## IN RE CHRISTIAN COUNTY GENERATION, LLC

PSD Appeal No. 07-01

## **ORDER DENYING REVIEW**

Decided January 28, 2008

#### Syllabus

On July 9, 2007, Sierra Club filed a petition requesting that the Environmental Appeals Board ("Board") grant review of certain conditions of a prevention of significant deterioration ("PSD") permit that the Illinois Environmental Protection Agency ("IEPA") issued to Christian County Generation, LLC ("CCG"). The Permit would authorize CCG to construct the Taylorville Energy Center (the "Facility"). The Facility is a proposed new coal-fired electric generating plant that would use a coal combustion method known as integrated gasification combined cycle, or IGCC, which is a process by which coal is first converted to a synthetic gas, then cleaned to remove particulate matter, mercury, sulfur compounds and other acid gases, and finally burned in a separate gas turbine to generate electric power.

Sierra Club objects to the issuance of the permit, arguing that the permit must contain a best available control technology ("BACT") limit for control of carbon dioxide ("CO<sub>2</sub>") emissions. IEPA, CCG, and EPA's Office of Air and Radiation ("OAR") all contend that the Board should dismiss the petition because Sierra Club did not raise its CO<sub>2</sub> BACT issue and related arguments during the public comment period on the draft permit. Raising issues and arguments during the comment period is required by 40 C.F.R. [124.13, .19(a) to preserve reasonably ascertainable issues or reasonably available arguments for consideration on appeal. Sierra Club argues that it is entitled to raise the CO<sub>2</sub> BACT issue for the first time in this administrative appeal because, after the close of public comment, the U.S. Supreme Court held in *Massachusetts v. EPA*, \_\_\_\_\_ U.S. \_\_\_\_, 127 S.Ct. 1438 (2007), that CO<sub>2</sub> is an air "pollutant" within the meaning of the Clean Air Act. Sierra Club argues that the CO<sub>2</sub> BACT issue was not reasonably ascertainable until after the Supreme Court's decision in *Massachusetts v. EPA*.

Held: Sierra Club's petition is denied on procedural grounds. The Board concludes that Sierra Club cannot raise this issue for the first time in this administrative appeal because it failed to raise it within the time required by 40 C.F.R. §§ 124.13, .19(a). The Board has routinely denied review where an issue was reasonably ascertainable but was not raised during the comment period on the draft permit. Here, the Board finds that the issue Sierra Club seeks to raise was reasonably ascertainable before the close of the public comment period on the draft permit.

At oral argument before the Board, Sierra Club acknowledged that, before the close of public comment (and while Sierra Club was a party to *Massachusetts v. EPA* pending before the Supreme Court), Sierra Club in fact considered the possibility that the Supreme Court would reach the result that it did in *Massachusetts v. EPA*. Because Sierra Club was

not only able to anticipate, but, in fact, before public comment on the permit closed, did specifically contemplate the holding of Massachusetts v. EPA, the arguments Sierra Club now advances based on the Massachusetts decision were reasonably ascertainable or reasonably available within the public comment period. A party's specific contemplation of a possible outcome of a pending Supreme Court case in which that party is involved logically falls within a common sense understanding of "reasonably ascertainable" or "reasonably available." The Board notes that Sierra Club is also the petitioner in another case before the Board, In re Deseret Power Electric Cooperative, PSD Appeal No. 07-03, in which petitioner raised the CO<sub>2</sub> BACT issue during the public comment period and, therefore, preserved the issue for appeal. In *Deseret*, like the present case, the public comment period closed before the Supreme Court issued its Massachusetts decision. Accordingly, unlike Deseret where it timely raised the issue, Sierra Club waived the CO<sub>2</sub> BACT issue in the present case by its failure to raise the issue during the public comment period, as required by the regulations governing this proceeding. The Board further concludes based on all relevant circumstances that the present case is not one appropriate for the Board to depart from normal practice by granting review of an issue that clearly was not properly preserved by the petitioner.

# Before Environmental Appeals Judges Edward E. Reich, Kathie A. Stein, and Anna L. Wolgast.

**Opinion of the Board by Judge Reich:** 

#### I. INTRODUCTION

On July 9, 2007, Sierra Club filed a petition requesting that the Environmental Appeals Board ("Board") grant review of certain conditions of a prevention of significant deterioration ("PSD") permit, Permit No. 021060ABC ("Permit"), that the Illinois Environmental Protection Agency ("IEPA")<sup>1</sup> issued to Christian County Generation, LLC ("CCG"). The Permit would authorize CCG to construct the Taylorville Energy Center ("Facility"), which is a proposed new coal-fired electric generating plant that would use a coal combustion method known as integrated gasification combined cycle, or IGCC. The Facility will be located in Christian County, Illinois.

