STATE OF NORTH CAROLINA

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OFFICE OF ADMINISTRATIVE HEARINGS

NORTH CAROLINA WASTE AWARENESS REDUCTION NETWORK, INC., ENVIRONMENTAL DEFENSE FUND, NATIONAL PARKS CONSERVATION ASSOCIATION, SIERRA CLUB, and SOUTHERN ALLIANCE FOR CLEAN ENERGY, Petitioners, v. N.C. DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, DIVISION OF AIR QUALITY, Respondent, DUKE ENERGY CAROLINAS, LLC, Respondent-Intervenor.	08 EHR 0771, 0835 & 0836 09 EHR 3102, 3174 & 3176 (consolidated) **ORDER ON CROSS-MOTIONS FOR PARTIAL SUMMARY JUDGMENT**

Upon the motions for partial summary judgment pursuant to N.C. Gen. Stat. § 1A-1, Rule 56 and N.C. Gen. Stat. §150B-33(b)(3a) from Petitioners Environmental Defense Fund, National Parks Conservation Association, Sierra Club and Southern Alliance for Clean Energy (collectively, "EDF Petitioners"), Respondent North Carolina Division of Air Quality ("DAQ") and Respondent-Intervenor Duke Energy Carolinas, LLC ("Duke"), the undersigned Administrative Law Judge ("ALJ") heard the matter on July 7, 2010, at the Business Court Courtroom, First Floor Elon University School of Law, 201 N. Greene Street, Greensboro, North Carolina. Based on the submissions of the parties and arguments of counsel at the hearing, the ALJ enters the following Order on pending motions for partial summary judgment:

PROCEDURAL HISTORY

These contested cases challenge DAQ's issuance of Air Quality Permits Nos. 04044T28 and 04044T29 ("Permit T28" and "Permit T29," respectively, and collectively, "the Permits") to Duke for the construction and operation of a new unit and associated facilities ("Unit 6") at Duke's existing Cliffside Steam Station in Rutherford County. DAQ issued Permit T28 on January 28, 2008 and Permit T29 on March 13, 2009. Permit T29 is identical to Permit T28 with regard to Unit 6, except that Permit T29 contains provisions concerning hazardous air pollutants.

EDF Petitioners have challenged the Permits on several grounds. EDF Petitioners as well as DAQ and Duke have now moved for partial summary judgment on a subset of these claims pursuant to N.C. Gen. Stat. § 1A-1, Rule 56. All of these issues were fully briefed and heard, to the extent desired and agreed upon by the parties, at the July 7, 2010 hearing.

APPEARANCES OF PARTIES

Appearing for the parties were as follows:

- For NC WARN: John D. Runkle, Chapel Hill, North Carolina.
- For EDF Petitioners: John Suttles and Gudrun Thompson, Chapel Hill, North Carolina.
- For DAQ: Marc Bernstein and Amy Bircher, Raleigh, North Carolina.
- For Duke: Charles Case, Raleigh, North Carolina; Brent Rosser and Garry Rice, Charlotte, North Carolina; and Harry M. (Pete) Johnson, III and Kevin J. Finto, Richmond, Virginia.

Non-party appearances were as follows:

- For ALSTOM Power, Inc.: William F. Lane, Raleigh, North Carolina and Michael L. Hardy, Cleveland, Ohio.

STATEMENT OF THE ISSUES

EDF Petitioners, DAQ, and/or Duke have moved for summary judgment on the following issues:

I. **Whether EDF Petitioners are "persons aggrieved" under the North Carolina Administrative Procedure Act**

II. **Whether DAQ violated public notice requirements in issuing the draft T29 Permit.**

III. **Whether DAQ erred in issuing a PSD permit with an expiration date.**

IV. **Whether Unit 6 is a "minor source" of hazardous air pollution.**

V. **Whether DAQ's use of coarse particle pollution as a surrogate for fine particle pollution was erroneous.**

VI. **Whether DAQ erred by allowing Duke to use Clean Smokestacks Act emissions reductions to net Unit 6 out of PSD applicability.**

VII. **Whether DAQ used the correct "look-back" period for determining baseline emissions for use in the PSD netting calculations.**

VIII. **Whether DAQ correctly determined that reductions in emissions of SO_2 and NO_x at Cliffside Units 1-5 have "approximately the same qualitative significance for public health and welfare" as the emissions from Unit 6.**

