BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	
Prairie State Generation Company, LLC	PSD Appeal No. 05-05

BRIEF OF THE EPA OFFICE OF AIR AND RADIATION AND REGION V

The U.S. Environmental Protection Agency Office of Air and Radiation (OAR) and Region V (hereinafter EPA) submit this brief in accordance with the Environmental Appeals Board's (EAB or Board) December 12, 2005 order in the above-captioned matter. EPA believes that the Illinois Environmental Protection Agency (IEPA) has addressed the alternative of low-sulfur coal consistently with the Clean Air Act (CAA or Act) and EPA policy. Under the circumstances of this case, IEPA was not required to include low-sulfur coal in the evaluation of Best Available Control Technology (BACT), and it adequately considered and addressed low-sulfur coal and other alternatives to the proposed source in response to public comments.

I. Background

This case involves an appeal of a CAA Prevention of Significant Deterioration (PSD) permit issued by IEPA to the Prairie State Generation Company (Prairie State) to construct a 1500-megawatt-mine-mouth-coal-fired power plant. In its December 12, 2005 order, the Board asked EPA to address several questions raised by Petitioners' arguments that IEPA improperly excluded several pollution control alternatives,

including combustion of low-sulfur coal, from the BACT analysis for the proposed facility.

Specifically, the Board has asked EPA to address the following three issues: (1) whether IEPA's conclusion that low-sulfur coal is not a potentially applicable control option for the proposed facility correctly applies the statutory definition of BACT and EPA's policy against redefining the basic design of the proposed source as part of the BACT analysis; (2) the statutory and regulatory basis for EPA's historical views regarding redefining the source; and (3) Petitioners' reliance on EPA briefs in other cases that argued EPA has broad authority to consider and a duty to respond to public comments suggesting alternatives to the proposed facility. Below, EPA first addresses the Board's second question, and then answers the first and third questions, respectively.

II. The Limitation On "Redefining the Source" Is Based On A Permissible Reading Of The Clean Air Act And A Rational Policy Judgment Of The Agency

The Administrator and EAB have long recognized EPA's policy not to utilize the BACT requirement as a means to fundamentally redefine the basic design or scope of a proposed project. *See, e.g., In Re Knauf Fiber Glass, GMBH*, 8 E.A.D. 121, 140 (EAB 1998); *In the Matter of: Old Dominion Electric Cooperative Clover, Virginia*, 3 E.A.D. 779, 793 n. 38 (Adm'r 1992); *In the Matter of: Pennsauken County, New Jersey, Resource Recovery Facility*, 2 E.A.D. 667, 673 (Adm'r 1988). EPA's policy reflects the Agency's longstanding judgment that there should be limits 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 done without changing fundamental characteristics of the proposed source.

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 must 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.

Permitting agencies are not, however, obligated to accept all elements of a proposed project. To the contrary, the statutory definition of BACT 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). As a result, EPA acknowledges that the potentially-applicable control options evaluated in the BACT review should include "inherently lower-polluting processes" as well as add-on pollution controls. NSR Workshop Manual at B.10, B.13. Further, although EPA does not require

a source to employ a totally different design, some design changes to the proposed source are not prohibited. *See, Knauf*, 8 E.A.D. at 136.

The Act thus creates some tension between the obligation to conduct the BACT analysis on the "proposed facility" with the concurrent obligation to consider as BACT "application of production processes and available methods, systems, and techniques," including lower-emitting fuels. 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 a project. When the Administrator first developed this policy in *Pennsauken*, he quoted the definition of BACT and acknowledged that this statutory language may require application of processes, methods, systems, and techniques, but concluded that "permit conditions that define these systems are imposed on the source as the applicant has defined it" and that "the source itself is not a condition of the permit." 2 E.A.D. at 673. In reaching this

conclusion, the Administrator recognized that it would not be possible to conduct a case-by-case review of BACT for each facility without to some extent accepting the proposed source as defined by the applicant. As *Pennsauken* illustrates, taken to its furthest extreme, the application of any inherently lower polluting process could result in elimination of the source altogether, which would not be consistent with subjecting the "proposed source" to BACT, as determined on a case-by-case basis. Since the Administrator's decision in *Pennsauken*, EPA has continued to adhere to this policy against redefining the basic design of the proposed source in the BACT analysis because there continues to be a need to distinguish between basic design aspects of the facility proposed by the applicant that must be fixed to enable a case-by-case review and the types of processes, methods, systems, and techniques that are potentially applicable to a specific facility to control pollution.

