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July 7, 2007

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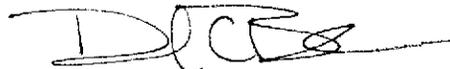
Ms. Erika Durr  
U.S. Environmental Protection Agency, Clerk of the Board  
Environmental Appeals Board  
1341 G Street, N.W., Suite 600  
Washington, D.C. 20005

Re: Petition for Review  
PSD Permit Number: 021060ACB  
Christian County Generation, LLC

Dear Ms. Durr:

Enclosed for filing is one original and three copies of Sierra Club's Petition for Review of the above-referenced PSD permit. If you have any questions about this filing or if I can be of any further assistance please call me at 608.256.1003.

Sincerely,  
GARVEY MCNEIL & MCGILLIVRAY, S.C.



David C. Bender

Attorney for Petitioner

Enclosures

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

ORIGINAL

IN THE MATTER OF: )  
CHRISTIAN COUNTY )  
GENERATION, LLC )  
)

APPEAL NUMBER: \_\_\_\_\_  
APPLICATION NUMBER: 05040027  
PSD PERMIT NUMBER: 021060ACB

PETITION FOR REVIEW AND REQUEST FOR ORAL ARGUMENT

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## INTRODUCTION

Pursuant to 40 C.F.R. § 124.19(a), the Sierra Club ("Petitioner"), petitions for review of the conditions of the Prevention of Significant Deterioration Permit Number 0201060ACB (Application Number 05040027) which the Illinois Environmental Protection Agency ("IEPA") issued to Christian County Generation, LLC, on June 5, 2007. A copy of the PSD permit is attached as Sierra Club Exhibit 1. The State of Illinois is authorized to administer the PSD permit program pursuant to a delegation of authority by the United States Environmental Protection Agency ("EPA"). The Permit authorizes the applicant to construct a new coal-fired power plant and associated emission units, known as the Taylorville Energy Center, in Christian County, Illinois. Petitioner contends that the IEPA failed to include certain permit conditions, make certain necessary findings, and undertake certain required analysis, based on IEPA's clearly erroneous conclusions of law, and also that this petition involves important policy considerations that the Board should review.

Petitioner also requests oral argument in the above-captioned matter. Oral argument would assist the Board in its deliberations on the issues presented by the case because the issues raised herein are issues of first impression for the Board and the U.S. Environmental Protection Agency, generally, are a source of significant public interest, and are of a nature such that oral argument would materially assist in their resolution.

## THRESHOLD PROCEDURAL REQUIREMENTS

Petitioner satisfies the threshold requirements for filing a petition for review under Part 124. Petitioner has standing to petition for review of the permit decision because Petitioner's members participated in the public comment period on the draft

permit. 40 CFR § 124.19(a). See comments filed by Bruce Nilles on behalf of the Sierra Club, attached as Sierra Club Exhibit 2. Petitioner's representatives also commented on the draft permit at the hearing held on January 11, 2007, at the Taylorville High School.<sup>1</sup> See Hr'g Tr., Ex. 4. The issues raised by Petitioner below were either raised with IEPA during the public comment period or are new issues, resulting from the Supreme Court's decision in Massachusetts v. Environmental Protection Agency, \_\_\_ U.S. \_\_\_, 127 U.S. 1438, 167 L.Ed.2d 248 (2007), after the period for public comments and, therefore, not reasonably ascertainable at the close of the public comment period. Consequently, the Board has jurisdiction to hear Petitioner's timely request for review.

#### **ISSUES PRESENTED FOR REVIEW**

Petitioner respectfully requests Board review of the following issues:

- (1) Whether IEPA's failure to include a best available control technology emission limit for carbon dioxide in the permit, despite the April 2, 2007, Supreme Court ruling that carbon dioxide is a Clean Air Act "pollutant," was a clearly erroneous conclusions of law or an important policy considerations that the Board should review and reverse; and
- (2) Whether IEPA's failure to consider carbon dioxide emissions in its collateral impacts analysis was a clearly erroneous conclusions of law, or an important policy considerations that the Board should review and reverse.

