Exhibit 2

Response to Comments
(pages 1-20)

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

Permitted Facility:
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. INTRODUCTION

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 re-submitted 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. COMMENTS AND RESPONSES

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.

Comment #1.a. 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.

Comment #1.b. 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_2 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_2 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_2, classified CO_2 as a title VI substance, or otherwise regulated CO_2 under any other provision of the Act, CO_2 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_2 emissions under the Act generally or the PSD program specifically. Accordingly, EPA cannot include emissions limitations for CO_2 (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_2 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_2 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_2 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_2 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_2 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_2 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,[1] 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.

[1] 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.

2. INTEGRATED GASIFICATION COMBINED CYCLE (IGCC)

Comment #2:

One group of commenters asserted that the proposed permit did not adequately evaluate IGCC as an available method to lower air emissions in the BACT analysis. The group of commenters presented four arguments:

Comment #2.a. First, arguing that Federal law requires a *thorough* evaluation of IGCC as part of the BACT analysis.

Comment #2.b. Second, arguing that recent state actions requiring consideration of cleaner coal technology establish irrefutable precedence for the consideration of IGCC, and validate the commenters' position on the "plain language of the definition of BACT."

Comment #2.c. Third, alleging EPA Region 8 previously determined it was appropriate to evaluate IGCC in the BACT analysis for a CFB coal-fired power plant. Commenters cited EPA Region 8's April 6, 2004 letter to the Utah Division of Air Quality, on Utah's proposed PSD permit for Nevco Energy's Sevier Power Company Project. Commenters also cited EPA's April 28, 2004 request to Deseret Power to provide an explanation of why Deseret ruled out IGCC for the WCFU project.

Comment #2.d. Fourth, pointing out the overall benefit of the alternative IGCC technology, including fewer emissions of criteria and hazardous air pollutants, the opportunity for capturing greenhouse gases, and increases in efficiency over other coal burning technologies.

Response #2:

Response #2.a. Disagree. EPA does not agree that the Clean Air Act requires a detailed evaluation of IGCC for the proposed facility, at or beyond step 1 of the top-down BACT analysis. We evaluated whether IGCC should be listed at step 1 and considered the commenters arguments, but we have not been persuaded to change our view that this alternative process would represent a redefinition of the source proposed by the applicant and thus need not be listed as a potentially applicable control option at step 1 and evaluated further in the BACT analysis for this type of facility. We have, however, evaluated this option as a potential alternative to the proposed source under other parts of our PSD permit review; see discussion below in response #2.d.

The Administrator and EPA's Environmental Appeals Board ("EAB" or "Board") have long maintained a policy against utilizing the BACT requirement as a means to fundamentally redefine the basic design or scope of a proposed project. *See, e.g., Knauf Fiber Glass, GMBH*, 8 E.A.D. 121, 140 (EAB 1998); *Pennsauken County, New Jersey, Resource Recovery Facility*, 2 E.A.D. 667, 673 (Adm'r 1988). EPA has not required applicants proposing to construct coal-fired steam electric generating facilities to evaluate building natural gas-fired combustion turbines as part of a BACT analysis, even though a gas turbine may be inherently less polluting. *SEI Birchwood Inc*, 5 E.A.D. 25 (1994); *Old Dominion Electric Cooperative Clover, Virginia*, 3 E.A.D. 779, 793 n. 38 (Adm'r 1992). Likewise, in *Hawaii Commercial & Sugar Co.*, the EAB found no error by the permitting authority when the petitioner argued that the BACT analysis for a coal-fired steam electric generator should include the option of constructing an oil-fired combustion turbine. 4 E.A.D. 95, 99-100 (EAB 1992).

EPA's policy reflects the Agency's longstanding judgment that limits should exist on the degree to which permitting authorities can dictate the design and scope of a proposed facility through the BACT analysis. This policy is based on a reasonable interpretation of sections 165 and 169(3) of the CAA, which recognizes that, although the permitting authority must take comment on and may consider alternatives to a proposed facility, the BACT analysis itself is conducted without changing fundamental characteristics of the proposed source.

