

6RC  
Environmental Integrity Project  
1303 San Antonio, Suite 200  
Austin, Texas 78701  
Phone: (512) 637-9477  
Fax: (512) 584-8019  
www.environmentalintegrity.org

February 11, 2009

**VIA CERTIFIED MAIL**

Ms. Lisa P. Jackson  
Administrator  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, NW  
Washington, DC 20406

EXTERNAL AFFAIRS DIVISION

2009 FEB 13 PM 2:45

RECEIVED

RE: *Environmental Integrity Project's Notice of Intent to Bring Suit Against Administrator Jackson for Failure to Grant or Deny Environmental Integrity Project's Petition to Object to American Electric Power/Southwestern Electric Power Company's Title V Permit for operation of John W. Turk, Jr. Power Plant, a Nondiscretionary Duty Under 42 U.S.C. §7661d(b)(2)*

Dear Administrator Jackson,

I am writing on behalf of the Environmental Integrity Project and Sierra Club ("Plaintiffs") to provide you with notice of intent to bring suit against the Administrator of the U.S. Environmental Protection Agency ("EPA") for failing to perform a nondiscretionary duty.

As explained more fully below, EPA failed to grant or deny Plaintiffs' petition objecting to American Electric Power/Southwestern Electric Power Company's proposed Title V Federal Operating Permit for operation of John W. Turk, Jr. Power Plant, which was issued on November 5, 2008. The petition was timely filed on November 24, 2008. The Administrator's failure to act on Plaintiffs' petition is a violation of 42 U.S.C. §7661d (b)(2), which requires the Administrator to grant or deny such petitions within 60 days after the petition is filed.

**Authority to Bring Suit**

Clean Air Act section 304 (a)(2) authorizes citizen suits "against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator." 42 U.S.C. §7604(a)(2). The Administrator has a nondiscretionary duty to grant or deny petitions filed by citizens that object to the issuance of a federal operating permit on the basis that it contains provisions not in compliance with the Clean Air Act. 42 U.S.C. §7661d (b). In the event that the Administrator fails to perform this nondiscretionary duty, citizens may bring suit to compel such action. The district courts have

jurisdiction over these suits. 42 U.S.C §7604(a); *New York Public Interest Research Group, Inc. v. Christine T. Whitman*, 214 F. Supp. 2d 1, 3 (2002).

The Clean Air Act requires citizens to give the Administrator 60 days notice before bringing an action under section 304 (a)(2). 42 U.S.C. §7604(b)(2). Plaintiffs are hereby giving Administrator Jackson notice of their intent to file suit against her, in her official capacity as Administrator of the EPA, under Clean Air Act section 304(a)(2) for failing to perform a nondiscretionary duty. Plaintiffs have the authority to commence this suit at any time 60 days after the Administrator has received this notice.

### **EPA's Failure to Perform a Nondiscretionary Duty**

During the Arkansas Department of Environmental Quality ("ADEQ") review of American Electric Power/Southwestern Electric Power Company's ("SWEPCO") Title V Federal Operating Permit for John W. Turk, Jr. Power Plant, Plaintiffs timely submitted written comments to ADEQ during public notice and comment periods on July 28, 2007, and again on September 23, 2008.

Plaintiffs' comments articulated numerous specific objections to provisions in SWEPCO's draft Title V permit. First, the proposed best available control technology ("BACT") analysis for the Turk plant's PSD permit is flawed as SWEPCO and ADEQ failed to adequately conduct the required full impacts analysis to determine whether this proposed source would cause or contribute to a violation of the national health-based ambient air quality standards (the "NAAQS") or PSD increments (including visibility in a Class I area). Flawed BACT analysis for a construction permit cannot be "bootstrapped" into a Title V permit. Second, the proposed maximum available control technology ("MACT") analysis is flawed as the Clean Air Act requires MACT analysis for hazardous air pollutants, and ADEQ did not conduct adequate "floor" and "beyond the floor" MACT analysis, or consider alternatives to control these air pollutants at the Turk Plant. Third, the Permit fails to assure compliance with and practical enforceability of the emission limits and standards required for PSD permits and Title V of the Clean Air Act. Finally, the Title V Permit fails to regulate harmful Carbon Dioxide (CO<sub>2</sub>) and Greenhouse Gas (GHG) Emissions from the Turk plant. See App. A (Plaintiffs' Petition for Objection).

EPA received the proposed Title V Permit from ADEQ on August 11, 2008. EPA's 45-day review period ended on September 25, 2008. EPA did not object to the proposed Permit during the review period, and ADEQ issued the Permit on November 5, 2008.

When the Administrator does not object to a permit containing provisions that are not in compliance with the Clean Air Act, citizens may petition the Administrator to object. 42 U.S.C. §7661d (b)(2). The Administrator must respond within 60 days after such a petition is filed by either granting or denying the petition. 42 U.S.C. §7661d (b)(2). The language of the statute states: "[t]he Administrator *shall* grant or deny such petition within 60 days after the petition is filed." This is very clearly a nondiscretionary duty. *New York Public Interest Research Group*, 214 F. Supp. 2d at 1-3.

Because the permit, even as modified by ADEQ, is not in compliance with the Clean Air Act, Plaintiffs filed a Petition for Objection on November 24, 2008, under Clean Air Act section 505(b)(2). 42 U.S.C. §7661d(b)(2); 40 C.F.R. 70.8(d); App. A, (Plaintiffs' Petition for Objection). This petition was timely filed within 60 days following the end of EPA's 45 day review period and was based solely on objections to the permit that were raised in Plaintiffs' comments. The Administrator had 60 days, until January 23, 2009, to grant or deny the petition. 42 U.S.C. § 7661d (b)(2).

The Administrator has not yet granted or denied the petition. Therefore, the Administrator has failed to perform the nondiscretionary duty to grant or deny Plaintiffs petition and is in violation of 42 U.S.C. § 7661d (b)(2).

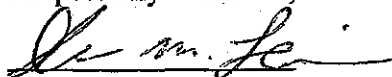
### **Relief Requested**

Plaintiffs intend to file suit 60 days after the Administrator receives this notice to compel the Administrator to perform her nondiscretionary duty to grant or deny Plaintiffs' petition. Plaintiffs will seek the following relief:

1. An order compelling Administrator Jackson to grant or deny Plaintiff's petition within 60 days from the date of the order;
2. Attorneys' fees and other litigation costs; and
3. Other appropriate relief as allowed.

If you have any questions regarding the allegations in this notice, believe any of the foregoing information to be in error, wish to discuss the exchange of information, or would otherwise like to discuss a settlement of this matter prior to the initiation of litigation, please contact us at the address below.