The limitation on redefining the basic design of the proposed source in the BACT analysis is a rational, common sense policy adopted by the Administrator under a permissible reading of the Act. Since the *Pennsauken* decision, the Administrator has continued to recognize that the BACT review should not be used to frustrate an applicant's ability to construct a particular type of facility in order to meet objectives that may be independent of environmental protection. The BACT review requires an applicant to take a hard look at how its proposed facility may be improved to reduce its environmental impact, but that review must occur on a case-by-case basis within the framework of a basic facility design proposed by the applicant. This is a rational policy that the Administrator is authorized to adopt to reconcile competing principles embodied in the statutory definition of BACT. *See Chevron*, 104 S.Ct. at 2782.

III. IEPA Appropriately Excluded Firing Low-Sulfur Coal From The List Of Potentially-Applicable Control Techniques In The BACT Analysis For This Facility

Because Prairie State applied for a permit to construct a single source that combines a coal mine and a coal-fired-steam-electric-generating facility, IEPA correctly applied the statutory definition of BACT and EPA's long-standing policy against redefining the basic design of a proposed project or source as part of the BACT process. Under these circumstances, requiring Prairie State to fire low-sulfur coal would fundamentally redefine the proposed project. Instead of constructing a mine on this site to supply coal, Prairie State would have to obtain low-sulfur coal from another site and transport this coal to the facility, significantly altering the design, scope, and purpose of the project. Although the definition of BACT provides for consideration of "clean fuels," IEPA had the discretion in this case not to include low-sulfur coal in the BACT analysis on the grounds that it would fundamentally alter the basic design of the "proposed source," which is a new coal-fired electric generating facility and mine. EPA recognizes that the BACT review should consider the examples of lower-polluting processes or techniques listed in the Act such as clean fuels, but only to the extent that such processes and techniques do not redefine the proposed source into an alternative type of facility that is fundamentally different than the source proposed by the applicant.

A. IEPA's omission of low-sulfur coal from the BACT analysis in this case is consistent with prior decisions of the Administrator and EAB.

Since the line between inherently-lower-polluting processes and alternatives to the proposed source is not always obvious, EPA generally recognizes that whether to include an inherently 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. NSR Workshop Manual at B.13.; *Knauf*, 8 E.A.D. at 136. The Administrator and the EAB have 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.

A comparison of the Administrator's decisions in *Pennsauken* and *In the Matter of: Hibbing Taconite Company*, 2 E.A.D. 838 (Adm'r 1989) illustrates how the Agency has distinguished options that redefine the basic design of the source from options that should be listed and evaluated in a top-down BACT analysis. In *Pennsauken*, the Administrator found no error in permitting a new municipal waste incinerator in lieu of the alternative of burning the waste in existing power plants. In *Hibbing Taconite*, the Administrator remanded a permit to modify an existing taconite ore pellet facility to fire petroleum coke in place of natural gas because the option of continuing to burn natural gas was not included in the BACT analysis. The Administrator distinguished the situation in *Hibbing Taconite* from the situation in *Pennsauken* by observing that the continued burning of natural gas at the Hibbing Taconite facility was "an alternative that will not require any fundamental change to Hibbing's product, purpose, or equipment." 2 E.A.D. at 843 n. 12.

EPA's approach to cases in particular industry sectors is also instructive. The Administrator remanded one permit for a municipal waste combustor on the grounds that the BACT analysis should have included an evaluation of a materials separation program that might reduce nitrogen oxide emissions from the facility. *In the Matter of: Brooklyn Navy Yard Resource Recovery Facility*, 3 E.A.D. 867, 875 (Adm'r 1992).[1] That case

[1] Based on new information on the potential emissions reduction that might be achieved through materials separation, the Administrator reached a different result than he had reached in an earlier case when it was

differed from *Pennsauken* where the Administrator concluded that a BACT analysis for a municipal waste combustor did not need to consider the option of burning the waste in existing power plants and not building the proposed source.