IX. **Whether DAQ erred in determining that Unit 6 would not result in a significant net emissions increase of SO2 and NO_x based on "PSD avoidance limits".**

X. **Whether DAQ erred by evaluating projected visibility impacts to Class I areas based on existing impaired conditions rather than natural background conditions.**

XI. **Whether DAQ erred by allegedly ignoring modeling performed and submitted by the FLM regarding Class I areas.**

XII. **Whether DAQ failed to determine that Cliffside Unit 6 will not cause violations of PSD increments when emissions from all increment-consuming sources are included.**

XIII. **Whether DAQ erred by exempting Unit 6 from BACT requirements during periods of startup, shutdown and malfunction.**

XIV. **Whether DAQ erred in failing to include BACT emissions limits or other controls for carbon dioxide in the Permits.**

XV. **Whether DAQ erred in failing to consider Integrated Gasification Combined Cycle technology in the BACT collateral impacts and alternatives analyses.**

XVI. **Whether DAQ erred by not requiring the air quality modeling to consider the alleged and unproven historical violations at existing Cliffside units.**

SPECIFIC STATUTES OR RULES AT ISSUE

- The North Carolina Administrative Procedure Act ("APA"), N.C. Gen. Stat. § 150B-23.
- The federal Clean Air Act ("CAA" or "Act"), 42 U.S.C. § 7401 et seq.; in particular, the Prevention of Significant Deterioration ("PSD") program at Title I, Part C, Subpart 1, 42 U.S.C. §§ 7470-7479; the Class I Program at 42 U.S.C. § 7491; and the hazardous air pollutants ("HAP") program at 42 U.S.C. § 7412.
- Federal regulations implementing the Clean Air Act; in particular, 40 C.F.R. §§ 81.422 and 81.428, and those portions of 40 C.F.R. § 51.166 that are incorporated by reference into state regulations.
- State air permitting statutes and rules; specifically, N.C. Gen. Stat. § 143-215.108, N.C. Admin. Code 2D .0530, N.C. Admin. Code 2Q .0300 et seq. and N.C. Admin. Code 2Q .0500 et seq.

STANDARD OF REVIEW

Summary judgment is proper when the "pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that [the moving party] is entitled to judgment as a matter of law." N.C. Gen. Stat. § 1A-1, Rule 56(c). A material fact is one of "such nature as to affect the result of the action, or if the resolution of the issue is so essential that the party against whom it is resolved may not prevail." Kessing v. Nat'l Mortgage Corp., 278 N.C. 523, 533, 180 S.E.2d 823, 829 (1971). The court determines "whether the evidence presents sufficient disagreement to require submission to a jury or whether it is so one-sided that one party must prevail as a matter of law." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 251-52 (1986). Summary judgment is proper where the moving party has shown the court that it must prevail

because there are no genuine issues of material fact, Celotex Corp. v. Catrett, 477 U.S. 317, 325 (1986), and the non-moving party must then demonstrate the existence of "evidence from which a jury might return a verdict in his favor." Anderson, 477 U.S. at 257.

The purpose of summary judgment is "to bring litigation to an early decision on the merits without the delay and expense of a trial [or evidentiary hearing] where it can be readily demonstrated that no material facts are in issue". Kessing, 278 N.C. at 533, 180 S.E.2d at 829. "It is a device to make possible the prompt disposition of controversies on their merits without a trial, if in essence there is no real dispute as to the salient facts." Town of S. Pines v. Mohr, 30 N.C. App. 342, 346, 226 S.E.2d 865, 867 (1976) (citations omitted).

DISCUSSION

I. Whether EDF Petitioners are "persons aggrieved" under the North Carolina Administrative Procedure Act.

EDF Petitioners have moved for summary judgment on the issue of whether they are "persons aggrieved" entitled to bring these contested cases pursuant to the North Carolina Administrative Procedure Act, N.C. Gen. Stat. § 150B-23(a). In support of their claim that they are "persons aggrieved", EDF Petitioners submitted affidavits from their members describing the harm they have suffered and will suffer as a result of DAQ's issuance of the Permits.

Neither DAQ nor Duke contests EDF Petitioners' status as "persons aggrieved. At the July 7, 2010 hearing, DAQ and Duke reiterated that they would stipulate that EDF Petitioners were "persons aggrieved" for purposes of these contested cases, but that they disagreed with some of the claims and facts asserted by EDF Petitioners and were explicitly not stipulating to any of those claims or asserted facts.

