EXhibit 4

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## **EXHIBIT 4**

United States Environmental Protection Agency, Region 8 Air & Radiation Program, Response to Public Comments on PSD Permit No. PSD-OU-0002-04.00 August 30, 2007 (pages 1-9)

## **RESPONSE TO PUBLIC COMMENTS**

## ON

Draft Air Pollution Control Prevention of Significant Deterioration (PSD) Permit to Construct

Permit No. PSD-OU-0002-04.00

Permittee: Deseret Power Electric Cooperative 10714 South Jordan Gateway South Jordan, Utah 84095

<u>Permitted Facility</u>: 110-Megawatt Waste Coal Fired Unit at Bonanza Power Plant



United States Environmental Protection Agency Region 8 Air & Radiation Program Denver, Colorado August 30, 2007

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## A. <u>INTRODUCTION</u>

On April 14, 2004, Deseret Power submitted a Prevention of Significant Deterioration (PSD) permit application to the United States Environmental Protection Agency, Region 8 (EPA), to approve construction of a new coal-fired electric utility unit at Deseret's existing Bonanza power plant. The application was updated and resubmitted to EPA on November 1, 2004. Several amendments to the application were submitted over the following year and a half. The application, amendments, draft PSD permit, draft Statement of Basis, and all related correspondence between EPA and Deseret Power are contained in the Administrative Record of this permit action, which was made available for 30-day public comment in late June of 2006.

The existing Bonanza power plant is located in eastern Utah, on the Uintah & Ouray Indian Reservation, and consists of a single bituminous coal fired electric utility unit ("Unit 1"), rated at 500 megawatts electrical output. The fuel for Unit 1 is supplied by the Deserado coal mine, located about 35 miles east of the plant. Unit 1 was constructed in the early 1980's and is operating under a Federal PSD permit originally issued by EPA on February 4, 1981, then updated and re-issued on February 7, 2001.

The new unit at Bonanza plant would consist of a Circulating Fluidized Bed (CFB) boiler and associated equipment, rated at 110 megawatts electrical output, and designed to be fueled with waste coal from the Deserado mine. The PSD permit for the new unit is proposed to be issued as a separate permit from the PSD permit for Unit 1.

The EPA published a public notice in the following newspapers, on the following dates, soliciting comments on its proposal to issue the permit for the new unit, in accordance with Sections 160-169 of the Clean Air Act (CAA), 40 CFR 52.21, and 40 CFR part 124:

Uintah Basin Standard (Roosevelt, UT)	June 27, 2006
Vernal Express (Vernal, UT)	June 28, 2006
Grand Junction Sentinel (Grand Junction, CO)	June 28, 2006
Rio Blanco Herald Times (Meeker/ Rangely, CO)	June 29, 2006
Salt Lake Tribune (Salt Lake City, UT)	June 29, 2006

The public comment period ended on July 29, 2006.

On June 22, 2006, the EPA mailed copies of the draft PSD permit, draft Statement of Basis, public notice, and Administrative Record for the proposed permit action, consisting of all permit-related correspondence, to the following parties:

> Uintah County Clerk's Office 147 East Main Street, Suite 2300 Vernal, Utah 84078

Ute Indian Tribe Environmental Programs Office 6358 East Highway 40 Fort Duchesne, Utah 84026

EPA sent the documents to these locations specifically to have the documents available locally for public review, during the public comment period. As stated in the public notice, these documents were also available at the EPA office in Denver, Colorado, and on the internet through EPA's website, at:

#### http://www.epa.gov/region8/air, under the heading "Topics of Interest"

The draft PSD permit would require air pollutant emission controls and restrict emissions of the following pollutants at the CFB boiler and associated pollutant-emitting support equipment: total particulate matter, filterable particulate matter, sulfur dioxide, nitrogen oxide, carbon monoxide, and sulfuric acid.

During the public comment period, one comment letter and one comment e-mail were received by EPA that expressed concerns with the draft permit and/or Statement of Basis. The comment letter, received on July 28, 2006, was from a group of seven environmental organizations: Western Resource Advocates, Environmental Defense, Utah Chapter of the Sierra Club, Southern Utah Wilderness Alliance, Western Colorado Congress, Wasatch Clean Air Coalition, and HEAL Utah. Comments #1 through #11 below are from the letter. The comment e-mail, received on July 26, 2006, was from Kathy Van Dame, representing the Wasatch Clean Air Coalition. Comments #12 through #16 below are from the e-mail.