Respectfully submitted,



Ilan Levin

Kimberly Wilson

ENVIRONMENTAL INTEGRITY PROJECT

1303 San Antonio Street, Ste. 200

Austin, TX 78701

(512) 637-9479 (phone)

(512) 584-8019 (facsimile)

Email: ilevin@environmentalintegrity.org

**cc Via Certified Mail:**

Eric H. Holder Jr., U.S. Attorney General  
U.S. Department of Justice  
950 Pennsylvania Avenue, NW  
Washington, DC 20530-0001

Lawrence E. Starfield, Acting Regional Administrator  
U.S. EPA Region 6  
1445 Ross Avenue, Suite 1200  
Mail Code 6RA  
Dallas, TX 75202-2733

Arkansas Department of Environmental Quality  
Attention: Mike Bates, Air Division Chief  
5301 Northshore Drive  
North Little Rock, Arkansas 72118

**Appendix A:**

**Petition for Objection to American Electric Power/Southwestern Electric Power Company  
Permit for Operation of John W. Turk, Jr. Power Plant**

November 24, 2008

(Without Attachments)

ENVIRONMENTAL INTEGRITY PROJECT  
1303 SAN ANTONIO STREET, SUITE 200  
AUSTIN, TEXAS 78701  
(512) 637-9477  
Fax: (512) 479-8302  
www.environmentalintegrity.org

November 24, 2008

VIA FACSIMILE AND CERTIFIED MAIL

Administrator Stephen L. Johnson  
U.S. Environmental Protection Agency  
Ariel Rios Building, Mail Code 1101A  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460  
Fax Number: (202) 501-1450

**Re: Petition for objection to American Electric Power/Southwestern Electric  
Power Company proposed Permit for operation of John W. Turk, Jr. Power  
Plant: AFIN#29-00506, Permit No. 212-AOP-R0**

Dear Administrator Johnson:

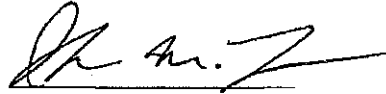
Enclosed is a petition requesting that the Administrator of the U.S. Environmental Protection Agency object to the proposed Title V federal operating Permit No. 212-AOP-R0 issued to American Electric Power/Southwestern Electric Power Company ("SWEPCO") for operation of John W. Turk, Jr. Power Plant. This petition is submitted by Environmental Integrity Project, Sierra Club and Audubon ("Petitioners") pursuant to Section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), 40 C.F.R. § 70.8(d), and Regulation No.26, §26.606 of the Arkansas Pollution Control and Ecology Commission. As required by these provisions, Petitioners are also providing a copy of this Petition to the Arkansas Department of Environmental Quality and to SWEPCO. Petitioners are also providing a courtesy copy of this Petition to the EPA Region VI Air Permit Section Chief.

As addressed in detail in the Petition, the proposed Permit is deficient and not in compliance with the Clean Air Act. Among the many deficiencies, the Permit contains flawed BACT analysis and fails to meet Clean Air Act PSD pre-construction permit requirements. In addition, the proposed maximum available control technology ("MACT") analysis in the Turk Permit is deficient. The Act requires MACT analysis, and ADEQ did not conduct adequate MACT analysis, or consider alternatives to control air pollutants at the Turk Plant. The proposed Permit also fails to assure compliance with and practical enforceability of the emission limits and standards required for PSD permits and Title V of the Clean Air Act.

Finally, EPA should object to the proposed Permit because it fails to consider carbon dioxide (CO<sub>2</sub>) and greenhouse gas (GHG) emissions from the Turk plant.

If you have any questions, please call me at (512) 637-9479.

Sincerely,



Ilan Levin  
Senior Attorney  
ENVIRONMENTAL INTEGRITY PROJECT  
1303 San Antonio Street, Ste. 200  
Austin, TX 78701  
(512) 637-9479 (phone)  
(512) 584-8019 (facsimile)  
Email: ilevin@environmentalintegrity.org

cc (facsimile and certified mail):

Arkansas Department of Environmental Quality  
Attention: Mike Bates, Air Division Chief  
5301 Northshore Drive  
North Little Rock, Arkansas 72118  
Fax Number: 501-682-0753

Michael G. Morris  
Chairman, President, and CEO  
American Electric Power Corporation  
1 Riverside Plaza  
Columbus, Ohio 43215-2372  
Fax Number: 614-716-1823

U.S. Environmental Protection Agency  
Attn: Air Permit Section Chief  
Region 6  
1445 Ross Avenue, Suite 1200  
Dallas, Texas 75202  
Fax Number: 214-665-7263

IN THE MATTER OF

# PETITION FOR OBJECTION

Pursuant to section 505(b)(2) of the Clean Air Act ("CAA" or "Act"), 42 U.S.C. § 7661d(b)(2), 40 C.F.R. §70.8(d), and Regulation No.26, §26.606 of the Arkansas Pollution Control and Ecology Commission, the Environmental Integrity Project, Sierra Club and Audubon ("Petitioners") petition the Administrator of the U.S. Environmental Protection Agency to object to the proposed Title V Operating Permit Number 212-AOP-R0 issued by the Arkansas Department of Environmental Quality ("ADEQ") to American Electric Power/Southwestern Electric Power Company ("SWEPCO") for operation of the John W. Turk, Jr. Power Plant (the "Turk plant"). As required by these cited provisions, Petitioners are providing this Petition to the EPA Administrator, the ADEQ, and SWEPCO. Petitioners are also providing this Petition to the EPA Region VI Air Permit Section Chief.

1



proposed source would cause or contribute to a violation of the national health-based ambient air quality standards (the "NAAQS") or PSD increments (including visibility in a Class I area). The EPA must object to the Permit as its flawed BACT analysis for a construction permit cannot be "bootstrapped" into a Title V permit. Second, the proposed maximum available control technology ("MACT") analysis is flawed. The Act requires MACT analysis for hazardous air pollutants, and ADEQ did not conduct adequate "floor" and "beyond the floor" MACT analysis, or consider alternatives to control these air pollutants at the Turk Plant. Third, the proposed Permit fails to assure compliance with and practical enforceability of the emission limits and standards required for PSD permits and Title V of the Clean Air Act. Finally, EPA should object to the proposed Permit as it fails to regulate harmful Carbon Dioxide (CO<sub>2</sub>) and Greenhouse Gas (GHG) Emissions from the Turk plant.

#### **BACKGROUND**

The Turk plant is a new 600 megawatt coal-fired electric generating unit and a natural gas-fired 555 mmBtu/hr auxiliary boiler to be operated by SWEPCO in Hempstead County, Arkansas. Major new sources of pollution are supposed to undergo a stringent permitting review intended to ensure that they do not degrade air quality and are made only after careful evaluation and adequate procedural opportunities for informed public participation in the decision making process. Clean Air Act ("CAA") § 160, 42 USC § 7470. In addition, the Clean Air Act reserves its most stringent and protective standards for the control of air toxics, or hazardous air pollutants (HAP), emissions from new major sources, including coal-fired power plants: "[t]he maximum degree of reduction in emissions that is deemed achievable for new source in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source..." CAA § 112(d)(3).

SWEPCO applied to the ADEQ for a Federal Operating Permit, and after Section 112(g) analysis, and two public notice and comment periods, ADEQ issued Permit No. 212-AOP-R0 to allow SWEPCO to operate the Turk plant on November 5, 2008.

During the public comment periods on the draft Turk plant Permit, Petitioners timely submitted written comments to ADEQ on July 28, 2007, and again on September 23, 2008. Petitioners raised all issues in this Petition in their comments to ADEQ. See App. A (Petitioners' Comments to ADEQ (July 28, 2007)); App. C (Petitioners' Comments to ADEQ (April 30, 2008)); App. D ((Petitioners' Comments to ADEQ (September 23, 2008))). In addition, Petitioners adopted and incorporated by reference in their comments, the comments of the Hempstead County Hunting Club, Dr. Mary O'Boyle, YCR Limited Partnership and F. Patrick Schultz, attached as App.B (July 31, 2007).