In their Reply and at hearing, EDF Petitioners stated that the question of "person aggrieved" status under the Administrative Procedure Act is a jurisdictional issue that is not

mooted by the stipulations of the opposing parties. Therefore, EDF Petitioners requested that the undersigned grant their motion for summary judgment on aggrieved party status.

Based on the evidence adduced by EDF Petitioners that has not been specifically controverted by Duke or DAQ, and based on the stipulations by both DAQ and Duke, the Court finds that each EDF Petitioner is a group of persons with a common interest that has been "directly or indirectly affected substantially" by an administrative action, i.e., the issuance of the Permits. N.C. Gen. Stat. § 150B-2(6). Accordingly, EDF Petitioners are "persons aggrieved" entitled to bring these contested cases under the APA.

Because there is no genuine issue of material fact and because EDF Petitioners are entitled to judgment as a matter of law, EDF Petitioners' motion for summary judgment on this issue is GRANTED.

II. Whether DAQ violated public notice requirements in issuing the draft T29 Permit.

EDF Petitioners and DAQ have both moved for summary judgment on EDF Petitioners' claim that the public notice for the draft version of Permit T29 did not comply with the Clean Air Act and its implementing regulations.

A "permit application subject to" the State's PSD rules "shall be processed in accordance with the" PSD public notice requirements. 15A N.C. Admin. Code 2D .0530(r) (2009). Nothing in State law requires a permit application that is not subject to the PSD rules to be subject to the PSD public notice requirements. Such a permit is subject to the public notice requirements for whatever type of permit is issued. A new permit may amend the permit requirements regarding and therefore may implicate only one of many of these programs.

Permit T28 was subject to the PSD program and the PSD public notice requirements applied to the Permit T28 process. Permit T29 only amended non-PSD parts of the Permit.

Therefore, it was not subject to the PSD program and DAQ was not required to comply with the PSD public notice requirements.

Accordingly, DAQ's motion for summary judgment on EDF Petitioners' public notice claim is GRANTED and EDF Petitioners' motion for summary judgment on this claim is DENIED.

III. Whether DAQ erred in issuing a PSD permit with an expiration date.

DAQ has moved for summary judgment on EDF Petitioners' claim that DAQ erred in including an expiration date in Permit T29. North Carolina law limits the term for which an air permit may be issued or renewed to five years. N.C. Gen. Stat § 143-215.108(d1) and 15A N.C. Admin. Code 2Q .0308(c) In light of North Carolina's five-year limitation on the term of an air permit, it cannot be said that the existence of an expiration date renders Permit T29 facially invalid. However, DAQ must reconcile EPA's prohibition on Title V permits superseding SIP-approved permits with the state's five-year permit term. Therefore, DAQ's motion for summary judgment on this claim is GRANTED.

IV. Whether Unit 6 is a "minor source" of hazardous air pollution.

DAQ has moved for summary judgment on EDF Petitioners' claim that DAQ erred in determining Unit 6 to be a minor source of hazardous air pollutants ("HAPs") and, therefore, exempt from the Clean Air Act's stringent maximum achievable control technology standards for HAPs.

A "major source" of HAPs is a source that "emits or has the potential to emit considering controls" at least 10 tons per year of any HAP, or 25 tons per year of any combination of HAPs. 42 U.S.C. § 7412(a)(1); 40 C.F.R. § 63.41; 15A N.C. Admin. Code 02D.1112(c)(4). A source's "potential to emit" ("PTE") is determined based on its "maximum capacity to emit" pollutants,

taking into account only those limitations that are "physical or operational" and federally and practicably enforceable. 40 C.F.R. § 63.2; 15A N.C. Admin. Code 02Q .0103(28).

DAQ determined Unit 6 to be a minor source of HAPs. DAQ's PTE calculation for HCl was based on three variables: (1) the chlorine content of the coal; (2) the amount of coal burned; and (3) the HCl removal efficiency of the pollution controls. EDF Petitioners and DAQ largely agree regarding the first two variables, but disagree strenuously regarding the HCl removal efficiency of the pollution controls for Unit 6, which DAQ assumed to be 99.95%. DAQ contends that EDF Petitioners have not demonstrated any error in DAQ's evaluation of the HCl removal efficiency.

