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ENVIR. APPEALS BOARD

In re:

Deseret Power Electric Cooperative

PSD Appeal No. 07-03

# BRIEF AMICI CURIAE OF UTAH AND WESTERN NON-GOVERNMENTAL ORGANIZATIONS

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# BRIEF AMICI CURIAE OF UTAH AND WESTERN NON-GOVERNMENTAL ORGANIZATIONS

## STATEMENT OF INTEREST

The signatories to this brief represent thousands of members and concerned citizens in Utah and across the American West. Our organizations are united by our abiding commitment to cost-effective clean energy solutions that address the global warming crisis. We have worked with western officials, western business leaders, publicly regulated utilities, and other allies to meet the West's electricity needs with low-emitting electric generating resources.

Mom-Ease is a non-profit helping Utah's families make healthy and sustainable choices. We provide free educational services including information on the public health risks posed by air pollution caused by coal-fired power plants. We strongly believe we owe it to our children's health and economy to start focusing on cleaner and more sustainable energy sources.

Utah Physicians for a Healthy Environment is dedicated to protecting the health and wellbeing of the citizens of Utah by promoting science-based education and interventions that result in progressive, measurable improvements to the environment. One of our goals is that all new electric energy supplies for the state of Utah should come from renewable resources.

Wasatch Clean Air Coalition (WCAC) works on energy, air quality and climate change issues in Utah. WCAC participates in public hearings, Legislative, Air Quality Board and

Public Service Commission workgroups advocating demand side management, energy efficiency and renewable energy sources as an answer to environmental and health problems.

Post Carbon Salt Lake is actively engaged in advocating clean and renewable energy solutions for our membership of approximately 200 Salt Lake City citizens. We support a complete moratorium on coal development as well as the dismantling of existing coal-fired utility plants unless the carbon dioxide can be completely sequestered. Post Carbon Salt Lake is a strong and active participant in alternatives to fossil-fuel use across the West.

For more than two decades, the Grand Canyon Trust has been engaged in controlling pollution from coal-fired power plants in the Southwest. The Trust is a committed advocate in reducing greenhouse gas emissions and preventing the ravages of climate change on the Colorado Plateau. The Trust is actively promoting efficiency and renewable energy options and policies for rapidly transitioning to a cleaner energy future in Utah and surrounding states.

The Montana Environmental Information Center (MEIC) is a member-supported advocacy and public education organization that works to protect and restore Montana's natural environment. Since its founding in 1973, MEIC has lobbied and litigated in state and federal forums to prevent degradation of air quality in Montana including from coalfired power plants.

The Wyoming Outdoor Council has promoted clean energy solutions in the State of Wyoming for the last forty years. It advocates for the use of clean, renewable forms of energy and increased energy use efficiency, and seeks to minimize the use of coal to meet our electricity needs due to the numerous and severe environmental impacts created by the use of coal for electricity generation. The Wyoming Outdoor Council is a recognized leader in the State of Wyoming in all issues related to energy development, production, transmission, and use.

Western Resource Advocates is a nonprofit conservation organization dedicated to protecting the Interior West's land, air, water and climate.

For a quarter century, the Rocky Mountain Office of Environmental Defense has been dedicated to addressing the health and welfare effects of airborne contaminants arising from a variety of sources and activities across the intermountain West. Protecting public health and the environment from global warming pollution and finding solutions to the global warming crisis is a core organizational mission.

#### STATEMENT

The Intergovernmental Panel on Climate Change has determined that the "[w]arming of the climate system is unequivocal."<sup>1</sup> Compelled by science, western officials and electricity providers are carrying out public and private actions to reduce heat-trapping emissions. These efforts include local climate action plans to deploy comprehensive

<sup>&</sup>lt;sup>1</sup> Intergovernmental Panel on Climate Change, *Summary for Policymakers*, in CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS 5 (2007), *available at* http://ipcc-wgl.ucar.edu/wgl/Report/AR4WG1 Print SPM.pdf.

climate-friendly policies.<sup>2</sup> Western states are currently developing a bipartisan regional market-based trading program to cut greenhouse gas emissions from major sectors 15% over 2005 levels by 2020.<sup>3</sup> Western states have established carbon dioxide emission limits for new coal plants in the same way that other air pollutants have long been controlled.<sup>4</sup> And western utilities are pioneering new portfolios that rely expansively on energy efficiency and renewable electricity resources.<sup>5</sup>

