

## STATEMENT OF BASIS

To: Reviewers  
Through: Lori Bocchino, Operating Permit Program Manager  
From: Cole Anderson  
Subject: Draft Chapter 6, Section 3 Operating Permit 3-2-198, Basin Electric Power Cooperative, Hartzog Generating Station  
Date: February 26, 2014 *Addendum May 30, 2014*

### Introduction

Attached for your review is the draft renewal Wyoming Air Quality Standards and Regulations (WAQSR) Ch 6, Sec 3 operating permit for the Basin Electric Power Cooperative, Hartzog Generating Station. The facility uses three natural gas driven Solar Taurus 70 turbine engines to provide local generation and also provide line voltage stability to the region. A Caterpillar 3412 diesel generator is used to start the turbines in cold weather.

### Permitting History

CT-2621 (11/27/2001): authorized the construction of three turbine engines and one diesel generator. Emission limits for NO<sub>x</sub> and CO, a maintenance program, and ambient temperature recordkeeping were established for the turbines and an operating hour limit was set for the diesel generator. The site rating for each of the Hartzog Generating Station turbines is limited to 6,106 kW per condition 11.

Waiver wv-11332-3 (1/7/2011): corrected the diesel generator engine configuration at the facility, and supersedes the generator engine conditions listed in CT-2621. Applicable requirements for the generator engine include an operating hours limit and a visible emissions limit.

### Applicable Requirements

The turbine engines are subject to the requirements of 40 CFR 60, Subpart GG, *Standards of Performance for Stationary Gas Turbines*. The turbine engines are not subject to the requirements of 40 CFR 63 Subpart YYYY, *Stationary Combustion Turbines*, since the facility is not a major source of hazardous air pollutants. Additionally, the turbine engines are subject to the visible emission requirements in WAQSR Ch 3, Sec 2. The diesel generator engine is subject to the requirements of 40 CFR 63 Subpart ZZZZ, *Hazardous Air Pollutants for Stationary Internal Combustion Engines*. The diesel generator engine was purchased in 2001 and is not subject to 40 CFR 60 Subpart IIII, *Requirements for Stationary Compression Ignition Internal Combustion Engines*.

### Periodic Monitoring

Monitoring of NO<sub>x</sub> and CO emissions from all the turbine engines is required at least every 2160 hours of operation. The permittee shall also ensure natural gas is the sole fuel source for the turbine engines to assure compliance with visible emission requirements. The permittee is required to monitor and record the operating hours of the diesel generator and each turbine engine. The permittee shall also measure the turbine engine fuel sulfur content to determine compliance with 40 CFR 60, Subpart GG. Additionally, the permittee shall monitor the diesel generator engine at least semi-annually to verify compliance with visible emission requirements.

### Addendum (May 30, 2014)

*Condition S1 is updated to include language currently used in operating permits issued by the Division. This change is administrative in nature and does not warrant an additional public notice period.*