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<sup>1</sup> The permitting documents, including the draft and final permit, response to comments, public notice and hearing transcript are available on EPA's website at: [http://yosemite.epa.gov/r5/il\\_permits.nsf/f6a6e842b457fe2b86256ee80050d983/ddb883bbdf61292b852572330056c63c!OpenDocument&Highlight=0,christian](http://yosemite.epa.gov/r5/il_permits.nsf/f6a6e842b457fe2b86256ee80050d983/ddb883bbdf61292b852572330056c63c!OpenDocument&Highlight=0,christian) (last visited July 6, 2007). Alternatively, go to <http://www.epa.gov/region5/air/permits/ilonline.htm>, click on "PSD/Major NSR Records" and search for "Christian."

## STATEMENT OF FACTS

Christian County filed the application for this permit on April 14, 2005. Christian County proposes to construct an integrated gasification combined cycle power plant comprised of three gasifiers and two syngas cleanup trains controlled by a flare, a sulfur recovery unit with tail gas treatment unit and thermal oxidizer, two combined cycle combustion turbines controlled with selective catalytic reduction, cooling towers, bulk material handling and other ancillary equipment. The power plant would have a power output of 630 megawatts. IEPA issued a draft PSD permit on or about November 27, 2006. A public hearing was held on January 9, 2007. The comment period closed on February 10, 2007. On April 2, 2007, the U.S. Supreme Court issued its decision Massachusetts v. Environmental Protection Agency, 127 S.Ct. 1438. In Massachusetts, the Court held that “greenhouse gases fit well within the Clean Air Act’s capacious definition of ‘air pollutant.’” Id. at 1462. IEPA subsequently issued the final Taylorville PSD permit on June 5, 2007, without reopening the permit for public comment or addressing how the Supreme Court’s decision affects its permitting obligations. IEPA also issued its Response to Comments, attached at Sierra Club Exhibit 3. The Sierra Club now petitions the Board for review of this final PSD permit and urges a remand because, *inter alia*, the IEPA failed to establish emission limits for the principal greenhouse gas proposed to be emitted by the Taylorville facility: carbon dioxide.

## ARGUMENT

### **I. The Permit Must Be Remanded Because It Lacks a CO<sub>2</sub> BACT Limit.**

On April 2, 2007, after the public comment period closed, but before the final permit was issued, the Supreme Court’s issued its landmark ruling, Massachusetts v.

EPA, and overturned EPA's long-held position that carbon dioxide and other greenhouse gases are not Clean Air Act "pollutants." 127 S.Ct. at 1460.

Because EPA believes that Congress did not intend it to regulate substances that contribute to climate change, the agency maintains that carbon dioxide is not an "air pollutant" within the meaning of the provision.

The statutory text forecloses EPA's reading. The Clean Air Act's sweeping definition of "air pollutant" includes "*any* air pollution agent or combination of such agents, including *any* physical, chemical ... substance or matter which is emitted into or otherwise enters the ambient air..." § 7602(g) (emphasis added). On its face, the definition embraces all airborne compounds of whatever stripe, and underscores that intent through the repeated use of the word "any." Carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons are without a doubt "physical [and] chemical ... substance [s] which [are] emitted into ... the ambient air." The statute is unambiguous

In ruling that carbon dioxide is a pollutant, and therefore "subject to regulation under the Act," the Court also triggered the obligation for permitting agencies to include carbon dioxide emission limits in PSD permits. 40 C.F.R. § 52.21(b)(50)(iv).

Despite the Supreme Court ruling, IEPA did not evaluate and require best available control technology (BACT) for Taylorville's proposed carbon dioxide emissions, even though, absent any controls, it will emit approximately 4,000,000 tons of carbon dioxide annually. IEPA's failure to establish BACT limits for this massive new and long-lived source of greenhouse gas pollution is an erroneous conclusion of law and an important policy issue deserving of this Board's review. 40 C.F.R. § 124.19(a).

A. The Clean Air Act PSD Provisions Require BACT For Each Pollutant "Subject to Regulation"

The Clean Air Act prohibits the construction of a new major stationary source of air pollutants except in accordance with a prevention of significant deterioration (PSD)

construction permit. 42 U.S.C. § 7475(a); 40 C.F.R. §52.21(a)(2)(iii). A PSD permit must include a BACT limit “for each pollutant subject to regulation under [the Clean Air Act]” for which emissions exceed specified significance levels. 42 U.S.C. §§ 7475(a), 7479; 40 C.F.R. §§ 52.21(b)(1), (b)(2), (b)(12), (b)(50), (j)(2). BACT is further required “for each regulated NSR pollutant that [a source] would have the potential to emit in significant amounts.” 40 C.F.R. § 52.21(j)(1) (emphasis added). For any regulated NSR pollutant that is not listed in the table at 40 C.F.R. § 52.21(b)(23)(i), a significant rate is “any net emission increase.” 40 C.F.R. § 52.21(b)(23)(ii).