EPA, by contrast, has declined to consider global warming pollution in permitting decisions for major emitting facilities under the Clean Air Act's Prevention of Significant Deterioration of Air Quality program. The narrow question presented here is whether EPA, when it is the permit issuing authority, must consider heat-trapping carbon dioxide emissions in determining the best available control technology (BACT) for new coal-fired power plants. At issue is EPA's interpretation of its own regulations governing the pollutants that must be considered in the BACT analysis. Those regulations plainly provide that BACT applies to "[a]ny pollutant that is . . . subject to regulation under the Act." 40 C.F.R. § 52.21(b)(50). Carbon dioxide has long been subject to regulation under the Act. The law could not be clearer that the BACT analysis must address this pollutant.

<sup>3</sup> Western Climate Initiative, Statement of Regional Goal (Aug. 22, 2007), *available at* http://www.westernclimateinitiative.org/WCI\_Documents.cfm. The Initiative includes Arizona, California, New Mexico, Oregon, Utah, Washington, and the Canadian provinces of British Columbia and Manitoba. Western Climate Initiative, http://www.westernclimateinitiative.org/.

<sup>4</sup> See infra Part II (discussing recent legislation in Washington, California, and Montana).

<sup>&</sup>lt;sup>2</sup> Local governments across the West have adopted climate action plans. <u>See</u> Exec. Order No. 2006-13 (AZ); Exec. Order No. S-03-05 (CA); Colorado Climate Action Plan, Nov. 5, 2007; Exec. Order No. 05-033 (NM); GOVERNOR'S ADVISORY GROUP ON GLOBAL WARMING, OREGON STRATEGY FOR GREENHOUSE GAS REDUCTIONS (2004) (OR); Exec. Order No. 07-02 (WA).

<sup>&</sup>lt;sup>5</sup> One prominent example is Xcel Energy, which recently filed a resource plan for Colorado that will add about a gigawatt of renewable energy by 2015, reduce demand by almost 700 megawatts, and reduce greenhouse gas emissions by ten percent by 2017. http://www.xcelenergy.com/XLWEB/CDA/0,3080,1-1-1\_15531\_46991-42162-0\_0\_0-0,00.html.

#### SUMMARY OF ARGUMENT

On April 2, 2007, the United States Supreme Court rejected EPA's claims that Congress did not intend for the Agency to regulate climate change under the federal Clean Air Act. The high Court held that greenhouse gases including "[c]arbon dioxide, methane, nitrous oxide, and hydrofluorocarbons are without a doubt" air pollutants within the scope of the Clean Air Act and that "greenhouse gases fit well within the Clean Air Act's capacious definition of 'air pollutant.'" <u>Massachusetts v. EPA, 127 S. Ct. 1438, 1460-1462 (2007)</u>.

Despite the fact that carbon dioxide has long been subject to regulation under the Act and that EPA's own regulations instruct that BACT applies to "any" pollutant subject to regulation under the Act, EPA unveils a *deus ex machina* in attempting to avoid the consequences of the high Court's decision. But EPA's improbable arguments cannot rescue the Agency from its obligations under the law.

First, EPA claims that the regulations requiring BACT for "any" pollutant "subject to regulation under the Act" are decisively limited to air pollutants subject to regulations requiring the actual control of emissions. In this way, EPA attempts to eliminate carbon dioxide from the scope of regulated pollutants by excluding from consideration the long-standing emission monitoring requirements for carbon dioxide that apply to coal-fired electric generating units.

But this interpretation cannot be reconciled with the language before the Board. BACT applies on its face to "[a]ny pollutant that is . . . subject to regulation under the Act." 40 C.F.R. § 52.21(b)(50). The natural and ordinary use of the term "any" is encompassing.

<u>Massachusetts v. EPA, 127 S. Ct. at 1460</u>. The operative language is straight forward in applying to all pollutants that are "subject to regulation" under the Act. There is no modifier. Nowhere does the regulatory text say that the pollutant must be subject to regulation for the purpose of controlling emissions.