In the fiberglass manufacturing industry, the EAB remanded a permit on the grounds that the BACT review failed to include the option of using a rotary spin fiberglass manufacturing process that emitted less particulate matter. *In Re: Knauf Fiber Glass, GMBH*, 8 E.A.D. 121, 140 (EAB 1998). In that opinion, the EAB only required the applicant to evaluate another rotary spin fiberglass process employed by a competitor in the same industry.[2] *Knauf* did not involve the question of whether the applicant should evaluate a fiberglass making process in a different subcategory such as flame attenuation. *See* 40 C.F.R. Part 63, Subpart NNN (Wool Fiberglass NESHAP).

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 per unit of product (in this case electricity). NSR Workshop Manual at B.13.; *In re SEI Birchwood Inc*, 5 E.A.D. 25 (1994); *In Re: Old Dominion Electric Cooperative*, 3 E.A.D. 779 (1992). Likewise, in *In Re: Hawaii Commercial & Sugar Co.*, the EAB found no error 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). More recently, the Office of Air Quality Planning and

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not yet clear to the Administrator that materials separation could effectively reduce emissions. *See, In re: Spokane Region Waste-to-Energy Facility*, 2 E.A.D. 809, 818-19 (Adm'r 1989).

[2] Since the alternative rotary spin process was the proprietary technology of a competitor, the Board observed that it was unlikely that this option would be technically feasible at the second step of the BACT analysis because the technology was not commercially available. *Knauf* at 142; see also, *In Re Knauf Fiber Glass, GMBH*, 9 E.A.D. 1 (EAB 2000) ("Knauf II") (upholding determination on remand that technology was not BACT because it was not commercially available).

Standards stated that it is currently not inclined to require applicants for permits to construct coal-fired boilers to include in their BACT analyses the option of building an integrated gasification combined cycle facility which would chemically convert coal into a synthetic gas and fire the gas in a combined-cycle combustion turbine. *See*, Letter from Stephen Page, EPA Office of Air Quality Planning and Standards to Paul Plath, E3 Consulting LLC (Dec. 13, 2005).

In the instant case, the option of firing low-sulfur coal would fundamentally change the nature of the proposed major source by eliminating construction of the co-located mine. Such a change is comparable to the changes in the basic design of the source that EPA determined did not need to be considered in the BACT analysis in *Pennsauken* and the coal-fired-steam-electric-generating examples. The low-sulfur coal alternative advocated by Petitioners would operate to the exclusion of a major portion of the proposed source that Prairie State seeks to construct -- the on-site coal mine. Furthermore, if Prairie State were to utilize low-sulfur coal as its primary fuel, the mine would have to be replaced by a completely different fuel supply system comprised of diesel locomotives and rail lines rather than a co-located mine and conveyor belt. Changing this aspect of the source into a wholly-distinct alternative is analagous to replacing the steam boilers and turbines at a power plant with combustion turbines in the examples described above. Although use of a low-sulfur coal would arguably not require Prairie State to fundamentally change the power block at the proposed source, this is not the only basic design element of the facility. The mine is also a major portion of this proposed source.

This case is distinguishable from the situations in the *Brooklyn Navy Yard*, *Knauf*, and *Hibbing Taconite*. In contrast to *Brooklyn Navy Yard*, which concluded a municipal waste combustor had improperly failed to consider waste segregation to address nitrogen oxide emissions, the BACT analysis performed by IEPA and Prairie State included an evaluation of coal washing, which is a pre-combustion technique more analogous to waste segregation.[3] Although coal washing would require some alteration of the design of Prairie State's fuel supply system, this technique would not redefine a fundamental aspect of Prairie State's facility (the mine) into something else entirely. Further, Petitioners do not assert that IEPA neglected to consider less-polluting techniques for mining coal from this site, which would raise issues more like those in *Knauf*. Finally, Prairie State is not seeking to modify an existing facility to combust a coal with a higher sulfur content, which would make this situation comparable to the circumstances in *Hibbing Taconite*. Thus, EPA has no basis to conclude that IEPA has abused its discretion or inappropriately applied EPA's prior guidance and decisions that have not required permitting authorities to redefine the basic design of a source in the BACT analysis.