EDF Petitioners, on the other hand, contend that DAQ erred in assuming an HCl removal efficiency of 99.95%, because it does not reflect Unit 6's "maximum capacity" to emit HAPs under its physical and operational design. 40 C.F.R. § 63.2, 15A N.C. Admin. Code 02Q .0103(28). EDF Petitioners' claim is premised upon several technical errors committed by DAQ, including but not limited to DAQ's selection of the wrong removal efficiency numbers from the wet scrubber tests at Duke's Marshall Steam Station and from the spray dry absorber pilot tests at Cliffside Unit 5 for use in its PTE calculations; DAQ's adding together of these individual removal efficiencies to estimate the efficiency of Unit 6's pollution control train; DAQ's rounding of the numbers on test results to yield artificially high HCl removal rates; and DAQ's reliance on stack tests that utilized a test method that EPA has disapproved for analyzing HCl emissions following treatment by a wet scrubber.

With regard to DAQ's calculation of Unit 6's potential to emit HCl, EDF Petitioners assert two additional legal errors, which DAQ contends are based on EDF Petitioners' incorrect presumption that DAQ concluded Unit 6 was a "synthetic" rather than a "natural" minor source

of HAPs, i.e., that HAP emissions are below the major-source threshold only due to limitations in the Permit.

Because EDF Petitioners have raised genuine issues of material fact – i.e., factual disputes on numerous highly technical issues regarding DAQ's determination that Unit 6 will be a minor source of HAPs – summary judgment on this claim is inappropriate. In addition, in light of several hotly contested legal issues, DAQ is not entitled to judgment as a matter of law. Accordingly, DAQ's motion for summary judgment on this claim is DENIED.

V. Whether DAQ's use of coarse particle pollution as a surrogate for fine particle pollution was erroneous.

EDF Petitioners, DAQ, and Duke have moved for summary judgment on EDF Petitioners' claim that Permit T29 violates the Clean Air Act and federal and state regulations because DAQ relied on coarse particle pollution ("PM_{10}") as a surrogate for fine particle pollution ("$PM_{2.5}$") for PSD purposes.

$PM_{2.5}$ is a regulated pollutant for which EPA established health-based standards separate from those set for PM_{10}. See 40 C.F.R. § 51.166(b)(49); 15A N.C. Admin. Code 02D. 0530(b). It is undisputed that Cliffside Unit 6 is a major source of $PM_{2.5}$. See 40 C.F.R. § 51.166(b)(23).

DAQ did not conduct a Best Available Control Technology ("BACT") analysis or set BACT emission controls for $PM_{2.5}$. Instead, DAQ presumed that they were in compliance. In so doing, DAQ relied on EPA guidance memoranda that provided an interim policy exception to the Clean Air Act's requirement of a $PM_{2.5}$ BACT analysis. This policy allowed for the interim use of PM_{10} as a surrogate for $PM_{2.5}$.

DAQ has concurred with and adopted an EPA application of the CAA known as the PM_{10} Surrogate Policy. Under the Policy, if a project triggers PSD review for PM_{10} and $PM_{2.5}$, and

DAQ performs a PSD analysis for PM_{10} and imposes appropriate control requirements and permit conditions based on that analysis, then DAQ has satisfied the PSD requirements for $PM_{2.5}$ as well. Longleaf Energy Assocs., LLC v. Friends of the Chattahoochee, Inc., 681 S.E.2d 203, 211-12 (Ga. Ct. App. 2009), cert. denied, No. S09C1879, 2009 Ga. LEXIS 809 (Ga. Sept. 28, 2009).

EPA has allowed States to "continue to implement a PM_{10} program as a surrogate to meet the PSD program requirements for $PM_{2.5}$ pursuant to the" Seitz Memo but EPA is requiring States to abandon the policy by July 15, 2011. Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers ($PM_{2.5}$), 73 Fed. Reg. 28,321, 28,336/1 (2008); see also In re N. Mich. Univ. Ripley Heating Plant, PSD Appeal No. 08-02, at 30 (Envtl. App. Bd. Feb. 18, 2009); In re E. Ky. Power Coop., Inc., Title V Permit No. V-06-007 (Adm'r Aug. 6, 2007); Page Memo, supra. Prevailing case law does not require any case-specific analysis to determine whether PM_{10} is a suitable surrogate for $PM_{2.5}$ on the facts of the particular permit under review. E.g. Appalachian Voices, 693 S.E.2d at 303.