Further, EPA's attempt to narrow its obligation to address BACT for pollutants subject to regulation under the Act, by excluding carbon dioxide because it is regulated by monitoring requirements, is unavailing. Monitoring is integral to the purposes of the statute. Not surprisingly, monitoring requirements are subject to the full enforcement protections under the Clean Air Act. 40 C.F.R. § 75.5. Indeed, the very purpose of the carbon dioxide monitoring requirements for coal plants was inextricably related to control requirements. The congressional sponsor of this provision expressly recognized that compliance with the law may require carbon dioxide reductions and therefore sought to ensure that credit was received for reductions: "What I hope to achieve with this amendment is the elimination of the possibility that U.S. utilities will reduce CO[2] emissions as a consequence of compliance with these Clean Air Act amendments and not get credit for these reductions in the future if the United States signs an international treaty on global climate change." CRS, *A Legislative History of the CAAA of 1990*, 1990 CAA Leg Hist. 2667, 2987 (comments of Mr. Moorhead).

EPA also seeks to disable the relevance of carbon dioxide in determining BACT by arguing that the long-standing monitoring requirements were adopted under the 1990 Amendments and therefore are not "subject to regulation under the Act." This novel argument rips the Clean Air Act Amendments from the fabric of the statute. This

wrenching severing of the law fails if for no other reason that EPA itself deemed section 821 as part and parcel of the Clean Air Act when it adopted the monitoring requirements under 40 C.F.R. pt. 75 and has consistently interpreted other entirely similar provisions of the Amendments as establishing obligations arising under the Clean Air Act. Plainly, carbon dioxide is a pollutant subject to regulation under the Act.

The Supreme Court rejected EPA's legal arguments that attempted to categorically shunt global warming pollution outside the scope of the Clean Air Act. EPA now endeavors to nullify the high Court's decision by excluding carbon dioxide from the category of pollutants that must be considered in determining BACT, despite the expansive obligation to address BACT for *any* pollutant subject to regulation under the Act. Indeed, the BACT requirement is pointedly designed to assimilate new information about air pollutants and available technologies on a case-by-case basis in each permitting decision for major emitting facilities. There are in fact a host of available measures to reduce carbon dioxide emissions that EPA should have considered in the permitting process. EPA must consider carbon dioxide in carrying out the BACT requirement for the Bonanza power plant.

#### ARGUMENT

## I. EPA MUST ADDRESS CARBON DIOXIDE IN DETERMINING BACT FOR THE BONANZA COAL-FIRED ELECTRIC GENERATING UNIT

## A. BACT Applies to Any Pollutant Subject to Regulation Under the Clean Air Act

The unambiguous words of the Clean Air Act's PSD BACT provision and the PSD regulations leave no room for uncertainty. EPA must perform a BACT analysis and set a BACT emission limitation for carbon dioxide. Clean Air Act § 165(a), 42 U.S.C. § 7475(a); 40 C.F.R. § 52.31(a)(2)(iii). It is undisputed that carbon dioxide is a pollutant under the Clean Air Act. <u>Massachusetts v. EPA, 127 S. Ct. at 1460</u>. In Sections 165(a)(4) and 169(3) Congress directed EPA to conduct a BACT analysis and include a BACT emissions limitation "for *each* pollutant subject to regulation under [the Clean Air Act]" for which emissions exceed specified significance levels. Clean Air Act, §§ 165(a)(4), 169(3), 42 U.S.C. §§ 7475(a), 7479(3) (emphasis added). Indeed, EPA's own regulations implementing the PSD program provide that "[a] new major stationary source shall apply best available control technology *for each regulated NSR pollutant* that it would have the potential to emit in significant amounts." 40 C.F.R. § 52.21(j)(1) (emphasis added). Section 52.21(b)(50) defines a "regulated NSR pollutant" as including "*any* pollutant...subject to regulation under the Act." (emphasis added).

Nowhere in the statute or in the federal regulations cited above is there any indication that Congress or EPA intended to exclude carbon dioxide from the BACT analysis. To the contrary, both Congress and EPA used broad, sweeping language to refer to the class of pollutants subject to BACT analysis and emissions limitations under the PSD program. This is evident in Congress's choice of the words "*each* pollutant subject to regulation under [the Clean Air Act] and EPA's use of the phrase "*any* pollutant...subject to regulation under the Act." 42 U.S.C. § 7475(a); 40 C.F.R. §52.21(a)(2)(iii).