B. Under the circumstances of this case, the definition of BACT does not require that IEPA evaluate low-sulfur coal as a clean fuel.

Declining to require an evaluation of low-sulfur coal in the BACT analysis for this particular facility is not inconsistent with language on "clean fuels" in the definition of BACT, 42 U.S.C. § 7479(3), or prior BACT analyses that have evaluated low-sulfur coal in different situations. The clean fuels language appears in the BACT definition

[3] IEPA concluded that, during normal operations, washing the coal from the mine would not be BACT for sulfur dioxide based on energy, environmental, and economic impacts that outweighed the potential benefits of the practice. Responsiveness Summary at 26-44; IEPA Response to Petition at 126-143.

among a list of examples of things included in the phrase "production processes and available methods, systems, and techniques." Thus, the "clean fuels" language, like the phrase it modifies in the definition of BACT, is limited by the language discussed above in Section II that requires BACT to be applied to each proposed facility and determined on a case-by-case basis. The clean fuels language should not be interpreted to have a meaning and effect that is broader than the phrase that it modifies. In cases such as this where the technique of firing low-sulfur coal would redefine the basic design of the source, EPA does not read the "clean fuels" language in the statute to mandate that the BACT analysis include an evaluation of low-sulfur coal.

Legislative history indicates that Congress intended to provide EPA with discretion to consider clean fuels in the BACT analysis when it is a potentially-applicable control option, but not necessarily to mandate that the option be included in the BACT analysis (or ultimately selected as BACT) in all cases. The "clean fuels" language was omitted from the original definition of BACT, but added in the 1990 amendments of the Clean Air Act. Pub. Law No. 101-549, § 403(d), 104 Stat. at 2631 (1990). 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).

Except in situations like the one here where application of a clean fuel would fundamentally redefine the proposed source, EPA recognizes that clean fuels should be included in the BACT analysis. For example, the Administrator observed in *Old Dominion* that the BACT analysis should involve consideration of cleaner forms of the

same fuel. 3 E.A.D. 779, 794 fn. 39. Furthermore, low-sulfur coal has been properly evaluated in the BACT analysis for some types of electric-generating facilities. *See, e.g., In Re Inter-Power of New York, Inc.*, 5 E.A.D. 130, 145-46 (EAB 1994). However, these cases did not involve an issue of whether cleaner forms of the same fuel would operate to exclude a major part of the proposed facility or redefine the basic design of the source.

C. IEPA need not evaluate the reasonableness of Prairie State's design.

With respect to the Board's question concerning the reasonableness of a proposed design, IEPA's conclusion in this case that use of low-sulfur coal would redefine the basic design of the facility does not require that IEPA evaluate the reasonableness of Prairie State's design. Such a requirement would be contrary to the intent of the policy against redefining the basic design of a source, which is to recognize a limitation on the degree to which permitting authorities may use the BACT analysis to second-guess the basic design decisions made by permit applicants when seeking a permit to build a particular type of source for reasons independent of air quality permitting. Within the framework of the basic design parameters of the proposed source, the permitting authority should evaluate whether additional process, methods, systems, and techniques that are potentially-applicable to that type of source might be utilized to reduce emissions considering energy, environmental, and economic impacts. However, this not an assessment of the "reasonableness" of the applicant's basic design. The reasonableness of an applicant's basic design is a matter solely within the expertise and discretion of the permit applicant.

D. Prairie State properly aggregated the power plant and mine for purposes of this permit.

Regarding another of the Board's questions, the definition of "emissions unit" on Page B.5. of NSR Workshop Manual does not suggest that it was inappropriate for IEPA and the applicant to treat the electric generating station and the mine as a single source for PSD permitting purposes. EPA has no information that would suggest that the electric generating facility and mine were not appropriately classified in this case as one source under EPA's NSR regulations.