EPA received the proposed Title V Permit from ADEQ on August 11, 2008. EPA's 45-day review period ended on September 25, 2008. EPA did not object to the proposed Permit during the review period, and ADEQ issued the Permit on November 5, 2008. See App. E (Letter from Mike Bates, ADEQ, to Kris Gaus, American Electric Power Corp., ADEQ & Response to Public Comment (November 5, 2008)).

This Petition is timely filed since Petitioners submitted it within 60 days following the end of EPA's 45-day review period as required by CAA §505(b)(2), 42 U.S.C. § 7661d(b)(2).

#### **SPECIFIC OBJECTIONS**

"If any [Title V] permit contains provisions that are determined by the Administrator as not in compliance with the applicable requirements of this chapter...the Administrator *shall*...object to its issuance." CAA §505(b)(1), 42 U.S.C. § 7661d(b)(1) (emphasis added).

EPA "does not have discretion whether to object to draft permits once noncompliance has been

demonstrated.” See *N.Y. Pub. Interest Group v. Whitman*, 321 F.3d 316, 334 (2nd Cir. 2003) (holding that EPA is required to object to Title V permits once petitioner has demonstrated that permits do not comply with the Clean Air Act).

### **I. Incorporation by Reference**

Environmental Integrity Project, Sierra Club and Audubon incorporate the attached Appendices into this Petition: *Comments on the proposed American Electric Power/Southwestern Electric Power Company (SWEPCO) JW Turk Power Plant*, July 28, 2007, attached as Appendix A; *Comments of Hempstead County Hunting Club, Dr. Mary O’Boyle, YCR Limited Partnership and F. Patrick Schultz*, July 31, 2007, attached as Appendix B; *Preliminary Comments on the Supplemental Information (i.e., Case-by-Case MACT Application) Submitted by American Electric Power AEP/Southwestern Electric Power Company (SWEPCO)*, April 30, 2008, attached as Appendix C; *Comments on the Section 112(g) Draft Permit Decision for the proposed American Electric Power/Southwestern Electric Power Company (SWEPCO) JW Turk Power Plant*, September 23, 2008, attached as Appendix D; Letter from Mike Bates, ADEQ, to Kris Gaus, American Electric Power Corp., ADEQ & Response to Public Comment (November 5, 2008), attached as Appendix E; Final Permit (November 5, 2008), attached as Appendix F.

### **II. The Permit BACT Analysis is Flawed and Violates National Health-Based Ambient Air Quality Standards (the “NAAQS”) and PSD requirements.**

The EPA must object to Title V permits that do not meet Clean Air Act requirements, including PSD pre-construction permit requirements. Petitioners argue that the Turk plant Title V Permit is invalid as it contains and is based on flawed BACT analysis and therefore fails to meet Clean Air Act PSD permit requirements. Even when ADEQ issues Title V operating

permit simultaneously with PSD construction permits, both must comply with the Clean Air Act. See In the Matter of Operating Permit Port Hudson Operations Georgia Pacific Zachary East Baton Rouge Parish Louisiana, No. 6-03-01, United States Environmental Protection Agency, Title V Air Permit Orders (May 9, 2003) (holding that a Title V permit can be invalid if it fails to assure compliance with applicable requirements of the Act, including Nonattainment New Source Review ("NNSR") and Prevention of Significant Deterioration ("PSD") requirements, by incorporating deficient NNSR and PSD requirements).

Section 165(a)(4) of the Clean Air Act (CAA) provides that "no major emitting facility on which construction is commenced after August 7, 1977, may be constructed in any area to which this part applies unless...the facility is subject to the best available control technology for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility." 42 U.S.C. §7475(a)(4). The requirement for conducting a BACT analysis is codified in the Federal PSD regulations at 40 C.F.R. § 52.21(j).

BACT requires a comprehensive analysis of all potentially available emission control measures, expressly including input changes (such as use of clean fuels), process and operational changes, and the use of add-on control technology. Additionally, it requires that a new source comply with emission limits that correspond to the most effective control measures available, unless the source can affirmatively demonstrate that use of the most effective control measures would be technologically or economically infeasible.

BACT is defined under federal law as follows:

an emissions limitation (including a visible emissions standard) *based on the maximum degree of reduction* for each pollutant subject to regulation under the [Clean Air] Act which would be emitted from any

proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is *achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.*

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

EPA has repeatedly acknowledged that the PSD program is technology-forcing and intended to become more stringent over time as control technologies improve and new cleaner processes are introduced. For example, the EPA Environmental Appeals Board ("EAB") has explained that:

A major goal of the CAA was to create a program that was technology forcing. . . . "The Clean Air Amendments were enacted to 'speed up, expand, and intensify the war against air pollution in the United States with a view to assuring that the air we breathe throughout the Nation is wholesome once again.'" . . . .

Similarly, the EPA Administrator has explained that the BACT provisions of the PSD program are principally technology- forcing and are intended to foster "rapid adoption" of improvements in emissions control technology. *In re Columbia Gulf Transmission Co.*, 2 E.A.D. 824, 828-29 (Adm'r 1989); see also *In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 127 n.26 (EAB 1997); *In re Metcalf Energy Center*, PSD Appeal 01-7, 01-8, at 15 (Aug. 10, 2001).

The definition of BACT includes coal gasification. The legislative history of the amendment adding the term "innovative fuel combustion techniques" to the Clean Air Act's definition of "BACT" is clear. Coal gasification must be considered. Both the language of the Act itself and the unequivocal expressions of Congressional intent in the legislative history indicate, that in order to fully comply with the Act, the emission limits identified as BACT must incorporate consideration of more than just add-on emission control technology – they must also

reflect appropriate considerations of fuel quality (such as low sulfur coal) and process changes (including specifically innovative combustion techniques such as coal gasification).

The proposed Permit BACT analysis is inadequate for several reasons, including the failure to consider integrated gasification combined cycle technology as part of the required BACT analysis. IGCC is an available control technology (with top-of-the-line pollution control efficiencies) that should have been fully considered in the draft permit's BACT determination for each of the PSD-regulated pollutants. The U.S. EPA has withdrawn the December 13, 2005, memo, which SWEPCO relied upon to suggest that IGCC should not be included in a BACT analysis for a PC boiler. See EPA Notice of Proposed Settlement Agreement, 71 Fed. Reg. 61771 (October 19, 2006). Thus, ADEQ did not conduct a BACT analysis consistent with the requirements of federal law for the Turk Plant. ADEQ must thoroughly evaluate all available control measures, including IGCC which is commercially available today. Federal law therefore requires that this technology be thoroughly evaluated as part of the ADEQ BACT analysis. See App. A (Petitioners' comments to ADEQ, specifically mentioning examples of state decisions implementing the federal PSD program that have required consideration of IGCC in the BACT review process for new coal-fired power plants).

In addition, BACT must be based on the top-ranked pollution control option. Clean production processes must be considered as a pollution control option. 42 U.S.C. § 7479(3); 40 C.F.R. § 52.21(b)(12). As unit efficiency increases, total pollution decreases. See U.S. EPA, *Environmental Footprints and Cost of Coal-Based Integrated Gasification Combined Cycle and Pulverized Coal Technologies*, July 2006, (Executive Summary). Therefore, BACT must consider efficiency of a unit and total pollution emissions, rather than merely focusing on emissions per unit of energy input. In other words, increased efficiency is a method of pollution

control because it decreases the total amount of pollution emitted into the environment to produce electric power.

