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BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
OF THE STATE OF WYOMING

IN THE MATTER OF:	)	
BASIN ELECTRIC POWER COOPERATIVE	)	
DRY FORK STATION,	)	Docket No. 07-2801
AIR PERMIT CT - 4631	)	

RESPONDENT DEPARTMENT OF ENVIRONMENTAL QUALITY'S MEMORANDUM IN SUPPORT OF MOTION TO DISMISS

Respondent, the Department of Environmental Quality (DEQ) by and through undersigned counsel and pursuant to WYO. R. CIV. P. 12(b)(6) and the Environmental Quality Council Rules, Chapter II, Sections 3 and 14, provides the following memorandum in support of its Motion to Dismiss, which is filed contemporaneously herewith.

I. INTRODUCTION

This case involves an appeal of air quality construction permit CT-4631 issued by the DEQ to Basin Electric Power Cooperative (hereinafter referred to as "Basin") to construct a coal-fired electric power generating station, known as the Dry Fork Station, near Gillette, Wyoming. One of the Protestants' (Sierra Club, Powder River Basin Resource Council and Wyoming Outdoor Council, hereinafter referred to as "Protestants") claims is that the permit

lacks emission limits for carbon dioxide (CO_2) and other greenhouse gases[1] based on Best Available Control Technology (BACT) determinations and that the DEQ failed to consider the collateral environmental impacts of CO_2 and other greenhouse gases in its BACT analysis. Through this claim, Protestants are essentially asking this Council to transform this single DEQ air quality permit appeal into a general debate about whether and how CO_2 and other greenhouse gases should be regulated, which is inappropriate because the DEQ does not currently regulate CO_2 and other greenhouse gases.

In fact, the only relevant inquiry in this case is whether the DEQ's decision to issue air quality permit CT-4631 for the Dry Fork Station was in accordance with the applicable statutory and regulatory legal requirements. In this case, Protestants' CO_2 and other greenhouse gas claims fail as a matter of law because neither CO_2, methane or nitrous oxide are currently regulated pollutants pursuant to the federal Clean Air Act (CAA) and corresponding EPA regulations, the Wyoming Environmental Quality Act (WEQA) or Wyoming's Air Quality Standards and Regulations (WAQSR). Consequently, as a matter of law, it is impossible for Protestants to assert any legally cognizable claims that the DEQ's decision did not comply with statutory and regulatory requirements where neither the CAA and corresponding EPA regulations, the WEQA, nor the WAQSR currently impose the legal duties that Protestants allege regarding CO_2 and other greenhouse gases – the simple fact is the DEQ does not currently regulate CO_2 and other greenhouse gases.

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[1] Protestants' Petition list carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) as "greenhouse gases that contribute to global warming." *See* Pet. ¶ 3. Hereinafter, rather than specifically listing each of these pollutants, they will simply be referred to as "CO_2 and other greenhouse gases," or "CO_2."

For the reasons stated herein, and pursuant to Rule 12(b)(6) of the Wyoming Rules of Civil Procedure, Respondent DEQ moves to dismiss Count I of the Issues Presented for Review in Protestants' Protest and Petition For Hearing (Petition) as well as any other claims referencing CO_2, greenhouse gases, or global warming for failing to state a claim upon which relief can be granted. *See* Petition, pages 8-10 (hereinafter Pet. p. __).

II. BURDEN AND STANDARD OF PROOF

When reviewing a motion to dismiss pursuant to Rule 12(b)(6) of the Wyoming Rules of Civil Procedure, the material allegations of the complaint are accepted as true and the complaint should be dismissed if it clearly appears the complainant can prove no set of facts in support of his or her claims. *Wilson v. Bd. of County. Comm'rs of County. of Teton*, 2007 WY 42, ¶ 12, 153 P.3d 917, 921 (Wyo. 2007). Although dismissal is a drastic remedy which should be granted sparingly, a motion to dismiss "is the proper method for testing the legal sufficiency of the allegations and will be sustained when the complaint shows on its face that the plaintiff is not entitled to relief." *Feltner v. Casey Family Program*, 902 P.2d 206, 208 (Wyo. 1995), *quoting Mummery v. Polk*, 770 P.2d 241, 243 (Wyo. 1989). Under these applicable standards, Count I of Protestants' Petition relating to CO_2 and other greenhouse gases does not contain allegations upon which this Council can grant relief and therefore must be dismissed under Rule 12(b)(6) of the Wyoming Rules of Civil Procedure.

III. ARGUMENT

In Count I of the Petition, the Protestants ask this Council to vacate and remand permit CT-4631 based on Protestants' allegations that the DEQ failed to comply with statutory and regulatory permitting requirements for CO_2 and other greenhouse gases. However,

Protestants' claims fail because CO_2 and other greenhouse gases are not currently regulated or "subject to regulation" under the CAA and corresponding EPA regulations, the WEQA or the WAQSR, and therefore these pollutants are not currently subject to BACT. Thus, Protestants' claims that the DEQ failed to comply with statutory and regulatory permitting requirements for CO_2 and other greenhouse gases fail as a matter of law. Protestants' requested relief is based on what they believe the law should be, rather than what the law currently requires. There is no legal basis to support the claims in Count I of Protestants' Petition and therefore such claims must be dismissed.

A. THE DEQ CANNOT IMPOSE CO_2 BACT LIMITS BECAUSE CO_2 IS NOT A POLLUTANT "SUBJECT TO REGULATION" UNDER FEDERAL OR WYOMING LAW

Contrary to Protestants' claims that the DEQ should have made a CO_2 BACT determination (Pet. ¶¶ 28-30), CO_2 emissions are not currently regulated under either the CAA and corresponding EPA regulations, the WEQA or the WAQSR, and therefore the DEQ is currently unable to perform such determinations or impose attendant CO_2 emission limits.

Congress enacted the CAA "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population[.]" 42 U.S.C. § 7401(b)(1). Although Wyoming's air quality program was initiated in response to CAA requirements, the underlying foundation is the WEQA which establishes a statutory structure designed in part to enable the State of Wyoming to preserve, protect, use, develop, reclaim and enhance its air resources. As the Preamble to the WEQA explains:

> Whereas pollution of the air ... of this state will imperil public health and welfare, create public or private nuisances, be harmful to wildlife, fish and aquatic life, and impair domestic, agricultural, industrial, recreational and other beneficial uses; it is hereby declared to be the policy and purpose of this act to enable the state to prevent, reduce and eliminate pollution; to preserve and enhance the air ... of Wyoming; to plan the development, use, reclamation, preservation and enhancement of the air ... resources of the state; to preserve and exercise the primary responsibilities and rights of the state of Wyoming; to retain for the state the control over its air ...."

WYO. STAT. ANN. § 35-11-102.

The CAA was designed to achieve its goal through a cooperative federalism approach with the states. *See* 42 U.S.C. §§ 7401-7671q (2000) (CAA); 40 C.F.R. parts 1 through 789 (2006)(EPA regulations) and 40 C.F.R. part 52, subpart ZZ (Wyoming's EPA approved State Implementation Plan (SIP)); *see also* WYO. STAT. ANN. §§ 35-11-201 through -214 (Wyoming's air quality statutes); and WAQSR chs. 1-14 (Wyoming's air quality standards and regulations). The CAA assigns primary responsibility and authority for managing and protecting air quality within state borders to each individual state. *See* 42 U.S.C. § 7407(a). The state then implements its responsibilities by submitting a SIP to the EPA specifying the strategies which will be used to attain, maintain and enforce ambient air quality standards in that state. *See* 42 U.S.C. § 7410(a). In accordance with the CAA and WEQA's purpose, the DEQ regulates air pollution in Wyoming pursuant to a carefully crafted, intricately woven federal and state statutory and regulatory system with many highly technical provisions.

At the core of the CAA and Wyoming's air quality program are ambient air quality standards. Ambient air quality standards established at the federal level are referred to as "national ambient air quality standards" (NAAQS). *See* 42 U.S.C. § 7409. NAAQS set the

maximum ambient air concentration levels for certain pollutants described as "criteria" pollutants at levels sufficient to protect public health and welfare with a built-in safety margin. *See* 42 U.S.C. §§ 7408-7409. and 40 C.F.R. part 50. The EPA currently has NAAQS established for lead (pb), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), particulate matter (PM), and Ozone (O_3).[2] 42 U.S.C. § 7409; 40 C.F.R. pt. 50. Wyoming's state specific ambient air quality standards are referred to as "WAAQS." *See* 2 WAQSR §§ 1-11 (WAAQS established for PM, NO_2, SO_2, CO, O_3, hydrogen sulfide (H_2S), suspended sulfates (SO_3), fluoride, lead, and odors). Noticeably missing from the list of NAAQS or WAAQS criteria pollutants is CO_2, methane or nitrous oxide. CO_2, methane and nitrous oxide are not currently regulated pursuant to either the federal or Wyoming's ambient air quality standard programs.

Since 1974, one of the primary means for attaining, maintaining, and protecting the NAAQS, the WAAQS, and Wyoming's air quality in general has been through the DEQ's air quality preconstruction review and permitting of new major and minor sources of air pollution. WYO. STAT. ANN. § 35-11-801(c), 6 WAQSR §§ 2 and 4; *see also* WYO. STAT. ANN. § 35-11-201 (prohibits pollution which violates rules, regulations and standards adopted by the Council).

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[2] Ozone is not emitted directly into the atmosphere but is created through a photochemical reaction. Therefore, ozone is actually regulated by its precursors – nitrogen oxides (NOx) and volatile organic compounds (VOCs). *See* 62 Fed. Reg. 38856, 38858 (July 18, 1997). VOCs, by definition, excludes carbon dioxide or methane. *See* 40 C.F.R. § 51.100(s)(1) (incorporated by reference in 3 WAQSR § 6(a)). NOx is defined to mean all oxides of nitrogen except nitrous oxide. 5 WAQSR § 2(e)(i); *see also* 40 C.F.R. § 60.2 (same).

1. The DEQ Air Quality Major Source Construction and Prevention of Significant Deterioration Permitting Requirements

Preconstruction review and permitting of major sources was mandated by congress in the 1977 CAA amendments when the Prevention of Significant Deterioration (PSD)/New Source Review (NSR) program was adopted to insure that "economic growth will occur in a manner consistent with the preservation of existing clean air resources[.]" 42 U.S.C. § 7470(3); *see also Id.* §§ 7470-79, *Alabama Power Co. v. Costle,* 636 F.2d 323, 346-52 (D.C. Cir. 1979)(describing history and background of PSD program). The DEQ's air quality program uses the term "NSR" to describe the permit application review process that all air pollution sources must follow, and the term "PSD/NSR" or "PSD" to specifically refer to the process that major sources must follow. The DEQ's PSD program requires, in part, that an applicant demonstrate to the satisfaction of the DEQ/AQD that construction of the proposed facility will not cause or contribute to an ambient air quality standard or increment violation, and that the facility will install and operate pollution controls determined through the BACT process to control emissions of regulated pollutants. 6 WAQSR §§ 2 and 4. Therefore, before beginning construction of the Dry Fork Station, Basin had to first obtain a DEQ NSR air quality construction permit, specifically a PSD permit.