EPA only first identified such a case-specific analysis requirement in August 2009. See In re Louisville Gas & Elec. Co., Title V Permit No. V-02-043, at 43-46 (Adm'r Aug. 12, 2009). Although advances in modeling techniques and collection of ambient PM data have occurred since the PM_{10} Surrogate Policy was first adopted, technical impediments to the evaluation of $PM_{2.5}$ in the PSD review process still remain.

In 2008, EPA issued a final rule eliminating the surrogacy policy. Duke and DAQ point to the rule's inclusion of a three-year transition period, during which states with approved implementation plans may continue to use PM_{10} as a surrogate before the policy is eliminated, as proof that DAQ's use of PM_{10} in this case was proper. Although DAQ may continue to use the

surrogacy policy under EPA's three-year transition period, the transition period does not eliminate the requirement that it demonstrate the reasonableness of doing so, nor the inherent limitation of the surrogacy policy that it is available only so long as there are "significant technical impediments" to direct regulation of $PM_{2.5}$.

There exists genuine issues of material fact, therefore EDF Petitioners' motion for summary judgment on this issue is DENIED, and DAQ's and Duke's motions for summary judgment on this issue are DENIED.

VI. Whether DAQ erred by allowing Duke to use Clean Smokestacks Act emissions reductions to net Unit 6 out of PSD applicability.

DAQ seeks summary judgment on EDF Petitioners' claim that DAQ erred by allowing Duke to use emission reductions required under the Clean Smokestacks Act ("CSA") to net Unit 6 out of PSD applicability.

The Court dismissed this claim in its May 12, 2009 Order. "Because the question of whether DAQ properly allowed credit for emission reductions at Units 1-5 turns on whether projects at those units were major modifications, and because that issue has not been decided in federal litigation, EDF's claims are not ripe for adjudication and are dismissed." Order on Mots. to Dismiss and for More Definite Statements (May 12, 2009) at 14.

Accordingly, the Court finds that this issue is not ripe for summary judgment and DAQ's motion for summary judgment on this issue is DENIED.

VII. Whether DAQ used the correct "look-back" period for determining baseline emissions for use in the PSD netting calculations.

EDF Petitioners claim that it was erroneous for DAQ to allow Duke to use NO_x emissions data for the existing Cliffside units from years 2001-2002 when determining the

baseline actual emissions for NO_x for purposes of "netting" emissions in the PSD process.

Genuine issues of material fact exist with respect to whether Duke's application for Permit T28 was administratively complete on December 21, 2005. Therefore, the court finds that this issue is not ripe for summary judgment and DAQ's motion for summary judgment on this issue is DENIED.

VIII. Whether DAQ correctly determined that reductions in emissions of SO_2 and NO_x at Cliffside have "approximately the same qualitative significance for public health and welfare" as the emissions from Unit 6.

DAQ seeks summary judgment on EDF Petitioners' claim that DAQ erred by not requiring Duke to demonstrate, through air quality modeling, that the historic emissions from the existing boilers and associated equipment at Cliffside have the same "qualitative significance" for public health and welfare as the future emissions from the new Unit 6.

For an emissions decrease at the existing Cliffside units to be "creditable" for netting purposes—meaning it can be used to offset emission increases from the new Unit 6—it must, in addition to other requirements, have "approximately the same qualitative significance for public health and welfare as that attributable to the increase" in emissions from the new Unit 6. 40 C.F.R. § 51.166(b)(3)(vi)(c) (incorporated by reference in 15A N.C. Admin. Code 02D .0530(b)).

Since no genuine issue of material fact exists, DAQ is entitled to summary judgment on this issue and its motion is GRANTED with respect to this claim.

IX. Whether DAQ erred in determining that Unit 6 would not result in a significant net emissions increase of SO_2 and NO_x based on "PSD avoidance limits".

EDF Petitioners claim that even if the emissions reductions from Units 1-5 were otherwise creditable, DAQ erred in allowing Unit 6 to "net out" of PSD applicability for SO_2 and

NO_x because the limitations and requirements that DAQ included in the Permit are inadequate to create sufficient creditable reductions in SO_2 and NO_x emissions at Units 1-5.

DAQ seeks summary judgment on this issue, arguing that regardless of any other limitations in the Permits, the Permits' "PSD avoidance limits" for NO_x and SO_2 keep the net emissions increases of those pollutants below the PSD significance threshold of 40 tons per year, and therefore it was proper to allow Unit 6 to avoid PSD review for NO_x and SO_2.