The determination of whether there is a single source or multiple sources is based on the definition of "building, structure, facility, or installation" in section 52.21(b)(6) of EPA's regulations. This defined phrase is contained in the definition of "stationary source" in section 52.21(b)(5). According to EPA's definition, "a building, structure, facility, or installation means all of the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control)." 40 C.F.R. § 52.21(b)(6). Activities are considered part of the same industrial grouping if they are part of the same major group under Standard Industrial Classification (SIC) codes. *Id.* EPA has recognized that one or more of the three criteria defining a single source can be satisfied when an emissions unit is a "support facility" or serves in a supporting role for a primary activity at a nearby location. A support facility may be considered to be a part of the same major group as the primary facility it supports even if the support facility would be classified in a separate group when operated independently. 45 Fed. Reg. 52695 (Aug. 7, 1980); *see also*, Letter from Robert B. Miller, EPA Region 5 to William Baumann, Wisconsin Department of Natural Resources regarding Oscar

Mayer and Madison Gas & Electric (Aug. 25, 1999); Memorandum from John S. Seitz, EPA OAQPS entitled "Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the Clean Air Act" (Aug. 2, 1996).

It is clear in this case that the mine and electric-generating facility would be under common control and located on contiguous or adjacent properties. Although a mine and power plant might be in separate major SIC groups when operated separately, there is clearly a support relationship here that allows these parts of the facility to be classified in the same group.

IV. IEPA Must Consider And Respond To Comments On Alternatives To The Proposed Facility And Has Discretionary Authority To Modify The Permit Based On Such Comments

EPA interprets section 165(a)(2) of the CAA to require that IEPA consider and provide a reasoned response to comments identifying alternatives to the proposed source and raising other appropriate considerations. The record in this case shows that IEPA provided a sufficient rationale for declining to require the alternatives suggested in comments. Furthermore, IEPA is not obligated to respond to comments addressing matters outside the scope the Act, such as the need for a particular facility. A PSD permitting authority has discretion under the Clean Air Act to modify the PSD permit based on comments raising alternatives or other appropriate considerations, but this is a highly discretionary matter. If the permitting authority considers and responds to relevant comments and provides a reasoned explanation for why it has elected not to exercise its discretion, as IEPA did in this case, the requirements of section 165(a)(2) are satisfied.

A. EPA construes section 165(a)(2) of the Act to require a response to comments raising alternatives to the facility and to provide the permitting authority discretion to modify or not modify a PSD permit based on such comments.

Section 165(a)(2) of the CAA provides that a PSD permit may not be issued unless "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, alternatives thereto, control technology requirements, and other appropriate considerations." 42 U.S.C. § 7475(a)(2). Inherent in the requirement to provide an opportunity for comment is an obligation to consider and respond to such comments. The Act also requires that the permitting authority evaluate the air quality impact of the source and control technology requirements to demonstrate that the proposed source will not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS) or PSD increment (section 165(a)(3)) and will apply BACT (section 165(a)(4)). Other appropriate considerations on which the public may comment include the impact of the source on air quality related values in a class I area (section 165(d)) and any impact of emissions on soils, vegetation, and visibility (section 165(e)(3)(B)).

As reflected in the briefs cited by Petitioners, EPA has traditionally construed section 165(a)(2) to require that a PSD permitting authority consider and respond to public comments on alternatives and other air quality considerations that are not otherwise expressly mentioned in other parts of section 165. Section 165 does not include a comparable requirement to that contained in section 173(a)(5) of the CAA, which requires that New Source Review in non-attainment areas include an analysis of alternative sites, sizes, production processes, and environmental control techniques to demonstrate that the benefits of the source outweigh its costs. 42 U.S.C. § 7503(a)(5).

Although this type of alternatives analysis is not required for PSD permits under section 165 of the Act, a PSD permitting authority still has an obligation under section 165(a)(2) to consider and respond to relevant public comments on alternatives to the source.

EPA, state permitting authorities, and permit applicant do not have an affirmative duty to identify and consider alternatives to the source on their own initiative. Instead of including a provision like section 173(a)(5) among the PSD provisions in the Act, Congress only chose to address alternatives in the PSD program in the context of the opportunity for public comment. Thus, EPA interprets the Act to place the burden of identifying alternatives on interested persons who submit comments on a PSD permit. A permitting authority need not conduct an independent analysis of available alternatives. However, when alternatives are raised in comments, the permitting authority must consider and respond to such comments. The extent of IEPA's consideration and analysis of alternatives need be no broader than the analysis supplied in public comments.