Furthermore, to comply with the Clean Air Act, the proposed Permit must contain limits for Particulate matter (PM) limits including both "front-half" (filterable) and "back-half" (condensable) emissions. The BACT analysis in the proposed Permit also failed to consider catalytic oxidation, and if it had, it would have concluded that catalytic oxidation is technically feasible. See Final Technical Report, *Catalytic Oxidation of NO in Flue Gas for Capture in Wet Scrubbers*, ICCI Project Number: 98-1/1.1E-1, Gary A. Robbins, CONSOL Inc., Research & Development, available at: <http://www.icci.org/00final/robbins.htm>. The proposed permit is also deficient because the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>) limits do not reflect best available control technology, and are higher than recently permitted similar sources, including Western Farmer's Electric Cooperative's Hugo Unit No. 2, in southeastern Oklahoma.

For the aforementioned reasons, EPA should object to the proposed permit as it incorporates invalid PSD requirements and flawed BACT analysis into the Turk plants proposed Permit. Until these deficiencies can be addressed, and compliance with the Clean Air Act assured, EPA should object to this Permit issuance.

### **III. Proposed Emission Limits Are Not MACT**

Section 112(g) requires all new EGUs, including the Turk plant, to meet what is determined to be the "maximum available control technology." MACT is a far stricter standard than the "best available control technology," or BACT, standards of the PSD program. At a minimum, the MACT standard "shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source," CAA § 112(d)(3); 40 C.F.R. § 63.41, regardless of cost. See *National Lime Association v. EPA*, 233 F.3d 625, 640 (D.C. Cir. 2000)

("[C]ost may not influence the determination of a MACT floor, which depends exclusively upon the emission reductions achieved by the best-performing sources."). In other words, MACT is concerned with what is "achieved in practice" by a benchmark source in that source category, CAA § 112(d)(3), whether through end-of-the-pipe technological controls, or by other means, such as low-pollutant fuel. See National Lime Association, 233 F.3d at 634; see also Cement Kiln Recycling Coalition v. EPA, 255 F.3d 855, 861 (D.C. Cir. 2001). Then, the MACT for a given source may be more strict than what has been achieved in practice by the best controlled similar source, if that increase in stringency is economically and technologically achievable for the source in question.

The case-by-case MACT analysis has two primary steps: First, ADEQ must determine the emissions control level achieved by the "best controlled similar source" for each of the HAPs that the source will emit. That emissions control level, referred to as the "floor," establishes the minimum emissions limit, which the applicant must find a way to meet regardless of cost. Second, the applicant and permitting authority must look into whether it is possible to achieve a more stringent control level for each of those HAPs, at which point cost and other feasibility issues may be taken into consideration. This is called the "beyond the floor" standard.

The Permit application fails to comply with the requirements for conducting a thorough case-by-case MACT analysis for Hazardous Air Pollutant emissions from the Turk Plant. See App. B (Petitioners' Comments to ADEQ (April 30, 2008)); App. C ((Petitioners' Comments to ADEQ (September 23, 2008)). The Permit must meet the MACT "Floor" for all HAP Emissions, often determined by the actual level of performance of the best performing source. The Permit must also meet the standards of the "Best Controlled Similar Source" regardless of cost. Here, the Permit identifies sub bituminous coal and pulverized coal boiler as "appropriate"



source types. (Letter from Mike Bates, ADEQ, to Kris Gaus, American Electric Power Corp., ADEQ Response to Public Comment, page 82-83 (November 5, 2008)). Yet SWEPCO's own data and that of ADEQ, clearly indicate that lower limits (i.e. MACT floor) have been achieved at other coal plants.

In addition, the SWEPCO and ADEQ must conduct a "beyond-the-floor" analysis, to determine whether a still higher level of emissions control is "achievable" in light of "the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements." CAA 112(d)(2). See also *Id.* at 112(d)(3) (the new source "shall achieve the maximum degree of reduction in emissions of HAPs 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." ). This higher level of emissions control is referred to as the "beyond-the-floor" MACT. See *NRDC v. EPA*, 489 F.3d 1250, 1254 (D.C. Cir. 2007); *Cement Kiln Recycling Coal. v. EPA*, 255 F.3d 855, 857-58. (D.C. Cir. 2001) (per curiam) (explaining two-step MACT process for hazardous waste combustors); *National Lime Association v. EPA*, 233 F.3d 625, 628-29 (D.C. Cir. 2000) (same for portland cement manufacturing plants). See also 40 C.F.R. 60.41 (MACT emission limitation is at minimum, the floor, but also "reflects the maximum degree of deduction in emissions that the permitting authority, taking into consideration the cost of achieving such emission reduction, and any non-air health and environmental impacts and energy requirements, determines is achievable ... "). This is not a step that can be skipped. Every MACT standard must include a robust "beyond-the-floor" analysis to identify and evaluate all potential options for achieving greater emissions controls. Such analyses must be conducted for each HAP that a

facility will emit, and must fully explore the possibility of reductions from emissions control technology as well as non-technology options (just as such an exploration must be included in the attempt to find a way to meet the MACT floor). See 40 C.F.R § 63.40 (definition of "control technology"); *Cement Kiln*, 255 F.3d at 863; S. REP. NO. 101-228, at 168.

The proposed Permit does not contain adequate MACT "floor" and "beyond the floor" analysis for the Turk plant. EPA must not approve this Permit without adequate MACT analysis as required by the CAA. See 40 C.F.R. § 63.43.

#### **IV. The proposed Permit fails to assure compliance with and practical enforceability of Title V emission limits**

The Clean Air Act and Arkansas law require permits to contain terms and conditions that assure compliance with the applicable limits. Clean Air Act § 504, 42 USC § 7661c; Ark. Code 8-4-315; Regulation 26.701. For Lead, PM10, HCl, HF, VOC, and CO, the Draft Permit requires only an annual stack test (only an initial test for the auxiliary boiler). This is insufficient to verify that MACT limits are being met. A once yearly test is insufficient to assure compliance, and continuous emissions monitoring systems are widely available and in use today.

For example, EPA should require continuous emissions monitoring systems (CEMS) for fine particles (as PM 2.5, or a select group of non-volatile HAPs), HCl, HF, and VOCs for the main boiler (SN-01) and for PM and CO for the auxiliary boiler (SN-02). Continuous emissions monitoring systems (CEMS) are the preferred method for determining compliance with PM limits. 40 C.F.R §§ 60.42, et seq. EPA has strongly urged PM CEMS, and determined that PM CEMS are reliable and accurate. There are many facilities that operate PM CEMS and have demonstrated that the systems are reliable and accurate. These include Tampa Electric power plant (Florida), Eli Lilly Corporation (Indiana), and the U.S. Department of Energy (Tennessee).

EPA has also secured commitments from up to 30 existing coal-fired utility installations to install PM CEMS within the next few years.

Common types of PM CEMS were described by EPA several years ago (which only bolsters the contention that PM CEMS technology is widely available) in "Current Knowledge of Particulate Matter (PM) Continuous Emission Monitoring," EPA-454/R-00-039, September 2000. That document describes at least two technologies that should be considered for continuous PM monitoring at the Turk plant: Light Scattering (an emitted light beam passes through a defined sample volume); and Acoustic Energy (shock waves caused by the impact of particles with a probe inserted into the flow are used to measure the particulate concentration).