Comment letters supporting the proposed WCFU project were received from the mayors of seven Utah municipalities: Salem City, Spanish Fork, Provo, Manti City, St. George, Nephi and Levan. Since these letters did not express any concerns with the draft PSD permit, EPA does not consider a response necessary.

After the close of the public comment period, EPA received an e-mail dated April 24, 2007, from Katy Savage of Provo, Utah, expressing concern about pollutants that would be emitted from the WCFU project, and a a letter dated April 25, 2007, from Daniel D. McArthur, Mayor of the City of St. George, Utah, expressing concern about delay in issuing the EPA permit for the WCFU project.

A detailed description of the commenters' concerns, along with EPA's responses to the significant issues raised in the comments, is contained in Section B of this document. Some of the lengthier comments have been paraphrased or generalized to allow direct responses to the concerns raised.

All references in Section B to the "Statement of Basis" mean the draft Statement of Basis dated June 14, 2006, which was made available along with the draft PSD permit for public comment in late June of 2006. All references to the "WCFU" mean Deseret

Power's proposed Waste Coal Fired Unit at Bonanza power plant, the subject of this PSD permit action. All references to "EPA" mean the EPA Region 8 office in Denver, unless otherwise indicated.

Section C of this document describes the specific provisions of the draft permit and draft Statement of Basis that have been changed in the final permit decision as a result of public comment. The final permit and final Statement of Basis include some administrative changes that may not be described in Section C, including renumbering permit conditions due to additional conditions added to the final permit, renumbering sections of the Statement of Basis due to additional explanations added to the Statement of Basis, and rewording as necessary to reflect the fact that the permit and Statement of Basis are final, not draft.

Deseret Power requested meetings with EPA, and met with EPA, on October 16, 2006 and on May 7, 2007, and submitted additional written permit-related material after the close of the public comment period. EPA is including the additional material and a summary of the October 16, 2006 and May 7, 2007 meetings in the Administrative Record for EPA's final permit decision.

Documents upon which EPA relied in reaching the final permit decision, and as referenced in EPA's response to comments, such as the Statement of Basis, the PSD permit application, and supplemental documents, are contained in the Administrative Record. Copies of EPA's response-to-comments document, final permit, and final Statement of Basis, are available on EPA's website at:

http://www.epa.gov/region8/air, under the heading "Topics of Interest"

The website also provides a link to the Administrative Record.

Copies of the response-to-comments document, the final permit, and the final Statement of Basis are also available for public review at the same locations where the draft permit and Statement of Basis were available for review:

> Uintah County Clerk's Office 147 East Main Street, Suite 2300 Vernal, Utah 84078

Ute Indian Tribe Land Use Department P.O. Box 460 6358 East Highway 40 Fort Duchesne, Utah 84026 All documents in the Administrative Record are available at the EPA office:

US EPA Region 8 Air & Radiation Program 1595 Wynkoop Street Denver, CO 80202-1129 Contact: Mike Owens, 303-312-6440 owens.mike@epa.gov

## B. <u>COMMENTS AND RESPONSES</u>

The descriptions of public comments below are a paraphrasing of the originally submitted comments. The full text of each public comment may be found in the Administrative Record for issuance of the WCFU permit, available at the same locations as the draft permit package was available (the Uintah County Clerk's office in Vernal, Utah, the Ute Indian Tribe office in Fort Duchesne, Utah, and the EPA Region 8 office in Denver, Colorado).

## 1. CARBON DIOXIDE/GREENHOUSE GAS EMISSIONS

#### Comment #1:

One group of commenters requested that EPA address carbon dioxide  $(CO_2)$  and other greenhouse gas (GHG) emissions from the proposed Deseret Bonanza WCFU. The commenters stated that the Clean Air Act requires EPA to do so in two ways.

<u>Comment #1.a.</u> First, the commenters believe EPA has a legal obligation to regulate  $CO_2$  and other GHGs under the Clean Air Act and thus should set  $CO_2$  emission limits in this permit.

<u>Comment #1.b.</u> Second, the commenters believe that EPA should consider emissions of  $CO_2$  in its BACT analyses for other pollutants at the Bonanza WCFU.