15A N.C. Admin. Code 02Q .0317 allows the owner or operator of a facility to request that terms and conditions be placed in the facility's permit to avoid the applicability of, among other things, the PSD permitting requirements in 15A N.C. Admin. Code 02D .0530. Pursuant to this provision, the Cliffside Permits include "PSD avoidance limits" of 6,370 tons per year of NO_x emissions and 25,185 tons per year of SO_2 emissions from Units 5 and 6.

To be creditable for netting purposes, an emissions decrease must be, among other things, "enforceable as a practical matter ***at and after the time that actual construction on the particular change begins***". 40 C.F.R. § 51.166(b)(3)(vi)(b) (emphasis added).[1] This requirement is not a mere technicality. The PSD requirements are preconstruction requirements that affect how a facility is designed and how it will be built, as well as how it can operate.

Because the Permits do not require Units 1-4 to be shut down and the Unit 5 scrubber to be operational prior to construction of Unit 6, the "PSD avoidance limits" do not allow the

[1] The citation is to the version of 40 C.F.R. § 51.166 that existed at the time that EPA proposed to approve revisions to the PSD rules as part of the SIP in September 2008. EPA has not yet taken final action on those rule changes. EPA last approved revisions to the North Carolina PSD SIP in 1999. 64 Fed. Reg. 55831 (October 15, 1999); 40 C.F.R. § 52.1770(c). The SIP-approved North Carolina PSD regulations, 15A N.C. Admin. Code 02D .0530, essentially incorporated by reference the federal PSD regulations in 40 C.F.R. § 51.166 as amended on March 15, 1996. The version of 40 CFR 51.166 referenced in North Carolina's current State Implementation Plan states that an emissions decrease must be "*federally* enforceable at and after the time that actual construction on the particular change begins". (Emphasis added.)

emissions reductions at Units 1-5 to be used for netting. In light of this legal error, DAQ is not entitled to judgment as a matter of law, and accordingly DAQ's motion for summary judgment this issue is DENIED.

X. Whether DAQ erred by evaluating projected visibility impacts to Class I areas based on existing impaired conditions rather than natural background conditions.

EDF Petitioners and DAQ have both moved for summary judgment on EDF Petitioners' claim that DAQ unlawfully evaluated Unit 6's projected impacts to visibility in "Class I" areas, such as national parks and wilderness areas, based on existing impaired conditions rather than natural background conditions.

Congress has established a national goal of remedying existing visibility impairment in Class I areas. See 42 U.S.C. §§ 7470-7491. EDF Petitioners argue that DAQ's use of existing visibility conditions does not comply with the Clean Air Act's national goal of restoring natural visibility conditions in all Class I Areas or the PSD program's purpose to "preserve, protect, and enhance" air quality in Class I areas. DAQ counters that the CAA's national goal of restoring natural visibility and the PSD program's purpose to enhance air quality in Class I areas do not refer to the part of the PSD program at issue in this case.

Under the PSD program, the CAA specifies a process for the permitting agency (*i.e.*, DAQ), the permit applicant (*i.e.*, Duke Energy), the FLM and EPA to interact to protect "air quality-related values (including visibility)" ("AQRVs") in class I areas. As relevant to the instant motion, if the FLM "demonstrates to the satisfaction of the State that the emissions from" the project "will have an adverse impact on the air quality-related values (including visibility)" in a class I area, "a permit shall not be issued." 42 U.S.C. §7475(d)(C)(ii).

NPS is the FLM responsible for protecting air quality related values, including visibility, at Great Smoky Mountains National Park, a Class I area. NPS guidance, known as the "FLAG

2000 Guidance", specifies that "natural conditions" should be used as background visibility levels when assessing potential visibility impairment from new air pollution sources. The FLAG 2000 Guidance applied to modeling demonstrations for Class I areas at the time Duke and DAQ developed and conducted air quality modeling to predict Cliffside Unit 6's visibility impacts on Great Smoky Mountains National Park.

According to FLAG, the FLM will communicate its final finding of adverse impact by publishing a notice, including specific elements, in the Federal Register, which it did not do. Because the FLM failed to follow its own procedures DAQ reasonably concluded that the FLM failed to make a "demonstration" to DAQ's "satisfaction".