The DEQ's NSR regulation, applicable to both major and minor pollution sources, requires an air quality construction permit before work is begun on the facility. *See* 6 WAQSR § 2. Further, the WAQSR provide other requirements applicable solely to PSD permits, like the permit for Dry Fork Station. *See* 6 WAQSR § 4.

In this case, the DEQ followed each of the prescribed steps in granting approval to construct the Dry Fork Station as described in Basin's application, none of which require limitations or consideration of CO_2 or other greenhouse gases as part of the permit process. Although CO_2 is an air pollutant[3], CO_2 and other greenhouse gases are not currently pollutants "subject to regulation" under the CAA, the EPA regulations, the WEQA or the WAQSR. Thus, the DEQ could not and did not violate BACT requirements by excluding CO_2 or other greenhouse gas emissions from the DEQ's PSD/NSR permit review process and attendant BACT determination for the Dry Fork Station. And, no matter under whatever set of facts Protestants allege, the law is what it currently is - Protestants cannot show that a BACT determination was required for either CO_2, methane or nitrous oxide. Therefore, Protestants' CO_2 and other greenhouse gas claims should be dismissed as a matter of law.

2. NEITHER THE CAA, THE EPA REGULATIONS, THE WEQA NOR THE WAQSR CURRENTLY REGULATE CO_2 AND OTHER GREENHOUSE GASES

The DEQ has not currently adopted any rules, regulations or standards requiring limitations or consideration of CO_2 or other greenhouse gases as part of any DEQ air quality construction permit review or BACT determination, including PSD permits. However, the DEQ air quality construction permit process does require BACT for all minor or major air quality construction permits, for each pollutant subject to regulation:

> (c) No approval to construct or modify shall be granted unless the applicant shows, to the satisfaction of the Administrator of the Division of Air Quality that:
>
> ...

[3] *See* 42 U.S.C. § 7602(g) and *Massachusetts v. EPA*, 127 S. Ct. 1438, 1460 (2007).

> (v) The proposed facility will utilize the Best Available Control Technology with consideration of the technical practicability and economic reasonableness of reducing or eliminating the emissions resulting from the facility....

6 WAQSR § 2 (c)(v)(2006).

BACT is defined as:

> an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each pollutant subject to regulation under these Standards and Regulations [WAQSR] or regulation under the Federal Clean Air Act, which would be emitted from or which results for [sic] 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 or production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emission standard infeasible, he may instead prescribe a design, equipment, work practice or operational standard or combination thereof to satisfy the requirement of Best Available Control Technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice, or operation and shall provide for compliance by means which achieve equivalent results. Application of BACT shall not result in emissions in excess of those allowed under Chapter 5, Section 2 [New Source Performance Standards (NSPS)] or Section 3 [National Emission Standards for Hazardous Air Pollutants (NESHAP)] of these regulations and any other new source performance standard or national emission standards for hazardous air pollutants promulgated by the EPA but not yet adopted by the State of Wyoming.

6 WAQSR § 4(a) (emphasis added); *see also* 42 U.S.C. § 7479(3) (CAA definition), 40

C.F.R. §§ 52.21(b)(12)(the EPA regulatory definition applicable to federally issued PSD permits) and 51.166(b)(12)(the EPA regulatory definition applicable to SIP approved attainment areas including Wyoming).[4]

In 2002, the EPA amended its PSD/NSR regulations and clarified that BACT is required for each regulated NSR pollutant that a major source would have the potential to emit in significant amounts and defined the term "regulated NSR pollutant." 67 Fed. Reg. 80186 (December 31, 2002)(commonly referred to as the PSD/NSR "Reform Rules") codified at 40 C.F.R. §§ 52.21(federal NSR rules), 51.165(non-attainment area NSR rules) and 51.166 (attainment area NSR rules); *see also New York v. EPA,* 413 F.3d 3 (D.C. Cir. 2006)(upholding, vacating and remanding portions of the Reform Rules).

The Reform Rules defined the term "Regulated NSR pollutant" and in the preamble to the revised rules, the EPA listed all the air pollutants that were "currently regulated under the Act [CAA]" and subject to PSD review and permitting requirements. *See* 67 Fed. Reg. 80186, 80240 (Dec. 31, 2002)(preamble). The EPA's list of air pollutants currently regulated under the CAA did not include CO_2, methane or nitrous oxide or any other air pollutant that was not already subject to a regulation requiring actual control of emissions. *See Id.*

The EPA's Reform Rule defined "Regulated NSR pollutant" to mean:

> (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

[4] For each NAAQS criteria pollutant, the EPA designates areas within each state as having air quality better than the NAAQS (attainment), worse than the NAAQS (non-attainment) or unclassifiable. *See* 42 U.S.C. § 7407. All areas within Wyoming are designated as attainment or unclassifiable for each NAAQS criteria pollutant except for the City of Sheridan which has been designated as non-attainment for PM-10. 40 C.F.R. § 81.351.

(e.g., volatile organic compounds and NOx 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 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) and 51.166(b)(49).

In December 2006, the DEQ amended Wyoming's PSD regulations to incorporate these changes into the WAQSR, including defining "Regulated NSR pollutant" to mean:

(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 EPA 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 Federal Clean Air Act;

(iii) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Federal Clean Air Act; or

(iv) Any pollutant that otherwise is subject to regulation under the Federal Clean Air Act; except that any or all hazardous air pollutants either listed in section 112 of the Federal Clean Air Act or added to the list pursuant to section 112(b)(2) of the Federal Clean Air Act, which have not been delisted pursuant to section 112 (b)(3) of the Federal Clean Air 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 Federal Clean Air Act.

6 WASQR § 4(a) (emphasis added); *see also* 40 C.F.R. §§ 52.21(b)(50) and 51.166(b)(49).

In adopting the definition of "Regulated NSR pollutant," the EPA clarified which pollutants are regulated under the CAA for PSD purposes. Neither CO_2, methane or nitrous oxide are listed. As previously set forth, there are no NAAQS or WAAQS currently established for CO_2, methane or nitrous oxide. *See* 42 U.S.C. §§ 7408-09, 40 C.F.R. part 50, 2 WAQSR §§ 1-11. Likewise, these pollutants are not subject to any standard promulgated under NSPS. *See* 40 C.F.R. part 60, 5 WAQSR § 2. It is also undisputed that currently there are no standards established by title VI of the CAA for such pollutants. *See* 42 U.S.C. §§ 7671-7671q. CO_2, methane or nitrous oxide have not been and are not currently Regulated NSR pollutants. CO_2, methane or nitrous oxide are not currently subject to any air quality standard or regulation that requires actual control of such emissions. Both the EPA regulatory definition and the WAQSR definition of "Regulated NSR pollutant" limit the applicable pollutants for BACT review to those for which emission controls are required. And, as further explained below, CO_2 and other greenhouse gases are not "subject to regulation" under the CAA. No matter what set of facts Protestants unveil, the law is clear – the DEQ was not required to make a BACT determination for CO_2, methane or nitrous oxide because such pollutants are not currently "Regulated NSR pollutants." Therefore Protestants' CO_2 and other greenhouse gas claims fail and must be dismissed.

3. CO_2, Methane and Nitrous Oxide are not "Subject to Regulation" under the CAA

The definition of "Regulated NSR pollutant," including the language "subject to regulation," limits the reach of the BACT requirements so that a BACT determination is not required for all air pollutants. Instead, within the context of the definition of BACT, the phrase "subject to regulation" means that the particular air pollutant must be regulated under either the CAA, the WEQA or the WAQSR. Interpreting this language as including any air pollutant that possibly could be regulated under either the CAA, the WEQA or the WAQSR would render this limiting language meaningless and require BACT for all air pollutants - regulated or not. *See Alabama Power Co. v. Costle*, 636 F.2d 323, 370 (D.C. Cir. 1979)(pollutant may be a CAA "air pollutant" but not 'subject to regulation' for BACT purposes until a standard has been promulgated).

a. CO_2 and Other Greenhouse Gases are "Air Pollutants" but are not "Subject to Regulation" Pursuant to *Massachusetts v. EPA*

Protestants cite *Massachusetts v. EPA*, 127 S.Ct. 1438 (2007), as support for their CO_2 BACT claim. According to Protestants, that case affirmed that "CO_2 and other greenhouse gases are 'pollutants' that are subject to regulation under the Clean Air Act." Pet. ¶ 26. Protestants' understanding of the case and use of the term "subject to regulation" are simply wrong.

In *Massachusetts*, the United States Supreme Court held that under the CAA, CO_2 and other greenhouse gases met the definition of "air pollutant," and that the EPA has the authority to regulate emissions of such gases from new motor vehicles. *Massachusetts*, 127 S. Ct. at 1459-60. In fact, the Court remanded the case to the EPA to determine whether such

motor vehicle emissions contribute to global climate change and thereby endanger public health and welfare. The Court did not rule that CO_2, or for that matter any other greenhouse gases, were "subject to regulation under the CAA," nor did the Court rule that BACT or other PSD requirements apply to CO_2 and other greenhouse gases for which no standard or emission control requirements have been promulgated.

Although CO_2 and other greenhouse gases are air pollutants, the Court did not hold that these pollutants are currently "subject to regulation." Protestants' allegations that *Massachusetts* affirmed that CO_2 and other greenhouse gases are "subject to regulation" is simply inaccurate. For PSD permitting, CO_2 and other greenhouse gases are not "subject to regulation" as a result of *Massachusetts v. EPA*.