The EAB recently reiterated and explained EPA's policy against redefining the source through the BACT analysis in *Prairie State Generating Company*, PSD Appeal No. 05-05 (Aug. 24, 2006). In the Prairie State case, involving a permit for an coal-fired electric generating station that was co-located and co-permitted with a new coal mine supplying fuel for the facility, the Board determined that it was consistent with EPA's historic policy and the Clean Air Act for the permitting authority in this case to decline to conduct a detailed BACT review of the option of using lower-sulfur coal from another location. Based on various provisions of the Clean Air Act, including language that requires the "proposed facility" to be "subject to" BACT, the Board concluded that "the statute contemplates that the permit issuer looks to how the permit applicant defines the proposed facility's purpose or basic design" as part of Step 1 of the top-down BACT analysis. *Prairie State*, slip. op. at 28-29. The Board further explained that "the permit issuer must be mindful that BACT, in most cases, should not be applied to regulate the applicant's objective or purpose for the proposed facility." *Prairie State* slip. op. at 30. The Seventh Circuit recently affirmed the EAB's *Prairie State* decision, including the Board's interpretation of the interplay of determining what redefines a source and the required BACT analysis. *See generally Sierra Club v. EPA*, slip op. (7th Cir. Aug. 24, 2007).

As discussed by the Board in the *Prairie State* opinion, affirmed by the Seventh Circuit, and explained more fully below, EPA's policy against redefining the proposed source through the BACT analysis is supported by a permissible and reasonable interpretation of the Clean Air Act. The language in sections 165 and 169 of the CAA distinguishes between the consideration of alternatives to a proposed source on the one hand and permitting and selection of BACT for the proposed source on the other. Alternatives to a proposed source are evaluated through the CAA section 165(a)(2) public hearing process, which requires that, before a permitting authority may issue a permit, interested persons have an opportunity to "submit written or oral presentations on the air quality impact of such source, *alternatives thereto*, control technology requirements, and other appropriate considerations." 42 U.S.C. § 7475(a)(2) (emphasis added). By listing "alternatives" and "control technology requirements" separately in section 165(a)(2), Congress distinguished "alternatives" to the proposed source that would wholly replace the proposed facility with a different type of facility from the kinds of "production processes and available methods, systems and techniques" that are potentially applicable to a particular type of facility and should be considered in the BACT review. *See* 42 U.S.C. § 7479(3).

In contrast to the requirements of section 165(a)(2), other parts of the PSD permitting process, including the requirement to apply BACT, focus on, and are generally confined by, the project as proposed by the applicant. Sections 165(a)(1) and 165(a)(4) of the CAA provide that no facility may be constructed unless "a permit has been issued for *such proposed facility* in accordance with this part" and "the *proposed facility* is *subject to* best available control technology for each pollutant subject to regulation under the Act." 42 U.S.C. § 7475(a)(1) and (a)(4) (emphasis added). The following definition of BACT in section 169(3) of the Act also makes clear that the BACT review is based on the proposed project, as opposed to something fundamentally different:

> 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.

42 U.S.C. § 7479(3) (emphasis added). The phrases "proposed facility" and "such facility" in section 165(a)(4) and 169(3) refer to the specific facility proposed by the applicant, which has certain inherent design characteristics. The Act also requires BACT to be determined "on a case-by-case basis." The case-specific nature of the BACT analysis indicates that the particular characteristics of each facility are an important aspect of the BACT determination. Thus, the Act requires that permitting authorities determine BACT for each facility individually, considering the unique characteristics and design of each facility.

As the group of commenters has also pointed out, the statutory definition of BACT also requires permitting authorities in selecting BACT to consider "application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques." 42 U.S.C. §7479(3). EPA has interpreted this phrase to require that permitting authorities evaluate both add-on pollution control technologies and lower polluting process in the BACT review. *Prairie State* at 33.

Considering these provisions together, the Act requires that we conduct the BACT analysis on a "case-by-case" basis on the "proposed facility" while concurrently considering the "application of production processes and available methods, systems and techniques" that could alter the proposed facility. The statute does not provide clear direction on how EPA is to reconcile these concepts and simultaneously consider the particulars of the facility proposed by the applicant while also assessing the use of methods or technology that could modify those particulars. Where a statute is ambiguous and Congress has not spoken to the precise issue, an administrative agency may formulate a policy to resolve the issue, provided that the policy is based on a permissible construction of the statute. *Chevron v. Natural Resources Defense Council*, 104 S.Ct. 2778, 2782 (1984). In this instance, sections 165 and 169(3) of the Clean Air Act are permissibly construed to authorize EPA and permitting authorities to establish some level of balance between the case-by-case nature of a BACT determination and the need to consider available processes, methods, systems, and techniques to reduce emissions. EPA's policy against redefining a source as part of the BACT analysis reasonably harmonizes the competing BACT obligations by requiring the permitting authority to consider potentially applicable processes, methods, systems, or techniques that may reduce pollution from the type of source proposed, provided such processes or techniques do not fundamentally redefine the basic design or scope of the facility proposed by the permit applicant.