A long line of Supreme Court cases, as well as a recent D.C. Circuit case arising under the Clean Air Act, demonstrate the importance of modifying words such as "any" or "each" in elucidating the meaning of the phrases they modify. <u>See, e.g., Norfolk S. Rwy.</u> <u>Co. v. Kirby, 543 U.S. 14, 31-32 (2004); see also Dep't of Hous. & Urban Dev. v.</u> <u>Rucker, 535 U.S. 125, 130-31 (2002); United States v. Gonzalez, 520 U.S. 1, 5 (1997)</u>. Importantly, in numerous instances, the courts have held that the word "any" has an expansive meaning. <u>Massachusetts, 127 S. Ct. at 1460</u> (holding that the repeated use of the word "any" in the Clean Air Act's definition of "air pollutant" evinced an unambiguous intent to define "air pollutant" broadly to include carbon dioxide); <u>State of</u> <u>New York v. EPA, 443 F.3d 880, 885 (D.C. Cir. 2006)</u> ("[re]ad naturally, the word 'any' has an expansive meaning, that is 'one or some indiscriminately of whatever kind,'" quoting <u>United States v. Gonzalez</u>, 520 U.S. at 5).

The D.C. Circuit decision in <u>Alabama Power Co. v. Costle, 636 F.2d 323, 403 (D.C. Cir.</u> <u>1979</u>) is particularly instructive as to Congress' intent as to the meaning of Section 165's BACT provision. <u>Alabama Power</u> involved a direct challenge by industry to EPA's regulations implementing the PSD program shortly after the program's creation in 1977. Industry argued that EPA's then existing regulations applying BACT "to all pollutants subject to regulation under the Act" was impermissibly broad; BACT should have

applied only to sulfur dioxide and particulate matter industry asserted. Alabama Power,

636 F.2d at 406.

The D.C. Circuit summarily rejected industry's argument, relying on the plain language of the BACT provision as applying to "each pollutant subject to regulation under the Act":

Section 165, in a litany of repetition, provides without qualification that each of its major substantive provisions shall be effective after 7 August 1977 with regard to each pollutant subject to regulation under the Act, or with regard to any "applicable emission standard or standard of performance under" the Act. As if to make the point even more clear, the definition of BACT itself in section 169 applies to each such pollutant. The statutory language leaves no room for limiting the phrase "each pollutant subject to regulation" to sulfur dioxide and particulates.

<u>Id.</u>

The same reasoning applies here. BACT applies to each and all pollutants subject to regulation under the Clean Air Act without limitation.

In declining to address carbon dioxide as part of the BACT requirement, EPA reinterprets the plain language of its regulation and posits that BACT applies only to pollutants "subject to a provision in the Clean Air Act or regulations promulgated by EPA that under the Act require actual control of emissions of that pollutant". EPA Region VIII's Resp. to Pet. For Review, 1. Had Congress intended the BACT requirement to encompass only air pollutants subject to specific control requirements, it would have said so explicitly. In drafting the Clean Air Act Congress knew well how to refer to provisions requiring actual control of emissions. Repeatedly throughout the statute Congress used the terms "emission(s) limitation" or "emission(s) standard" to refer to provisions requiring actual control of emissions. <u>See, e.g.</u>, 42 U.S.C. §§ 7602(k), 7651d(a)(1), and 7617(a)(7). Indeed, the terms "emission(s) limitation" or "emission(s) standard" appear no less than 162 times throughout the Clean Air Act.

Rather than using either of the familiar "emission(s) limitation" or "emission(s) standard" terms in delineating the pollutants that BACT is required to address, Sections 165(a)(4) and 169(3) instead used the broad phrase "subject to regulation." The meaning of this phrase surely was known to the drafters of the BACT provision as it appears no less than 11 times in the Clean Air Act.<sup>6</sup> In fact, in Section 112(j)(5) Congress used both the phrases "subject to regulation" within the same sentence:

[T]he permit shall be issued pursuant to title V and shall contain emission limitations for hazardous air pollutants subject to regulation under this section and emitted by the source that the Administrator or the State determines, on a case-bycase basis, to be equivalent to the limitation that would apply to such source if an emission standard had been promulgated in a timely manner under subsection (d)...