Because the FLM failed to state clearly in its correspondence with DAQ or through any other means whether it formally found that the Cliffside project would have "an adverse impact on the air quality-related values (including visibility)" in a class I area, DAQ reasonably concluded that the FLM never made any such finding.

For all of the foregoing reasons, DAQ did not err in concluding that the FLM's demonstration was not to DAQ's "satisfaction". DAQ appropriately assessed the modeling performed and submitted by the FLM regarding class I areas and did not, as the Petitioners' allege, ignore such modeling. The material facts are not in dispute and DAQ is entitled to judgment as a matter of law, EDF Petitioners' motion for summary judgment on this issue is DENIED and DAQ's motion for summary judgment on this issue is GRANTED.

XI. Whether DAQ erred by allegedly ignoring modeling performed and submitted by the FLM regarding Class I areas.

EDF Petitioners claim that DAQ erred in ignoring the National Park Service's ("NPS") findings regarding the Class I impacts of NO_x and SO_2 emissions from Unit 6 in Great Smoky Mountains National Park ("GSMNP"), a Class I area under the Clean Air Act.

NPS is the Federal Land Manager ("FLM") responsible for protecting air quality related values, including visibility, as well as other park resources in the GSMNP. See 42 U.S.C. § 7475(d)(2)(B); 40 C.F.R. § 81.422, 40 C.F.R. § 81.428. Accordingly, DAQ was required to notify the NPS of Duke's permit application for Cliffside Unit 6 and provide it with information, including Duke's visibility impact analysis. 15A N.C. Admin. Code 2D .0530(t).

DAQ claims that NPS's modeling was inconsistent with the PSD regulations. Cliffside Unit 6 would be located near several national parks and wilderness areas identified in the Clean Air Act as "Class I" areas subject to strict air quality protections. See 40 C.F.R. § 81.422.

DAQ argues that NPS's modeling analysis did not constitute a formal finding of adverse impact and, therefore, did not trigger DAQ's consideration of NPS's modeling. DAQ also argues that NPS did not actually conclude that Cliffside Unit 6 had an adverse impact. NPS conducted its own modeling with the limited data it had available and submitted comments to DAQ. Based on NPS's submissions to DAQ, the Court finds that NPS did not allege an adverse impact.

In light of NPS's modeling analysis and resulting objections, DAQ was not required to consider modeling performed by NPS since adverse effect was not shown.

Because there are no outstanding issues of material fact, DAQ's motion for summary judgment is GRANTED.

XII. Whether DAQ failed to determine that Cliffside Unit 6 will not cause violations of PSD increments when emissions from all increment-consuming sources are included.

DAQ seeks summary judgment on EDF Petitioners' claim that DAQ erred by issuing the Permit without determining that Cliffside Unit 6 will not cause violations of PSD increments when emissions from all increment-consuming sources are included.

The Clean Air Act requires a demonstration that the emissions increases from a project such as Cliffside Unit 6 will not exceed the "maximum allowable increase" over the baseline concentration in any area. The "maximum allowable increase", also known as the "PSD increment", is a limit on the amount of additional air pollution that may be added to the "baseline concentration" for each regulated air pollutant. 40 C.F.R. § 51.166(k)(2).

According to EDF Petitioners, emissions increases from Duke's past modifications to units 1-5, as well as other emissions increases in the area, should have been modeled to determine whether emissions from the new Unit 6 will cause or contribute to a violation of the coarse particulate matter ("PM_{10}") increment.[2] This is because the PSD regulations prescribe that emissions increases from certain sources occurring after specified dates must be added to the baseline concentration. See 40 C.F.R. §§ 51.166(b)(13)(ii)(a), 51.166(b)(13)(ii)(b).[3]

Because no genuine issues of fact exist, DAQ's motion for summary judgment on this issue is GRANTED.

XIII. Whether DAQ erred by exempting Unit 6 from BACT requirements during periods of startup, shutdown and malfunction.

DAQ has moved for summary judgment on EDF Petitioners' claim that DAQ erred by exempting Unit 6 from BACT requirements during periods of startup, shutdown or malfunction ("SSM").

EDF Petitioners contend that sections 2.1.J.2.d, and 2.1.J.2.g, and 2.2.A.1.a of the Permits do not comply with the Clean Air Act's requirement that "emission limitations", including BACT emissions limitations, apply "on a continuous basis". 42 U.S. C. §§ 7602(k), 7479(3).