In *Massachusetts*, the Court simply held that CO_2 and other greenhouse gases are air pollutants that the EPA had the authority to, but was not required to, regulate unless the EPA made an endangerment finding. *Id.* at 1462-63. The Court did not hold that CO_2 is currently regulated under the CAA. There is an immense difference between having the authority to impose regulations and actually exercising that authority. A pollutant is only "subject to regulation" for purposes of PSD permitting when it is subject to an emission control regulation or standard. *See In re North County Resource Recovery Assocs.*, 2 E.A.D. 229 (EAB 1986)(the EPA lacks authority to impose limits directly on the emissions of unregulated pollutants)[5]; *see also* WYO. STAT. ANN. §§ 35-11-801(a)(DEQ authorized to

[5] The Environmental Appeals Board (EAB) decides challenges to PSD permits issued by the EPA and seven states administering PSD programs under authority delegated by the EPA. The EAB does not have jurisdiction over PSD permits issued by states administering their own PSD programs. *See* 40 C.F.R. § 124.19.

impose permit limits consistent with existing rules, regulations and standards) and 35-11-201(prohibits air pollution which violates rules, regulations and standards adopted by the Council); *see also* Attachment 1, *In re Sevier Power Company Power Plant*, Utah Air Quality Board Docket No. DAQE-AN2529001-04, *Findings of Fact, Conclusions of Law, and Final Order* (Jan. 9, 2008)(rejecting Sierra Club's argument that BACT requires consideration of CO_2 or other greenhouse gases because the Utah Air Quality Board has not promulgated rules requiring limitation or consideration of such gases as part of the permit process). Neither the EPA nor the DEQ have issued regulations requiring control of CO_2 emissions under the CAA, the WEQA or the PSD program. PSD permits (and by extension the attendant BACT analysis) are only required for pollutants subject to a statutory or regulatory provision that requires actual control of emissions for the specific pollutant.

As discussed previously, neither the CAA, the EPA regulations, the WEQA, nor the WAQSR have established any ambient air quality standards, NSPS, or emission control requirements for CO_2 or other greenhouse gases. And, *Massachusetts* does not provide any such standards. Consequently, CO_2 is not "subject to regulation" under the CAA as a result of the Court's decision in *Massachusetts*. Accordingly, for all the reasons stated above, Protestants have failed to make a claim that the DEQ's decision not to require or include a CO_2 BACT emissions limit in the Dry Fork Station PSD permit was not in accordance with the law.

b. CO_2 and other Greenhouse Gases are not "Subject to Regulation" Pursuant to Title IV of the CAA (Acid Rain Program)

Protestants also cite the CAA's "Acid Rain Program"as support alleging that "CO_2 has been subject to regulation under the Clean Air Act's acid rain program for well over a decade." Pet. ¶ 27. According to Protestants, CO_2 is "subject to regulation" solely because CO_2 emissions are monitored and the data is made publically available. *Id.* Title IV of the 1990 CAA Amendments directed the EPA to establish an Acid Rain Program to reduce the adverse effects of acid deposition resulting from the release of SO_2 and NO_x emissions. § 401(b) of Pub. L. 101-549. Subsequently, the EPA promulgated regulations to implement the Acid Rain program. *See* 40 C.F.R. parts 72-78. The DEQ has adopted and incorporated by reference the EPA's Acid Rain Program regulations. 11 WAQSR §§ 1-2.

At the same time that Congress enacted the CAA Acid Rain program, Congress also enacted section 821 of Public Law 101-549, entitled "Information Gathering on Greenhouse Gases Contributing to Global Climate Change," which called for the EPA to require acid rain sources to monitor, collect and report CO_2 emission data. 42 U.S.C. § 7651k (historical and statutory notes). When the EPA promulgated regulations to implement the Acid Rain Program, it also promulgated requirements governing the gathering of CO_2 monitoring and data information. *See* 58 Fed. Reg. 3590 (Jan. 11, 1993)(codified at 40 C.F.R. parts 72, 73, 75, 77 and 78).

Although the Acid Rain program regulations and requirements include CO_2 monitoring requirements, the Acid Rain Program never has, and currently does not, impose any emission controls on CO_2. *See* 40 C.F.R. part 75 (monitoring requirements for CO_2 as

a diluent gas and for data collection purposes). Gathering information about CO_2 emissions does not constitute regulation of CO_2 for BACT purposes nor make CO_2 a "Regulated NSR pollutant" or "subject to regulation." The Acid Rain Program requirements have not and do not subject CO_2 to regulation and BACT. Information gathering monitoring and data collection provisions in and of themselves do not subject CO_2 to regulation because such provisions do not control CO_2 emissions. *See Alabama Power,* 636 F.2d at 370 (pollutants are "subject to regulation" only when subject to an emission control standard).

Shortly after the EPA promulgated requirements to implement § 821, the EAB, in challenges to two separate PSD permits, rejected arguments that the permitting authority should have imposed CO_2 BACT emission limits. *See In re Inter-Power of New York, Inc.*, 5 E.A.D. 130, 151 (EAB 1994) ("carbon dioxide and hydrogen chloride are ... unregulated pollutants. In such circumstances the Region was not required to examine control technologies aimed at controlling these pollutants"); *In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 132 (EAB 1997) (permitting authority's conclusion that carbon dioxide "is not considered a regulated air pollutant for permitting purposes" was upheld because "at this time there are no regulations or standards prohibiting, limiting or controlling the emissions of greenhouse gases"). Both of these decisions were issued after Congress' adoption of § 821 and the EPA's promulgation of rules implementing the monitoring and information gathering and reporting requirements for CO_2. "Subject to regulation" means that the particular pollutant is subject to a requirement for actual control of emissions - i.e., the pollutant must currently be subject to a regulation or standard prohibiting, limiting, or otherwise controlling that pollutant's emissions.

Because § 821 of Public Law No. 101-549 and the EPA's Acid Rain Program regulations do not prohibit, limit or otherwise establish CO_2 emission control requirements, CO_2 is not currently an air pollutant "subject to regulation" under the CAA. The mere act of gathering information does not make a pollutant regulated. If it did, the permitting entity would be left with the bizarre result of having to impose emission control limits while still collecting data and before ever having had the opportunity to evaluate whether and how a particular pollutant should be regulated.[6] *See* WYO. STAT. ANN. § 35-11-202 (process for establishing Wyoming air quality standards or requirements).

"Regulated NSR pollutants" are identified by reference to three air quality programs: NAAQS or WAAQS, NSPS, and Title VI governing certain ozone depleting substances, as well as any pollutant that is "subject to regulation" under the CAA. *See* 40 C.F.R. § 52.21(b)(50)(i - iv) and 6 WAQSR § 4(a). Neither the EPA nor the DEQ have established a NAAQS/WAAQS or NSPS for CO_2, nor classified CO_2 as an ozone depleting substance nor otherwise required control of CO_2 emissions under any CAA or WEQA statutory or corresponding regulatory provision. Because CO_2 is not currently a "regulated NSR pollutant" subject to BACT, Protestants' CO_2 and other greenhouse gas claims must be dismissed as a matter of law.

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[6] For example, major stationary sources are currently defined to include sources that emit more than 250 tons per year of regulated pollutants and for 28 listed sources that threshold is only 100 tons per year. *See* 6 WAQSR § 4(a), 40 C.F.R. § 51.166(b)(1)(i). If "Regulated NSR pollutants" included CO_2, then Wyoming's PSD program would likely be greatly expanded to include sources that are currently regulated as minor sources.

C. Consideration of CO_2 and other Greenhouse Gas Emissions is Not Required or Appropriate in a BACT Collateral Impacts Analysis

Protestants allege that even if greenhouse gases are not subject to regulation under the CAA and Wyoming law, the DEQ must still consider the collateral environmental impacts of greenhouse gas emissions in setting BACT limits for other pollutants. Pet. ¶ 29. However, as more fully explained below, the BACT collateral impacts analysis focuses on local impacts directly attributable to the proposed facility, not potential global impacts of unregulated pollutants such as greenhouse gases that are not directly attributable to the proposed facility. Therefore, Protestants fail to state a claim and their CO_2 and greenhouse gas claims must be dismissed.

BACT determines an emission limit:

> based on the maximum degree of reduction of each pollutant subject to regulation ...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 ...

6 WAQSR § 4(a). *See also* 42 U.S.C. § 7479(3) (CAA definition), 40 C.F.R. §§ 52.21(b)(12)(the EPA regulatory definition applicable to federally issued PSD permits) and 51.166(b)(12)(the EPA regulatory definition applicable to SIP approved attainment areas); SENATE COMM. ON ENVIRONMENT AND PUBLIC WORKS, A LEGISLATIVE HISTORY OF THE CLEAN AIR ACT AMENDMENTS OF 1977 (Comm. Print August 1978), vol. 6 at 4723-24 (explaining that the collateral impacts clause was added to provide permitting authorities with flexibility to consider local impacts).

The EPA has established a five-step, top-down process for determining BACT. *See New Source Review Workshop Manual*, EPA (Draft Oct. 1990); *In re Prairie State Generating Co.*, 13 E.A.D. ____, slip op. at 14-18 (EAB 2006) (describing top-down BACT analysis), *aff'd sub nom. Sierra Club v. EPA*, 499 F.3d 653 (7th Cir. 2007); *see also Alaska v. EPA*, 540 U.S. 461, 475-76 (2004). Use of the EPA's top-down method is not mandatory, but is frequently used to ensure that the regulatory criteria were considered. *See In re Knauf Fiber Glass*, 8 E.A.D. 121, 128-132 (EAB 1999). There are five steps to the EPA's top-down method: 1) identify control options, 2) eliminate technically infeasible control technologies, 3) rank remaining technologies in descending order of control effectiveness, 4) evaluate the most effective controls, and 5) select the most effective remaining option. *See New Source Review Workshop Manual*, at B.5, EPA (Draft Oct. 1990).

The DEQ generally follows the EPA's top-down BACT process. The most stringent or "top" alternative is established as BACT unless the applicant demonstrates to the DEQ/AQD's satisfaction that the other considerations listed in the BACT definition justify the conclusion that the most stringent technology is not "achievable." If a technology is eliminated, the process continues and the next most stringent alternative is considered until BACT is reached. The so-called "collateral environmental impacts" (including energy, environmental, or economic impacts) allows rejection of the most effective technology only when "unusual circumstances specific to the facility make it appropriate to use less than the most effective technology," resulting in the conclusion that the most stringent technology is not achievable. *See In re Columbia Gulf Transmission Co.*, 2 EAD 824, 827 (EAB 1989)(emphasis added).

Therefore, the collateral impacts analysis allows the permitting agency to reject the most stringent control technology as BACT if the collateral impacts analysis, with its focus on local impacts directly attributable to the proposed facility, not potential global impacts of CO_2 and other greenhouse gas emissions, makes it appropriate to use less effective control technology. *See Id.* (focus of analysis is on local impacts), *see also In re World Color Press, Inc.* 3 E.A.D. 474, 478 (Adm'r 1990) ("collateral impacts clause focuses upon specific local impacts which constrain a particular source from using the most effective control technology"), *In re Kawaihae Cogeneration Project*, 7 E.A.D. at 116-17 (focus is on circumstances or concerns "unusual or unique"to the facility or locality). The BACT collateral impacts analysis is not the appropriate method for addressing potential global impacts of CO_2 and other greenhouse gas emissions.

