DESERET POWER
ELECTRIC COOPERATIVE

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Mr. Richard R. Long
Director, Air program (Mail Code 8P-AR)
999 18th Street, Suite 300
Denver, Colorado 80202-2466

Mike Owens
USEPA Region 8 (Mail Code 8P-AR)
999 18th Street, Suite 300
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Re: Requested Emission Data; Bonanza Power Plant 2003 Maintenance Outage

Dear Mr. Long and Mr. Owens:

With this letter, Deseret Generation & Transmission Co-operative ("Deseret") hereby conveys certain emissions data previously requested pertaining to a certain rotor upgrade project at Deseret's Bonanza Power Plant in May 2000. The attached data summarizes the information that Deseret understands to have been requested. We understand that this information was requested in connection with Deseret's pending Title V permit application. Deseret provides this information subject to all of the comments previously submitted in connection with the Title V application process.

This letter is also to inform you of the 2003 maintenance outage scheduled for the Bonanza Power Plant. The purpose for the plant outage is to perform general maintenance on the plant equipment. During the outage, Deseret will, among other things, replace the voltage regulator in the generator and replace the bottom ash removal system with a new submerged flight conveying system. In addition, Deseret will install a series of monitoring equipment in and around the boiler in order to accommodate a so-called "intelligent" soot blowing system.

This maintenance outage will begin at midnight on April 4, 2003. The completion of the planned maintenance is expected to occur on approximately April 21, 2003. Deseret has scheduled two days at the conclusion of the outage to test the new equipment and complete the required testing of the unit for the Western Electric Coordinating Council (WECC). During this two days of testing, the unit will be on and off-line. The unit is expected to be fully on-line with the baghouse and scrubber in service on April 23, 2003.

The current voltage regulator has been in service for 17 years and will be replaced by a similar regulator of solid state design.

The current bottom ash removal system has also been in service for 17 years. Due to ordinary wear on the ash removal system, it makes rebuilding the system an unacceptable option. Deseret explored two options to replace the bottom ash system. The first option was to replace the system with the same type of system that is currently used. The second option was to change the system to a slightly different design, aimed to reduce the amount of wear on the replacement system.

The current ash removal system has two problems. First, the system is complicated and requires a lot of manual maintenance, primarily the sometimes dangerous process of breaking up larger chunks of ash (clinkers) created in the boiler. Given the current design and access points into the removal system, the large clinkers have to be broken up by hand, exposing workers to serious risk of injury. Several workers at the Bonanza plant have been injured as a result of this process during the past years.

After analyzing the current system, a submerged flight conveyor has been identified which will remove the bottom ash through a conveyor system. This system is less complicated and much safer than the current one, because it will automatically feed the large clinkers from the boiler, rather than relying on human intervention in the process, as the existing system does.

The current bottom ash removal system collects ash or pyrites from three sources. Heavy ash from the economizer section of the boiler is collected in hoppers. The ash from the economizer hoppers feed into the economizer ash storage silos. Pyrites from the pulverizers are collected in pyrite storage tanks. When the tanks are full, the pyrites are moved into the pyrite transfer tank. The third source of bottom ash is the heavy ash (clinkers) that falls through the bottom of the boiler. These clinkers are collected in the bottom ash storage hoppers. When an economizer ash storage silo, pyrite transfer tank or bottom ash storage silo is full, the contents of the tank are then slurried from the boiler area out to the ash de-watering bins in the sludge handling area. The bottom ash is then de-watered and conveyed out to the sludge/ash pile for disposal.

The new bottom ash submerged flight conveyor system will be much simpler in operation. The current pyrite system will move the pyrites directly from the pyrite hoppers to the submerged flight conveyor. Two dry flight conveyors will move the heavy ash from the economizer hoppers directly to the submerged flight conveyor. Bottom Ash from the bottom of the boiler will feed directly onto the submerged flight conveyor. The submerged flight conveyor will take the bottom ash/pyrites to the bottom ash belt conveyor. The bottom ash belt conveyor will then convey the ash outside the

boiler building to a temporary storage pile. From the temporary ash storage pile the ash will be loaded onto trucks and disposed of in a new ash storage pile.

The submerged flight conveyor system will allow the plant to abandon the pyrite transfer tank, economizer storage silos, bottom ash storage hoppers, ash slurry system, the de-watering bins and all the associated equipment.

The new ash handling system will not allow for any increase in plant production or cause any increases in stack emissions. Also, there will be no increase in fugitive emissions because the amount of bottom ash handled will not increase and the ash from the submerged flight conveyor will have a moisture content of 20% to 30%. The change simply represents an easier, less complicated and safer way to handle the bottom ash. Due to the fact that no increases in production or emissions will occur, no new source review will be required for the project.

In connection with the outage, Deseret will be placing certain thermal detection devices in and around the boiler, which will increase the flow of data/information from locations within and about the boiler. This data will be analyzed through a programmable logic controller, a software enabled device that will interface with the Plant's control system to operate the soot blowers. The primary purpose of this increased data flow will be to provide necessary inputs to better inform and assist operators in the timing and scope of soot blowing cycles on the Plant. This change will not result in any increase in emissions.

Any questions about the project should be directed to myself, as well as to Michael Goddard (435-781-5704) or Howard Vickers (435-781-5706). Deseret thanks Region 8 for its continuing support of the air quality programs at the Bonanza Plant.

Sincerely,

David Crabtree
Vice President, General Counsel

Enclosures

c: Stan Gordon, Bonanza Plant Manager