurate information is developed and known.

Actual unanimous approval for the first installation of SmartBurn, on Unit 4, by the Colstrip owner group occurred on March 18, 2015. The associated official meeting minutes are attached to this response.

## **Bullet Point 1-** (see Zipped Folder for Confidential Attachment A)

SmartBurn Proposals: Please see attached:

"20150508\_SB\_Proposal\_Package\_PPL\_Colstrip\_4\_Retrofit\_R3.pdf".

"10-24-16\_SB\_Proposal\_Package\_Talen\_Montana\_Colstrip\_3\_Low\_NOx\_Retrofit\_R.pdf".

*Hurdle Rate Sheets:* Please see the following attachments:

"2015 U4 SmartBurn Budget Hurdle Rate Sheet.pdf"

"2016 U4 SmartBurn Budget Hurdle Rate Sheet.pdf"

"2017 U4 SmartBurn Budget Hurdle Rate Sheet.pdf"

**Emails:** Avista is in the process of evaluating correspondence that may be responsive to this request; however, due to the volume of potentially responsive documents, that process is not yet complete. To the extent additional documents are identified as responsive, Avista will supplement this response on or before Friday, March 19, 2021.

To the extent Avista has identified relevant emails to date, those emails are included with Staff-DR-132C – Confidential Attachment A.

#### **Bullet Point 2-**

The initial installation of SmartBurn was proposed by the operator, PPL Montana (now Talen Montana). Because the proposal was made by the Operator, the "two other committee member" requirement was not applicable. Official, unanimous approval for the first installation of SmartBurn on Unit 4 occurred on March 18, 2015, as documented and included as an attachment to this response. Avista's approval occurred after a review of the BACT analysis. Please see Zipped Folder Staff-DR-132C Confidential Attachment A - attachment "Smart Burn Timeline" for additional information.

### **Bullet Point 3-**

Official, <u>unanimous</u> approval for the first installation of SmartBurn on Unit 4 occurred on March 18, 2015 as documented and included as an attachment to this response.

Please see Zipped Folder Staff-DR-132C Confidential Attachment A - presentation "Colstrip Unit 3 Challenge Review 2017.pptx". The projects and a brief description of those project is given below:

SmartBurn: This item was listed as a challenge because it was a relatively large project that fell on the critical path. In other words, it needed to be installed in a timely fashion for the overall outage to meet its scheduled completion dates.

Cooling tower, circulating water lines, boiler repairs, & turbine repairs: These items were listed as challenges because they were near critical path items.

The presentation also listed safety/human performance and craft resource availability as additional key challenges. Safety and human performance is almost always listed as a challenge as a way to motivate the crews to always be thinking of those topics. Craft resource availability is always a challenge at Colstrip because the plant must compete with other industry requirements for a limited pool of skilled workers.

#### **Bullet Point 4-**

The EPA required emission control evaluations (132A) for Colstrip Units 3 & 4, Supplemental submittal (132B) for Units 3 & 4 and the meeting presentation to EPA (132C) all took place in the 2011-2012 timeframe. Our recollection on participants for the meeting in Denver is that the meeting was attended by representatives from EPA, Talen, legal counsel and Avista Environmental. The EPA FIP (132D) was issued in September 2012, which ordered NOx emission controls on Units 1 & 2 and deferred review of NOx emission controls on Units 3 & 4 until the next review period.

Please see Staff-DR-133 regarding the Best Available Control Technology analysis.

#### **RESPONSE: SUPPLEMENTAL 1 (3/19/21)**

Please see Staff-DR-132C Confidential Supplemental Attachment A which contains additional identified relevant emails.

Please find attached the testing report for the SmartBurn installation on Colstrip Unit 2. According to the test report, "At the high, medium and low load testing conditions, SmartBurn either met or substantially exceeded (i.e. achieved lower emissions values) than the contractual NOx performance guarantees".

Staff-DR-132C Confidential Supplemental Attachment B - 2015 11 05 Talen Colstrip 2 Perf Test Summary.pdf

Below is a summary table taken from that report. These results are a portion of the contemporaneous documentation supporting our decision to proceed with SmartBurn on unit 4.

Table 1. Summary of Average Performance Testing Results At Test Loads

Load	330 MWg	240 MWg	160 MWg
Achieved Performance NO <sub>x</sub> (lb/MMBtu)	0.126	0.111	0.099

SmartBurn performance testing was subsequently conducted following installation on Colstrip Units 3&4. Emails documenting those results are included in the following attachment:

Staff-DR-132C Confidential Supplemental Attachment A - 20210318 Supplemental SmartBurn Performance SC 003.pdf

From the attachment above:

For Unit 3, the results of the performance testing indicated NOx emissions ranging from 0.089 lb/MMBtu at 300 MWg to 0.131/0.134 at 800 MWg. This range of values was close to the SmartBurn guarantee. For Unit 4, the results of the performance testing indicated NOx emissions ranging from 0.104 lb/MMbtu at 300 MWg to 0.123-0.144 at 800 MWg. This range of values was close to the SmartBurn guarantee. SmartBurn was projected to reduce NOx from 0.17 to 0.125 lb/MMBtu on units 3&4. This means that a subsequent installation of an SCR would have only had to reduce from 0.125 to ~0.06 lb/MMBtu. An SCR installed by itself would have to therefore remove 50% more NOx than an SCR installed in conjunction with SmartBurn. The owners considered the reduced cost of an optimally sized, smaller SCR with reduced upfront capital costs, reduced ongoing maintenance costs, reduced chemical use, reduced chemical storage requirements, potential reduction in footprint, and a reduction in draft losses. (Draft losses contribute to reduced efficiency overall and an increase in ALL emissions per MWh as a result). The potential benefits to customers go beyond these categories, however. By installing SmartBurn early on, Colstrip was demonstrating excellent progress with respect to the Regional Haze Glide Path. Given Regional Haze rules it was reasonable to conclude that the installation of SmartBurn could, at a minimum, delay the installation requirement of an SCR further into the future than if we had chosen to do nothing at all- with a significant time value of money benefit to customers.