42 U.S.C. § 7412(j)(5).

The parallels to sections 165 and 169(3) are striking. In section 169(3), Congress similarly delineated the class of substances within the scope of statutory protection to include pollutants that are "subject to regulation" and then directed the Agency to establish emission limitations or standards for such pollutants. But EPA's interpretation

<sup>&</sup>lt;sup>6</sup> See, e.g., 42 U.S.C. § 112(a)(2) ("[F]or purposes of this section, the term "area source" shall not include motor vehicles or nonroad vehicles *subject to regulation* under Title II."; 42 U.S.C. § 7412(c)(3) (directing EPA to establish area rules for "categories or subcategories of area sources to ensure that area sources... that present the greatest threat to public health in the largest number of urban areas are *subject to regulation* under this section...") (emphasis added).

would conflate the meaning of the two distinct phrases in section 169(3) and thereby nullify the phrase "subject to regulation." That is contrary to law.

## 1. Carbon Dioxide is "Regulated" Under the Act.

Section 821 of the Clean Air Act Amendments of 1990 directed EPA to promulgate regulations to require certain sources, including coal-fired power plants, to monitor carbon dioxide emissions and report monitoring data to EPA. 42 U.S.C. § 7651k note. In 1993, EPA promulgated these regulations, which are set forth at 40 C.F.R. pt. 75. The regulations generally require monitoring of carbon dioxide emissions through the installation, certification, operation and maintenance of a continuous emission monitoring system or an alternative method (40 C.F.R. § 75.1(b), 75.10(a)(3)); preparation and maintenance of a monitoring plan (40 C.F.R. § 75.33); maintenance of certain records (40 C.F.R. § 75.57); and reporting of certain information to EPA, including electronic quarterly reports of carbon dioxide emissions data (40 C.F.R. §§ 75.60 – 64). Section 75.5, 40 C.F.R., prohibits operation of an affected source in the absence of compliance with the substantive requirements of Part 75, and provides that a violation of any requirement of Part 75 is a violation of the Clean Air Act. Thus, carbon dioxide is currently regulated under the Acid Rain provisions of the Act.

Importantly, Congress used the same word -"regulation"-in Sections 165(a)(4), 169(3) and Section 821. Congress expressly provides that the BACT requirement applies to each pollution "subject to regulation." 42 U.S.C. §§ 7475(a)(4) & 7479(3). Section 821 in turn plainly describes the carbon dioxide monitoring requirements as "regulations." For the pollutant carbon dioxide, the law commands the Administrator to "promulgate

regulations" and states that the "regulations" shall require reporting of data to the Administrator. 42 U.S.C. § 7651k note. Thus, Congress plainly provided that carbon dioxide is subject to regulation.

Monitoring regulations, such as those set forth in 40 C.F.R. pt. 75, are fundamental pillars of the Clean Air Act and the PSD program. The purpose of the Clean Air Act is to protect human health and the environment from the dangerous effects of harmful airborne pollutants. 42 U.S.C. § 7401. The purpose of the PSD program is to protect public health and welfare from any actual or potential adverse effect of air pollution which the Administrator reasonably anticipates could occur. 42 U.S.C. § 7470(1) (emphasis added). Accordingly, the PSD program is designed to prevent the potential impacts of air pollution. Monitoring and recordkeeping requirements are critical to the success of the protective and preventive goals of both the Clean Air Act and the PSD program. They provide important and timely information necessary to establish sufficiently protective standards. The Supreme Court in Massachusetts v. EPA recognized the importance of collaboration and research, enabled by tools such as monitoring and reporting, for any "thoughtful regulatory effort." Massachusetts, 127 S. Ct. 1438, 1461 (2007). Indeed, like other pollutants regulated under the statute, failure to comply with the carbon dioxide regulatory requirements is deemed a violation of the Act subject to the statute's full panoply of enforcement provisions. 40 C.F.R. § 75.5. Carbon dioxide has long been subject to regulation under the Act and must be addressed in determining BACT.

## 2. The Monitoring Requirements Are Regulations "Under the Act".

EPA argues that the regulations requiring monitoring and reporting of CO<sub>2</sub> emissions are not regulations "under the Act" because Section 821 of the 1990 Clean Air Act Amendments is not part of the Act. Congress found otherwise when it adopted the 1990 Clean Air Act Amendments. The opening lines of the 1990 Clean Air Act Amendments declare that it is "An Act" "To amend the Clean Air Act...." Pub. L. No. 101-549, 104 Stat. 2399 (1990). Congress intended that all of the provisions that follow this introduction be woven into the fabric of the Clean Air Act. The public law deliberately constituted a revision to the Clean Air Act, not some ancillary or separate law.