In support, the commenters cited a U.S. Supreme Court case that was pending at the time, an Environmental Appeals Board decision, a draft EPA guidance document, and an article presenting a potential legal rationale for using PSD permits to limit CO<sub>2</sub> emissions.

#### Response #1:

**Response #1.a.** Disagree. EPA recognizes the importance of addressing the global challenge of climate change, and in light of the Supreme Court's decision in *Massachusetts v. EPA*, 127 S. Ct. 1438 (2007), the Agency is working diligently to develop an overall strategy for addressing the emissions of CO2 and other GHGs under the Clean Air Act. However, EPA does not currently have the authority to address the challenge of global climate change by imposing limitations on emissions of CO<sub>2</sub> and other greenhouse gases in PSD permits.

It is well established that "EPA lacks the authority to impose [PSD permit] limitations or other restrictions directly on the emission of unregulated pollutants." *North County Resource Recovery Assoc.*, 2 E.A.D. 229, 230 (EAB 1986). The Clean Air Act and EPA's regulations require PSD permits to contain emissions limitations for "each pollutant subject to regulation" under the Act. CAA § 165(a)(4); 40 C.F.R. § 52.21(b)(12). In defining those PSD permit requirements, EPA has historically interpreted the term "subject to regulation under the Act" to describe pollutants that are presently subject to a statutory or regulatory provision that requires actual control of emissions of that pollutant. *See* 43 Fed. Reg. 26388, 26397 (June 19, 1978) (describing pollutants subject to BACT requirements); 61 Fed. Reg. 38250, 38309-10 (July 23, 1996) (listing pollutants subject to PSD review). In 2002, EPA codified this approach for implementing PSD by defining the term "regulated NSR pollutant" and clarifying that Best Available Control Technology is required "for each regulated NSR pollutant that [a major source] would have the potential to emit in significant amounts." 40 C.F.R. § 52.21(j)(2); 40 CFR 52.21(b)(50).

In defining a "regulated NSR pollutant," EPA identified such pollutants by referencing pollutants regulated in three principal program areas -- NAAQS pollutants, pollutants subject to a section 111 NSPS, and class I or II substance under title VI of the Act-- as well as any pollutant "that otherwise is subject to regulation under the Act." 40 CFR 52.21(b)(50)(i)-(iv). As used in this provision, EPA continues to interpret the phrase "subject to regulation under the Act" to refer to pollutants that are presently subject to a statutory or regulatory provision that requires actual control of emissions of that pollutant. Because EPA has not established a NAAQS or NSPS for CO<sub>2</sub>, classified CO<sub>2</sub> as a title VI substance, or otherwise regulated CO<sub>2</sub> under any other provision of the Act, CO<sub>2</sub> is not currently a "regulated NSR pollutant" as defined by EPA regulations.

Although the Supreme Court decided the case cited by commenters and held that  $CO_2$  and other GHGs are air pollutants under the CAA, *see Massachusetts v. EPA*, 127 S. Ct. 1438 (2007), that decision does not require the Agency to set  $CO_2$  emission limits in the PSD permit for the Deseret Bonanza WCFU. Notably, the Court did not hold that EPA was required to regulate  $CO_2$  and other GHG emissions under Section 202, or any other section, of the Clean Air Act. Rather, the Court concluded that these emissions were "air pollutants" under the Act, and, therefore, EPA could regulate them under Section 202 (the provision at issue in the *Massachusetts* case), subject to certain Agency determinations pertaining to mobile sources.

EPA is currently exploring options for addressing GHG emissions in response to the Supreme Court decision. EPA is taking the first steps toward regulating GHG emissions from mobile sources, but the Agency has not yet issued regulations requiring control of CO<sub>2</sub> emissions under the Act generally or the PSD program specifically. Accordingly, EPA cannot include emissions limitations for CO<sub>2</sub> (or other GHGs that are not otherwise regulated NSR pollutants) in the Deseret PSD permit because it has long been established that "EPA lacks the authority to impose [PSD permit] limitations or other restrictions directly on the emission of unregulated pollutants." *North County*, 2 E.A.D. at 230. At this time, we believe that any action EPA might consider taking with respect to regulation of CO<sub>2</sub> or other GHGs in PSD permits or other contexts should be addressed through notice and comment rulemaking, allowing for a process which is public and transparent and based on the best available science.