In addition to the use of continuous emissions monitoring systems (CEMS), Petitioners found the Permit to be based on inadequate modeling data, which undermines the enforceability of Permit terms. Preferably, SWEPCO should have collected at least one-year of pre-construction meteorological data consistent with USEPA Meteorological Monitoring Guidance for Regulatory Modeling Applications. The SWEPCO Turk plant's air emissions would be enormous and are released in a complex arrangement of point, area, and volume sources. Using an antiquated, low-quality, and non site-specific meteorological data set, for no other reason than to expedite the permitting process for the applicant, invalidates the entire air quality impact analysis. The permit application should be denied because of this poor modeling practice, and not resumed until SWEPCO has collected at least one year of site-specific meteorological data consistent with USEPA's Meteorological Monitoring Guidance for Regulatory Modeling Applications.

The EPA should not approve this Permit as its terms do not assure compliance with the Clean Air Act, or allow for proper enforcement of permit terms. Clean Air Act § 504, 42 USC § 7661c; Ark. Code 8-4-315; Regulation 26.701.

**V. The Proposed Permit Fails to Even Consider, Let Alone Regulate, Carbon Dioxide (CO<sub>2</sub>) and Greenhouse Gas (GHG) Emissions from the Turk Plant**

The Turk Plant will release an estimated at least 5 million tons of CO<sub>2</sub> into the atmosphere each year. A PSD permit for a source that emits significant quantities of a pollutant "subject to regulation" under the Clean Air Act must include an emission limitation based on the best available control technology ("BACT") for that pollutant. 42 U.S.C. §§ 7475(a)(4), 7479(3). A "regulated NSR pollutant" includes, inter alia, "any pollutant that otherwise is subject to regulation under the Clean Air Act," except hazardous air pollutants listed under section 108 of the Act. 40 C.F.R. § 52.21(b)(50).

On April 2, 2007, the Supreme Court issued its landmark ruling, *Massachusetts v. EPA*, and overturned EPA's long-held position that carbon dioxide and other greenhouse gases are not Clean Air Act "pollutants." 127 S.Ct. at 1460. The Court's ruling that carbon dioxide is a pollutant, combined with the various Clean Air Act statutory and regulatory provisions that regulate carbon dioxide, triggered the obligation for permitting agencies to include carbon dioxide emission limits in PSD permits. 40 C.F.R. § 52.21(b)(50)(iv).

Despite the Supreme Court ruling, ADEQ did not evaluate and require best available control technology (BACT) for the Turk Plant's proposed carbon dioxide emissions. There are at least three ways in which EPA must consider the global warming impacts associated with the proposed Turk Plant: (1) as a pollutant "subject to regulation" in the BACT analysis, (2) in the BACT collateral impacts analysis, and (3) in the alternatives analysis under CAA Section 165.

**a. EPA Has Authority Under Title V to Require the ADEQ to Reopen and Revise SWEPCO's PSD Permit to Include BACT Limits for CO<sub>2</sub> and GHG Emissions.**

EPA's supervisory authority over Title V permits requires it to object to the ADEQ's permit, based on the permit's lack of a BACT limit on CO<sub>2</sub> and GHG emissions. Section 505(b) of the Act requires the Administrator to object to the issuance of a permit that omits any "applicable requirements" of the Clean Air Act or state implementation plan. 42 U.S.C. § 7661d(b). Section 502(b) of the Act mandated that EPA promulgate regulations establishing permit program requirements that would assure compliance "with each applicable standard, regulation or requirement under this chapter." 42 U.S.C. § 7661a(b)(5); see also 42 U.S.C. § 7661c(a). Accordingly, the regulations in 40 C.F.R. Part 70, which govern the State Operating Permit Programs, require that Title V permits include all "applicable requirements." See 40 C.F.R. §§ 70.1(b), 70.3(c)(1), 70.7(a)(1)(iv). Applicable requirements include "[a]ny term or condition of any preconstruction permits." 40 C.F.R. § 70.2.

ADEQ's failure to establish BACT limits for this massive new and long-lived source of greenhouse gas pollution is erroneous and unacceptable. The regulatory definition of BACT applies to all air pollutants "subject to regulation" under the Act:

Best available control technology means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction *for each pollutant subject to regulation under Act* which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

40 C.F.R. § 52.21(b)(12) (emphasis added); See also, 42 U.S.C. 7479(3). In short, a PSD permit must include a BACT limit for each pollutant *subject to regulation*. Therefore, the ADEQ must reopen and revise the PSD permit before it can issue the Part 70 Permit. EPA must require the ADEQ to remedy its failure to conduct a BACT analysis and establish emission limitations for carbon dioxide and GHG emissions.

**b. Carbon Dioxide Is Subject To Regulation Under the Clean Air Act**

On November 13, 2008, the Environmental Appeals Board (“EAB” or “Board”) of the EPA issued a landmark decision rejecting EPA’s justifications for not requiring BACT analysis for CO<sub>2</sub> in a PSD permit for a coal-fired power plant. *In re Deseret Power Electric Cooperative, Slip Op.*, PSD Appeal No. 07-03 (EAB Nov. 13, 2008) (“Deseret”).

In *Deseret*, the Board remanded a PSD permit for a waste coal-fired power plant to EPA Region 8 for its failure to adequately justify excluding carbon dioxide from its BACT analysis. Although the Board declined to decide whether CO<sub>2</sub> is subject to regulation under the Act, it rejected every rationale that EPA offered to justify its refusal to impose BACT for CO<sub>2</sub>. See Id. at 35- 64. The Board held that EPA committed clear error when it maintained that it did “not now have the authority to impose a CO<sub>2</sub> BACT limit.” *Id.* at 8-9, 37, and determined that “[EPA’s] permitting authority [to impose a CO<sub>2</sub> BACT limit] is not constrained . . . by an authoritative historical Agency interpretation,” *Id.* at 9. In light of this unconstrained authority, EPA could not issue a PSD permit lacking a CO<sub>2</sub> BACT limit without “develop[ing] an adequate record for its decision, including reopening the record for public comment.” *Id.* at 64.

Although the EAB “ha[s] the authority to resolve legal questions on behalf of the [EPA] in issuing the [EPA’s] final decision,” it chose to remand the permit rather than deciding whether CO<sub>2</sub> is subject to regulation under the Act, noting that “even legal and interpretive questions are

best resolved on the basis of a well-developed record.” *Id.* at 62 n.63. The EAB therefore did not consider various arguments in favor of requiring BACT for CO<sub>2</sub> emissions, instead allowing the EPA region to consider those arguments in the first instance. *Id.* at 55 n.57.

The Board’s rationale in *Deseret* is equally applicable to state-issued permits. The record supporting the SWEPCO permit is considerably more sparse than the record rejected in *Deseret*, providing (as in *Deseret*) no adequate grounds to justify the absence of a CO<sub>2</sub> BACT limit. States may not issue permits less stringent than necessary to meet applicable requirements of the Clean Air Act. 40 C.F.R. § 70.1(c). Indeed, the Board recognized that the EPA decision “regarding the application of BACT to limit CO<sub>2</sub> emissions . . . is an issue of national scope that has implications far beyond this individual permit proceeding.” *Deseret*, Slip Op. at 63-64. It therefore recommended that EPA consider taking an “action of nationwide scope” to address whether BACT limits must be applied to carbon dioxide. *Id.* at 64.