<sup>&</sup>lt;sup>1</sup> IEPA administers the PSD program in Illinois pursuant to a delegation of authority from U.S. EPA Region 5 (the "Region"). *See Delegation of Authority to State Agencies*, 46 Fed. Reg. 9580 (Jan. 29, 1981); *In re Zion Energy, LLC*, 9 E.A.D. 701, 701 n.1 (EAB 2001). PSD permits issued by states acting with delegated authority are considered EPA-issued permits. *In re SEI Birchwood, Inc.*, 5 E.A.D. 25, 26 (EAB 1994); *see also In re Hadson Power 14-Buena Vista*, 4 E.A.D. 258, 259 (EAB 1992). Because IEPA acts as EPA's delegate in implementing the federal PSD program within the State of Illinois, the Permit is considered an EPA-issued permit for purposes of federal law, and is subject to review by the Board pursuant to 40 C.F.R. § 124.19. *See In re Hillman Power Co., LLC*, 10 E.A.D. 673, 675 (EAB 2002); *In re Three Mountain Power, LLC*, 10 E.A.D. 39, 40 n.1 (EAB 2001); *In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 109 n.1 (EAB 1997); *In re Commonwealth Chesapeake Corp.*, 6 E.A.D. 764, 765 n.1 (EAB 1997); *In re W. Suburban Recycling & Energy Ctr., LP*, 6 E.A.D. 692, 695 n.4 (EAB 1996).

IGCC is a process by which coal – in this case Illinois Basin coal (Herrin No. 6 coal seam), which is a particularly high sulfur coal<sup>2</sup> – is first converted to a synthetic gas, then cleaned to remove particulate matter, mercury, sulfur compounds and other acid gases and finally burned in a separate gas turbine to generate electric power.<sup>3</sup> Heat energy recovered as steam from the gasification process is also used to generate electric power.<sup>4</sup> CCG's proposed Facility is designed to have a nominal electric power generation capacity of 630 megawatts ("MW") produced by two separate gas turbines (the Facility will produce an additional 140 MW of electricity that the Facility will consume in its operations).<sup>5</sup> It will be operated as a "base load power plant" with each combustion turbine running for months at a time at or near capacity. The design includes two gasifiers to deliver the necessary syngas and a third gasifier to serve as a spare or backup for use during periods of maintenance or outage of the two primary gasifiers.

Sierra Club objects to the issuance of the Permit, arguing that the Permit must contain a best available control technology ("BACT") limit for control of carbon dioxide ("CO<sub>2</sub>") emissions. Sierra Club, however, did not raise its CO<sub>2</sub> BACT issue and related arguments during the public comment period on the draft permit. As we explain below, the procedural rules governing EPA permitting proceedings require all reasonably ascertainable issues or reasonably available arguments to be raised before the close of public comment on the draft permit. 40 C.F.R. §§ 124.13, .19(a). Sierra Club nevertheless asserts that it is entitled to raise the CO<sub>2</sub> BACT issue for the first time in this administrative appeal because, after the close of public comment, the U.S. Supreme Court held in *Massachusetts v. EPA*, \_\_\_\_\_\_ U.S. \_\_\_, 127 S.Ct. 1438 (2007), that CO<sub>2</sub> is an air "pollutant" within the meaning of the Clean Air Act. Sierra Club argues that the CO<sub>2</sub> BACT issue was not "reasonably ascertainable" until after the Supreme Court's decision in *Massachusetts v. EPA*. Petition for Review and Request for Oral Argument at 2 (July 9, 2007) [hereinafter "Petition"].

<sup>3</sup> IEPA Bureau of Air, *Project Summary for a Construction Permit Application from Christian County Generation, LLC for the Taylorville Energy Center*, § II, at 1-2 (Nov. 28, 2006) [hereinafter "Project Summary"].

<sup>4</sup> The integration of syngas production and electric generation gives the process its name as "integrated gasification," and the secondary electric power generation from heat recovery is referred to as "combined cycle."

<sup>5</sup> Most of the electricity used by the Facility will be consumed in the air separation unit, which will separate ambient air into oxygen and nitrogen using low temperature refrigeration and high pressure. Project Summary at 1-2. Both the oxygen and the nitrogen will be used by the Facility at different stages of the process. *Id.* at 2. The oxygen will be used in the gasification process, and the nitrogen will be used in the combustion turbine. *Id.* 

<sup>&</sup>lt;sup>2</sup> See, e.g., In re Prairie State Generating Co., 13 E.A.D. 1,16 (EAB 2006), aff d sub nom. Sierra Club v. EPA, No. 06-3907 (7th Cir. Aug. 24, 2007).

As we explain below, we reject Sierra Club's argument and conclude instead that this is not an appropriate case for us to grant review of an issue that Sierra Club waived by failing to raise it within the time required by 40 C.F.R. §§ 124.13, .19(a).

## II. BACKGROUND

#### A. Statutory and Regulatory Background

Congress enacted the PSD provisions of the Clean Air Act ("CAA") in 1977 for the purpose of, among other things, "insur[ing] that economic growth will occur in a manner consistent with the preservation of existing clean air resources." CAA § 160(3), 42 U.S.C. § 7470(3). The statute requires preconstruction approval in the form of a PSD permit before anyone may build a new major stationary source of air pollutants or make a major modification to an existing source if located in either an "attainment" or "unclassifiable" area. CAA §§ 107, 160-169B, 42 U.S.C. §§ 7407, 7470-7492. The PSD permitting program regulates air pollution in "attainment" areas, where air quality meets or is cleaner than the national ambient air quality standards ("NAAQS"), as well as in areas that cannot be classified as "attainment" or "non-attainment" (i.e., "unclassifiable" areas). 42 U.S.C. §§ 7407, 7471; *see also In re EcoEléctrica, L.P.*, 7 E.A.D. 56, 59 (EAB 1997); *In re Commonwealth Chesapeake Corp.*, 6 E.A.D. 764, 766-67 (EAB 1997).