Not surprisingly, EPA interpreted section 821 as part of the Act when it adopted the carbon dioxide regulatory requirements. EPA also conveniently overlooks the fact that several other statutory provisions, which EPA does not dispute are part of the Clean Air Act, are cited as authority for EPA's adoption of the carbon dioxide regulations. Thus, the interpretation of its regulations advanced by EPA in this proceeding cannot prevail.

In response to the Clean Air Act Amendments of 1990, EPA proposed a set of "core" regulations under the Acid Rain Program that it described as "interrelated components," including the continuous emissions monitoring regulation. See 56 Fed. Reg. 63,002 (Dec. 11, 1991). In the same proposal, EPA asserted that "section 821 *of the Act* requires all affected units in the Acid Rain program to monitor carbon dioxide (CO<sub>2</sub>) emissions." Id. (emphasis added). EPA continued to assert that Section 821 was part of the Clean Air Act when it adopted the final rule and this statement can still be found today in the regulation itself:

#### PART 75—CONTINUOUS EMISSION MONITORING

Subpart A-General

§ 75.1 Purpose and scope.

(a) *Purpose*. The purpose of this part is to establish requirements for the monitoring, recordkeeping, and reporting of sulfur dioxide (SO2), nitrogen oxides (NOX), and carbon dioxide (CO2) emissions, volumetric flow, and opacity data from affected units under the Acid Rain Program pursuant to sections 412 and 821 of the CAA, 42 U.S.C. 7401–7671q as amended by Public Law 101–549 (November 15, 1990) [the Act].

40 C.F.R. § 75.1 (2007). The history of the  $CO_2$  monitoring regulation demonstrates the error of EPA's argument in this proceeding—clearly the 1990 Clean Air Act Amendments are part of the Clean Air Act, as recognized even by EPA when it adopted these regulations under Section 821.

Furthermore, as is the case with many Clean Air Act regulations, EPA grounded its authority to adopt the continuous emission monitoring regulations in several different provisions of the Clean Air Act, most of which EPA does not contest are part of the Act. The CO<sub>2</sub> monitoring requirements are an integral part of these regulations, which EPA has itself described as "interrelated components" of the core regulations under the Acid Rain Program. The continuous emission monitoring regulations apply generally to SO<sub>2</sub> and NO<sub>x</sub> along with CO<sub>2</sub>, see 40 C.F.R. §§ 75.1 and 75.10(a) (2007), and the specific provisions for CO<sub>2</sub> monitoring refer back to the specific provisions for SO<sub>2</sub>, simply replacing one term for the other, id. § 75.13(a). Part 75 of the regulations was adopted under the authority of Section 412 of the Clean Air Act as well, which EPA does not contest is part of the Act. Additionally, the regulations specifying appeal procedures

applies broadly to all of the core Acid Rain Program regulations, and EPA takes its authority for these regulations from a number of Clean Air Act provisions, including both Title IV generally (the Acid Rain provisions) and Section  $301.^7$  See 40 C.F.R. pt. 78 (2007). In adopting the monitoring requirements at 40 C.F.R. pt. 75, EPA even defined the term "Act" to mean "the Clean Air Act, 42 U.S.C. § 7401, et seq. as amended by Public Law No. 101-549 (November 15, 1990)." 40 C.F.R. § 72.2. Thus, even were Section 821 of the Clean Air Act Amendments of 1990 not considered to be part of the Clean Air Act, the CO<sub>2</sub> monitoring requirement nevertheless is a regulation "under the Act" because it takes its authority from numerous provisions of the Act, including Sections 301 and 412. Thus EPA's novel argument that the regulation of CO<sub>2</sub> emissions is not "under the Act" is erroneous and must fail.