Section 52.21(b)(50), in turn, defines “Regulated NSR pollutant” as:

- (i) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator (e.g., volatile organic compounds are precursors for ozone);
- (ii) Any pollutant that is subject to any standard promulgated under Section 111 of the Act;
- (iii) Any Class I or Class II substance subject to a standard promulgated under or established by title VI of the Act; or
- (iv) Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, which have not been delisted pursuant to section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act.

40 C.F.R. § 52.21(b)(50) (emphasis added). The regulatory definition of BACT similarly applies to all air pollutants “subject to regulation” under the Act:

Best available control technology means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking

into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

40 C.F.R. § 52.21(b)(12) (emphasis added); see also 42 U.S.C. 7479(3). In short, a PSD permit must include a BACT limit for each pollutant *subject to regulation*.

B. The Significance Level for Carbon Dioxide is Any Amount Above Zero.

The significance level triggering PSD applicability for a regulated NSR pollutant, other than the 15 listed in 40 C.F.R. § 52.21(b)(23)(i), is *any* net increase. 40 C.F.R. § 52.21(b)(23)(ii). Carbon dioxide is not one of the 15 pollutants listed in 40 C.F.R. § 52.21(b)(23)(i). Therefore, because carbon dioxide is a regulated NSR pollutant, as shown below, *any* increase in emissions is significant and requires a BACT limit for carbon dioxide. 42 U.S.C. §§ 7475(a)(1), (4), 7479(3); 40 C.F.R. § 52.21(j)(2); 40 C.F.R. § 52.21(b)(23)(ii). The Taylorville plant will have the potential to emit carbon dioxide well above “any” emission rate; the estimated emissions are approximately 4 million tons of carbon dioxide annually. This would amount to at least 200 million tons of CO<sub>2</sub> over the expected operational life. Therefore, a BACT limit is required for carbon dioxide emissions.

C. Carbon Dioxide Is A Pollutant That Is Subject to Regulation Under the Act.

Carbon dioxide is a “pollutant,” as that term is used in the Clean Air Act and the PSD regulations. Section 302(g) of the Clean Air Act defines “air pollutant” expansively to include “*any* physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters into the ambient air.” 42 U.S.C. § 7602(g) (emphasis added).

The Clean Air Act's sweeping definition of "air pollutant" includes "any air pollution agent or combination of such agents, including any physical, chemical . . . substance or matter which is emitted into or otherwise enters the ambient air . . ." §7602(g) (emphasis added). On its face, the definition embraces all airborne compounds of whatever stripe, and underscores that intent through the repeated use of the word "any." Carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons are without a doubt "physical [and] chemical . . . substance[s] which [are] emitted into . . . the ambient air." The statute is unambiguous.

Massachusetts, 127 S.Ct. at 1460 (emphasis in original).

Additionally, the term "subject to regulation," as that term is used in the Act and the PSD regulations, means not only pollutants that are currently regulated, but pollutants for which EPA and the states possess but have not exercised authority to impose requirements. Notably, carbon dioxide meets either test – it is currently regulated and is potentially regulated even further under the Act.

1. Carbon Dioxide Is Currently Regulated Under the Act.

Even if the term "subject to regulation" in the Act and 40 C.F.R. § 52.21(b)(50) were limited to pollutants that are currently regulated under an existing Clean Air Act provision, a BACT limit for carbon dioxide is required. Carbon dioxide is currently regulated under the Clean Air Act's acid rain provisions and the Illinois State Implementation Plan.

a. Carbon Dioxide Is Regulated Under the Acid Rain Provisions.

