

Air Pollution Control
40 CFR 52.21(i)
Prevention of Significant Deterioration Permit to Construct
Final Statement of Basis
for Permit No. PSD-OU-0002-04.00
August 30, 2007

Deseret Power Electric Cooperative
Bonanza Power Plant, Waste Coal Fired Unit
Uintah & Ouray Reservation
Uintah County, Utah

In accordance with requirements at 40 CFR 124.7, the Region 8 office of the U.S. Environmental Protection Agency (EPA) has prepared this Statement of Basis describing the issuance of a Prevention of Significant Deterioration (PSD) permit to Deseret Power Electric Cooperative. This Statement of Basis discusses the background and analysis for the PSD permit for construction of a new Waste Coal Fired Unit (WCFU) at Deseret Power's Bonanza power plant, and presents information that is germane to this permit action.

C. Pollutants Subject to BACT for this Project

For major modifications to existing major stationary sources, 40 CFR 52.21(j)(3) requires that BACT be applied for each regulated NSR pollutant for which there will be a significant net emission increase at the source. The requirement applies to each proposed emitting unit at which a net emissions increase in the pollutant would occur as a result of the physical change or change in the method of operation of the unit. As detailed in Deseret Power's PSD permit application dated November 1, 2004, the WCFU project will result in significant net emission increases from the Bonanza power plant for the following regulated NSR pollutants:

- particulate matter (PM),
- particulate matter smaller than 10 microns (PM₁₀),
- sulfur dioxide (SO₂),
- nitrogen oxide (NO_x),
- sulfuric acid (H₂SO₄), and
- carbon monoxide (CO).

A BACT analysis for each of these pollutants is presented later in this Statement of Basis. Since potential uncontrolled emissions of volatile organic compounds (VOC) from the WCFU project are estimated at 32 tons per year, less than the PSD significance threshold, no BACT analysis for VOC is required.

The definition of "regulated NSR pollutant" in 40 CFR 52.21(b)(5) includes "any pollutant for which a national ambient air quality standard [NAAQS] has been promulgated." On July 18, 1997, EPA promulgated the NAAQS for particulate matter with aerodynamic diameter smaller than 2.5 microns (PM_{2.5}).

Consistent with the October 23, 1997 memorandum titled, "Interim Implementation of New Source Review Requirements for PM_{2.5}," issued by John Seitz, Director of EPA's Office of Air Quality Planning & Standards (OAQPS), and consistent with the April 5, 2005 memorandum titled, "Implementation of New Source Review Requirements in PM_{2.5} Nonattainment Areas," issued by Stephen D. Page, Director of OAQPS, and consistent with the November 1, 2005, Federal Register notice on the proposed implementation rule for the PM_{2.5} NAAQS (70 FR 66044.), in which EPA recommends that PM₁₀ be used as a surrogate for PM_{2.5}, EPA considers all permit limits and analyses in this Statement of Basis that pertain to PM₁₀ to also satisfy the requirements for PM_{2.5} at Deseret Power's proposed WCFU project.

The aforementioned memoranda are available on EPA website:

Oct. 1997 memo: <http://www.epa.gov/region07/programs/artd/air/nsr/nsrmemos/pm25.pdf>

Apr. 2005 memo: <http://www.epa.gov/region07/programs/artd/air/nsr/nsrmemos/pmguid25.pdf>