Finally, EPA's interpretation of section 821 directly conflicts with the court's interpretation of other similar provisions of the acid rain program. One of the most well known examples is EPA's interpretation of the Section 404 study of acid deposition standards provided for under the 1990 Clean Air Act Amendments. Section 404 of Pub. L. No. 101-549 provided for EPA to prepare a report on the feasibility and effectiveness of an acid deposition standard. New York maintained that the Agency had failed to carry out the analysis required under the statutory provisions and filed a citizen suit to compel EPA to carry out the full statutory requirements. The reviewing court held that it had subject matter jurisdiction to review the claim regarding the section 404 requirement which it treated as a requirement of the Act: "Because the Complaint alleges that

<sup>&</sup>lt;sup>7</sup> Section 301 provides general rulemaking authority for the Administrator to promulgate regulations under subchapter III of the Clean Air Act. 42 U.S.C. § 7601(a) (2006) ("[T]he Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under the chapter.")

defendants' violated § 404(2) of the Act, plaintiff stated a claim upon which relief may be granted." <u>New York v. Browner</u>, 1998 U.S. Dist. LEXIS 5996, \*5, n. 4 (April 21, 1998). Section 404, like section 821, is a requirement of the Act.

## B. The Structure and Purpose of the PSD Program Requires EPA to Establish BACT Limits That Maximize Emission Reductions of Pollutants Subject to Regulation Under the Act Through Advances in Technology and Careful Decision-Making.

The PSD program is preventive in its purpose and structure. Congress declared that the PSD program is to protect public health and welfare from the "potential adverse effect" of air pollution and to "preserve, protect, and enhance" air quality in special places such as national parks. 42 U.S.C. § 7470(1), (2). The BACT provision is designed to advance these statutory purposes by protecting and enhancing air quality against any class of air pollutants "subject to regulation under the Act."

The PSD program is preventive in its structure by applying to a broad class of pollutants and applying the latest technology to reduce emissions from these contaminants. BACT requires the maximum degree of emission reduction for pollutants regulated under the Act by assimilating advances in technology through case-by-case decision making. And like many other provisions in the Clean Air Act, BACT is intended to spur innovation and investments in new technology. When Congress added the BACT provision to the 1977 Clean Air Act Amendments, it made this purpose clear. The drafters of the 1977 Amendments described BACT as "[p]ossibly the most important of the 1977 Act's many

technology-fostering measures, to spur 'improvements in the technology of pollution control." S. Rep. No. 95-127 at 17-18.

BACT's unique case-by-case approach to pollution control facilitates this core purpose. Unlike other provisions in the Clean Air Act, BACT ensures that each permitted facility is subject to the best available control technology taking into account energy, environmental and economic impacts specific to each facility. 42 U.S.C. § 7479(3). This site-specific analysis allows for flexibility in permitting decisions intended to result in the "maximum degree of reduction" of each pollutant achievable for the facility. 42 U.S.C. § 7475(a)(4); see, e.g., State of Alaska Dep't. of Envtl. Conservation v. EPA, 124 S. Ct. 983, 1007 (2004) (affirming EPA's authority to invalidate a state PSD permit for failure to adequately explain the absence of the most stringent pollution control technology). Importantly, this aspect of BACT stands in sharp contrast to other provisions of the Act which are bound by more static determinations. For example, EPA is required to establish New Source Performance Standards requiring specific categories of new and modified sources to meet technology-based standards only once every 8 years. 42 U.S.C. § 7411(b)(1)(B). These industry-wide standards serve as the floor to a BACT emissions limitation. 42 U.S.C. § 7479(3).

The PSD program reflects Congress' overarching interest in ensuring rigorous decisionmaking as part of the PSD permit review process so as to carry out the preventive purpose of this program. This procedural rigor is written into the law. A core purpose of the PSD program is "to assure than any decision to permit increased air pollution in

any area" is made "only after careful evaluation of all the consequences of such a decision." 42 U.S.C. § 7470. Addressing the implications of a new facility that will release millions of tons of heat-trapping greenhouse gases is consonant with the core requirements of the PSD program that provide for preventive action by applying to a broad class of pollutants regulated under the Act, the assimilation of technological advances and judicious decision making that accounts for all of the consequences of a decision to permit increased air pollution.

## II. THERE ARE AVAILABLE METHODS TO LOWER CARBON DIOXIDE FROM COAL-FIRED ELECTRIC GENERATING UNITS AND WESTERN STATES HAVE PROVIDED FOR ENFORCEABLE EMISSION LIMITATIONS.

