Exh. DCG-22 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

State of Montana, Regional Haze 5-Year Progress Report, August 2017

**April 21, 2021** 

## STATE OF MONTANA

# REGIONAL HAZE 5-YEAR PROGRESS REPORT





**AUGUST 2017** 

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## **EXECUTIVE SUMMARY**

This document is intended to meet the requirements of the Regional Haze Rule (RHR) – codified in Title 40 of the Code of Federal Regulations (CFR), Part 51.308 – for a periodic progress report. The RHR requires that the following items be included in a progress report:

- The status of implementation of control measures included in the original plan (Montana FIP);
- The emissions reductions achieved through implementing control measures;
- An assessment of visibility conditions and changes;
- An analysis of emission trends;
- An assessment of any changes impeding visibility progress;
- An assessment of whether the current strategy is sufficient to meet the Reasonable Progress Goals (RPGs); and
- A review of the visibility monitoring strategy.<sup>1</sup>

This document evaluates visibility progress in Montana since the baseline years of 2000-2004 and, more specifically, progress since the Montana FIP was published in 2012. It provides a 5-year update on the current status of visibility at the Class I Areas affected by emissions from Montana sources of air pollution, describes statewide emissions reductions, and concludes with a determination that the Montana FIP is adequate and does not require substantive revision at this time in order to achieve established visibility goals.

To do so, this progress report relies on monitoring data collected from the IMPROVE (Interagency Monitoring of Protected Visual Environments) network, which is designed to measure visibility at each of Montana's Class I Areas. Additionally, Montana relied on data from the Western Regional Air Partnership (WRAP) Technical Support System (TSS) for summaries and analyses of comprehensive emissions and modeling datasets to help describe visibility progress in Montana.

### **Key Findings**

The data and analysis included in this report support several conclusions about visibility progress in Montana. Overall, visibility on the clearest days in a given year has improved at all Class I Areas in the state. This is because, in Montana, these clear days are primarily affected only by very low levels of haze caused by manmade air pollution and, as described in this report, emissions of visibility-impairing pollutants have decreased over time. This assessment points to the conclusion that the strategies in the Montana FIP targeting reductions of manmade emissions have been successful at improving visibility.

On the other hand, visibility on the haziest days in a given year has worsened at all but two of Montana's Class I Areas. Analysis shows that, in Montana, the haziest days are primarily caused by wildfire activity both in and outside the state. At most Class I Areas in Montana, these haziest days usually

<sup>&</sup>lt;sup>1</sup> EPA, 40 CFR § 51.308(g) (2016). Code of Federal Regulations references can be obtained from the following link: https://www.gpo.gov/fdsvs/browse/collectionCfr.action?selectedYearFrom=2016&go=Go.

It would be a mistake to assume that, in the absence of regulatory emission limits in the Montana FIP, these remaining sources have not installed controls or improved efficiency over the years since the Montana FIP was promulgated. Notable emissions-reducing improvements include the installation of SmartBurn<sup>R</sup>  $NO_x$  reduction technology on Units 3 and 4 at the Colstrip Steam Electric Station in 2016 and 2017, respectively. According to facility operator Talen Energy, these new controls are expected to improve  $NO_x$  removal from 80% to 86%.<sup>22</sup>

In addition, although the Montana FIP did not set reasonable progress emission limits for Montana-Dakota Utilities (MDU) Lewis & Clark Station, a coal-fired power plant located in Sidney, MT, the facility was upgraded in early 2016 to comply with other federal and state regulations. Upgrades included a mist eliminator retrofit and installation of sieve trays to reduce filterable PM, which also resulted in a significant reduction in SO<sub>2</sub> emissions.<sup>23</sup>

#### 2.2. Adjacent States' BART Implementation

In addition to emission reductions at Montana facilities, reductions of emissions in neighboring states may affect visibility in Montana. The following summaries briefly discuss implementation of BART controls in other states in the region.

#### 2.2.1. Idaho

Idaho has five (5) Class I Areas, including Hells Canyon Wilderness, Craters of the Moon Wilderness, Sawtooth Wilderness, and two that are shared with Montana: Selway-Bitterroot Wilderness and Yellowstone National Park. According to Idaho's Regional Haze documentation, Idaho had one BART source, Amalgamated Sugar Company, LLC (TASCO Riley Boiler located in Nampa, Idaho), which was required to install new emission controls by July 22, 2016. This facility was required to install and operate low NO<sub>x</sub> burners after it was determined that Selective Catalytic Reduction (SCR) was not technically feasible for the specific process at this facility. There are also two other boilers at this facility referred to as B&W Boilers 1 and 2 that also ended up as part of a BART Alternative Controls option that resulted in a combined NO<sub>x</sub> limit for the three boilers. The initial performance test for the new BART limits was required by December 20, 2016.

As part of the BART determination, three non-BART pulp dryers were also shut down at the facility in an effort to provide the necessary SO<sub>2</sub> reductions. The rationale behind this is that the approach provided more improvement in visibility than otherwise would have occurred from the original BART determination. A second facility in Soda Springs, Idaho, went through a BART analysis but EPA determined that no additional control was required.

<sup>&</sup>lt;sup>22</sup> Conversation with Gordon Criswell, Environmental and Compliance Director for Talen Energy (11 May 2017).

<sup>&</sup>lt;sup>23</sup> Correspondence with the facility (30 May 2017).

<sup>&</sup>lt;sup>24</sup> Idaho Department of Environmental Quality, "Regional Haze Plan" (8 Oct. 2010), <a href="http://www.deq.idaho.gov/air-quality/air-pollutants/haze/">http://www.deq.idaho.gov/air-quality/air-pollutants/haze/</a>.