EPA does not read the legislative history cited by the commenter to require a detailed evaluation of the IGCC technology in the BACT analysis for every proposed facility that generates electricity from coal. That Senator Huddleston intended for the phrase "innovative fuel combustion techniques" to encompass "gasification" or "low Btu gasification" does not necessarily require EPA or other permitting authorities to identify the IGCC option as a candidate for further analysis at step 1 of a top-down BACT review. The "innovative fuel combustion techniques" phrase appears in the BACT definition among a list of examples of things included in the phrase "production processes and available methods, systems, and techniques." Thus, the "innovative fuel combustion" language, like the phrase it modifies in the definition of BACT, is limited by other language discussed above that requires BACT to be applied to each proposed facility and determined on a case-by-case basis. Thus, even assuming that coal gasification was in all respects an innovative fuel combustion technique for producing electricity from coal, we do not interpret the Clean Air Act to require an "innovative fuel combustion technique" to be subject to a detailed BACT review when application of such a technique would re-design the proposed source to the point that it becomes an alternative type of facility, which, as discussed below, we believe would be the case if the IGCC technology were applied to Deseret's project.

Furthermore, it is not clear from the terms of his statement that Senator Huddleston himself intended to require mandatory review of coal gasification in every case where such an option was not proposed by the permit applicant. Senator Huddleston said the purpose of the amendment was to leave no doubt that "all actions taken by the fuel user are to be taken into account." This phrase suggests the Senator wanted to make sure that, when a fuel user was proposing an innovative fuel combustion technique, such as coal gasification, that such actions by the fuel user would be taken into account and credited in the determination of BACT for the proposed facility. Thus, the Senator's statement could be read to express an intent similar to that expressed in a subsequent Congress when adding the phrase "clean fuels" to the definition of BACT in the 1990 amendments of the Clean Air Act. Pub. Law No. 101-549, § 403(d), 104 Stat. at 2631 (1990). At the time "clean fuels" was added to the list that includes "innovative fuel combustion techniques," the relevant Senate committee report stated the following in consecutive paragraphs:

> The Administrator may consider the use of clean fuels to meet BACT requirements if a permit applicant proposes to meet such requirements using clean fuel. . . . In no case is the Administrator compelled to require mandatory use of clean fuels by a permit applicant.

S. Rep. 101-228, at 338 (describing section 402(d) of S. 1630). Based on this legislative history, EPA does not interpret the list of examples that appear in the BACT definition after the phrase "production processes, methods, systems, or techniques" to require mandatory evaluation of each of those options at advanced stages of the BACT analysis, regardless of the degree to which such an option would redefine the type of facility proposed by the permit applicant.

Although EPA reads the Act to preclude redefining the source and to draw a distinction between alternatives to the proposed source and lower polluting process that can be applied to the proposed source, EPA does not interpret the Clean Air Act to obligate a PSD permitting authority to accept all elements of a proposed project when determining BACT. To the contrary, EPA recognizes that the Act calls for an evaluation of the "application of production processes and available methods, systems, and techniques." 42 U.S.C. §7479(3).

As the Board observed in *Prairie State*, EPA's policy against redefining the source is only relevant when considering lower polluting processes and would not permit a reviewing authority to rule out "add-on controls" at Step 1 of the BACT analysis. Slip. op. at 33. Further, although EPA does not require a source to consider a totally different design, some design changes to the proposed source are within the scope of the BACT review. *See Knauf Fiber Glass*, 8 E.A.D. at 136. As the Board observed in the *Prairie State* case, the central issue in situations involving a lower polluting process concerns "the proper demarcation between those aspects of a proposed facility that are subject to modification through the application of BACT and those that are not." Slip. Op. at 26. The Board observed that one of the permit issuer's tasks at step 1 of the BACT analysis is to "discern which design elements are inherent to [the applicant's] purpose, articulated for reasons independent of air quality permitting, and which design elements may be changed to achieve pollutant emissions reductions without disrupting the applicant's basic business purpose for the proposed facility." *Prairie State*, slip. op. at 30.