For all the reasons stated above, Protestants fail to state a claim that the DEQ is required to consider CO_2 and other greenhouse gas emissions in the BACT collateral impacts analysis for the Dry Fork Station permit. Therefore Protestant's CO_2 and other greenhouse gas claims must be dismissed as a matter of law.

IV. CONCLUSION

In this case, Protestants' CO_2 and other greenhouse gas claims fail as a matter of law because CO_2 is not currently a regulated pollutant pursuant to the federal Clean Air Act (CAA) and corresponding EPA regulations, the Wyoming Environmental Quality Act (WEQA) or Wyoming's Air Quality Standards and Regulations (WAQSR). Consequently, as a matter of law, it is impossible for Protestants to assert any legally cognizable claims that the DEQ's decision did not comply with statutory and regulatory requirements where neither

the CAA, the WEQA, nor the WAQSR currently impose the legal duties that Protestants allege regarding CO_2 and other greenhouse gases – the simple fact is that CO_2 and other greenhouse gases are not currently regulated under either federal or Wyoming law. Thus, Protestants can not make any claims under Wyoming law that the DEQ failed to consider CO_2 or other greenhouse gas emissions in issuing the Dry Fork Station permit, and their Petition should be dismissed as to those claims.

DATED this 7th day of February, 2008.

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CERTIFICATE OF SERVICE

I hereby certify that I have served a true and correct copy of the foregoing *Respondent Department of Environmental Quality's Memorandum in Support of Motion to Dismiss* through United States mail, postage prepaid on this the 7th day of February, 2008 to the following:

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ATTACHMENT 1
to
Respondent DEQ's Memorandum in Support of Motion to Dismiss

In re Basin Electric Dry Fork Air Permit CT-4631 - EQC Docket No. 07-2801

BEFORE THE
UTAH AIR QUALITY BOARD

In the Matter of:	*	
	*	Findings of Fact, Conclusions of Law, and Final Order
Sevier Power Company Power Plant Sevier County, Utah DAQE-AN2529001-04	*	
	*	

The Utah Chapter of the Sierra Club (referred to herein as "Sierra Club") filed a Request for Agency Action dated November 12, 2004 and petition to intervene seeking review of the October 12, 2004 decision by the Executive Secretary of the Utah Air Quality Board to issue an Approval Order granting a permit to Sevier Power Company ("SPC") to construct and operate a coal-fired power plant in Sevier County, Utah. The Sierra Club presented nine issues for consideration of the Board. The Utah Air Quality Board denied Sierra Club's petition to intervene, which was appealed. The Utah Supreme Court, on November 21, 2006, determined Sierra Club had made a sufficient demonstration to support intervention and remanded the matter to the Board for hearing. PacifiCorp had also filed a petition to intervene, which was initially denied, but as a result of the Utah Supreme Court decision, PacifiCorp renewed its petition to intervene. The Board granted PacifiCorp intervention on Issue 2 of the Sierra Club's Request for Agency Action. Sierra Club filed a Motion for Leave to Amend its Request for Agency Action that was granted by the Board, which added an Issue 10.

On April 4, 2007, the Utah Air Quality Board heard dispositive motions from all parties on Sierra Club's Requests for Agency Action. Joro Walker and David Becker appeared for the Sierra Club; Brian W. Burnett and Fred W. Finlinson appeared for SPC; Martin K. Banks

appeared for PacifiCorp; and Paul M. McConkie and Christian C. Stephens appeared for the Executive Secretary. Utah Air Quality Board members present were Dianne R. Nielson, Wayne M. Samuelson, H. Craig Petersen, James R. Horrocks, Nan Bunker, Stead Burwell, Stephen C. Sands, Don J. Sorensen, Kathy Van Dame, and Darrell Smith. Mr. Sands and Ms. Van Dame recused themselves. Mr. Ernest E. Wessman had earlier recused himself and left the proceedings. The Board denied all motions with the exception of the Motions for Judgment on the Pleadings by SPC, PacifiCorp, and the Executive Secretary on Issue 1, which was granted.

Sierra Club subsequently withdrew issues 5 and 6, leaving issues 2, 3, 4, 7, 8, 9, and 10 to be heard by the Board at hearings on October 1, 2007, October 3, 2007, November 7, 2007, and November 12, 2007. The Board heard this matter pursuant to its authority as set forth in Chapter 2 of Title 19 of the Utah Code and conducted the proceeding pursuant to the provisions of Utah Administrative Code ("UAC") R307-103 et seq. as a formal adjudicative proceeding under the provisions of the Administrative Procedures Act as set forth in Utah Code Ann. § 63-46b-8. Joro Walker and David Becker appeared for the Sierra Club, Brian W. Burnett and Fred W. Finlinson appeared for SPC, and Paul M. McConkie and Christian C. Stephens appeared for the Executive Secretary. Issue 2 was heard on November 12, 2007, and in addition to the counsel listed above, Martin K. Banks and Michael Jenkins appeared for PacifiCorp. At those hearings, Utah Air Quality Board members present were Wayne M. Samuelson, H. Craig Petersen, James R. Horrocks, Nan Bunker, Kathy Van Dame (who recused herself), Joel E. Elstein, Richard W. Sprott (who recused himself) and Darrell Smith. Board member Stead Burwell was also in attendance for all but the October 1, 2007, hearing. He reviewed the transcript and evidence from that hearing date. Mr. Ernest Wessman and Mr. Stephen C. Sands had previously recused

themselves and were not present.

In all the proceedings and hearings, Fred Nelson acted as counsel for the Board.

The underlying issue before the Board is whether the Executive Secretary complied with State statutes and the Utah Air Quality Board rules in issuing the October 14, 2004, Approval Order to Sevier Power Company. To prevail, petitioners have the burden of proving that the Executive Secretary failed to comply with State air quality requirements. "[T]he proper standard of proof in the administrative context is generally the 'preponderance of the evidence' standard." *Harken SW. Corp. v. Bd. of Oil, Gas & Mining*, 920 P.2d 1176, 1182 (Utah 1996).

The Board makes the following findings, conclusions, and final order with respect to each of the issues presented by Sierra Club:

Issue 1

Issue 1 is whether the Executive Secretary failed to address carbon dioxide and other greenhouse gases relating to the SPC Plant. The Board granted the Motions for Judgment on the Pleadings by SPC, PacifiCorp, and the Executive Secretary on this Issue 1 by a vote of seven in favor (Nielsen, Peterson, Burwell, Samuelson, Smith, Bunker, and Sorenson) and none opposed based on the following findings and conclusions that are restated as part of this final order.

While the United States Supreme Court has recently determined that carbon dioxide and other greenhouse gases come within the definition of "air pollutant" subject to regulation under the federal Clean Air Act (Massachusetts v EPA, 127 S.Ct. 1438 (April 2, 2007)), neither the EPA (as recognized in the U.S. Supreme Court opinion) nor the Utah Air Quality Board have, to date, adopted rules requiring limitations or consideration of carbon dioxide or other greenhouse gases as part of a new source review or a BACT determination. The definition of "air pollution"

as defined in U.C.A. § 19-2-102(3) over which the Board has authority to control and regulate (U.C.A. § 19-2-104) is "the presence in the ambient air of one or more air contaminants in the quantities and duration and under conditions and circumstances as is or tends to be injurious to human health or welfare . . . as determined by the rules adopted by the board." Inasmuch as the Board has never adopted rules governing carbon dioxide or other greenhouse gases, it has not, as a matter of law, required limitations or consideration of carbon dioxide or other greenhouse gases as part of the approval order or permit process.

The Board rejected Sierra Club's argument that the definition of BACT requires consideration of all pollutants that could be regulated, to include carbon dioxide and other greenhouse gases. The Board interprets the language of its rule to mean that the phrase "pollutant subject to regulation under the Clean Air Act and/or the Utah Air Conservation Act" in the definition of BACT (UAC R307-101-2) references pollutants for which the Board has established rules, not pollutants that could potentially be subject to rules. Since the Board has not promulgated rules governing carbon dioxide or other greenhouse gases, the Executive Secretary had no rules to enforce, and, with respect to the issue of not requiring limitations and consideration of carbon dioxide and other greenhouse gases, the Executive Secretary correctly, as a matter of law, issued the Approval Order to SPC without addressing carbon dioxide or other greenhouse gas emissions.

Issue 2

Issue 2 is whether the Executive Secretary failed to consider adequately Integrated Gasification Combined Cycle ("IGCC") in its Best Available Control Technology ("BACT") determination for the SPC facility.

On November 12, 2007, the Board upheld the actions of the Executive Secretary on Issue 2 by a vote of six in favor (Horrocks, Peterson, Samuelson, Smith, Bunker, and Elstein) and one opposed (Burwell) based on the following findings and conclusions.

Findings of Fact

1. A party intending to construct a "major" new source in a NAAQS attainment area must first obtain an approval order. UAC R307-401-1 (references to the Board's rules in the findings and conclusions of this order are the rules in effect at the time of the issuance of the Approval Order to SPC).

2. The applicant for an approval order must demonstrate that the new source will employ BACT for each criteria pollutant emitted. UAC R307-401-6.

3. UAC R307-101-2(4) defines BACT as follows:

> [A]n emission limitation and/or other controls to include design, equipment, work practice, operation standard or combination thereof, based on the maximum degree or reduction of each pollutant subject to regulation under the Clean Air Act and/or the Utah Air Conservation Act emitted from or which results from any emitting installation, which the Air Quality Board, on a case-by-case basis taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such installation through application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant . . . .

4. SPC filed an application, a Notice of Intent ("NOI"), asking the Executive Secretary for an approval order to allow SPC to build a power plant utilizing a Circulating Fluidized Bed ("CFB") boiler in conjunction with a limestone injection and a dry lime scrubber for sulfur dioxide control, along with selective non-catalytic reduction ("SNCR") with ammonia injection as a post-combustion control device for NOx control. SPC 0052-0738.

5. After an applicant has proposed the type of installation or power generation

technology, then through the BACT analysis the applicant must identify available emission control technology options for the particular installation proposed. Campbell Pre-Filed Testimony, August 31, 2007 at 5. Campbell Hearing Testimony, November 12, 2007 at 265-273, 290.

6. In doing a BACT review, a "top-down" method, though not required, may be used for determining BACT as follows: (1) identify control technology options ("Step 1"), (2) eliminate technically infeasible control technologies, (3) rank remaining technologies, (4) evaluate the most effective controls, and (5) select the most effective remaining option. EPA's Draft New Source Review Workshop Manual ("Draft NSR Manual"), at B.5.