Thus, IEPA correctly observed that the PSD provisions of the Act do not require a permitting authority to conduct additional analysis of alternatives raised in public comments or require such an analysis from the applicant. *See*, IEPA, Responsiveness Summary for Public Questions and Comments on the Construction Permit Application from Prairie State Generating Company (Responsiveness Summary) at 13. IEPA had the discretion to conduct more analysis if it thought any alternative merited further evaluation to protect air quality in Illinois, but the Act does not require that IEPA do so before it can issue a PSD permit.

Although commenters may address a broad range of issues, the scope of section 165(a)(2) is not unlimited. The permitting authority need not respond to comments

unrelated to air quality impacts, alternatives, control technology requirements, or other appropriate considerations. EPA construes "appropriate" considerations to include matters addressed in other parts of section 165 that are not described in section 165(a)(2), as well as other air quality matters addressed in the CAA. In addition, the alternatives that the permitting authority must consider are alternatives that have the potential to reduce deterioration of air quality. The permitting authority need not respond to comments on alternatives that commenters recommend to achieve objectives unrelated to air quality. For example, as discussed further in section V below, a permitting authority is not obligated to respond to a comment arguing that there is no need to construct a new glass plant because of insufficient demand for the product or a surplus of glass making capacity in the country. Such matters are outside the scope of the PSD program and the expertise of PSD permitting authorities.

Implicit in the obligation to consider and respond to public comments on particular matters is the discretion to modify the permit decision based on such comments. The opportunity to raise alternatives and other appropriate considerations in public comments under section 165(a)(2) would have limited utility if the Act did not also provide the permitting authority with the discretion to incorporate relevant points raised in comments into the permitting decision. Thus, the permitting authority has the discretion to modify or not modify a PSD permit based on alternatives or other appropriate considerations raised in public comments. This view is consistent with the brief filed by OAR and Region V in *West Suburban Recycling and Energy Center*, 6 E.A.D. 692 (EAB 1996). *See*, Petitioners' Exhibit 39 at 12.

Although permitting authorities have discretion to consider alternatives to the proposed source, that discretion is not unlimited. *See*, Petitioners' Exhibit 40 at 12. A permitting authority may not abuse its discretion. In accordance with standard principles of administrative decisionmaking, the discretion of a permitting authority must be exercised in a manner that is reasoned and not arbitrary. *See, Motor Vehicle Mfgs. Ass'n v. State Farm Mutual Automobile Ins. Co.*, 103 S.Ct. 2856, 2866-67 (1983)

Although a PSD permitting authority has this discretion, nothing in sections 165 and 169 of the CAA requires that the permitting authority exercise its discretion to condition or deny a PSD permit on the basis of alternatives or other considerations. Provided that the necessary air quality analysis has been conducted and the procedural requirements of the PSD program have been followed, the permitting authority is only expressly required to condition or deny a permit on one of the following grounds: (1) the source will cause or contribute to a violation of the NAAQS or PSD increment; (2) the source does not apply BACT; and (3) the permitting authority agrees with a Federal Land Manager that the source will have an adverse impact on Air Quality Related Values in a Class I area. If the applicant demonstrates compliance with these criteria, and the permitting authority has a reasoned basis for declining to exercise it discretionary authority to impose additional conditions, the requirements of the PSD program are satisfied and the permit may issue.

B. IEPA satisfied the requirements of section 165(a)(2) in this case.

Consistent with EPA's interpretation of section 165(a)(2) of the CAA, IEPA was required in this case to consider and respond to commenters' suggestions that IEPA only issue a permit for alternatives to the proposed source that produce power from low-sulfur

coal, natural gas, wind, and solar radiation. IEPA was not required to evaluate these alternatives to the proposed mine and power plant in the BACT analysis for reasons discussed above, but IEPA was still required to consider and respond to public comments on alternatives to the proposed source. Although IEPA observed that such alternatives need not be evaluated in the PSD BACT analysis and argued that Illinois law did not give IEPA authority to require Prairie State to develop one of these alternatives, IEPA correctly recognized that section 165(a)(2) requires an opportunity to comment on alternatives to the proposed source. *See*, Responsiveness Summary at 13. Consistent with this obligation, IEPA considered these alternatives and provided a reasoned, non-arbitrary basis for authorizing the proposed facility and declining to permit only the construction of the alternatives proposed in public comments.