The NAAQS are "maximum concentration 'ceilings" for particular pollutants, "measured in terms of the total concentration of a pollutant in the atmosphere." U.S. EPA Office of Air Quality Planning & Standards, *New Source Review Workshop Manual* at C.3 (Draft Oct. 1990) ["NSR Manual"].<sup>6</sup> NAAQS have been set for six criteria pollutants: sulfur oxides,<sup>7</sup> particulate matter ("PM"),<sup>8</sup>

<sup>&</sup>lt;sup>6</sup> The NSR Manual has been used as a guidance document in conjunction with new source review workshops and training, and as a guide for state and federal permitting officials with respect to PSD requirements and policy. Although it is not a binding Agency regulation, the NSR Manual has been looked to by this Board as a statement of the Agency's thinking on certain PSD issues. *E.g., In re RockGen Energy Ctr.*, 8 E.A.D. 536, 542 n.10 (EAB 1999); *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 129 n.13 (EAB 1999).

<sup>&</sup>lt;sup>7</sup> Sulfur oxides are measured as sulfur dioxide ("SO<sub>2</sub>"). 40 C.F.R. § 50.4(c).

<sup>&</sup>lt;sup>8</sup> "Particulate matter, or 'PM' is 'the generic term for a broad class of chemically and physically diverse substances that exist as discrete particles (liquid droplets or solids) over a wide range of sizes." *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 181 (EAB 2000) (quoting 62 Fed. Reg. 38,652, 38,653 (July 18, 1997)). For purposes of determining attainment of the NAAQS, particulate matter is measured in the ambient air as particulate matter with an aerodynamic diameter of 10 micrometers or less, referred to as PM<sub>10</sub>. 40 C.F.R. § 50.6(c).

nitrogen dioxide ("NO<sub>2</sub>"),<sup>9</sup> carbon monoxide ("CO"), ozone,<sup>10</sup> and lead. *See* 40 C.F.R. §§ 50.4-50.12. No NAAQS has been promulgated for CO<sub>2</sub>.

The PSD regulations require that new major stationary sources in attainment or unclassifiable areas, such as CCG's proposed IGCC Facility, employ the "best available control technology," or BACT,<sup>11</sup> to control emissions of "each pollutant subject to regulation" under the Clean Air Act that the source would have the potential to emit in significant amounts. CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4); *see also* 40 C.F.R. § 52.21(b)(5), (j)(2). Specifically, the statute provides that BACT applies to "each pollutant *subject to regulation under this chapter.*" 42 U.S.C. § 7475(a)(4) (emphasis added). The central issue in Sierra Club's appeal is whether CO<sub>2</sub> is a "pollutant subject to regulation" under the Clean Air Act. *Compare* Petition at 5-12 *with* IEPA's Response at 16-32.<sup>12</sup>

<sup>10</sup> A facility's compliance with respect to ozone is measured in terms of emissions of volatile organic compounds ("VOCs"). 40 C.F.R. § 52.21(b)(23).

<sup>11</sup> BACT is defined by the statute in relevant part as follows:

The term "best available control technology" means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter 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 each such pollutant.

CAA § 169(3), 42 U.S.C. § 7479(3); see also 40 C.F.R. § 52.21(b)(12).

<sup>&</sup>lt;sup>9</sup> A facility's compliance with respect to nitrogen dioxide is measured in terms of emissions of any nitrogen oxides ("NO<sub>X</sub>"). 40 C.F.R. § 52.21(b)(23); *In re Haw. Elec. Light Co.*, 8 E.A.D. 66, 69 n.4 (EAB 1998). "'The term nitrogen oxides refers to a family of compounds of nitrogen and oxygen. The principal nitrogen oxides component present in the atmosphere at any time is nitrogen dioxides. Combustion sources emit mostly nitric oxide, with some nitrogen dioxide. Upon entering the atmosphere, the nitric oxide changes rapidly, mostly to nitrogen dioxide." *Alaska Dept. of Envtl. Conservation v. EPA*, 540 U.S. 461, 470 n.1 (2004) (quoting EPA, Preservation of Significant Deterioration for Nitrogen Oxides, 53 Fed. Reg. 40,656, 40,656 (Oct. 17, 1988)).

<sup>&</sup>lt;sup>12</sup> Sierra Club points to the Supreme Court's *Massachusetts v. EPA* decision as establishing that CO<sub>2</sub> is an air "pollutant" within the meaning of the Clean Air Act. Petition at 5. Although the Supreme Court did determine that greenhouse gases, such as CO<sub>2</sub>, are "pollutants" under the CAA, the *Massachusetts* decision did not address the question whether CO<sub>2</sub> is a pollutant "subject to regulation" under the Clean Air Act. *Massachusetts v. EPA*, <u>US. at</u> <u>127</u> S.Ct. at 1460-63.

Determination of BACT for control of pollutant emissions is one of the central features of the PSD program.<sup>13</sup> *In re BP W. Coast Prods., LLC, Cherry Point Co-Generation Facility,* 12 E.A.D. 209, 213-14 (EAB 2005); *In re Knauf Fiberglass, GmbH,* 8 E.A.D. 121, 123-24 (EAB 1999). BACT is a "site-specific determination resulting in the selection of an emission limitation that represents application of control technology or methods appropriate for the particular facility." *In re Cardinal FG Co.,* 12 E.A.D. 153, 161 (EAB 2005); *In re Three Mountain Power, LLC,* 10 E.A.D. 39, 47 (EAB 2001); *Knauf Fiber Glass* 8 E.A.D. at 128-29; *see also In re CertainTeed Corp.,* 1 E.A.D. 743, 747 (Adm'r 1982) ("It is readily apparent \* \* that \* \* BACT determinations are tailor-made for each pollutant emitting facility.").