7. In review of the SPC application for an approval order, the Executive Secretary determined that IGCC had not been proposed by SPC and that IGCC was a different power generation technology and not a "control technology" to be considered under Step 1, and therefore, did not include IGCC in assessing what was BACT for the proposed facility. September 27, 2004 Memorandum to Sevier Power Plant File, at 30, SPC 2523. Jenks Pre-Filed Testimony, October 22, 2007, at 9-10. Jenks Hearing Testimony, November 12, 2007, at 37.

8. Sierra Club argued that IGCC is a production process and existing available technology that should have been considered in any BACT determination for the SPC plant, and presented information on plants in the United States and Europe. Thompson Pre-Filed Testimony, August 31, 2007, at 5-41. Thompson Pre-Filed Testimony, November 6, 2007, at 2-9. Thompson Hearing Testimony, November 12, 2007, at 99-142.

9. In a CFB plant, coal is a fuel, whereas in an IGCC plant the coal is a feedstock for a chemical process, where it is thermally converted into a gas. For an IGCC facility, this syngas

which is the fuel is then combusted in a separate gas turbine power plant, not a boiler. Jenkins Pre-Filed Testimony, August 31, 2007 at 3-5, 7, 9-10. Jenkins Hearing Testimony, November 12, 2007 at 182-184, 208-209.

10. IGCC is a power generation technology, not an emission control technology. Jenkins Pre-Filed Testimony, August 31, 2007 at 4, 7, 8, 42. Campbell Hearing Testimony, November 12, 2007. at 281, 288. Jenkins Hearing Testimony, November 12, 2007, at 187-190, 200, 208.

11. IGCC is not a technology that can be added onto or designed into the proposed CFB installation "for the control of . . . pollutant[s]." Jenkins Pre-Filed Testimony, August 31, 2007, at 7. Jenkins Hearing Testimony, November 12, 2007, at 188-190.

12. The BACT requirement is not to be used "as a means to redefine the design of the source when considering available emission control options." Draft NSR Manual at B.13. *In re Pennsauken County, New Jersey Resource Recovery Facility*, PSD Appeal No. 88-8, 1988 WL 249035 (EPA November 10, 1988). EPA's 8/30/07 Response to Comment #2a, Deseret Power's Permit No. PSD-OU-0002-04.00, attached to Jenks Pre-Filed Testimony, October 22, 2007.

13. Because of the fundamental differences between CFB and IGCC, requiring the inclusion of IGCC would effectively require SPC to redefine the design of its proposed CFB installation. Jenkins Pre-Filed Testimony, August 31, 2007, at 9-10, 42. Jenkins Hearing Testimony, November 12, 2007, at 189 –190. Campbell Pre-Filed Testimony, August 31, 2007, at 4, 8, 10-11.

14. Of the numerous states that have considered the issue of whether to include IGCC in a BACT analysis for a proposed CFB boiler, only three (Illinois, New Mexico, and Montana) did so, and Montana has since determined that IGCC not be included because it would redefine the

source. None of those states went on to conclude that IGCC was BACT. Campbell Pre-Filed Testimony, August 31, 2007, at 10-11. SPC's Summary of State Determinations re Inclusion of IGCC in BACT, attached to SPC's Pre-Hearing Brief.

15. Even if IGCC should otherwise be considered in a BACT analysis, only "available" control options are required to be included in Step 1. UAC R307-101-2(4); Draft NSR Manual B.5, B.11.

16. With respect to the SPC installation, IGCC is not an "available" technology, but is still in the developmental stage. Jenkins Pre-Filed Testimony, August 31, 2007, at 4, 16, 20-21, 24, 28, 30-31, 40-42. Jenkins Hearing Testimony, November 12, 2007, at 200-204, 209-210, 240-241, 307-308.

Conclusions of Law

1. Under the BACT definition in UAC R307-101-2(4), IGCC does not need to be included in a BACT analysis, in that it is an installation that is a different power production technology and to do so would require redefining the source. Findings of Fact 9-13.

2. Because the law does not require the inclusion of IGCC in the BACT analysis, the Executive Secretary did not err by not requiring the inclusion of IGCC.

3. In exercising any discretion the Executive Secretary had to require or not require the inclusion of IGCC in Step 1 of the BACT analysis, the Executive Secretary's decision to not require the inclusion of IGCC was reasonable.

4. Even if the Executive Secretary was otherwise required to include IGCC in the BACT analysis, the Executive Secretary did not err by not requiring consideration of IGCC in the BACT analysis because only "available" control options are required to be included in Step 1,

and, with respect to the SPC application, IGCC could not be considered an "available" technology. Findings of Fact 16.

Issue 3

Issue 3 is whether the Executive Secretary failed to provide adequate justification for not requiring Sevier Power Company to meet the most stringent oxides of nitrogen ("NOx") BACT limits proposed or required for other CFB Boilers.

On November 7, 2007, the Board upheld the actions of the Executive Secretary on Issue 3 by a vote of six in favor (Horrocks, Peterson, Samuelson, Smith, Bunker, and Elstein) and one opposed (Burwell) based on the following findings and conclusions.

Findings of Fact

1. SPC's NOI to build a power plant utilized a CFB boiler with selective non-catalytic reduction ("SNCR") with ammonia injection as a post-combustion control device for NOx control. SPC 0054-0738.

2. SPC is required to employ the "best available control technology" ("BACT") for NOx. UAC R307-401-6(1).

3. SPC submitted a BACT analysis for NOx with its NOI. SPC 0139-0145.

4. SPC's BACT analysis concluded that the proposed emission limit for NOx (0.10 lb/MMBtu based on a 24-hour basis) was equivalent to or lower than other facilities using CFB boilers with SNCR. SPC 0139-0145. Conger Pre-Filed Testimony, June 27, 2007, at 4-13. Conger Hearing Testimony, October 1, 2007, at 114-122.

5. The Executive Secretary conducted a BACT analysis and independently evaluated control technologies with potential application to SPC's proposed CFB boiler. SPC 1031-1035.

Jenks Pre-Filed Testimony, September 10, 2007, at 8-9. Jenks Hearing Testimony, October 1, 2007, at 161-180.

6. The Executive Secretary identified two technologies that were potentially applicable to the SPC project: SNCR which had been employed by SPC and Selective Catalytic Reduction ("SCR"). SPC 1031. Jenks Pre-Filed Testimony, September 10, 2007, at 8.

7. Sierra Club argued that SCR should have been more fully considered in the BACT determination for the SPC facility in that: SCR's use had been demonstrated in CFB facilities overseas, SCR has better NOx control efficiencies, the Utah Division of Air Quality ("DAQ") did not discuss SCR with vendors, and DAQ did not describe why SCR technology transfer to CFBs was infeasible. Sahu Pre-Filed Testimony, June 27, 2007, at 5-22. Sahu Hearing Testimony, October 3, 2007, at 621-655, 682-690.

8. The use of SCR on coal-fired atmospheric CFB boilers is not demonstrated as technically feasible because of issues involving the high particulate matter of the exhaust stream, the low exhaust gas temperature, as well as the chemical composition of the exhaust stream. SPC 1032. Jenks Pre-Filed Testimony, September 10, 2007, at 8-9. Jenks Hearing Testimony, October 1, 2007, at 161-180, 211. Campbell Pre-Filed Testimony, August 20, 2007, at 11-16. Campbell Hearing Testimony, October 3, 2007, at 667, 676-677. Conger Pre-Filed Testimony, June 27,2007, at 11-13. Conger Hearing Testimony, October 1, 2007, at 120. Hennenfent Pre-Filed Testimony, June 27, 2007, at 4-7. Hennenfent Hearing Testimony, October 1, 2007, at 309-314.

9. The Executive Secretary "was unable to find a single instance of an atmospheric coal-fired atmospheric CFB boiler using SCR for control of NOx." Jenks Pre-Filed Testimony,

September 10, 2007, at 8. Campbell Pre-Filed Testimony, August 20, 2007, at 12-16.

10. The CFB boilers located overseas that use SCR are not comparable as argued by Sierra Club because they are small industrial boilers which do not burn coal. Jenks Hearing Testimony, October 1, 2007, at 177-180. Hennenfent Hearing Testimony, October 1, 2007, at 312-314.

11. The Executive Secretary approved SPC's selection of SNCR as BACT for the SPC project because SNCR has been demonstrated to offer the maximum degree of reduction in reducing NOx emissions from CFB boilers. SPC 1032-1033.

12. SNCR technology has been demonstrated for use on atmospheric coal-fired CFB boilers and is BACT for the SPC project. SPC 0139-0145, 1031-1035. Jenks Pre-Filed Testimony, September 10, 2007, at 8-9. Jenks Hearing Testimony, October 1, 2007, at 161-180. Campbell Pre-Filed Testimony, August 20, 2007, at 17-20. Campbell Hearing Testimony, October 3, 2007, at 664-665, 692-693. Conger Pre-Filed Testimony, June 27, 2007, at 4-13. Conger Hearing Testimony, October 1, 2007, at 114-122, 149-150. Hennenfent Pre-Filed Testimony, June 27, 2007, at 4-7.

13. Sierra Club argued that even using SNCR, the Executive Secretary had not appropriately established NOx emission limitations for the SPC facility, more stringent numbers should have been applied based on actual emissions data from other facilities and alternative averaging periods. Sahu Pre-Filed Testimony, June 27, 2007. Sahu Hearing Testimony, October 3, 2007, at 621-655, 682-690.

14. The Executive Secretary reviewed EPA's BACT/RACT/LAER Clearinghouse, along with web searches and a review of other sources using CFB boilers with SNCR to approve the

emission rate for NOx of 0.10 lb/MMBtu based on a 24-hour basis as BACT for SPC's project. SPC 1033-1035. Jenks Pre-Filed Testimony, September 10, 2007, at 8-9. Jenks Hearing Testimony, October 1, 2007, at 161-180, 218-220.

15. Permits with different time frames are statistically comparable to SPC's proposed emission limit of 0.10 lb/MMBtu on a 24-hour basis. Jenks Pre-Filed Testimony, September 10, 2007, at 8. Jenks Hearing Testimony, October 1, 2007, at 191-195. Campbell Hearing Testimony, October 3, 2007, at 655-658.

16. The Executive Secretary did not find "any atmospheric CFB boiler with a lower emission limit expressed with the same averaging period." Jenks Pre-Filed Testimony, September 10, 2007, at 9.

17. Other facilities, including those listed in the National Parks Service comments, are distinguished from the SPC emission limits based on the type of technology, fuel used, size of facility, different permit emission time periods and, actual emissions versus permit emission limits. Jenks Hearing Testimony, October 1, 2007, at 161-180. Campbell Hearing Testimony, October 3, 2007, at 655-675.