The requirement that EPA undergo a BACT analysis for the Deseret unit in no way preordains an outcome. As explained above, BACT simply requires the Agency consider a full range of available pollution control technologies capable of achieving the maximum degree of reduction available.

There are several "available methods, systems and techniques" for addressing the carbon dioxide from a new coal-fired electric generating unit. For example, higher boiler efficiencies directly affect carbon dioxide emissions. Alstom, the top supplier of coal-fired boilers worldwide, exaplins that "an efficiency improvement of 1 percentage point equals 2-3% less CO<sub>2</sub> emitted." Alstom, *Leading the Industry in Supercritical Boiler Technology*, available at:

http://www.power.alstom.com/\_eLibrary/presentation/upload\_70124.pdf.

Alstom documents that pulverized coal boilers available today can operate at much higher thermal efficiencies while saving overall costs. <u>Id.</u> ("Plants that employ today's generation of Alstom supercritical boilers can operate at cycle efficiencies in excess of 42-45% HHV (44-47% LHV)); ("Lower fuel consumption is a direct consequence of higher efficiencies. Fuel costs are a power plant's largest operating cost item. Because the capital cost of supercritical plants is close to those of subcritical plants, overall life cycle costs are often reduced."). EPA has recognized the potential for thermal efficiency advances to lower emissions. 70 Fed. Reg. 9706, 9713 (Feb. 28, 2005).

The use of cleaner fuels such as coal scrubbing and co-firing with biomass or natural gas can lower the carbon dioxide emissions discharged by a facility. The Department of Energy has documented over 9,000 megawatts of installed biomass capacity in the United States. The sources of biomass include forest products and agricultural residues and were fired using gasification, direct firing or co-firing.<sup>8</sup>

Facilities can use their waste heat through combined heat and power configurations that lower the carbon dioxide emissions. EPA has documented the climate-friendly benefits of combined heat and power.<sup>9</sup>

EPA has also recognized the potential to lower carbon dioxide emissions through capture of carbon dioxide and underground storage. EPA Region IX advised the Bureau of Land Management, in preparing an Environmental Impact Statement for a proposed coal plant

<sup>&</sup>lt;sup>8</sup> http://www1.eere.energy.gov/biomass/electrical\_power.html (last visited Oct. 8, 2007).

<sup>&</sup>lt;sup>9</sup> http://www.epa.gov/chp (last visited Oct. 8, 2007).

in Nevada, to "discuss carbon capture and sequestration and other means of capture and storage of carbon dioxide as a component of the proposed alternatives." Letter from Nova Blazej, EPA Region IX to Jeffrey A. Weeks, Bureau of Land Management at 14 (June 22, 2007). Thus EPA has, in fulfilling its duties under the Clean Air Act, both recognized the potentially significant impact that CO<sub>2</sub> emissions from power plants can have and argued that potential control strategies should be evaluated. Conducting a BACT analysis for CO<sub>2</sub> would therefore only result in EPA engaging in the same type of analysis that it would have other federal agencies conduct.

Several western states establish binding carbon dioxide emission limits for coal-fired power plants. For example, in May, Washington adopted a law requiring new coal plants to meet a carbon dioxide emission limitation of 1100 pounds per megawatt-hour unless the standard is demonstrated to be infeasible. S.B. 6001, 60th Leg., 1st Reg. Sess. (Wash. 2007). California has a similar carbon dioxide emission standard in effect. S.B. 1368, 2005-06 Leg., Reg. Sess. (Cal. 2006). Montana requires facilities fueled primarily by coal to capture and sequester at least 50 percent of the carbon dioxide produced. H.B. 25, 60th Leg., Reg. Sess. (Mont. 2007).

These numerous examples of available measures and technologies to reduce carbon dioxide emissions from traditional coal-fired power plants demonstrate the fallacy in EPA's refusal to even consider the effects of  $CO_2$  in the PSD permit process. Carbon dioxide is a pollutant subject to regulations under the Act and must be addressed in the BACT analysis. Indeed, EPA can ignore this harmful pollutant no longer.

## CONCLUSION

For the foregoing reasons, we respectfully ask the Environmental Appeals Board to reverse and remand EPA's permit determination to consider carbon dioxide pollution consistent with the BACT requirement.

Respectfully submitted,

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#### **CERTIFICATE OF SERVICE**

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