Since this line can be difficult to draw in each case, the Administrator and Environmental Appeals Board have generally recognized that the decision on whether to include a lower polluting process in the list of potentially-applicable control options compiled at Step 1 of the top-down BACT analysis is a matter within the discretion of the PSD permitting authority. *Knauf Fiber Glass,* 8 E.A.D. at 136; *Old Dominion*, 3 E.A.D.

at 793; *Hawaiian Commercial*, 4 E.A.D. at 100 & n.9. The Administrator and the EAB have usually respected the decisions of the permitting authority and only remanded permits in cases where it was clear that the permitting authority abused its discretion by excluding a particular option from consideration in the BACT review. *Knauf Fiber Glass*, 8 E.A.D. at 140. *See, e.g., Hibbing Taconite Company*, 2 E.A.D. 838, 843 (Adm'r 1989). The Seventh Circuit affirmed this view in upholding the EAB's *Prairie State* decision, emphasizing the discretion given the permitting authority in making the technical judgment as to "where control technology ends and a redesign of the 'proposed facility' begins." *Sierra Club v. EPA*, slip op. at 5.

In its review of this issue in *Hibbing*, the Board considered whether the option in question would "require any fundamental change to Hibbing's product, purpose, or equipment." *Hibbing* at 843 n. 12. In *Prairie State*, where the use of the alternative coal source arguably did not significantly affect the power-generating equipment to be used at the proposed source, the Board focused on the applicants "objective or purpose" to the extent that purpose was "articulated for reasons independent of air quality permitting." *Prairie State*, slip. op. at 30.

With respect to the project proposed by Deseret, our assessment is that the application of the IGCC process to the Deseret facility would fundamentally change the nature of the proposed major source. The IGCC option would both fundamentally change the basic design of the equipment that Deseret proposes to install and fundamentally alter the objective and purpose of Deseret to make productive use of a coal supply that was previously considered a waste. Thus, we consider the IGCC process to be an alternative to the proposed source that should be evaluated under section 165(a)(2) of the Clean Air Act rather than as a BACT candidate under section 165(a)(4).

From an equipment perspective, Deseret has proposed a facility that fires pulverized waste coal in a fluidized mixture with limestone and inert materials, in a boiler to generate steam to drive an electric turbine. An IGCC facility uses a chemical process to first convert coal into a synthetic gas and to fire that gas in a combined cycle turbine. "Final Report, Environmental Footprints and Costs of Coal-Based Integrated Gasification Combined Cycle and Pulverized Coal Technologies," EPA-430/R-06/006, July 2006. The combined cycle generation power block of an IGCC process employs the same turbine and heat recovery technology that is used to generate electricity with natural gas at other electric generation facilities. Thus, this portion of the IGCC process is very similar to existing power generation designs that EPA has agreed would redefine the basic design of the source when an applicant proposed to construct a pulverized coal-fired boiler. *SEI Birchwood Inc*, 5 E.A.D. 25 (1994); *Old Dominion Electric Cooperative Clover, Virginia*, 3 E.A.D. 779 (Adm'r 1992). Furthermore, the core process of gasification at an IGCC facility is fundamentally different than a boiler. Coal gasification is more akin to technology employed in the refinery and chemical manufacturing industries than technologies generally in use in power generation (i.e. a controlled chemical reaction versus a true combustion process). Use of coal gasification technology would necessitate different types of expertise on the part of the applicant and employees to produce the desired product (electricity). Thus, these fundamental differences in equipment design are sufficient to conclude that the IGCC process would redefine the proposed source. Similarly, in *Sierra Club v. EPA*, slip op. at 4 (7th Cir. Aug. 24, 2007), the Court upheld the EAB's decision that use of low-sulfur coal that was available only at a distance from a proposed plant would redefine the source, because the plant was designed to use higher sulfur coal located at a nearby mine. As the Court explained, "to convert the design from that of a mine-mouth plant to one that burned coal obtained from a distance would require that the plant undergo significant modifications – concretely, the half-mile-long conveyor belt, and its interface with the mine and the plant, would be superfluous and instead there would have to be a rail spur and factilities for unloading coal from rail cars and feeding it into the plant." *Id.*