18. The emissions limit for NOx for the SPC project, 0.10 lb/MMBtu based on a 24-hour basis, is the lowest permit limit for NOx for an atmospheric CFB boiler using SNCR and is BACT for the SPC project. SPC 0139-0145, 1031-1035; Jenks Pre-Filed Testimony, September 10, 2007, at 8-9. Jenks Hearing Testimony, October 1, 2007, at 161-180. Campbell Pre-Filed Testimony, August 20, 2007, at 17-20. Campbell Hearing Testimony, October 3, 2007, at 660-666, 691-694. Conger Pre-Filed Testimony, June 27, 2007, at 4-13. Conger Hearing Testimony, October 1, 2007, at 114-122. Hennenfent Pre-Filed Testimony, June 27, 2007, at 4-7.

Hennenfent Hearing Testimony, October 1, 2007, at 323.

Conclusions of Law

1. The Executive Secretary correctly determined that SNCR technology is BACT for the SPC project. Findings of Fact 4-12.

2. The Executive Secretary did not err and complied with state rules in establishing the emission limit for NOx (0.10 lb/MMBtu based on a 24-hour basis) as BACT in that it is equivalent to or lower than other facilities using CFB boilers with SNCR. Findings of Fact 14-18.

3. Sierra Club did not meet its burden of proving SCR was feasible and available to be considered as BACT, nor that a more stringent emission limitation was BACT.

Issue 4

Issue 4 is whether the Executive Secretary failed to consider sufficiently activated carbon injection for control of mercury emissions from the SPC facility in its MACT determination.

On November 7, 2007, the Board upheld the actions of the Executive Secretary on Issue 4 by a vote of six in favor (Horrocks, Peterson, Samuelson, Smith, Bunker,and Elstein) and one opposed (Burwell) based on the following findings and conclusions.

Findings of Fact

1. The SPC facility will emit mercury, a Hazardous Air Pollutant ("HAP"), as defined by 112(b) of the Clean Air Act. UAC R307-101-2.

2. SPC was required to obtain an approved Maximum Achievable Control Technology ("MACT") determination from the Executive Secretary regarding its mercury emissions pursuant to 40 C.F.R. § 63.43 which was incorporated into Utah's regulations at UAC R307-214-2(2).

3. 40 C.F.R. § 63.43 (d) (1) and (2) state as follows:

> The MACT emission limitation or MACT requirements recommended by the applicant and approved by the permitting authority shall not be less stringent than the emission control which is achieved in practice by the best controlled similar source, as determined by the permitting authority.
>
> Based upon available information, as defined in this subpart, the MACT emission limitation and control technology (including any requirements under paragraph (d)(3) of this section) recommended by the applicant and approved by the permitting authority shall achieve the maximum degree of reduction in emissions of HAP which can be achieved by utilizing those control technologies that can be identified from the available information, taking into consideration the costs of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements associated with the emission reduction.

4. SPC conducted a case by case MACT determination which was submitted to the Executive Secretary on December 5, 2003. SPC 0007-0011.

5. The SPC MACT determination included review and comparison of existing sources of mercury emissions from CFB boilers with fabric filters, and evaluation of other control options. Conger Pre-Filed Testimony, June 27, 2007, at 17-18.

6. CFB boilers typically have high flue gas concentrations of high-carbon-content fly ash and therefore high levels of mercury capture can be accomplished in particulate emission control devices such as a baghouse (fabric filters). Conger Pre-Filed Testimony, June 27, 2007, at 16-19. Conger Hearing Testimony, October 3, 2007, at 534. Hennenfent Pre-Filed Testimony, June 27, 2007, at 9-10. Hennenfent Hearing Testimony, October 3, 2007, at 548-550, 556.

7. Sierra Club argued that activated carbon injection should have been more fully considered and applied for control of mercury and that actual mercury emissions at other coal-fired power plants are lower than SPC's emission limits. Sahu Pre-Filed Testimony, June 27, 2007, at 23-32. Sahu Pre-Filed Rebuttal Testimony, September 19, 2007, at 1-4. Sahu

Testimony, October 3, 2007, at 577-585.

8. Activated carbon injection had not been demonstrated to achieve better results than that proposed by SPC and it had not been demonstrated as available technology for the type of facility proposed by SPC. Conger Pre-Filed Testimony, June 27, 2007, at 18-19. Conger Hearing Testimony, October 3, 2007, at 534. Hennenfent Pre-Filed Testimony, June 27, 2007, at 9-10. Hennenfent Hearing Testimony, October 3, 2007, at 548-550, 556. Jenks Pre-Filed Testimony, September 10, 2007, at 10-11. Jenks Hearing Testimony, October 3, 2007, at 564-566, 568, 571. Campbell Hearing Testimony, October 3, 2007, at 599-605.

9. The use by SPC of a sorbent injection system with a dry-lime scrubber for control of NOx and other acid gases that will inject low-moisture slurry of lime into the exhaust prior to the baghouse would result in the lime particles absorbing sulfur compounds and acid gases as well as mercury emissions that are collected in the bag house, similar to an activated carbon injection system. Jenks Pre-Filed Testimony, September 10, 2007, at 10-11.

10. The MACT emission limit for mercury for SPC is 4×10^{-7} lb/MMBtu or four tenths of a pound per trillion Btu heat input. SPC 0861-0864, 2481-2493. Jenks Pre-Filed Testimony, September 10, 2007, at 10-12. Campbell Pre-Filed Testimony, August 20, 2007, at 27, 37-38.

11. The SPC mercury limitation is the lowest mercury emission limit of any coal-fired electricity utility boiler. Jenks Pre-Filed Testimony, September 10, 2007, at 10. Jenks Hearing Testimony, October 3, 2007, at 567. Campbell Pre-Filed Testimony, August 20, 2007, at 29. Campbell Hearing Testimony, October 3, 2007, at 607. Hennenfent Hearing Testimony, October 3, 2007, at 563.

12. EPA has rescinded the MACT standard for mercury and is regulating mercury

emissions from power plants under the New Source Performance Standards ("NSPS"). Conger Pre-Filed Testimony, June 27, 2007, at 14-15. 70 FR 15994 (March 29, 2005).

13. EPA's current NSPS requirements for coal-fired electric generating units for mercury include the use of fabric filters or electrostatic precipitators, wet or dry flue gas desulfurization, SCR or SNCR on bituminous units. 70 FR 28606 (May 18, 2005). Conger Pre-Filed Testimony, June 27, 2007 at 20.

14. SPC's permit application proposes to use bituminous coal, fabric filters, SNCR for NOx reduction and a dry lime scrubber which meet the technical basis that EPA used to determine Best Demonstrated Technology under NSPS. Conger Pre-Filed Testimony, June 27, 2007, at 20.

15. EPA's NSPS standard for bituminous coal is 20×10^{-6} lb/MWh. Conger Pre-Filed Testimony, June 27, 2007, at 15.

16. SPC's emissions limit for mercury in its AO is below the NSPS mercury control limit. Conger Pre-Filed Testimony, June 27, 2007, at 20.

Conclusions of Law

1. The Executive Secretary properly determined that SPC's emissions limit for mercury complied with the MACT requirements in 40 CFR § 63.43(d) and was and is the lowest in the United States. Findings of Fact 6, 9, and 11.

2. The Executive Secretary did not err in rejecting activated carbon injection for the reasons set forth in the Findings of Fact 8 and 9 above.

3. The Executive Secretary correctly determined that the MACT emission limit for mercury for SPC is 4×10^{-7} lb/MMBtu.

4. Sierra Club failed to meet its burden of proof that activated carbon injection was commercially available and could be applied to the SPC facility.

Issue 7

Issue 7 is whether the Executive Secretary failed to require sufficient analysis of the impacts of the SPC facility on visibility, soils, and vegetation.

Mr. Horrocks recused himself from discussion and voting on this issue. On November 7, 2007, the Board upheld the actions of the Executive Secretary on Issue 7 by a vote of five in favor (Peterson, Samuelson, Smith, Bunker, and Elstein) and one opposed (Burwell) based on the following findings and conclusions.

Findings of Fact

1. UAC R307-405-6(2)(a)(i)(D) states that an NOI must contain:

> An analysis of the air quality related impact of the source or modification including an analysis of the impairment to visibility, soils, and vegetation and the projected air quality impact from general commercial, residential, industrial, and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

2. SPC submitted in its NOI an analysis of the impacts to visibility, soils and vegetation. SPC 0269-0272, 0637-0682, and 0284-0287.

3. Sierra Club argued that the analysis was inadequate because of lack of visibility information for Sevier Valley, lack of analysis of pollutants other than SO2 and inadequate growth projections and information. Sahu Pre-Filed Testimony, June 27, 2007, at 33-38. Sahu Hearing Testimony, October 3, 2007, at 496-502.

4. SPC conducted and submitted, and the Executive Secretary reviewed and approved, an analysis regarding visibility by submitting a plume blight or visual impact analysis to determine

whether or not a plume emanating from the proposed SPC project would be visible inside the nearby national parks (Class I areas) that require special protection. The results of SPC's plume blight analysis showed that at five areas in Utah (Arches, Bryce, Canyonlands, Capitol Reef, and Zion National Parks) and one Class I area in Colorado (Weminuche Wilderness Area), the plume would not be visible to an observer in these Class I areas. Capital Reef is the closest (approximately 50 Kilometers) to Sevier Valley. Conger Pre-Filed Testimony, June 27, 2007, at 22-25. Conger Hearing Testimony, October 3, 2007, at 427-429. Orth Pre-Filed Testimony, September 12, 2007, at 13. Campbell Hearing Testimony, October 3, 2007, at 516, 520, 528-530.

5. The visibility impacts in the Sevier Valley (a Class II area) were not modeled since there is no regulatory (federal or state) requirement for analyses of visibility impact in Class II areas. The Executive Secretary determined that "(n)ear-field modeling for visibility is also problematic because the models are complex and the results are too unreliable for using in pre-construction permitting. There are also limitations to their applicable use in transport areas as small as the Sevier Valley." Orth Pre-Filed Testimony, September 12, 2007, at 11-12. Orth Hearing Testimony, October 3, 2007, at 443, 452-453. Conger Pre-Filed Testimony, June 27, 2007, at 22-25. Conger Hearing Testimony, October 3, 2007, at 427-429, 443. Campbell Pre-Filed Testimony, August 20, 2007, at 24-26.

6. SPC's plume blight or visual impact analysis for Class I areas served as a proxy for Class II areas because there were Class I areas that were close enough to be covered by a plume blight analysis rather than a regional haze analysis. Campbell Hearing Testimony, October 3, 2007, at 528-530.