In the present case, IEPA used an approach known as the "top-down" method for determining BACT recommended by the NSR Manual's guidance.<sup>14</sup> Project Summary at 5-14. Among other things, the NSR Manual's recommended method for determining BACT includes consideration of the energy, environmental, and economic impacts of the available technologies, including any potential "collateral impact" of the technology on pollutant emissions other than the pollutant to be controlled by the technology. NSR Manual at B.26-.53.

CCG's proposed IGCC Facility is one of the source types listed as regulated in 40 C.F.R. § 52.21(b)(1)(i), and it has the potential to emit PM, SO<sub>2</sub>, NO<sub>x</sub>, and CO in amounts exceeding 100 tons per year. Accordingly, the Facility will be a new "major stationary source" of regulated pollutant emissions within the meaning of the PSD regulations. Project Summary at 4. The PSD permitting requirements, however, are pollutant-specific, which means that a facility may emit many air

<sup>&</sup>lt;sup>13</sup> The PSD regulations also require the permit issuer to review new major stationary sources prior to construction to ensure that emissions from such facilities will not cause or contribute to an exceedance of either the NAAQS or any applicable PSD ambient air quality "increments." CAA § 165(a)(3), 42 U.S.C. § 7475(a)(3); 40 C.F.R. §§ 52.21(k)-(m). Air quality increments represent the maximum allowable increase in a particular pollutant's concentration that may occur above a baseline ambient air concentration for that pollutant. *See* 40 C.F.R. § 52.21(c) (increments for three regulated air pollutants). The performance of an ambient air quality and source impact analysis, pursuant to the regulatory requirements of 40 C.F.R. § 52.21(k), (l) and (m), as part of the PSD permit review process, is the central means for preconstruction determination of whether the source will cause an exceedance of the NAAQS or PSD increments. *See Haw. Elec. Light*, 8 E.A.D. at 73. In the present case, Petitioner has not sought review of IEPA's ambient air quality and source impact analysis.

<sup>&</sup>lt;sup>14</sup> "The NSR Manual is not a binding Agency regulation and, as such, strict application of the methodology described in the NSR Manual is not mandatory." *Cardinal FG*, 12 E.A.D. at 162. "However, a careful and detailed analysis of the criteria identified in the regulatory definition of BACT is required, and the methodology described in the NSR Manual provides a framework that assures adequate consideration of the regulatory criteria and consistency within the PSD permitting program." *Id.*; *see also Steel Dynamics*, 9 E.A.D. at 183 ("This top-down analysis is not a mandatory methodology, but it is frequently used by permitting authorities to ensure that a defensible BACT determination, involving consideration of all requisite statutory and regulatory criteria, is reached.").

pollutants, but only one or a few may be subject to PSD review, depending upon a number of factors including the amount of projected emissions of each pollutant. NSR Manual at 4. CCG's proposed Facility will emit PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, and sulfuric acid mist in amounts qualifying as "significant" under 40 C.F.R. § 52.21(b)(23)(i). Project Summary at 5. As such, CCG is required to comply with the BACT emissions limits that are set based on the best available technology for controlling emissions of these pollutants. Sierra Club does not challenge IEPA's BACT determination for controlling emissions of any of these pollutants. Instead, Sierra Club contends that the Permit must also contain a BACT emissions limit for CO<sub>2</sub>.

#### B. Procedural Background

On April 14, 2005, CCG submitted its application for a PSD permit that would authorize CCG to construct the proposed Facility. IEPA Bureau of Air, Responsiveness Summary for Public Questions and Comments on the Christian County Generation's Taylorville Energy Center Power Plant Project Near Taylorville, at 2 (June 2007) ("IEPA's Response to Comments"). In November 2006, IEPA issued a draft permit, along with the Project Summary, and IEPA provided notice to the public inviting comment on the draft permit between November 27, 2006, and February 10, 2007. Id. IEPA also held a public hearing on January 11, 2007. Id. Sierra Club's representatives participated in the public hearing. See Transcript Public Hearing: Proposed Issuance of a Construction Permit/PSD Approval to Christian County Generation, LLC in Taylorville, at 28, 33, 42 (Jan. 11, 2007). Sierra Club submitted extensive written comments on the draft permit. See Letter from Bruce Nilles, attorney for Sierra Club, to John Kim, IEPA Hearing Officer, attachment Sierra Club Comments (Feb. 13, 2007). Sierra Club did not raise in its written comments or its oral testimony its present argument that a BACT limit must be established for CO<sub>2</sub> emissions. Instead, Sierra Club's comments submitted during the public comment period argued, among other things, that CO<sub>2</sub> emissions should be taken into account as a collateral impact in setting the emissions limits for the regulated pollutants that are subject to BACT. Letter from Bruce Nilles, attorney for Sierra Club, to John Kim, IEPA Hearing Officer, attachment Sierra Club Comments at 6-9 (Feb. 13, 2007).