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. In 1993, EPA promulgated such regulations, which are set forth at 40 C.F.R. Part

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. See also, Buckley v. Valeo, 424 U.S. 1, 66-67 (1976) (finding record keeping and reporting requirements to be regulation, albeit permissible regulation, of political speech). Thus, carbon dioxide is already regulated under the Act as part of the Acid Rain provisions.

b. Carbon Dioxide Is Regulated Under the Illinois State Implementation Plan

The Illinois State Implementation Plan-- approved by EPA-- reads: “[N]o person shall cause or threaten or allow the discharge or emission of any contaminant into the environment in any State so as, either alone or in combination with other sources, to cause or tend to cause air pollution in Illinois.” 35 Ill. Admin. Code § 201.141.<sup>2</sup> The term “air pollution” is further defined to mean “the presence in the atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property.” 35 Ill. Admin. Code § 201.102.<sup>3</sup>

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<sup>2</sup> U.S. EPA approved this rule as part of the Illinois SIP on May 31, 1972 (37 Fed. Reg. 10,862). *See* <http://yosemite.epa.gov/r5/newsip.nsf/02ddba31bced1b4386256fb10062256f35e0f10c8f62d967852563ab0069e2e2!OpenDocument>

<sup>3</sup> This SIP provision was also approved on May 31, 1972 (37 Fed. Reg. 10,682).

IEPA does not dispute Taylorville is a large new source of carbon dioxide, carbon dioxide contributes to global warming, and global warming is injurious to human, plant, or animal life. In fact, IEPA concedes that the SIP's "statutory definition of air pollutant is broad ... and CO2 would seem to fall within the meaning of the term ...." Response to Comments at 10. Instead, IEPA argues that a court may not construe its SIP language literally, but offers no reasoned explanation for how a court would go about ignoring the plain language of the statute and regulation. Moreover, IEPA's own website recognizes that combating global warming needs urgent action:

In 2006 Governor Blagojevich announced a new global warming initiative that will build on Illinois' role as a national leader in protecting the environment and public health. The announcement marked the beginning of a long-term strategy by the state to combat global climate change, and builds on the steps the state has already taken to reduce greenhouse gas (GHG) emissions, such as enhancing the use of wind power, biofuels and energy efficiency.

Executive Order 2006-11 signed by the Governor Blagojevich creates the Illinois Climate Change Advisory Group, which will consider a full range of policies and strategies to reduce GHG emissions in Illinois and make recommendations to the Governor. The Advisory Group has broad representation including business leaders, labor unions, the energy and agricultural industries, scientists, and environmental groups from throughout the state. The Governor named Doug Scott, Director of the Illinois Environmental Protection Agency, as Chair of the Advisory Group.

See <http://www.epa.state.il.us/air/climatechange> (last visited July 5, 2007).

IEPA argues that "historically" carbon dioxide "has not been considered harmful to humans or the environment." Response to Comments at 10. However, whether carbon dioxide has "historically" been considered a pollutant is irrelevant in light of the clear statutory definition of a pollutant. The Supreme Court dispensed with IEPA's theory in

Massachusetts. The definition of “air pollution” in the Illinois SIP is substantially similar to the definition in the Clean Air Act, which the Court found “embraces all airborne compounds of whatever stripe... [and c]arbon dioxide, methane, nitrous oxide, and hydrofluorocarbons are without a doubt “ physical [and] chemical ... substance [s] which [are] emitted into ... the ambient air.” Massachusetts, 127 S.Ct. at 1460. The Court found the definition “unambiguous” and rejected EPA’s arguments based on the historical treatment of carbon dioxide in light of the plain statutory language. Id. at 1460-61. Even without the benefit of the most recent IPCC Reports, the Supreme Court also found that carbon dioxide met the definition of an “air pollutant... [which can] cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” Id. at 1460. Indeed, the Court found that “[t]he harms associated with climate change are serious and well recognized.” 127 S. Ct. at 1455. The Supreme Court also acknowledged “the enormity of the potential consequences associated with man-made climate change.” Id. at 1458. Therefore, carbon dioxide is a “contaminant,” which the Taylorville plant “in combination with other sources [will] cause or tend to cause air pollution...” 35 Ill. Admin. Code §§ 201.141. As such, carbon dioxide is already regulated under the Illinois SIP.