7. SPC's AO contains two provisions for opacity monitoring, one relating to the overall facility and another specific monitoring requirement for opacity at SPC's stack which govern and are related to visibility close to SPC's facility. SPC 2490.

8. In preparing the soils and vegetation section of a PSD permit, SPC consulted EPA's Draft NSR Manual and the Natural Resource Conservation Service ("NRCS") in order to review the soil types in the area. Draft NSR Manual at D.4-5. Richins Pre-Filed Testimony, June 27, 2007, at 4-7.

9. SPC concluded that none of the soil types in the area are likely to show adverse impacts as a result of the low levels of near field emissions from the SPC power plant. The emissions from the SPC facility are mildly acidic and should be neutralized by the soils in the area near SPC's facility which are mildly to strongly alkaline. Richins Pre-Filed Testimony, June 27, 2007, at 6-7.

10. SPC also relied on the fact that "for most types of soils and vegetation, ambient concentrations of criteria pollutants below the secondary [NAAQS] will not result in harmful effects." Draft NSR Manual at D.4-5. Because SPC's modeled emissions are below the secondary NAAQS and the agricultural areas of the Sevier Valley are almost completely excluded from the predicted impact areas of the plume, harm to vegetation is not expected. Richins Pre-Filed Testimony, June 27, 2007, at 13-15. Orth Pre-Filed Testimony, September 12, 2007, at 10. Richins Hearing Testimony, October 3, 2007, at 455-464. Jenks Hearing Testimony, October 3, 2007, at 481.

11. SPC 's review of the vegetation surrounding the SPC power plant, after consultation with NRCS, Bureau of Land Management and the United States Forest Service did not identify

species that required regulatory protection. Richins Pre-Filed Testimony, June 27, 2007, at 8-9.

12. SPC determined that while some primary crops grown in the Sevier Valley, alfalfa, wheat and barley are considered to be SO_2 sensitive, the maximum modeled SO_2 concentrations are below the threshold level at which harm to these crops is known to occur. Richins Pre-Filed Testimony, June 27, 2007, at 12-13. Jenks Pre-Filed Testimony, September 10, 2007, at 12-13.

13. SPC's emissions and modeling information was reviewed by DAQ's toxicologist who determined that additional analysis was not required. Jenks Pre-Filed Testimony, September 10, 2007, at 12-13. Jenks Hearing Testimony, October 3, 2007, at 481.

14. The Executive Secretary reviewed SPC's modeling analysis and determined that no observable changes in native vegetation or crop plants were expected to occur. Orth Pre-Filed Testimony, September 12, 2007, at 10-11.

15. The SPC growth analysis determined that the additional impacts caused by the project would be minimal. SPC 0288, 0742-0747, 1402-1409. Jenks Pre-Filed Testimony, September 10, 2007, at 12-13. Campbell Pre-Filed Testimony, August 20, 2007, at 20-22.

Conclusions of Law

1. UAC R307-405-6(2)(a)(i)(D) setting forth the requirements relating to visibility, soils, vegetation and impacts from growth for projects such as the SPC facility does not specify the extent or content of the analysis regarding the impairment to visibility, soils, vegetation and growth for the area.

2. The Executive Secretary's determination that the analysis submitted by SPC on visibility, soils, vegetation and impacts from growth was adequate and met the requirements of UAC R307-405-6(2)(a)(i)(D) was correct and reasonable.

3. The Executive Secretary did not err in determining that the requirements of UAC R307-405-6(2)(a)(i)(D) had been met on visibility based on the Findings of Fact 4-7 as stated above.

4. While the SPC analysis focused on some specific pollutants for impact on soils and vegetation, all emissions were considered (Findings of Fact 8-14), and the Sierra Club did not meet its burden of proof that analysis of other impacts was not done or necessary.

5. The Executive Secretary did not err in determining that the requirements of UAC R307-405-6(2)(a)(i)(D) had been met for growth analysis based on Finding of Fact 15 above.

Issue 8

Issue 8 is whether the Executive Secretary illegally exempted the proposed facility from a cumulative Class I increment analysis.

On November 7, 2007, the Board upheld the actions of the Executive Secretary on Issue 8 by a vote of six in favor (Horrocks, Peterson, Samuelson, Smith, Bunker, and Elstein) and one opposed (Burwell) based on the following findings and conclusions.

Findings of Fact

1. Utah Admin. Code R307-405-6(2) states:

> Every new source or major modification must be reviewed by the Executive Secretary to determine the air quality impact of the source to include a determination whether the source will cause or contribute to a violation of the maximum allowable increases or the NAAQS in any area. The determination of air quality impact will be made as of the source's projected start-up date. Such determination shall take into account all allowable emissions of approved sources and growth in the affected area, or not, and, to the extent practicable, the cumulative effect on air quality of all sources and growth in the affected area.

2. PSD increments are the maximum allowable increases of particular pollutants. PSD Class I increments are incremental amounts of pollution above a baseline level that cannot be

exceeded when new sources are constructed in a protected Class I areas. UAC R307-405-5 and UAC R307-405-17.

3. SPC performed an increment analysis to include a Class I increment analysis for Capitol Reef, Canyonlands, Zion, Arches, and Bryce National Parks. Wilkerson Pre-Filed Testimony, June 27, 2007, at 27. Prey Pre-Filed Testimony, September 10, 2007, at 4.

4. The SPC cumulative analysis showed that the increments both annual and short term to include Class I increments were not exceeded at any National Park. Wilkerson Pre-Filed Testimony, June 27, 2007, at 27-28, 31, 34. Wilkerson Hearing Testimony, October 1, 2007, at 232, 346.

5. SILs is the acronym for Significant Impact Levels, which are concentration levels that consist of 4 percent of the Class I increment. Wilkerson Testimony, October 1, 2007, at 230-231. Wilkerson Pre-Filed Testimony, June 27, 2007, at 26. Heying Pre-Filed Testimony, September 10, 2007, at 13-14.

6. Applying SILs as a screening method, if a source models below the SILs, then the analysis is deemed complete. However, if a source models in above the Class I SILs, then a cumulative Class I increment analysis is required. Wilkerson Pre-Filed Testimony, June 27, 2007, at 26, 28. Prey Pre-Filed Testimony, September 10, 2007, at 5.

7. During the initial SPC permitting process, upon DAQ's suggestion, SPC's modeler contacted the National Park Service ("NPS") for guidance on performing a cumulative Class I analysis. Wilkerson Pre-Filed Testimony, June 27, 2007, at 26.

8. The NPS had adopted the use of Class I SILs and recommended SILs to both SPC and the DAQ as the method to follow for the far-field modeling effort. Wilkerson Pre-Filed

Testimony, June 27, 2007, at 26. Wilkerson Hearing Testimony, October 1, 2007, at 230, 231. Heying Pre-Filed Testimony, September 10, 2007, at 13.

9. The use of SILs as a screening tool is accepted in Utah and among other states and is supported by the National Park Service and the EPA. Heying Pre-Filed Testimony, September 10, 2007, at 13.

10. SPC performed modeling for the SPC facility, and the modeled maximum concentrations came in below the PSD Class I increment and PSD Class I SILs. Wilkerson Pre-Filed Testimony, June 27, 2007, at 27-28, 35. Prey Pre-Filed Testimony, September 10, 2007, at 4-5, 7. Wilkerson Hearing Testimony, October 3, 2007, at 346.

11. In September 2003, SPC submitted its final permit application based upon the SILs modeling. Wilkerson Hearing Testimony, October 1, 2007, at 231.

12. In April 2004, the NPS reran the SPC's cumulative analysis using SPC's modeling files, but also added Hunter Unit 1 and the proposed IPP Unit 3 to its analysis, and confirmed no Class I increment violations. Wilkerson Hearing Testimony, October 1, 2007 at 230-233, 238. Heying Hearing Testimony, October 3, 2007, at 393-394.

13. Sierra Club argued that use of SILs was not appropriate without going through rulemaking to authorize use of SILs.

Conclusions of Law

1. Use of SILs is an appropriate screening device for making the determination under UAC R307-405-6(2) as to whether a source would cause or contribute to violations of maximum allowable increases or whether a full cumulative Class I increment analysis is required to make that demonstration.

2. The Executive Secretary did not err in making a determination that the final application from SPC could be based on the SILs analysis properly exercising discretion in determining the information requirements to demonstrate that the provisions of UAC R307-405-6(2) were met.

3. The Executive Secretary complied with UAC R307-405-6(2) based not only upon use of the SILs, but also the cumulative analysis performed by both SPC and the National Park Service which confirmed that emissions from the proposed SPC source would not cause or contribute to any violations of the maximum allowable increases.

4. Use of SILs is a technical tool for making the determination under UAC R307-405-6(2) and does not require rulemaking.

Issue 9

Issue 9 is whether the Executive Secretary violated Utah rules because, as permitted, the proposed facility will contribute to Class I SO_2 increment violations at Capitol Reef National Park.

On November 7, 2007, the Board upheld the actions of the Executive Secretary on Issue 9 by a vote of six in favor (Horrocks, Peterson, Samuelson, Smith, Bunker, and Elstein) and one opposed (Burwell) based on the following findings and conclusions.

Findings of Fact

1. The findings of fact from Issue 8 are incorporated herein.

2. Though the Executive Secretary ultimately relied upon the SILs, for the cumulative Class I increment analysis that was performed by SPC, increment consuming sources within the domain (Utah and surrounding states) needed to be modeled. Wilkerson Pre-Filed Testimony,

June 27, 2007, at 30-31.

3. Hunter Unit 1 and IPP Unit 3 were not included in the cumulative Class I increment analysis done by SPC under UAC R307-405-6(2). Wilkerson Pre-Filed Testimony, June 27, 2007, at 33, 35. Wilkerson Hearing Testimony, October 1, 2007, at 232-33.

4. Sierra Club argued that Hunter Unit 1 and IPP Unit 3 were required to be included based on documents and testimony on construction dates of Hunter Unit 1 and proposed construction dates of IPP Unit 3. Sierra Club Pre-Hearing Brief, Exhibits 16 and 17. Milford Pre-filed Testimony, June 27, 2007, at 5-7,

5. The Executive Secretary did not require that Hunter Unit 1 be included because the Executive Secretary deemed Hunter Unit 1 to have been permitted and commenced construction before the time of the baseline date of January 6, 1975 (based on documentation presented by Executive Secretary), and EPA agrees with that determination. Heying Hearing Testimony, October 1, 2007, at 257-265, 276-277.

6. IPP Unit 3 was not included because it was not an approved, permitted source at the time the SPC Class I increment modeling review took place. Wilkerson Pre-Filed Testimony, June 27, 2007, at 33, 35.