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[2] EDF Petitioners' particulate matter increment claims specifically involve coarse particulate matter, or PM_{10}, which is particulate matter with an aerodynamic diameter of between 2.5 and 10 microns. 40 C.F.R. § 50.6(c).

[3] In this case, the relevant baseline dates are January 6, 1975 and April 30, 1979.

According to EDF Petitioners, by exempting Cliffside Unit 6 from BACT emission limit requirements during SSM, DAQ improperly approved an emissions limit that was "less stringent than" the continuous BACT emissions limitation requirements of the federal Clean Air Act. EDF Pet'rs' T29 Pet. at 12-13, ¶IV(H).

DAQ argues that these two provisions simply implement the State's EPA-approved SSM rule, 15A N.C. Admin. Code 2D .0535, and that EDF Petitioners cannot challenge the validity of that rule in this forum.

The sections of the Permits cited by EDF Petitioners conflict with 15A N.C. Admin. Code 2D .0535, which allows SSM emissions to exceed BACT limits only under certain circumstances and conditions. Specifically, section 2D .0535(g) allows excess emissions resulting from startup or shutdown only if the owner/operator demonstrates that the excess emissions are unavoidable. In addition, the rule specifies that "[t]he owner or operator shall, to the extent practicable, operate the source and any associated air pollution control equipment or monitoring equipment in a manner consistent with best practicable air pollution control practices to minimize emissions during start-up and shut-down."

The Permit does not require, nor even mention, the unavoidability determination required by 2D .0535(g). Instead, it simply states that "emissions resulting from startup, shutdown or malfunction as defined in under 15A NCAC 2D .0535, exceeding above [BACT] limits … are permitted". Permit T29 at 70. Likewise, the incorporated definitions of "startup" and "shutdown" do not guarantee that emissions in excess of BACT limits during start up and shutdown are allowable only to the extent they are unavoidable. Therefore, this section does not comply with Rule 2D .0535(g). In addition, the Permit requires only "good" air pollution control practices for

minimizing emissions, rather than "best practicable" air pollution control practices, as required by the rule.

Because a genuine issue of fact exists, DAQ's motion for summary judgment on this issue is DENIED.

XIV. Whether DAQ erred in failing to include BACT emissions limits or other controls for carbon dioxide in the Permits.

DAQ and Duke have both moved for summary judgment on EDF Petitioners' claims regarding carbon dioxide ("CO_2").

EDF Petitioners maintain that CO_2 is a pollutant that is "subject to regulation" under the Act and that therefore, DAQ should have conducted a BACT analysis and set BACT emission limits for CO_2. Nevertheless, EDF Petitioners have withdrawn this claim in light of recent regulatory developments.

EDF petitioners have an affirmative duty to defend any claims asserted. Since they have not provided such defense, Duke's and DAQ's motions for summary judgment on this claim are GRANTED.

XV. Whether DAQ erred in failing to consider Integrated Gasification Combined Cycle technology in the BACT collateral impacts and alternatives analyses.

Duke and DAQ have also moved for summary judgment on EDF Petitioners' claim that DAQ erred in failing to consider integrated gasification combined cycle ("IGCC") in the BACT collateral impacts and alternatives analyses.

In Case No. 08 EHR 0835 (Permit T28), this Court dismissed EDF Petitioners' claim regarding consideration of IGCC in the BACT analysis for Unit 6. See Order on Motions to Dismiss and For More Definite Statements at 6-7 (May 13, 2009). EDF petitioners have an

affirmative duty to defend any claims asserted. Since they have not provided such defense, Duke's and DAQ's motions for summary judgment on this claim are GRANTED.

XVII. Whether DAQ erred by not requiring the air quality modeling to consider the alleged and unproven historical violations at existing Cliffside units.

Duke has moved for summary judgment on EDF's claim that DAQ erred by not requiring the air quality modeling to consider the alleged and unproven historical violations at existing Cliffside units. The Court dismissed this claim in its May 12, 2009 Order because the issue had not been decided in federal litigation. Since the claim is pending in Federal litigation, EDF's claim is not ripe for adjudication. The Court finds the claims related to allegations that Duke made illegal modifications to the existing Cliffside units not ripe for consideration at this time.

Therefore, Duke's motion for summary judgment is DENIED.

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ORDERED this 8th day of December, 2010.

J. Randall May
Administrative Law Judge

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This is the 8th day of December, 2010.

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