IEPA explained that wind and solar power would not be acceptable substitutes for the proposed power plant because these alternatives would be a less-reliable source of base load power supply. *See*, Responsiveness Summary at 16. The proposed coal-fired plant would supply electricity for up to 24 hours a day. IEPA noted that because wind speed is highly-variable in Illinois, a wind plant would have an annual capacity factor of at most 25 percent, which was equivalent to the plant being available for no more than 6 random hours each day. *Id.* Further, IEPA observed that there are technical and practical obstacles to employing solar power on a utility scale as an alternative to traditional power plants. *Id.* These are non-arbitrary reasons for IEPA not to exercise its discretionary authority.

IEPA also provided a reasoned response to comments on alternative facilities using different fuels such as natural gas and low-sulfur coal. IEPA first noted that it was

not required to consider natural gas in the top-down BACT analysis for the proposed source, but also supplied a reasoned basis for declining to permit only natural gas plants in Illinois. The Responsiveness Summary explains that using available coal to produce electricity allows more natural gas to be available and affordable for other existing uses such as heating homes and businesses and supplying industrial plants. *Id.* at 22. IEPA also declined to evaluate low-sulfur coal in the BACT analysis but broadly considered the use of alternative coal supplies from outside of the State. *Id.* at 23. IEPA concluded that the additional environmental impacts resulting from the transportation of low-sulfur coal from out of State would be excessive if the emissions from combustion of local coal could be appropriately controlled. *Id.* at 23. A more detailed analysis of collateral environmental impact is often required for options that are included in the BACT analysis, but IEPA's response was sufficient to meet its obligation under section 165(a)(2) of the CAA to address the low-sulfur coal alternative raised in comments.

Furthermore, with respect to low-sulfur coal, even though IEPA said the economic benefits of the plant did not influence its permitting decision, IEPA observed that the proposed plant was important for the regional economy. *See*, Responsiveness Summary at 7. The goal of promoting regional economic development and utilizing local resources would be a non-arbitrary basis for IEPA not to invoke its discretionary authority under section 165(a)(2) of the Act to permit only an alternative type of facility. When coupled with other elements of the PSD permit review, this approach is consistent with the goals and purposes of the PSD program which include "ensuring economic growth will occur consistent with preservation of existing air quality," 42 U.S.C. § 7460,

and with Congressional recognition in section 125 of the CAA that use of local fuel sources may be appropriate to ensure stability of local economies. 42 U.S.C. § 7425(b).

V. IEPA Was Not Required To Respond To Comments On The Need For The Proposed Source

IEPA was not required under section 165(a)(2) to respond to the comments in this case that questioned whether there was a need to construct the facility at all or whether all of the electricity supplied by the proposed facility was needed. Although the Administrator and Board have not previously concluded that such matters are wholly outside the scope of section 165(a)(2) of the CAA, the Administrator and Board have consistently agreed that the question of need is not an appropriate subject for federal permitting authorities to address while issuing or reviewing PSD permits. *See In Re Ecoelectrica, L.P.*, 7 E.A.D. 56, 74 (EAB 1997) (Region II acted appropriately by deferring questions of need to Puerto Rican government); *In Re SEI Birchwood, Inc.*, 5 E.A.D. 25, 28 (EAB 1994) (the need for the proposed facility is "outside the scope of the Board's jurisdiction"); *In re Kentucky Utilities Company*, PSD Appeal No. 82-5, at 2 (Adm'r 1982) (need for a power plant is "more appropriately addressed by the state agency charged with making that determination."). In its brief to the Board in the *Ecoelectrica* case, the OAR agreed that the Region II had appropriately deferred consideration of questions of need to Puerto Rico, consistent with the prior decisions in *SEI* and *Kentucky Utilities*. *See*, Petitioner Exhibit 40 at p. 16. EPA's policy of deferring to states on the issue of need should apply equally in states that have the authority to do so under state law and states, such as Illinois, that elect to deregulate industries and eliminate requirements to evaluate the need for particular types of facilities.