On June 5, 2007, IEPA issued its permit decision. IEPA also issued its response to the comments received from the public. *See* IEPA's Response to Comments. IEPA provided an explanation of its conclusions regarding the collateral impacts of the selected BACT technology on emissions of  $CO_2$ . *Id.* at 8-9. In particular, IEPA explained that the "collateral consideration of  $CO_2$  emissions does not lead to any changes to or adjustment of the BACT determination made for emissions of PSD pollutants from the proposed plant." *Id.* at 8. IEPA explained further that the selected technology, IGCC, "appears more advantageous than conventional boiler power plants in its potential for collection of  $CO_2$  for sequestration [and] \* \* \* to provide significant improvements in energy efficiency." *Id.* at 9.

Sierra Club timely filed its petition requesting that this Board grant review of IEPA's permitting decision. *See* Petition for Review and Request for Oral Argument (July 9, 2007). Sierra Club raised two issues in its Petition: whether the Permit must establish a CO<sub>2</sub> BACT limit; and whether IEPA erred in its collateral impacts analysis with respect to CO<sub>2</sub>. Petition at 3, 13. IEPA filed a response to the Petition. *See* Response to Petition (Aug. 24, 2007) [hereinafter "IEPA's Response"]. CCG also requested and was granted leave to file a response to the Petition. *See* Christian County Generation LLC's Motion to Participate and Request for Oral Argument (Aug. 16, 2007) [hereinafter "CCG's Response"]. Among other things, both IEPA and CCG object that Sierra Club did not preserve for appeal its arguments that a BACT limit should be applied to control CO<sub>2</sub> emissions. *See* IEPA's Response at 11-15; CCG's Response at 4-9.

By order dated July 20, 2007, the Board requested that U.S. Environmental Protection Agency, Office of Air and Radiation and Office of General Counsel, jointly submit a brief addressing the two issues raised in Sierra Club's Petition. The Agency's Office of Air and Radiation ("OAR"), represented by the Agency's Office of General Counsel, submitted its brief on September 24, 2007. *See* Brief of the EPA Office of Air and Radiation (Sept. 24, 2007) ("OAR's Brief").

Sierra Club filed a reply to the briefs submitted by IEPA, CCG, and OAR. *See* Petitioner's Reply Brief (Oct. 9, 2007). In its reply brief, Sierra Club withdrew its contention that IEPA erred in considering the potential collateral impacts of the selected BACT limits on  $CO_2$  emissions. *Id.* at 3.

The Board held oral argument in this matter on October 17, 2007. *See* Transcript of Oral Argument on October 17, 2007 (Oct. 22, 2007) [hereinafter "EAB Oral Arg. Tr."]. IEPA did not participate in the oral argument. Instead, a few days prior to the argument, IEPA's attorney informed the Board that he had not received the necessary appointment from the Illinois Attorney General's Office to represent the State at the oral argument. *See* Letter from Robb H. Layman, IEPA Assistant Counsel, to Eurika Durr, EAB Clerk of the Board (Oct. 12, 2007).<sup>15</sup>

<sup>&</sup>lt;sup>15</sup> IEPA's counsel's letter leaves some doubt as to whether counsel also lacked authority to file IEPA's response to Sierra Club's Petition. We need not resolve this question because we do not rely upon IEPA's brief in deciding this case.

## **III.** DISCUSSION

Both IEPA and CCG observe that Sierra Club did not raise during the public comment period on the draft permit its arguments that CO<sub>2</sub> emissions must be regulated by a BACT emissions limit. IEPA's Response at 11-15; CCG's Response at 4-9. IEPA and CCG argue that by not raising these arguments during the public comment period, Sierra Club failed to preserve them for review. *See* IEPA's Response at 11-15; CCG's Response at 4-9. OAR echoed these concerns. *See* OAR's Brief at 2 ("As a preliminary matter, OAR agrees with IEPA and permittee that Petitioner has not preserved these issues for review for the reasons set forth in the briefs already submitted by these parties.").

The regulations governing PSD permitting provide that the petition for review shall include "a demonstration that any issues being raised were raised during the public comment period (including any public hearing) to the extent required by these regulations." 40 C.F.R. § 124.19(a). The regulations include the following requirement for raising issues during the public comment period:

All persons, including applicants, who believe any condition of a draft permit is inappropriate \* \* \* must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period (including any public hearing) \* \* \*.

40 C.F.R. § 124.13. In applying these regulations, the Board has routinely denied review where the issue "was reasonably ascertainable but was not raised during the comment period on the draft permit[]." *In re Shell Offshore, Inc.*, 13 E.A.D. 357, 394 (EAB 2007); *In re BP W. Coast Products, LLC, Cherry Point Co-generation Facility*, 12 E.A.D. 209, 218-20 (EAB June 21, 2005) [hereinafter "BP Cherry Point"]; *In re Kendall New Century Development*, 11 E.A.D. 40, 55 (EAB 2003); *In re Haw. Elec. Light Co.*, 10 E.A.D. 219, 227 (EAB 2001); *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 249-50 (EAB 1999).<sup>16</sup>

Sierra Club asserts that it is entitled to raise the  $CO_2$  BACT issue for the first time in this administrative appeal because, after the close of public comment, the U.S. Supreme Court held in *Massachusetts v. EPA*, \_\_ U.S. \_\_, 127 S.Ct. 1438 (2007), that  $CO_2$  is an air "pollutant" within the meaning of the Clean Air Act. Petition at 2. Sierra Club argues that the  $CO_2$  BACT issue is a new issue "resulting from the Supreme Court's decision \* \* \* after the period for public comments