Furthermore, Deseret Power's proposal calls for extracting the remaining heating value of the waste coal that has accumulated over the past 20 years in order to conserve other natural resources. In light of the technical difficulties of using IGCC for waste coal (described in detail below), IGCC would not serve the basic purpose of the project, which is to take advantage of the current waste coal reserves and future waste coal generated from the coal washing operations that provide the existing Bonanza Unit 1 with its coal. *See* Letter from Ed Thatcher, Deseret Power, to Richard R. Long, EPA Region 8, May 10, 2005. Thus, in addition to fundamentally changing the basic design of the source that Deseret proposes to construct, the IGCC option would also have the effect of regulating the applicant's objective or purpose for the proposed facility by precluding the use of the waste coal resource. The record reflects that Deseret is seeking to use waste coal for reasons independent of air quality permitting. See *Prairie State*, slip. op. at 30.

We acknowledge that in the *Prairie State* case, the EAB recognized that IGCC technology could be listed as a potentially applicable option at step 1 of the BACT analysis, as Illinois EPA had elected to do in that case. However, the Board's opinion in *Prairie State* did not interpret the Clean Air Act to require IGCC to be listed as a potentially applicable control option àt step 1 for every permit application involving a coal-fired steam electric generating unit. In *Prairie State*, the Board did not directly address the issue raised by the Petitioners comment on the Deseret permit because Illinois EPA chose, in an exercise of its discretion, to list the IGCC option at step 1 of the BACT analysis for the proposed facility and further analyze the option. IEPA ultimately eliminated the option at step 2. *See Prairie State*, slip. op. at 45. In Prairie State, the Board pointed to IEPA's consideration of the IGCC option beyond step 1 to illustrate that there was no question that IEPA had conducted a sufficiently thorough step 1 BACT analysis in that case, because IEPA had even considered an option that "would have required extensive design changes to Prairie State's proposed facility." Slip. op. at 36. The Board did not conclude that IGCC, or any other option involving such extensive design changes, had to be listed as a potentially applicable option at Step 1 in each case or find that it would be an abuse of a permitting authorities discretion to decline to list IGCC at Step 1 of the BACT analysis for the type of facility proposed by Deseret. The Board continued to recognize that the decision of where to draw the line between BACT options listed at step 1 and alternatives to the proposed source is ultimately a matter within the discretion of the permitting authority. *Prairie State* slip. op. at 29 n. 22.

Moreover, even if EPA was to list IGCC as a potentially applicable option at step 1 of the BACT analysis for the facility proposed by Deseret, the IGCC option could also be eliminated at step 2 of the top-down BACT analysis for the facility proposed by Deseret. It is not technically feasible to use Deseret's waste coal in the IGCC process. Based on an analysis of samples, Deseret's waste coal has an average heating value of approximately 4,000 Btu/lb, with a range of 3,051 Btu/lb to 5,326 Btu/lb, and ash content of the waste coal is estimated by Deseret to be in excess of 50 percent by weight on a dry basis. *See* Statement of Basis at 9. As explained below, IGCC units are not designed to operate, nor have they been operated, with coal that has a heating value as low, or ash content as high, as the waste coal that will be utilized for the proposed project.

A recently issued EPA report on IGCC states that "relatively little research or commercial work has been done to investigate gasification of low rank coals, including subbituminous and lignite, for electric generation purposes. The existing IGCC plants use bituminous coal as feedstocks." *See* "Final Report, Environmental Footprints and Costs of Coal-Based Integrated Gasification Combined Cycle and Pulverized Coal Technologies," EPA-430/R-06/006, July 2006, page ES-1, available in the Administrative Record for this permit and through website at:

http://www.epa.gov/air/caaac/coaltech/2007_01_epaigcc.pdf

The report only discusses IGCC units as a possibility for use with bituminous, subbituminous and lignite coals. Deseret's waste coal is a lower rank of coal than subbituminous or lignite, having much lower heat content and much higher ash content than either subbituminous or lignite.

The above-mentioned EPA report states that there are currently two commercial-scale, coal-based IGCC plants in the U.S. and two in Europe. The U.S. projects (Wabash River Repowering Project in Indiana and Tampa Electric Polk Power Station in Florida) were both supported by the DOE's Clean Coal Technology demonstration program. Both plants have operated on bituminous coals and petroleum cokes; no use of low-rank coal at these facilities is known. EPA report at 2-6 and 2-7.