## 2. Carbon Dioxide Is Subject to Further Regulation Under the Act.

Moreover, a current limit on carbon dioxide is unnecessary for it be “subject to” regulation under the Clean Air Act. “Subject to” means “capable of being regulated” and not “currently regulated.” EPA itself has recognized the principle that “[t]echnically, a pollutant is considered regulated once it is *subject to regulation* under the Act. A pollutant *need not be specifically regulated* by a section 111 or 112 standard to be considered regulated. (See 61 FR 38250, 38309, July 23, 1996.)” 40 CFR Part 70,

Change to Definition of Major Source Tuesday, 66 Fed. Reg. 59161 (Nov. 27, 2001)

(emphasis added). Also, EPA has previously interpreted the phrase “subject to” in the context of the Resource Conservation and Recovery Act (RCRA) and Clean Water Act as meaning “should” be regulated, as opposed to currently regulated:

RCRA section 1004(27) excludes from the definition of solid waste “solid or dissolved materials in ... industrial discharges which are point sources subject to permits under [section 402 of the Clean Water Act].” For the purposes of the RCRA program, EPA has consistently interpreted the language “point sources *subject to permits* under [section 402 of the Clean Water Act]” to mean point sources that *should have* a NPDES permit in place, whether in fact they do or not. Under EPA’s interpretation of the “subject to” language, a facility that should, but does not, have the proper NPDES permit is in violation of the CWA, not RCRA.

Memo from Michael Shapiro and Lisa Friedman (OGC) to Waste Management Division Directors, *Interpretation of Industrial Wastewater Discharge Exclusion from the Definition of Solid Waste* at 2, (Feb. 17, 1995) (emphasis added).<sup>4</sup>

Under both Sections 111 and 202, carbon dioxide can be regulated and, indeed, should be regulated. Section 202 of the Act requires EPA to set standards applicable to emissions of “any air pollutant” from motor vehicles, and Section 111 requires EPA to establish standards of performance for emissions of “air pollutants” from new stationary sources, where air pollution “may reasonably be anticipated to endanger public health or welfare.” 42 U.S.C. § 7411(b)(1)(A); 42 U.S.C. § 7521(a)(1). EPA’s failure, thus far, to establish specific emission limits for carbon dioxide under these two programs is not determinative of whether carbon dioxide is “subject to” regulation. However, it is

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<sup>4</sup> The EPA memo is available at: [http://yosemite.epa.gov/osw/rcra.nsf/ea6e50dc6214725285256bf00063269d/C8FA9634A91B9FE08525670F006BF1ED/\\$file/11895.pdf](http://yosemite.epa.gov/osw/rcra.nsf/ea6e50dc6214725285256bf00063269d/C8FA9634A91B9FE08525670F006BF1ED/$file/11895.pdf) (last visited July 6, 2007).

notable that this failure to establish emission limits is the subject of pending legal actions against the agency. For example, EPA's failure to establish carbon dioxide emission limits stationary sources, including power plants, under Section 111 is pending before the United States Court of Appeals for the District of Columbia. State of New York, et al. v. EPA, No. 06-1322.

On April 30, 2007, EPA announced that it was holding a hearing on California's request to regulate greenhouses gas from automobiles because, as EPA explains, "Section 209(b) of the Act requires the Administrator ... to waive application of the prohibitions of section 209(a) for any state that has adopted standards ... for the control of emissions from new motor vehicles ... if the state determines that the state standards will be ... at least as protective of public health and welfare as applicable standards." 72 Fed. Reg. 21,260 (Apr. 30, 2007). While the State of California has notified EPA that it intends to sue the agency for unreasonable delay in responding to its waiver request later this year,<sup>5</sup> Administrator Johnson announced that the agency expects to make its waiver decision by the end of the year.

More recently, on May 14, 2007, President Bush issued an Executive Order confirming the Supreme Court's ruling that EPA can regulate greenhouse gases, including carbon dioxide, from motor vehicles, nonroad vehicles and nonroad engines under the Clean Air Act.<sup>6</sup> The Executive Order directs EPA to coordinate with other federal agencies in undertaking such regulatory action. The President's action indicates the Chief Executive is also of the opinion that carbon dioxide is subject to regulation under the Clean Air Act.

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<sup>5</sup> Gov. Schwarzenegger Tells U.S. EPA of Inevitable Lawsuit on Greenhouse Gas Emissions Waiver, <http://gov.ca.gov/index.php?/press-release/6665/> (June 13, 2007) (last visited July 5, 2007).

<sup>6</sup> <http://www.whitehouse.gov/news/releases/2007/05/20070514-2.html> (last visited July 5, 2007).