<sup>&</sup>lt;sup>16</sup> The federal appellate courts apply a similar rule: "[i]t is the general rule \* \* \* that a federal appellate court does not consider an issue not passed upon below." *Singleton v. Wulff*, 428 U.S. 106, 120 (1976).

and, therefore, not reasonably ascertainable at the close of the public comment period." *Id.* Notably, Sierra Club was a party to the *Massachusetts v. EPA* case pending before the Supreme Court and argued in favor of the position ultimately adopted by the Supreme Court. *See Massachusetts v. EPA*, 127 S.Ct. at 1446 n.4. At oral argument before the Board, Sierra Club acknowledged that, before the close of public comment (and while *Massachusetts v. EPA* was pending before the Supreme Court), Sierra Club in fact considered the possibility that the Supreme Court would reach the result that it did in *Massachusetts v. EPA*. EAB Oral Arg. Tr. at 14 ("That was obviously a possibility and an outcome we were hoping for.").

Because Sierra Club was not only able to anticipate, but, in fact, before public comment on the Permit closed, did specifically contemplate the holding of Massachusetts v. EPA, the arguments Sierra Club now advances based on the Massachusetts decision were reasonably ascertainable or reasonably available within the public comment period. In Sierra Club's view, a successful decision in the Massachusetts case would "trigger[] the obligation for permitting agencies to include carbon dioxide emissions limits in PSD permits," the very issue Sierra Club now argues for the first time on appeal in the present case. Petition at 4. Sierra Club points to nothing that occurred after the close of public comment, other than the Massachusetts decision, to explain why its arguments first became reasonably ascertainable or reasonably available after public comment closed. A party's specific contemplation of a possible outcome of a pending Supreme Court case in which that party is involved logically falls within a common sense understanding of "reasonably ascertainable" or "reasonably available."<sup>17</sup> Thus, we must conclude that Sierra Club did not do what the regulations governing this proceeding require of a petitioner in order to preserve an issue for review on appeal. "Of course, a litigant cannot simply sit back, fail to make good faith arguments and then, because of developments in the law, raise a completely new challenge." Old Ben Coal Co. v. Dir., Office of Workers' Comp. Programs, 62 F.3d 1003, 1007 (7th Cir. 1995). Accordingly, Sierra Club waived the CO<sub>2</sub> BACT issue by its failure to raise the issue during the public comment period as required by the regulations governing this proceeding.

Notwithstanding Petitioner's failure to properly preserve the issue, we recognize the importance of giving full effect to controlling interpretations of federal law by the Supreme Court. *See Harper v. Va. Dept. of Taxation*, 509 U.S. 86, 97 (1993). The Supreme Court has recognized that the federal appellate courts may exercise discretion with respect to which issues may be taken up and resolved for the first time on appeal. *Singleton v. Wulff*, 428 U.S. 106, 121 (1976). As the Seventh Circuit noted in *Old Ben Coal*, a change in the law – even a change

<sup>&</sup>lt;sup>17</sup> We do not address here the effect of a court decision in a case of which the petitioner may not have been aware during the comment period.

announced by the Supreme Court's interpretation of federal law – does not give rise to an opportunity for a litigant to raise a completely new challenge that could have been, but was not raised earlier. *Old Ben Coal*, 62 F.3d at 1007. For the reasons expressed below, the present case is not one appropriate for us to grant review of an issue that clearly was not properly preserved by the petitioner.<sup>18</sup>

The regulatory requirement that a petitioner must raise issues during the public comment period "is not an arbitrary hurdle, placed in the path of potential petitioners simply to make the process of review more difficult; rather, it serves an important function related to the efficiency and integrity of the overall administrative scheme. As we have explained in the past, '[t]he intent of these rules is to ensure that the permitting authority \* \* \* has the first opportunity to address any objections to the permit, and that the permit process will have some finality." BP Cherry Point, 12 E.A.D. at 219 (quoting In re Sutter Power Plant, 8 E.A.D. 680, 687 (EAB 1999)). "The effective, efficient, and predictable administration of the permitting process demands that the permit issuer be given the opportunity to address potential problems with draft permits before they become final." In re Encogen Cogeneration Facility, 8 E.A.D. 244, 250 (EAB 1999). The Board and the Administrator have explained that the PSD permitting process requires a specific time for public comment so that issues may be raised and "the permit issuer can make timely and appropriate adjustments to the permit determination, or, if no adjustments are made, the permit issuer can include an explanation of why none are necessary." In re Union County Res. Recovery Facility, 3 E.A.D. 455, 456 (Adm'r 1990); accord Sutter Power, 8 E.A.D. at 687.19 Accordingly, the requirement to raise all reasonably ascertainable issues and reasonably available arguments during the public comment period has an important role in establishing the proper staging of the permit decision process. We have explained as follows:

<sup>&</sup>lt;sup>18</sup> In addition, because Sierra Club was actively litigating before the Supreme Court the issue of whether  $CO_2$  is a pollutant under the Clean Air Act, Sierra Club cannot argue that raising that issue in the present permitting proceeding would have appeared pointless. *Cf. United States v. Washington*, 12 F.3d 1128, 1139 (D.C. Cir. 1994) (Appellant is not precluded from raising a new issue on appeal "where a supervening decision has changed the law in appellant's favor and the law was so well-settled at the time of trial that any attempt to challenge it would have appeared pointless"); *see also Holland v. Big River Minerals Corp.*, 181 F.3d 597, 605-606 (4th Cir. 1999) ("The intervening law exception to the general rule that the failure to raise an issue timely in the district court waives review of that issue on appeal applies when 'there was strong precedent' prior to the change, such that the failure to raise the issue was not unreasonable and the opposing party was not prejudiced by the failure to raise the issue sooner." (citations omitted)). Prior to the *Massachusetts* case, there was no "strong precedent" in the federal courts that was contrary to the position now advanced by Sierra Club for the first time on appeal in this case on the issue of whether  $CO_2$  is a pollutant under the Clean Air Act, and the ramifications of that issue on the BACT issue.