Like EPA, Arkansas may not issue a final permit that omits a BACT emissions limit for carbon dioxide without an adequate record for its decision and opportunity for public comment. Moreover, that record cannot rely upon the EPA justifications for refusing to regulate CO<sub>2</sub> that the Board discarded in *Deseret*. Indeed, the EAB rejected every rationale that ADEQ used to justify its refusal to require BACT for CO<sub>2</sub> emissions. ADEQ expressly relied on the rationale that EPA Region 8 used to defend its *Deseret* permitting decision, and cited the very same regulatory history that EPA used to prove that its historical interpretation of “subject to regulation under the Act” limited its discretion. *See* Response to Comments on PSD Permit at 6, 11-12. The EAB held that EPA committed “clear error” in relying on this regulatory history. *Deseret*, Slip Op. at 37. ADEQ has likewise committed clear error in relying on this discarded rationale. Similarly, the EAB decision rejected ADEQ’s contention that BACT cannot be

required for a pollutant in the absence of an endangerment determination. *See* Response to Comments on PSD Permit at 6. On the contrary, the EAB recognized that unlike section 202 of the Clean Air Act, the PSD provisions do not require an endangerment finding to render a pollutant subject to regulation. *Deseret*, Slip Op. at 25. The EAB opinion in *Deseret* has undermined entirely ADEQ's permitting decision.

Because the ADEQ must issue a permit that is at least as stringent as a federally issued permit but may issue a more stringent permit, 40 C.F.R. § 70.1(c), EPA should object to the SWEPCO permit and instruct the ADEQ to either require BACT for CO<sub>2</sub> or await an EPA decision on whether BACT is required for CO<sub>2</sub>.

EPA is highly likely (in fact, legally bound) to interpret the Clean Air Act as requiring BACT for CO<sub>2</sub> emissions. While the EAB found that the statute is ambiguous and allows room for agency interpretation, it found that construing the Act to require BACT for CO<sub>2</sub> is not only plausible, but is also supported by the only regulatory history that speaks directly to the meaning of "subject to regulation." *Deseret*, Slip. Op. at 38-42.

Moreover, the only court to decide the issue has ruled that the plain language of the statute requires BACT for CO<sub>2</sub>. A Georgia state court recently overturned the decision of a Georgia Department of Environmental Protection ALJ granting an air permit to a new coal plant because the agency had not performed a BACT analysis for CO<sub>2</sub>, rejecting the very same rationale EPA relied upon in *Deseret*. *See Friends of the Chattahoochee Inc. et al. vs. Dr. Carol Couch & Longleaf Energy Ass. LLC*, 2008CV146398 (Fulton County, GA Jun. 30, 2008) (appeal pending). The Georgia ruling overturned a state-issued air permit for the 1,200-megawatt Longleaf coal plant because "the permit contains no CO<sub>2</sub> emissions limits." *Id.* at 6. "There was no effort to identify, evaluate, or apply available technologies that would control



CO<sub>2</sub> emissions, and the permit contains no CO<sub>2</sub> emission limits.” *Id.* at 7. The judge cited the *Massachusetts v. EPA* ruling that carbon dioxide is a pollutant under the federal Clean Air Act and regulatory provisions concerning CO<sub>2</sub> and concluded that “there is no question that CO<sub>2</sub> is ‘subject to regulation under the [Clean Air] Act.’” *Id.* at 7. Since CO<sub>2</sub> is “otherwise subject to regulation under the Act,” a PSD permit could not issue for Longleaf without CO<sub>2</sub> emission limitations based on a BACT analysis. The SWEPCO air permit is invalid for the same reason.

**i. Carbon Dioxide Is Currently Regulated Under Section 821.**

Section 821(a) of the Clean Air Act Amendments of 1990 directed EPA to promulgate regulations to require certain sources, including coal-fired power plants, to monitor CO<sub>2</sub> emissions and report monitoring data to EPA. 42 U.S.C. § 7651k. In 1993, EPA promulgated these regulations as a part of the rules implementing the acid rain provisions of Title IV of the Act. The regulations are set forth at 40 C.F.R. Part 75. The regulations generally require monitoring of carbon dioxide emissions through the installation, certification, operation and maintenance of a continuous emission monitoring system or an alternative method, 40 C.F.R. §§ 75.1(b), 75.10(a)(3); preparation and maintenance of a monitoring plan, *id.* § 75.33; maintenance of certain records, *id.* § 75.57; and reporting of certain information to EPA, including electronic quarterly CO<sub>2</sub> emission data reports, *id.* §§ 75.60 – 64. Section 75.5 of the federal regulations prohibits operation of an affected source in the absence of compliance with the substantive requirements of part 75, and provides that a violation of any requirement of part 75 is a violation of the Clean Air Act. Thus, carbon dioxide is currently regulated under Title IV of the Act. See *Buckley v. Valeo*, 424 U.S. 1, 66-67 (1976) (record-keeping and reporting requirements are regulation of political speech).

Significantly, Congress used the very same term – “regulation” – in sections 165(a)(4) and 821 of the Clean Air Act. In section 165 Congress expressly and unambiguously made BACT a requirement for any pollutant “subject to regulation,” 42 U.S.C. § 7475(a)(4) (emphasis added), and in section 821 Congress required EPA to establish “regulations” requiring monitoring, recordkeeping, and reporting for carbon dioxide emissions, *id.* § 7651k note (emphasis added). Basic tenets of statutory interpretation demand that these two provisions must be read consistently – “regulation” used in one section of the Act cannot be appropriately understood to mean something different than the same term used elsewhere.

A more narrow reading of “regulation” for purposes of section 165(a)(4) of the Act to include only those measures that restrict emissions would be especially inappropriate, as the Act already includes terminology that is specifically intended to identify such requirements. Specifically, 42 U.S.C. §§ 7602(k), 7651d(a)(1), and 7617(a)(7) establish and use the terms “emission limitation” and “emission standard” to specifically refer to regulatory requirements that limit or restrict emissions. See also 42 U.S.C. § 7617(a)(5) (distinguishing between regulations that establish emission standards and “other” regulations). Thus, if Congress had intended for BACT to apply only where a pollutant is subject to an emission limitation or emission standard, it would have done so expressly.

Notably, the only regulatory history that directly interprets the meaning of “subject to regulation under this Act” supports the view that CO<sub>2</sub> is subject to regulation by virtue of section 821 and its implementing regulations. The preamble to the 1978 PSD regulations states:

Some questions have been raised regarding what “subject to regulation under this Act” means relative to BACT determinations. The Administrator believes that the proposed interpretation published on November 3, 1977, is correct and is today being made final. As mentioned in the proposal, “subject to regulation under this Act” means

any pollutant regulated in Subchapter C of Title 40 of the Code of Federal Regulations for any source type. This then includes \* \* \*.

43 Fed. Reg. 26388, 26397 (June 19, 1978) (cited in *Deseret*, Slip Op. at 38-39). The preamble proceeded to identify the general categories of pollutants then regulated in Subchapter C of Title 40. *Id.*

The regulations that implement section 821 by requiring monitoring and reporting of CO<sub>2</sub> emissions are located in Subchapter C of Title 40. As the EAB noted in *Deseret*, the 1993 rulemaking that added the section 821 regulations to Subchapter C did not withdraw this 1978 interpretation. *Deseret*, Slip Op. at 42. Thus the only existing EPA interpretation of the meaning of "subject to regulation" in section 165 of the Act reinforces the view that BACT is required for CO<sub>2</sub> emissions because CO<sub>2</sub> is subject to regulation under the Act.

**ii. Carbon Dioxide Is Regulated Under State Implementation Plans.**

In addition to section 821 of the Act and its implementing regulatory requirements, carbon dioxide is also regulated under various state implementation plans (SIPs), which in turn constitutes regulation under the Clean Air Act.