Because carbon dioxide is currently regulated under both the acid rain provisions of the Act and the Illinois SIP, it is a pollutant "subject to regulation" under the Act. Additionally, because carbon dioxide can and should be regulated under one or more additional Clean Air Act programs, including section 111 and 202, because it "may reasonably be anticipated to endanger public health or welfare," it is otherwise "subject to regulation" under the Act. 42 U.S.C. §§ 7411(b)(1)(A), 7521(a)(1). IEPA's failure to require BACT for Taylorville's carbon dioxide emissions was an erroneous conclusion of law. This issue is also an important policy matter that the Board should review.

## **II. IEPA Failed To Consider The Collateral Impacts of CO2.**

Should the Board conclude that carbon dioxide is not a pollutant subject to regulation under the Clean Air Act, it must still remand the permit because IEPA failed to consider carbon dioxide emissions as part of its BACT collateral impacts analysis. Petitioner raised this issue in its comments and urged IEPA to, *inter alia*, establish output-based standards as one way to minimize the project's carbon dioxide emissions. See Sierra Club Comments at 6-7. IEPA responded that "the consideration of CO2 emissions in the collateral environmental impacts analysis does not provide leverage to impose requirements on this project related to CO2 emission, such as out-put based limit based on a net thermal efficiency for the combustion turbines." Response to Comments at 9. Elsewhere in its response, IEPA states:

In this case, the issued permit does not impose conditions relating to the control or reduction of CO2 emissions. The commenter notes several aspects of the Illinois EPA's permitting decision that purportedly warrant the inclusion of some form of CO2 emission control or permit limitation. ... In general, the comments do not support the imposition of CO2 emission controls or limits. ...

Response to Comments at 6; see also Response to Comments at 10 (“[T]reating CO2 emissions as a regulated pollutant under Illinois law would be wholly unconventional.”).

IEPA is simply mistaken that it lacks the authority to establish output-based standards. Moreover, IEPA confuses the requirement to set an output based limit for criteria pollutants based on the consideration of carbon dioxide emissions, with the requirement to set limits on carbon dioxide emissions.

IEPA’s assertion of limited authority is also at odds with this Board’s rulings that a permitting authority has plenary authority to consider unregulated pollutants in a BACT analysis. Specifically, the Board has interpreted BACT as allowing a permitting agency to consider unregulated pollutants in setting emission limits and other terms of a permit, since a BACT determination is to take into account environmental impacts.<sup>7</sup> In this case, Petitioner urged IEPA to set output-based standards for other PSD pollutants, such as sulfur dioxide and nitrogen oxides, with an eye to carbon dioxide emissions. In other words, by setting permit limits based on output-based, instead of input-based limits, a facility operator would be maximizing achievable control of criteria pollutants, 42 U.S.C. § 7479(3), while also reducing carbon dioxide emissions by maximizing efficiency. A limit based on heat input could have the opposite effect—increasing fuel usage, and therefore heat input, for the same level of energy production.

In promulgating the new NSPS standards for electric utility steam generating units, EPA established output-based standards precisely because it promotes efficiency and, thereby, less fuel consumed per unit output and less overall carbon dioxide emissions: “By relating emission limitations to the productive output of the process,

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<sup>7</sup> See In Re North County Resource Recovery Associates, 2 E.A.D. 229, 230 (Adm’r 1986), 1986 EPA App. LEXIS 14.

output-based emission limits encourage energy efficiency because any increase in overall energy efficiency results in a lower emission rate.” Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978 70 Fed. Reg. 9706, 9713 (Feb. 28, 2005). Furthermore, EPA explained, “an output-based standard establishes emission limits in a format that incorporates the effects of unit efficiency by relating emissions to the amount of useful-energy generated, not the amount of fuel burned.” Id.

While IEPA may not be required to establish limits due to collateral carbon dioxide impacts, it should consider such impacts. Moreover, contrary to its response to comments, IEPA is not prohibited from doing so. IEPA’s failure to consider carbon dioxide in the collateral impacts analysis, and include output-based standards as a feasible strategy to limit carbon dioxide, based on its belief that it cannot consider carbon dioxide, was clearly an erroneous conclusion of law and a significant policy issue warranting this Board’s review.

### CONCLUSION

For these reasons we respectfully urge the Board to review and remand the Taylorville PSD permit. Respectfully submitted, this 7th day of July, 2007.



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