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May 27, 2021

Ms. Patricia Van Gerpen, Executive Director
South Dakota Public Utilities Commission
State Capitol Building
500 East Capitol Avenue
Pierre, SD 57501-5070

**RE: In the Matter of the Application of Otter Tail Power Company for An Energy Conversion Facility Permit for the Construction of a Combustion Turbine Generator and Associated Infrastructure Including a Natural Gas Pipeline and Electric Transmission Line Near Astoria, South Dakota
Docket No. EL17-042**

Dear Ms. Van Gerpen:

Conditions 29 and 30 of the Settlement Stipulation, as approved by the Commission in the above referenced docket, set forth noise level limits from nearest occupied, then-existing residences and required that a post-construction operational noise assessment be completed by an independent third-party noise consultant, approved by Commission Staff, to show compliance with the noise standards.

In accordance with these conditions, Otter Tail submits this informational filing and the enclosed post-construction operational noise assessment prepared by CleanAir Engineering, which Commission Staff approved to conduct the test.

As detailed in the assessment, Astoria Station met the noise standards at a 235-megawatt (MW) gross load level that was maintained throughout the test. However, this operational level is less than Astoria Station's 245 MW nominal rating and less than the achievable full baseload turbine output for the date of the test (i.e., approximately 260 MW). As described on Page 4 of the report, the unit was operated at a reduced output level for the noise test due to high vibration in the exhaust duct and stack at higher loads. It was apparent that at higher loads, Astoria Station would exceed its far field noise limits due to this vibration and, therefore, load was reduced to 235 MW.

Otter Tail is working closely with the gas turbine generator manufacturer to evaluate solutions for the vibration. Until a solution can be fully implemented, Otter Tail is committed to the following mitigation measures:

- Astoria Station will limit load to 235 MW for standard periods of dispatch.
- Operation above 235 MW will occur only when necessary to gather further vibration or noise data, and any such operation will be conducted only during daytime hours.
- Once the vibration issue is resolved, Otter Tail will conduct another operational noise assessment at or above 245 MW to verify compliance with the noise standards. At this time we anticipate that it will take 8-12 months before the vibration is resolved.

Should you have any questions or require additional information, please contact me at 218-739-8205 or wswanson@otpc.com.

Sincerely,

/s/ WILLIAM SWANSON

William Swanson, P.E.

Manager, Supply Engineering & Operations

cjh

Enclosures

By electronic service