<sup>&</sup>lt;sup>19</sup> The rules barring litigants from raising an issue for the first time before the federal Circuit Courts of Appeal serve a similar purpose. *See Bailey v. Int'l Bhd. of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers & Helpers, Local 374*, 175 F.3d 526, 530 (7th Cir. 1999).

If an issue is not raised during the notice and comment process, \* \* \* the permitting authority is provided no opportunity to address the issue specifically prior to permit issuance. In such instances, if the Board were to exercise jurisdiction, it would become the first-level decisionmaker as to such newly raised issues, contrary to the expectation that "most permit conditions should be finally determined at the [permit authority] level." Knauf I, 8 E.A.D. at127 (quoting 45 Fed. Reg. 33,290, 33,412 (May 19, 1980)). Alternatively, the Board might remand such issues back to the permitting authority for initial determination at that level, potentially resulting in an unnecessarily protracted permitting process, where each time a final permit is issued and a new issue is raised on review, the permit must be sent back to the permit issuer for further consideration. Such an approach would undermine the efficiency, predictability, and finality of the permitting process.

*BP Cherry Point*, 12 E.A.D. at 219-20. In the present case, Sierra Club's failure to raise the  $CO_2$  BACT issue during the public comment period deprived the permit issuer, IEPA, opportunity to consider Sierra Club's arguments in the first instance.

In contrast, the Board recently granted review and set a briefing schedule in another case where the  $CO_2$  BACT issue was raised during the public comment period and therefore was preserved for appeal. *See In re Deseret Power Electric Cooperative*, PSD Appeal No. 07-03 (Nov. 21, 2007) (Order Granting Review). Notably, Sierra Club is also the petitioner in the Deseret case. Sierra Club's comments submitted during the Deseret public comment period demonstrate how a petitioner can raise an issue where a decision is anticipated, but has not yet been issued, by the U.S. Supreme Court. In Deseret, Sierra Club stated as follows during the public comment period:

We believe that the EPA has a legal obligation to regulate  $CO_2$  and other greenhouse gases as pollutants under the Clean Air Act. \* \* This issue is now before the U.S. Supreme Court. If the Supreme Court agrees that greenhouse gases, such as  $CO_2$ , must be regulated under the Clean Air Act, such a decision may also require the establishment of  $CO_2$  emission limits in this permit for the [proposed new waste coal-fired unit].

E-mail from Utah Chapter of the Sierra Club, et al., to Mike Owens, U.S. EPA, Region 8, regarding Draft PSD Permit for Major Modifications to the Bonanza Power Plant in Utah, at 2. This comment was sufficient to apprise the permit issuer in that case, U.S. EPA Region 8, to include a detailed response on the issue in its response to public comments. *See* U.S. EPA Region 8, Response to Public Comments (Permit No. PSD-OU-0002-04.00) at 5-9 (Aug. 30, 2007).

Even assuming we have discretion to grant review in circumstances where the Supreme Court has announced in an intervening decision its interpretation of federal law directly applicable to an issue raised for the first time in a petition for review,<sup>20</sup> the present case does not fall within those circumstances. Here, the interpretation of federal law announced by the Supreme Court in its Massachusetts decision, standing alone, does not compel application of a CO<sub>2</sub> BACT limit in the present case. Indeed, Sierra Club acknowledges that the Court's conclusion that CO<sub>2</sub> is an air pollutant under the Clean Air Act does not resolve all issues necessary to determine whether the PSD permit issued to CCG must contain a CO<sub>2</sub> BACT emissions limit. Specifically, Sierra Club notes that only air pollutants that are "subject to regulation" and emitted by the Facility in amounts exceeding the applicable "significance level" must be controlled by a BACT limit. Petition at 6. Whether CO<sub>2</sub> is a pollutant "subject to regulation" under the Clean Air Act remains a matter of considerable dispute. Compare Petition at 5-12 with IEPA's Response at 16-32; see also OAR's Brief at 3-11; CCG's Response at 10-15. In addition, application of BACT would require a remand for the permit applicant to supplement its application and for the permit issuer, IEPA, to make necessary factual findings on this new issue that Sierra Club wholly failed to raise within the time required by 40 C.F.R. §§ 124.13, .19(a). We are reluctant to delay this proceeding in order to consider the new issue that Sierra Club seeks to raise for the first time in this administrative appeal.<sup>21</sup>