Another publication on IGCC analyzes the impact that various coal parameters have on various gasifiers, based on actual operation of the gasifiers. *See* "Coal Quality Handbook for IGCC," published by Cooperative Research Centre for Coal in Sustainable Development, Technology Assessment Report 8, April 1999, available through website at http://www.ccsd.biz/products/qualitybook.cfm .

Page 14 of the Handbook lists the maximum ash content of the coal that can be handled by various types of gasifiers. For a moving bed gasifier, the ash content has to be less than 15 percent; for an entrained bed gasifier, less than 25 percent; and for a fluidized bed gasifier, less than 40 percent. As mentioned above, Deseret's waste coal will have ash content in excess of 50 percent.

In addition to the Wabash River and Tampa Electric IGCC projects, the above-mentioned Handbook reviews several other IGCC demonstration or pilot projects, utilizing various gasifier designs, and the required characteristics of the coal. These projects include:

BGL IGCC Process, owned/operated by British Gas and Lurgi
Demkolec IGCC plant, owned/operated by Shell
Nedo facility, owned/operated by Engineering Research Associates
Pinon Pine Power Project, owned/operated by Sierra Pacific and MK Kellogg
Prenflow IGCC Process, owned/operated by Krupp Koppers and Siemens AG

However, all of these projects require coal with higher heat content and lower ash content than Deseret's waste coal. Of particular significance is that all of these projects (as well as the Wabash River and Tampa Electric projects) require coal with ash content less than 25 percent by weight on a dry basis. This is less than half the ash content of Deseret's waste coal. The Handbook also indicates that the above-mentioned IGCC projects generally require coal with much higher heat content than Deseret's waste coal, 8,100 to 13,760 Btu/lb, compared to Deseret's range of 3,051 to 5,326 Btu/lb, respectively. *See* Handbook at 22-28.

Inquiries with representatives of IGCC test programs confirmed that IGCC units have not been tested on coal with heat content as low as Deseret's waste coal. The U.S. Department of Energy's Power Systems Development Facility near Wilsonville, Alabama, has only utilized coal as low as 6,000 to 7,000 Btu/lb. The National Energy Technology Institute is also not aware of any IGCC unit utilizing coal with the low heating value that will be used in Deseret Power's proposed WCFU. (Ref: June 9, 2004 letter from Ed Thatcher, Deseret Power, to Richard R. Long, EPA Region 8.)

Response #2.b: Disagree. As was recognized by commenters in the comment letter, state decisions as to how to conduct the BACT analysis do not necessarily set the bar for EPA. As discussed above, the decision of where to draw the line between alternatives to the proposed source is a discretionary matter. The fact that some states have elected to list IGCC at step 1 of the BACT analysis for a coal-fired steam electric generating facility does not require EPA to do so if EPA's reasoned assessment is that the option would redefine the proposed source. EPA *does not* interpret the Clean Air Act to mandate evaluation of IGCC in a BACT analysis in cases involving proposed coal-fired steam electric generating facilities. We do not read the state examples cited by commenters to be based on a contrary interpretation of the Clean Air Act, but rather to reflect policy decisions in those states to conduct a more extensive analysis. Even if a state were to conclude that evaluation of IGCC was mandatory under its interpretation of the Clean Air Act or state law, such a decision by a state is not binding on EPA. Furthermore, because Illinois administers the Federal PSD program under a delegation agreement with EPA Region V, Illinois must act in a manner consistent with EPA's interpretation of the Clean Air Act and controlling regulations.

<u>Response #2.c:</u> <u>Disagree</u>. Regarding EPA's letter to Utah on Nevco, the commenters incorrectly characterized the letter as a determination on evaluating IGCC. Letters from EPA to states providing comments on proposed state PSD permits are not final EPA actions. *See Public Service Co. of Colorado v. Environmental Protection Agency, 225 F 3d 1144 (10th Cir.2000).*

Regarding EPA's request to Deseret Power to provide information regarding IGCC as an alternative to its planned CFB boiler, EPA's correspondence with Deseret merely explored IGCC as a possibility and made no final determination regarding IGCC. (Ref: Letters from Richard R. Long, EPA Region 8, to Ed Thatcher, Deseret Power, dated November 22, 2004, December 29, 2004, and June 22, 2005.)