Most significantly, EPA has now approved and promulgated a Delaware state implementation plan revision that sets limits on CO<sub>2</sub> emissions. Specifically, in a Federal Register notice that became effective on May 29, 2008, EPA promulgated its approval of CO<sub>2</sub> emission standards, operating requirements, record keeping and reporting requirements, and emissions certification, compliance and enforcement obligations for new and existing stationary electric generators in Delaware. See 73 Fed. Reg. 23101 (April 29, 2008). The control requirements approved and promulgated by EPA included a CO<sub>2</sub> emission standard of 1900 lbs/MWh for existing distributed generators, 1900 lbs/MWh for new distributed generators

installed on or after January 1, 2008, and 1,650 lb/MWh for new distributed generators installed on or after January 1, 2012. See Delaware Department of Natural Resources and Environmental Control (DNREC), Regulation No. 1144: Control of Stationary Generator Emissions, §3.2; see also 73 Fed. Reg. at 23102-103 (codifying approval in the Code of Federal Regulations at 40 C.F.R. § 52.420).

In EPA's proposed and final rulemaking notices, the Agency plainly stated that it was approving the SIP revision "under the Clean Air Act" (see 73 Fed. Reg. 11845 (March 5, 2008)) and "in accordance with the Clean Air Act." See 73 Fed. Reg. at 23101. EPA's action in approving the SIP revision made the control requirements and obligations part of the "applicable implementation plan" enforceable under the Clean Air Act. See 42 U.S.C. §7602(q).

Many Clean Air Act provisions authorize EPA enforcement of requirements and prohibitions under the "applicable implementation plan." See, e.g., 42 U.S.C. § 7413(a)(1) (authorizing EPA Administrator to issue a compliance order, issue an administrative penalty, or bring civil action against the violating party); *id.* at (a)(2) (Administrator may enforce the "applicable implementation plan" if states fail to do so); *id.* at (b)(1) (requiring the Administrator to commence a civil action or assess and recover a civil penalty against the owner or operator of a source or facility that violates an "applicable implementation plan"). In addition, EPA's action makes the emission standards and limitations enforceable by a citizen suit under section 304 of the Clean Air Act. 42 U.S.C. § 7604.

The Supreme Court has made clear that the requirements under an EPA-approved state implementation plan are federally-enforceable obligations under the federal Clean Air Act:

The language of the Clean Air Act plainly states that EPA may bring an action for penalties or injunctive relief whenever a person is in violation of any requirement of an "applicable implementation plan." § 113(b)(2), 42

U.S.C. § 7413(b)(2) (1982 ed.). There can be little or no doubt that the existing SIP remains the "applicable implementation plan" even after the State has submitted a proposed revision.

*General Motors Corp. v. United States*, 496 U.S. 530, 540 (1990).

Thus, CO<sub>2</sub> is a pollutant subject to regulation under the Clean Air Act both because it is subject to monitoring and reporting requirements, and because it is subject to emissions limits.

**iii. Carbon Dioxide Is Regulated Under New Source Performance Standards for Landfills.**

Finally, greenhouse gases such as carbon dioxide and methane are also regulated as a component of landfill gases. The EAB did not consider the merits of this argument in its *Deseret* decision.

EPA has promulgated emission guidelines and standards of performance for municipal solid waste (MSW) landfill emissions. 40 C.F.R. §§ 60.33c, 60.752. "MSW landfill emissions" are defined as "gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste." 40 C.F.R. § 60.751. EPA has specifically identified carbon dioxide as one of the components of the regulated "MSW landfill emissions." See *Air Emissions from Municipal Solid Waste Landfills – Background Information for Final Standards and Guidelines*, U.S. EPA, EPA-453/R-94-021 (Dec. 1995) (explaining "MSW landfill emissions, or [landfill gas], is composed of methane, carbon dioxide, and NMOC."). Thus, carbon dioxide is regulated through the landfill emission regulations at 40 C.F.R. Part 60 Subparts Cc, WWW. See also 56 Fed. Reg. 24468 (May 30, 1991) ("Today's notice designates air emissions from MSW landfills, hereafter referred to as 'MSW landfill emissions,' as the air pollutant to be controlled").

In sum, section 165 of the Clean Air Act requires a BACT limit for “any pollutant subject to regulation” under the Act. 42 U.S.C. § 7475(a)(4). Accordingly, a plain-language reading of the Act compels the conclusion that, in light of *Massachusetts v. EPA*, the regulation of carbon dioxide under section 821 of the Act and the regulation of carbon dioxide under 40 C.F.R. § 60.751, Section 165 requires the establishment of BACT limits for carbon dioxide emissions from coal-fired power plants under the PSD program.

**c. Carbon Dioxide and GHG Emissions Are Subject To Further Regulation under the Act.**

A pollutant that is “subject to regulation” under the Clean Air Act must obtain a BACT-based permit limit. This holds true not only for pollutants that are currently regulated, but also for pollutants that EPA and the states have the authority or the obligation to regulate. In this sense, carbon dioxide and nitrous oxide are both “subject to regulation” under the Act.

**i. Pollutants Subject To Future-Enacted Regulation Are “Subject To Regulation”**

Emissions of a pollutant need not be currently regulated for the pollutant to be “subject to” regulation under the Clean Air Act. “Subject to regulation” means “capable of being regulated” and is not limited to pollutants that are “currently regulated.” The plain meaning of section 165(a)(4) extends not only to air pollutants for which there are regulatory requirements, but also to air pollutants for which EPA and the states possess but have not exercised authority to impose such requirements.

EPA has recognized the general principle that “[t]echnically, a pollutant is considered regulated once it is *subject to regulation* under the Act. A pollutant *need not be specifically regulated* by a section 111 or 112 standard to be considered regulated.” 66 Fed. Reg. 59161, 59163 (Nov. 27, 2001) (citing 61 Fed. Reg. 38250, 38309 (July 23, 1996)) (emphasis added).

EPA has also previously interpreted the phrase "subject to" in the context of the Resource Conservation and Recovery Act (RCRA) and Clean Water Act as meaning "should" be regulated, as opposed to currently regulated:

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

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

**ii. Sections 111 And 202 Of The Act Require EPA To Promulgate Regulations Limiting Emissions Of Pollutants From New Stationary Sources And Motor Vehicles**

Section 111 of the Act requires EPA to promulgate regulations establishing standards of performance for emissions of "air pollutants" from new stationary sources. 42 U.S.C. § 7411. Section 202 requires EPA to promulgate regulations establishing standards applicable to emissions of "any air pollutant" from motor vehicles. 42 U.S.C. § 7521. Both carbon dioxide and nitrous oxide are emitted from stationary sources and motor vehicles. Regulation under sections 111 and 202 is required where air pollution "may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7411(b)(1)(A); 42 U.S.C. § 7521(a)(1). In *Massachusetts v. EPA*, the Court held that if EPA makes an endangerment finding for a pollutant, it must regulate emissions of the pollutant from new motor vehicles. 127 S. Ct. at 1462. The same analysis applies with equal force to section 111. Given this regulatory scheme and the Supreme

Court's holding that EPA is authorized to regulate carbon dioxide and other greenhouse gases as "pollutants" under the Act, carbon dioxide and nitrous oxide are unquestionably pollutants subject to regulation under the Act.