**Response #1.b:** Disagree. EPA recognizes the importance of addressing the global challenge of climate change, and in light of the Supreme Court's decision in *Massachusetts v. EPA*, 127 S. Ct. 1438 (2007), the Agency is working diligently to develop an overall strategy for addressing the emissions of CO2 and other GHGs under the Clean Air Act. Nevertheless, with regard to the present permitting decision, the

record before the Agency does not suggest, and commenters have not provided any evidence showing, that the outcome of our BACT analysis for the regulated NSR pollutants emitted by the Deseret Bonanza WFCU would have been resulted in a different choice of control technologies had we considered the potential collateral environmental impacts of  $CO_2$  emissions.

The CAA defines BACT as "an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this Act emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of such pollutant." CAA § 169(3) (emphasis added); *see also* 40 CFR 52.21(b)(12). EPA has established a five-step, top-down process for determining BACT emission limits for each PSD-regulated pollutant considered in a permitting decision: (1) identify all potentially applicable control options (2) eliminate technically infeasible control options; (3) rank remaining technologies by control effectiveness; (4) eliminate control options from the top down based on energy, environmental, and economic impacts; and (5) select the most effective option not eliminated as BACT. *See Prairie State Generating Co.*, 13 E.A.D.

\_\_\_\_, PSD Appeal No. 05-05, slip op. at 14-18 (EAB Aug. 24, 2006) (summarizing and describing steps in the top-down BACT analysis). Accord Three Mountain Power, L.L.C., 10 E.A.D. 39, 42-43 n.3 (EAB 2001); Knauf Fiber Glass, GmbH, 8 E.A.D. 121, 129-31 (EAB 1999); Hawaii Electric Light Co., 8 E.A.D. 66, 84 (EAB 1998). Thus, EPA has traditionally considered the collateral impacts (energy, environmental, and economic) of each BACT option at Step 4 of this analysis.

The CAA does not specify how EPA should weigh these collateral impacts when determining BACT for a particular source. The Agency's longstanding interpretation is that "the primary purpose of the collateral impacts clause is to temper the stringency of the technology requirements whenever one or more of the specified collateral impacts – energy, environmental, and economic – renders use of the most effective technique inappropriate." *Columbia Gulf Transmission Co.*, 2 E.A.D. 824, 826 (EAB 1989). Accordingly, the environmental impacts analysis "is generally couched in terms of discussing which available technology, among several, produces less adverse collateral effects, and, if it does, whether that justifies its utilization even if the technology is otherwise less stringent." *Old Dominion Electric Cooperative*, 3 E.A.D. 779, 792 (EAB 1992).

In this case, the commenters have not shown that consideration of the environmental impacts of  $CO_2$  emissions in the collateral impacts step of the EPA's BACT analysis for the regulated NSR pollutants would lead to a different result in our selection of BACT for the Deseret facility. The record before the Agency does not suggest that the Agency should have selected a less stringent option as BACT in order to reduce the potential collateral environmental impacts of  $CO_2$  emissions. Although there may be some differences in the  $CO_2$  emissions resulting from use of the technologies we evaluated at step 4 of the BACT analysis, we do not have information indicating such

differences would be significant enough to necessitate changing our selection of BACT for other pollutants. *See Hillman Power Co., L.L.C.*, PSD Appeal Nos. 02-04 (July 31, 2002) ("collateral environmental impacts analysis need only address those control alternatives with any significant or unusual environmental impacts that have the potential to affect the selection or elimination of a control alternative."). Commenters have not given EPA cause to believe that comparisons of the CO<sub>2</sub> emissions from various control technologies considered in the BACT analysis for the Deseret Bonanza WCFU would render unacceptable any of the options we have identified as BACT for this PSD permit.