<u>Response #2.d.</u> <u>Partially agree</u>. Since EPA's judgment is that use of the IGCC process would redefine the proposed source and thus need not be listed as an option at Step 1 of the BACT analysis for the Deseret facility, EPA is treating this comment as a request that EPA consider IGCC technology as an alternative to the proposed source in accordance with section 165(a)(2). EPA agrees with commenters that IGCC technology has many potential environmental benefits, but EPA is not requiring Deseret to employ this alternative technology for the reasons set forth below.

Under CAA section 165(a)(2), a PSD permit may not be issued unless, among other things, "a public hearing has been held with opportunity for interested persons ... to appear and submit written or oral presentations on the air quality impact of such source, alternative thereto, control technology requirements, and other appropriate considerations...." EPA interprets section 165(a)(2) of the CAA to require that EPA consider and provide a reasoned response to comments identifying alternatives to the proposed source. *Prairie State*, slip op. at 38-41.

As EPA has observed in other contexts, EPA considers IGCC to be one of the most promising alternative technologies in reducing the environmental consequence of generating electricity. *See* "Final Report, Environmental Footprints and Costs of Coal-Based Integrated Gasification Combined Cycle and Pulverized Coal Technologies," EPA-430/R-06/006, July 2006, at Forward. EPA has undertaken several initiatives to provide incentives for development and deployment of this technology. This approach is consistent with U.S. policy reflected in the Energy Policy Act of 2005, which established loan guarantees and tax incentives to encourage, but not require, development of IGCC facilities.

As a general matter, assessing whether IGCC is an appropriate alternative may entail a robust analysis of a broad range of factors. Such an analysis is not necessary in this case because there are two specific features of this plant that make IGCC a technically unfeasible option: fuel and plant size. The main fuel for this plant is waste coal, which has an ash content ranging from 40 to 56% and a heating value ranging from 3,000 to 5,400 Btu/lb. There exists no IGCC operating experience with this type of coal. An ash content as high as found in this waste coal would be a major issue for the design and operation of a gasifier (an integral part of an IGCC plant). In addition, the proposed

110 MW size for this plant is too small to be considered viable for an IGCC application. The four operating IGCC installations in the world (two of which are in the U.S.) are each greater than 250 MW in size. In general, the currently proposed IGCC plants by the U.S. power industry are larger than these operating IGCC installations. These plants are being proposed in larger size because they would be relatively less expensive per MW of electricity generation. Thus, even if it were possible to build a 110 MW IGCC plant, it would most likely be too costly to be considered economically viable.

More broadly, EPA believes the environmental and energy security goals of the United States are best served by encouraging the development of all forms of clean coal technology and the development of alternative fuels. Further, providing a reliable and secure supply of electricity to meet growing demand in the United States without adverse affects on air quality will require the use of a diverse array of power producing technologies and innovations in pollution control technology for each type of generating unit. Deseret's proposal to utilize a previously untapped reserve of waste coal with the best pollution control technology available for this type of source is consistent with these goals. In summary, comment #2 has not resulted in any changes to the permit.

3. SUPERCRITICAL CFB BOILER

<u>Comment #3</u>:

One group of commenters asserted that EPA should have required consideration of a supercritical CFB boiler in the BACT analysis for the Bonanza WCFU. Commenters cited discussion in a Western Governors Association Technology Working Group report on advanced clean coal technologies.

<u>Response #3</u>:

<u>Agree</u>. In response to this comment, EPA has evaluated a supercritical CFB boiler as a BACT option and has determined that since there are no known supercritical pressure turbines available in the size needed for the WCFU project, this option should be eliminated at step two of the top-down BACT analysis as technically infeasible, because it is not available and applicable for the WCFU project. *See In re Prairie State Generating Co.*, 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 In re Three Mountain Power, L.L.C.*, 10 E.A.D. 39, 42-43 n.3 (EAB 2001); *In re Knauf Fiber Glass, GmbH,* 8 E.A.D. 121, 129-31 (EAB 1999); *In re Hawaii Electric Light Co.*, 8 E.A.D. 66, 84 (EAB 1998).

At the first step of the top-down BACT analysis, all demonstrated and potentially applicable control technology alternatives must be identified. This must include a survey of production processes or innovative technologies that have a practical potential for application to reduce relevant emissions at the source type being evaluated. (*Prairie State*, slip op. at 17.) At the second step, "technically infeasible" options are eliminated. A technology is feasible if either it is demonstrated, i.e. installed and operated