EPA is not only authorized to establish emission limitations for carbon dioxide and nitrous oxide emissions under sections 202 and 111, but is required to do so because there is no question that emissions of those pollutants from motor vehicles, power plants and other sources "may reasonably be anticipated to endanger the public health and welfare." This standard, reflecting the precautionary nature of the Clean Air Act, does not require proof of actual harm. Congress directed that regulatory action taken pursuant to an endangerment finding would be designed to "precede, and, optimally, prevent, the perceived threat." *Ethyl Corp. v. EPA*, 541 F.2d 1, 13 (D.C. Cir. 1976). EPA is not required to document "proof of actual harm" as a prerequisite to regulation; rather, EPA is supposed to act where there is "a significant risk of harm." *Id.* at 12-13.

The 1977 Clean Air Act Amendments confirmed and adopted the precautionary interpretation enunciated in *Ethyl Corp.*, enacting special provisions, Pub. L. No. 95-95, § 401, 91 Stat. 790-91 (Aug. 7, 1977), designed to "apply this interpretation to all other sections of the act relating to public health protection." H.R. Rep. No. 294, 95th Cong., 1st Sess. 49 (1977); accord, *id.* at 51 (amendments are designed, inter alia, to "emphasize the precautionary or preventive purpose of the act (and, therefore, the Administrator's duty to assess risks rather than wait for proof of actual harm)"). Congress rejected the argument that, "unless conclusive proof of actual harm can be found based on the past occurrence of adverse effects, then the standards should remain unchanged," finding that this approach "ignores the commonsense reality that 'an ounce of prevention is worth a pound of cure.'" *Id.* at 127.



The precautionary nature of the Clean Air Act creates a low threshold for findings relating to the negative consequences of air pollution. Indeed, the Court's analysis in *Massachusetts v. EPA*, addressing the petitioners' standing, outlines harms caused by global warming that are more than adequate to establish endangerment under the Clean Air Act. There is no question that greenhouse gas emissions that contribute to global warming endanger public health and welfare. As a result, not only are carbon dioxide and nitrous oxide currently "subject to regulation" under the Act because of existing statutory authority to regulate, but EPA and the states have a statutory obligation to adopt regulations that establish emission limitations for carbon dioxide and other greenhouse gases pursuant to various provisions of the Act. Global warming's far-reaching and grave public health and welfare impacts, which are in large part attributable to carbon dioxide emissions from power plants, automobiles and other sources, compel EPA to exercise its authority under sections 111 and 202 of the Clean Air Act to regulate greenhouse gas emissions.

Thus, carbon dioxide and nitrous oxide are "subject to regulation under the Clean Air Act" both because EPA and the states currently have authority to regulate them as pollutants under the Act and because EPA and the states have an obligation to do so under particular provisions of the Act.

**iii. EPA Must Promulgate Additional Clean Air Act Regulations Governing Greenhouse Gases**

In addition to regulation under sections 111 and 202 of the Act, the Consolidated Appropriations Act of 2008 requires EPA to use its existing authority under the Clean Air Act to establish regulations that require monitoring and reporting of greenhouse gases, including CO<sub>2</sub>

and N<sub>2</sub>O, across all sectors of the economy by June 2009. See 2008 Consolidated Appropriations Act (H.R. 2764, Public Law 110-161).

EPA has no discretion regarding whether to promulgate these regulations and no endangerment finding is required. Because EPA must promulgate these Clean Air Act regulations governing carbon dioxide and nitrous oxide, they are subject to regulation under the Act and BACT limits are required.

EPA must require the ADEQ to remedy its failure to conduct a BACT analysis and establish emission limitations for carbon dioxide and nitrous oxide. EPA should instruct the Department to either (1) deny the requested permit after reopening it for greenhouse gas review; (2) stay the permit pending EPA's determination of whether BACT limits are required for CO<sub>2</sub> emissions; or (3) require SWEPCO to provide it with all information necessary for a BACT analysis, conduct the BACT analysis, and issue a revised proposed permit containing the required carbon dioxide and nitrous oxide emission limitations, allowing public notice and an opportunity to comment on the revised proposed permit.

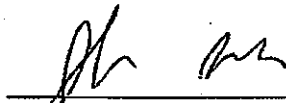
### CONCLUSION

The proposed SWEPCO Title V permit lacks the requisite BACT and MACT analysis, and the monitoring and compliance measures required by the Clean Air Act. The proposed permit also fails to consider GHGs from the Turk Plant. Additional BACT and MACT analysis and compliance measures, including those described above, must be required before a final permit can be issued. Without these measures, Title V's purpose of increasing enforcement and compliance will be defeated. Title V aims to improve accountability and enforcement by "clarify[ing], in a single document, which requirements apply to a source." 57 Fed. Reg. 32250, 32251 (July 21, 1992).

For all of these reasons, the proposed permit is not in compliance with the Clean Air Act or its implementing regulations, and the EPA therefore must object to the proposed permit.

DATED: November 24, 2008

Respectfully submitted,



Ilan Levin  
Senior Attorney  
ENVIRONMENTAL INTEGRITY PROJECT  
1303 San Antonio Street, Ste. 200  
Austin, TX 78701  
(512) 637-9479 (phone)  
(512) 584-8019 (facsimile)  
Email: ilevin@environmentalintegrity.org

Joanne Spalding  
Senior Staff Attorney  
Sierra Club  
85 Second Street, Second Floor  
San Francisco, CA 94105  
415-977-5725  
415-977-5793 (Fax)  
joanne.spalding@sierraclub.org

**CERTIFICATE OF SERVICE**

I declare under penalty of perjury under the laws of the United States that I have provided the foregoing Petition to persons or entities below on November 24, 2008, as specified:

**VIA FACSIMILE AND CERTIFIED MAIL**

Administrator Stephen L. Johnson  
U.S. Environmental Protection Agency  
Ariel Rios Building, Mail Code 1101A  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460  
Fax Number: (202) 501-1450

**VIA FACSIMILE AND CERTIFIED MAIL**

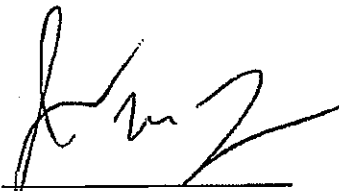
Arkansas Department of Environmental Quality  
Attention: Mike Bates, Air Division Chief  
5301 Northshore Drive  
North Little Rock, Arkansas 72118  
Fax Number: 501-682-0753

**VIA FACSIMILE AND CERTIFIED MAIL**

Michael G. Morris  
Chairman, President, and CEO  
American Electric Power Corporation  
1 Riverside Plaza  
Columbus, Ohio 43215-2372  
Fax Number: 614-716-1823

**VIA FACSIMILE AND CERTIFIED MAIL**

U.S. Environmental Protection Agency  
Attn: Air Permit Section Chief  
Region 6  
1445 Ross Avenue, Suite 1200  
Dallas, Texas 75202  
Fax Number: 214-665-7263

  
\_\_\_\_\_  
Ian Levin

## **Appendix B**

**(ON COMPACT DISK)**

**COMMENTS ON THE DRAFT AMERICAN ELECTRIC  
POWER/SOUTHWESTERN ELECTRIC POWER COMPANY (SWEPCO)  
JW TURK POWER PLANT, PERMIT NO. 2123-AOP-RO (AFIN: 29-00506)**

**Submitted By:**

**Hempstead County Hunting Club, Dr. Mary O'Boyle, YCR Limited  
Partnership and F. Patrick Schultz**

**July 31, 2007**