Specifically, the comments did not contain any information on CO<sub>2</sub> emissions that would lead EPA to reach a different conclusion in its BACT analysis for this facility. The commenters state only that "EPA must consider emissions of CO<sub>2</sub> in its BACT analysis for the Bonanza WCFU," but they do not address how the particular control technologies considered for the Bonanza WCFU would have resulted in substantially differing  $CO_2$  emissions. Nor do they discuss how any such differences would have resulted in differing impacts that would have necessitated our selecting a different technology as BACT. Such comparisons are at the heart of the BACT analysis, and thus are required by a commenter alleging a deficiency in the analysis. See Old Dominion, 3 E.A.D. at 793 (finding no error based on petitioner's lack of "specificity and clarity" because they provided "no specific comparison" of differences in the environmental impacts of the various technologies considered in the BACT analysis). See also Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 553 (U.S. 1978) (explaining that comments regarding an Agency's analysis of environmental impacts "cannot merely state that a particular mistake was made, ...[but] must show why the mistake was of possible significance in the results"). Accordingly, commenters have failed to show how consideration of CO<sub>2</sub> emissions in the BACT environmental impacts analysis would have changed the Deseret Bonanza permitting decisions.

Moreover, because EPA has historically interpreted the phrase "environmental impacts" to focus on local environmental impacts that are directly attributable to the proposed facility, the collateral impacts analysis of this BACT determination is not the appropriate mechanism for addressing the potential global impacts of  $CO_2$  emissions from the Deseret Bonanza WCFU. See Columbia Gulf, 2 E.A.D. at 829-30 (finding that the environmental impacts analysis "focuses on local impacts that constrain the source from using the most effective technology"). Any predicted impacts in the area surrounding the Deseret facility that are potentially due to global climate change – to which the  $CO_2$  and other GHG emissions from the proposed source may contribute generally – are not the type of local environmental impact that is readily traceable directly back to the particular source subject to PSD review.

EPA's interpretation that the collateral environmental impacts analysis should focus on local impacts that are directly attributed to construction and operation of the proposed source is supported by relevant statutory language, legislative history, EAB decisions, and EPA policies and permitting decisions. Both the "case-by-case" language of the BACT definition and Congress' stated reason for adding the collateral impacts analysis to that definition suggest that a facility-centered, locally-focused analysis is appropriate. See Kawaihae Cogeneration Project, 7 E.A.D. 107, 116-17 (EAB 1997) (describing how the collateral impacts analysis considers factors unique to the specific source); Senate Comm. on Environment And Public Works, A Legislative History of the Clean Air Act Amendments of 1977 (Comm. Print August 1978), vol. 6 at 4723-24 (explaining that the collateral impacts clause was added to provide permitting authorities with flexibility to consider the impact of a specific facility on the character of the community in which it was located). While the EAB's North County decision directed permitting authorities to look at the effect of emissions from non-PSD regulated hazardous air pollutants (i.e., HAPs) in the collateral impacts analysis, the Board's opinion did not specify that all emissions not directly regulated under PSD – such as  $CO_2$ - had to be considered as well, See id., 2 E.A.D. at 230 (stating that the "exact form" and "level" of the BACT environmental impacts analysis would depend on the facts of the individual permitting decision). In subsequent policy guidance, EPA did not interpret North County to call for consideration of global impacts, see, e.g., Memorandum from Gerald Emison, OAQPS Director entitled Implementation of North County PSD Remand, pp. 3-4 (Sept. 22, 1987), and the EAB later determined that EPA did not have to consider CO<sub>2</sub> and other GHG emissions in the BACT environmental impacts analysis. *Interpower* of New York, 5 E.A.D. 130 (EAB 1994); Kawaihae Cogeneration Project, 7 E.A.D. 107 (EAB 1997). Consistent with these prior EAB decisions and Agency policy, EPA has not previously considered the environmental impact of  $CO_2$  and other GHG emissions in setting the BACT levels for permits,<sup>1</sup> and for the reasons discussed above, we do not consider it necessary to do so in issuing the PSD permit for the Deseret Bonanza WFCU.

<sup>&</sup>lt;sup>1</sup> Although one draft of EPA's 1990 *NSR Workshop Manual* referenced "greenhouse gas emissions" as an example of environmental impact that a reviewing authority might consider in the BACT analysis, EPA has not done so in practice. The Agency never finalized the draft guidance cited by commenters, and other drafts of that same document do not include the phrase "greenhouse gas emissions" as an example of the type of environmental impact to be considered in the BACT analysis. *See* http://www.epa.gov/region07/programs/artd/air/nsr/nsrmemos/1990wman.pdf, at B49. Moreover, both of these drafts of the *NSR Workshop Manual* also indicate that the BACT environmental impacts analysis should focus on "consideration of site-specific circumstances," which contrasts with the notion that such analysis should be used to consider the source's impact on what is a global issue. *Id.* at B47.