<sup>&</sup>lt;sup>20</sup> In a few cases involving compelling circumstances, the Board has referred to the importance or significance of an issue when reaching the merits of an issue notwithstanding some uncertainty regarding whether the issue was properly preserved. *See In re Campo Landfill Project*, 6 E.A.D. 505, 519 n. 19 (EAB 1996); *In re Marine Shale Processors, Inc.*, 5 E.A.D. 751, 763 n.11 (EAB 1995). Notably, the circumstances present in those cases are not present here. In *Marine Shale*, the permit issuer had already addressed the issue raised on appeal. 5 E.A.D. at 763 n.11 (holding that "given the importance of the issues, the Board has decided that, regardless of which issues were or were not raised during the comment period, the Board will examine the merits of [the] petition."). In *Campo Landfill*, we recognized the authority to reach a particularly important issue, but also concluded that the particular issue in the case was not reasonably ascertainable during the public comment period. 6 E.A.D. at 519 n. 19 ("Although we conclude that the issue raised by petitioners was not 'reasonably ascertainable' during the public comment period, we note that, given the importance of the offset requirement, we can exercise our discretion to consider the issue on that basis as well.").

<sup>&</sup>lt;sup>21</sup> In applying the federal appellate rules governing issue preservation, the courts are often unwilling to entertain a new issue for the first time on appeal where the record has not been fully developed or additional issues must be resolved to address the question raised for the first time on appeal. See, e.g., Singleton v. Wulff, 428 U.S. 106, 121 (1976) (denying review because additional fact finding would be required). Notably, the need for a full analysis of potential control methods establishes both a legally and practically significant distinction between the issue of applying BACT to Continued

While we understand Sierra Club's concern for controlling emissions that contribute to global warming, we must operate within the framework of the applicable law and regulations. Moreover, we are mindful that the IGCC technology that CCG proposes to use offers many environmental benefits compared to conventional emissions control technology. IEPA noted in its response to Sierra Club's CO<sub>2</sub> collateral impacts argument that IGCC "is an important component of the technology that will be needed" to control CO<sub>2</sub> emissions. IEPA's Response to Comments at 7. IEPA explained that "this proposed plant will be far better prepared for a CO<sub>2</sub> regulated future, in that it would be carbon capture ready. [According to IEPA,] when CO<sub>2</sub> regulations are adopted, Christian County Generation will be able to add the necessary system to capture and direct the CO<sub>2</sub> to sites for sequestration."  $Id.^{22}$ 

Approval of the permit for this proposed IGCC Facility also will likely result in reduction of other pollutant emissions as CCG's Facility is considered in future BACT determinations. In this regard, we note that, for a number of years, Sierra Club has argued that IGCC technology should be adopted as the best available control technology for limiting air pollutant emissions from the burning of coal to produce electrical power. See, e.g., In re Prairie State Generating Co., 13 E.A.D. 1 (EAB 2006). The emissions limits and projected annual pollutant emissions set forth in the Permit for the proposed Facility demonstrate why Sierra Club has long advocated the use of IGCC technology. The Permit's emissions limit for SO<sub>2</sub> is 0.016 pounds per million Btu on a 3-hour rolling average. Project Summary at 10. This can be compared to the SO<sub>2</sub> emissions limit of 0.182 lb/MMBtu, on a 30-day rolling average, that was approved in 2006 for the Prairie State facility using state-of-the-art emissions control technology on a pulverized-coal-fired power plant also burning Illinois Basin coal. Prairie State, 13 E.A.D. at 9. The difference in projected annual emissions from the two facilities illuminates the significance of the lower emissions limit found to be achievable in this case by the proposed IGCC facility: CCG's proposed IGCC facility is projected to have SO<sub>2</sub> emissions of only 299 tons per year ("tpy") for a generating capacity of 630 MW, or 0.47 tpy per MW generating capacity (Project Summary at 3); in contrast, the Prairie State facility is projected to have SO<sub>2</sub> emissions of 11,866 tons per year for a generating capacity of 1500 MW, or 7.91 tpy per MW generating capacity (Prairie State, 13 E.A.D. at 15 n.12). CCG's pro-

<sup>(</sup>continued)

control  $CO_2$  emissions that Sierra Club failed to raise during the public comment period and the issue of "collateral impacts" that Sierra Club did raise at the proper time but has now withdrawn. As the Seventh Circuit has observed, "[o]f course, a litigant cannot simply sit back, fail to make good faith arguments and then, because of developments in the law, raise a completely new challenge." *Old Ben Coal Co. v. Director, Office of Workers' Compensation Programs*, 62 F.3d 1003 (7th Cir. 1995).

 $<sup>^{22}</sup>$  We express no opinion regarding Sierra Club's contention that CO<sub>2</sub> is currently regulated under the CAA. *See, e.g.*, Petition at 6-13.

posed IGCC facility is projected to have an SO<sub>2</sub> removal efficiency of more than 99% and possibly as high as 99.8%. Similar improvements in pollutant removal will be obtained for particulate matter, nitrogen oxides, mercury and lead.

Under these circumstances, we conclude that it is not appropriate for us to depart from normal practice in the present case by granting review of an issue that was not properly preserved for appeal by the petitioner as required by 40 C.F.R. §§ 124.13, .19(a). Accordingly, review is denied.

#### **IV.** CONCLUSION

For the reasons discussed above, we deny review of the PSD permit issued by the Illinois Environmental Protection Agency, as delegate of U.S. EPA Region 5, to Christian County Generation, LLC, for the proposed Taylorville Energy Center. In accordance with 40 C.F.R. § 124.19(f)(2), the Region 5 Administrator (or his delegate) shall promptly publish in the Federal Register a notice of final agency action.

So ordered.