Contrary to Petitioners' argument, EPA has not repeatedly taken the position that a PSD permitting authority must consider whether a facility or its product is needed. Consistent with section IV of this brief, EPA program offices have repeatedly recognized that a permitting authority should consider alternatives to the proposed source when raised in public comments. In *In re Rockgen Energy Center*, 8 E.A.D. 536, 547 (EAB 1999), OAR and Region V did argue that the need for a source and its size should be evaluated by some agency of the state because it perceived these issues to be connected with the alternative of demand side management (reducing energy demand). Petitioners' Exhibit 41 at 18. However, the Board's opinion in *Rockgen* did not adopt this reasoning or address the question of need. 8 E.A.D. at 547. The Board held that the public comments had not raised the alternative of demand side management with sufficient specificity to preserve review of this issue by the Board. *Id.* The commenter had clearly raised the question of need, but the Board declined to consider the issue. *See, Id.*

In the *Ecoelectrica* and *Rockgen* cases, OAR and Regions II and V viewed energy conservation and demand management as alternatives to the proposed source that merited consideration under section 165(a)(2). Petitioners' Exhibits 40 and 41. In a footnote in its opinion in *Ecoelectrica*, the Board clarified that its reluctance to consider need in prior cases did not necessarily mean to address whether the Board could review a failure to respond to comments raising alternatives to an energy-producing facility. 7 E.A.D at 74 n. 25. To the extent that alternatives such as energy efficiency and demand management are advocated as a basis for questioning the need for a facility, EPA now believes such comments are outside the scope of section 165(a)(2) of the Act and need not be considered. Where energy conservation and demand management techniques can be

employed by a permit applicant to reduce emissions from the proposed source (without regard to need for the source), these issues may still merit consideration under section 165(a)(2). But if a commenter advocates energy conservation by third parties to reduce emissions from the proposed source, it is sufficient for the permitting authority to respond as IEPA did in this case that its lacks the authority to impose energy conservation and demand management measures on private entities not before the agency in the PSD permitting process. Responsiveness Summary at 27.

Consistent with the historic reluctance of the Administrator, Regional Administrators, and the Board to address whether PSD sources and their products are needed, the Board should recognize that nothing in the CAA or its legislative history suggests Congress intended for the question of need to be addressed through the federal PSD program. To the extent state laws provide independent authority to deny authorization for a facility based on need, these matters may be within the jurisdiction of a state public utility commission or a similar body, but nothing in the Clean Air Act provides an independent requirement that a PSD permitting authority review such matters. There is no indication that Congress intended for EPA to preempt state policies and require an evaluation of need where a state elects not to do so.

EPA does not construe the Act to include the need for the proposed facility among air quality impacts, alternatives, control technology requirements, or other appropriate considerations. Thus, IEPA was not obligated under section 165(a)(2) to respond to comments on the need for the proposed facility and its product. As a delegated state issuing a PSD permit on behalf of EPA, IEPA has no greater authority under the PSD program than that which EPA has under the CAA and EPA regulations. *West Suburban*

Recycling, 6 E.A.D at 707. Even if Illinois had the authority under State law to consider need under another state program, as a delegated PSD state, IEPA would not be authorized to exercise that authority in the context of the federal PSD program and use need as a basis to condition or deny a PSD permit. *Id.*

VI. Conclusion

In conclusion, IEPA's decision in this case not to evaluate the option of using low-sulfur coal in the BACT analysis was consistent with the PSD provisions of the Act and prior EPA guidance and decisions that do not require redefining the basic design of a proposed source. EPA's policy against redefining the source in such situations is based on a permissible reading of the Act. IEPA properly considered and responded to comments suggesting alternatives to the proposed source, including the option of using low-sulfur coal. Nothing in the briefs filed by EPA offices in prior cases supports the view that a permitting authority is required to deny the permit on the basis of need or implement one of the alternatives advocated by Petitioners. Those briefs merely argued, consistent with the arguments in this brief, that a permitting authority has an obligation to consider and respond to comments on alternatives and has the discretion to incorporate matters raised in such comments into its permitting decisions. EPA program offices and attorneys did not argue in those cases that the Clean Air Act requires a permitting authority to base permitting decisions on such matters if it has a reasoned basis for declining to do so.

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Respectfully submitted,

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