7. In a subsequent cumulative analysis performed by the National Park Service, both IPP Unit 3 and Hunter Unit 1 were included and no Class I increment violations were shown. Wilkerson Hearing Testimony, October 1, 2007, at 232-33, 238. Heying Hearing Testimony, October 3, 2007, at 393-394.

8. The Executive Secretary did not require the use of maximum actual 3 and 24-hour emission rates, and thus SPC used average annual emissions in its Class I increment analysis.

Heying Pre-Filed Testimony, September 10, 2007, at 8. Heying Hearing Testimony, October 1 2007, at 254-57.

9. PSD regulations, specifically 40 C.F.R. § 51.166(b)(21) and § 51.21(b)(21), do not directly address how one is to determine actual emissions when modeling short-time periods, such as 3 and 24-hour averaging times for a cumulative Class I increment analysis. Wilkerson Pre-Filed Testimony, June 27, 2007, at 32.

10. Sierra Club argued that using annual average emissions rates underestimates increment consumption because it does not account for sources which may emit at higher than annual averages rates over the shorter time period. Milford Pre-Filed Testimony, June 27, 2007, at 3-12.

11. Sierra Club's expert acknowledged the question is unsettled. Milford Hearing Testimony, October 1, 2007, at 302. She testified that use of annual averages was too low, and that all sources simultaneously emitting at their short term maximum may be too extreme which level would be permissible to back away from, but did not state what should be used. Milford Hearing Testimony, October 1, 2007, at 299, 303-305.

12. EPA is divided on what is an acceptable approach between the two. Heying Hearing Testimony, October 1, 2007, at 253-57, 266. Milford Hearing Testimony, October 1, 2007, at 299-302.

13. EPA signed a Memorandum of Understanding with the State of North Dakota stating that use of annual averages is an acceptable method for cumulative Class I increment analysis. Heying Pre-Filed Testimony, September 10, 2007, at 8. Heying Hearing Testimony, October 1, 2007, at 254-257.

14. To model using existing sources at their maximum actual 3-hour average and 24-hour average SO_2 emission rates overestimates the impact of those facilities. Wilkerson Hearing Testimony, October 1, 2007, at 239-42.

15. Use of annual averages rather than maximum actual 3-hour average and 24-hour average more accurately reflects actual air quality. Heying Pre-Filed Testimony, September 10, 2007, at 6-8. Heying Hearing Testimony, October 1, 2007, at 257, 266, 268-269, 272-273.

16. SPC submitted one year of meteorological data with its September 2003 permit application required by the rules. Wilkerson Hearing Testimony, October 1, 2007, at 242-243.

17. Sierra Club argued that one year of meteorological data was insufficient. Milford Pre-Filed Testimony, June 27, 2007, at 23. Milford Hearing Testimony, October 1, 2007, at 294.

Conclusions of Law

1. The Executive Secretary did not err in determining that IPP Unit 3 and Hunter 1 need not be included in any cumulative analysis to assess violation of Class I increments in that IPP Unit 3 was not permitted and Hunter 1 was included in the baseline as supported by the Findings of Fact 5 above.

2. Whether IPP Unit 3 and Hunter 1 were included by SPC in its cumulative analysis is not significant because in the cumulative analysis performed by the National Park Service, both IPP Unit 3 and Hunter Unit 1 were included and the results were also under the Class I increment. See Finding of Fact 7 above.

3. The one year of meteorological data submitted by SPC complied with the regulation in effect at the time of the permit application.

4. UAC R307-405-4(1) allows for discretion whether to use maximum actual short term

average emission rates or annual average rates.

5. The Executive Secretary's use of long term averages for modeling purposes was protective of the increment in that it more accurately represented actual air quality than using every source's maximum emission rates and was in compliance with existing rules of the Board based on the Findings of Fact, specifically 14 and 15 above.

6. The Executive Secretary complied with the rules of the Board in determining sources to be included, required meteorological data, and use of annual average emissions of sources in modeling for increment determinations.

7. The proposed SPC installation will not contribute to Class I increment violations at Capitol Reef National Park based on the modeling analysis.

Issue 10

Issue 10 is whether the Approval Order for the SPC facility is now invalid because construction did not commence within 18 months of the Approval Order, having therefore automatically expired, and that the Executive Secretary's purported approval of the extension was illegal.

On October 1, 2007, the Board ruled on the first part of Issue 10 (whether the Approval Order is invalid because construction did not commence within 18 months, having therefore automatically expired), by a vote of six in favor (Horrocks, Peterson, Samuelson, Smith, Bunker, and Elstein) and none opposed, determining the Approval Order had not automatically expired based upon the following.

Findings of Fact

1. The Executive Secretary signed the Sevier Power Company Approval Order ("AO") on October 12, 2004 and 18 months from that date is April 12, 2006. SPC 2531.

2. On October 12, 2004 and on April 12, 2006, the applicable rule was UAC R307-401-11 (now renumbered as UAC R307-401-18) which provides:

> Approval orders issued by the executive secretary in accordance with the provisions of R307-401 shall be reviewed eighteen months after the date of issuance to determine the status of construction, installation, modification, relocation or establishment. If a continuous program of construction, installation, modification, relocation or establishment is not proceeding, the executive secretary may revoke the approval order.

3. Condition 9 of the Sevier Power Company AO states:

> [i]f construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-11.

SPC 2535.

4. On November 17, 2005, SPC requested in a letter to the Executive Secretary that the running of the 18 month period for construction of the power plant be held "in abeyance" pending resolution of the litigation. Jenks Pre-Filed Testimony, September 10, 2007, at 13. Sprott Pre-Filed Testimony, September 10, 2007 at 11-12.

5. The Executive Secretary conducted a review of the status of the SPC Approval Order prior to April 12, 2006. Jenks Hearing Testimony, October 1, 2007 at 84-86. Jenks Pre-Filed Testimony, October 22, 2007, at 10. Sprott Pre-Filed Testimony, September 10, 2007 at 11-12.

6. On June 6, 2007, the Executive Secretary, at the request of the Board, sent a

letter to SPC in response to the November 17, 2005, letter explaining the Executive Secretary's position on the request and that the Approval Order had not been revoked. June 6, 2007 Letter from Richard Sprott to Fred Finlinson. Jenks Pre-Filed Testimony, September 10, 2007, at 13. Jenks Pre-Filed Testimony, October 22, 2007, at 11.

7. Sierra Club argued that a federal rule, 40 CFR 52.21(r), stated that "[a]pproval to construct shall become invalid if construction is not commenced within 18 months of receipt of such approval. . .", and therefore SPC's Approval Order is invalid.

8. 40 C.F.R. § 52.21(r) was not incorporated into and effective as part of UAC R307-405-19(1) by the Air Quality Board, until June 2006.

Conclusions of Law

1. The operative provisions, UAC R307-401-11 and SPC AO Condition 9, grant the Executive Secretary discretion to decide whether, based upon his review, to revoke an approval order if construction has not commenced after 18 months. The Executive Secretary reasonably exercised discretion in not revoking the Approval Order.

2. 40 CFR 52.21(r) was not applicable to the SPC permit on April 12, 2006, therefore, the Approval Order did not automatically expire.

3. The Executive Secretary properly interpreted and complied with the requirements of UAC R307-401-11 and SPC complied with the conditions of the Approval Order.

On November 12, 2007, the Board upheld the actions of the Executive Secretary on the remaining part of Issue 10 (the legality of the 18 month review of the Approval Order) by a vote

of six in favor (Horrocks, Peterson, Samuelson, Smith, Bunker, and Elstein) and one opposed (Burwell). The Boards findings and conclusions on the legality of the 18 month review were based on the following:

Findings of Fact

1. The findings of fact for the first part of Issue 10 are incorporated herein.

2. Sierra Club argued that the Executive Secretary should have conducted a BACT review and established a new construction date at the time of the 18-month review.

3. After receipt of the November 17, 2005 letter from SPC, the matter was reviewed by DAQ staff and there was consultation between staff and management (including the Executive Secretary) with respect thereto. Jenks Hearing Testimony, October 1, 2007, at 86-89. Jenks Pre-Filed Testimony, September 10, 2007, at 13. Jenks Pre-Filed Testimony, October 22, 2007, at 10. Sprott Pre-Filed Testimony, September 10, 2007, at 11-12.

4. The Executive Secretary directed that his permitting engineer conduct an informal review of air quality permits that had been issued subsequent to the Sevier Power Company Approval Order, to compare the emissions limitations between those permits and the SPC AO. Jenks Pre-Filed Testimony, October 22, 2007, at 11. Jenks Hearing Testimony, October 1, 2007, at 88-92.

5. After the review, the Executive Secretary found nothing to indicate that the BACT determinations for the SPC facility were outdated or otherwise inadequate and opted not to revoke the SPC Approval Order. Jenks Pre-Filed Testimony, September 10, 2007, at 13. Jenks Hearing Testimony, October 1, 2007, at 89-92. Sprott Pre-Filed Testimony, September 22, 2007,

at 11-12.

Conclusions of Law

1. The Executive Secretary complied with the requirements of UAC R307-401-11 by conducting an 18 month review to determine the status of the SPC facility.

2. UAC R307-401-11 does not require a BACT review at the time of the 18-month review nor does it require a modification of the permit.

3. The Executive Secretary's actions in regard to the 18 month review were in compliance with the requirements of UAC R307-401-11.

FINAL ORDER

Based on the above, the Board finds that the Executive Secretary did comply with State statutes and rules of this Board in issuing the Approval Order to SPC to construct and operate a coal-fired electric generating facility near Sigurd in Sevier County, Utah. The Sierra Club Request for Agency Action as amended is denied. The Approval Order issued by the Executive Secretary to SPC is affirmed and upheld.

Dated this 9th day of January, 2008.

James Horrocks, Presiding Officer
Utah Air Quality Board

Notice of the Right to Apply for Reconsideration or Review

Within 20 days after the date this final order is signed in this matter by the Utah Air Quality Board, any party shall have the right to apply for reconsideration with the Board, pursuant to Utah Code Ann. § 63-46b-13. The request for reconsideration should state the specific grounds upon which relief is requested and should be submitted in writing to the Board at 168 North 1950 West, Salt Lake City, Utah, 84114. A copy of the request must be mailed to each party by the person making the request. The filing of a request for reconsideration is not a prerequisite for seeking judicial review of this Order.

Notice of the Right to Petition for Judicial Review

Judicial review of this Order may be sought in the Utah Court of Appeals under Utah Code Ann. § 63-46b-16 and the Utah Rules of Appellate Procedure by the filing of a proper petition within thirty days after the date of this Order.

CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of January, 2008, I caused a copy of the forgoing Findings of Fact, Conclusions of Law, and Final Order to be mailed by United States Mail, postage prepaid, to the following:

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