

**BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

In the Matter of Bowen Steam-Electric )  
Generating Plant Title V Operating Permit )  
Amendment )  
4911-015-0011-V-01-2 )  
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Issued by the Georgia Environmental )  
Protection Division )

Petition No: 04-02-\_\_\_\_\_

PETITION TO HAVE THE ADMINISTRATOR OBJECT TO BOWEN STEAM-ELECTRIC GENERATING PLANT TITLE V OPERATING PERMIT AMENDMENT

**I. INTRODUCTION**

A recent scientific study claims that air pollution from power plants shortens the lives of over 1,600 people in Georgia each year.<sup>1</sup> 2,581,516 Georgians live in areas that the United States Environmental Protection Agency (EPA) has designated as failing to meet the health based ambient air quality standard for ground level ozone.<sup>2</sup> Ozone is a powerful lung irritant that can cause shortness of breath, coughing, burning eyes, chest pain, asthma attacks and other respiratory problems and a lessened ability to fight off disease and infection.<sup>3</sup> There are also significant economic consequences of air pollution. For example, the US EPA has concluded that the direct benefits for the Clean Air Act from 1970 to 1990 had a central tendency estimate of \$22.2 trillion dollars. During the

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<sup>1</sup> Death, Disease and Dirty Power, Clean Air Task Force, October 2000, at 22 available at [http://www.cleartheair.org/fact/mortality/mortalitystudy.vtml?PROACTIVE\\_ID=cecfcecfccc6cdccc5cecfcfce5cecf9cbcccac6c6c7c9c5cf](http://www.cleartheair.org/fact/mortality/mortalitystudy.vtml?PROACTIVE_ID=cecfcecfccc6cdccc5cecfcfce5cecf9cbcccac6c6c7c9c5cf).

<sup>2</sup> Smog Watch 2000, Clean Air Network, June, 2000 at 11 available at [http://www.cleartheair.org/fact/SmogWatch2000.pdf?PROACTIVE\\_ID=cecfcecfcacacac8c6c5cecfcecfce5cecfcafc9c6c8cecec9c5cf](http://www.cleartheair.org/fact/SmogWatch2000.pdf?PROACTIVE_ID=cecfcecfcacacac8c6c5cecfcecfce5cecfcafc9c6c8cecec9c5cf).

<sup>3</sup> *Id.* at 16.

same period, implementing the Clean Air Act had a direct cost of \$523 billion. This means that the economic benefit of the Clean Air Act outweighed the costs by more than a factor of 42.<sup>4</sup> Georgia's air pollution problems have reached such levels as to catch the attention of the media including major local newspapers. *See e.g.* May 1, 2001 Atlanta Journal, "Bad air days: Atlanta ranks sixth in pollution."

Interposed between Georgians and the air pollution is the Clean Air Act. In simple terms, the Clean Air Act has the EPA set standards for safe ambient air and then requires air pollution control agencies to issue permits to major stationary sources of air pollution as well as implement regulations to control pollution from mobile sources. The permits for major stationary sources are designed to ensure that aggregate air pollution does not exceed ambient air quality standards.

A major component of the Clean Air Act is the Title V permitting program.

According to the EPA:

The purpose of title V permits is to reduce violations of air pollution laws and improve enforcement of those laws. Title V permits do this by:

1. recording in one document all of the air pollution control requirements that apply to the source. This gives members of the public, regulators, and the source a clear picture of what the facility is required to do to keep its air pollution under the legal limits.
2. requiring the source to make regular reports on how it is tracking its emissions of pollution and the controls it is using to limit its emissions. These reports are public information, and you can get them from the permitting authority.
3. adding monitoring, testing, or record keeping requirements, where needed to assure that the source

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<sup>4</sup> EPA, The Benefit and Costs of the Clean Air Act: 1970 to 1990 EPA Report to Congress, EPA-410-R-97-002, Oct. 1997 at Abstract.

complies with its emission limits or other pollution control requirements.

4. requiring the source to certify each year whether or not it has met the air pollution requirements in its title V permit. These certifications are public information.
5. making the terms of the title V permit federally enforceable. This means that EPA and the public can enforce the terms of the permit, along with the State.

See <http://www.epa.gov/oar/oaqps/permits/index.html>. However, the Georgia

Environmental Protection Division (EPD) has derailed this purpose by issuing a Title V permit with numerous flaws that are discussed in more detail below.

## **II. PARTIES**

The Sierra Club, a non-profit corporation, is one of the nation's oldest and largest environmental organizations. The Sierra Club has long been involved in air pollution issues in Georgia and throughout the nation. The Georgia Chapter of the Sierra Club has over 14,000 members. Sierra Club members live, work, farm, recreate, grow food, own land and structures, and obtain spiritual and aesthetic pleasure from locations that are adversely affected by the air pollution from this facility.

Georgia ForestWatch is a non-profit corporation. Its Mission is to promote and support the preservation of the natural environment of Georgia's two National Forests and the publicly owned lands of North Georgia through the following objectives:

- (1) to promote and support the protection, preservation and enhancement of biological diversity, areas of ecological significance and threatened, endangered and sensitive species;
- (2) to support and promote the protection, maintenance and/or improvement of water and soil quality;
- (3) to support and promote the maintenance or enhancement of populations of all flora and fauna native to the national and the publicly owned land of North Georgia;

(4) to monitor compliance with all federal laws, rules, regulations, standards and guidelines;

(5) to enhance public awareness of the United States Forest Service's land resources use and management;

(6) to promote and support the protection and increase of wilderness areas; and

(7) to promote and support low impact recreational activities within the national and the publicly owned land of North Georgia.

Georgia ForestWatch members recreate, work, own real estate, grow crops and study in and near areas affected by the air pollution controlled by this Permit

Amendment. The air quality of these areas affects the recreational, aesthetic and economic interests of Georgia ForestWatch's members. The interests of Georgia ForestWatch's members have been, are being and will be adversely affected by the Permit Amendment issued by the Director of EPD, because pollutants discharged will degrade air quality, injure and/or damage wildlife, vegetation, real estate and human health in areas Georgia ForestWatch members use, and harm Georgia ForestWatch members' aesthetic enjoyment of these areas.

Colleen Kiernan is a member and employee of Sierra Club. Her duties include advocating for clean air and a responsible energy policy for Georgia. Ms. Kiernan recreates, works, and owns real estate in and near areas affected by the air pollution controlled by this Permit Amendment. The air quality of these areas affects the recreational, aesthetic and economic interests of Ms. Kiernan. Ms. Kiernan's interests are being and will be adversely affected by the Permit Amendment issued by the Director of EPD, because pollutants discharged will degrade air quality, injure and/or damage wildlife, vegetation, real estate and human health in areas Ms. Kiernan uses and harm Ms. Kiernan's aesthetic enjoyment of these areas.

### **III. PREVIOUS PROCEEDINGS**

The EPA granted final approval of the Georgia Title V operating permit program on June 8, 2000. 65 FR 36398 (June 8, 2000). The Georgia Environmental Protection Division (Georgia EPD) of the Georgia Department of Natural Resources is the agency responsible for issuing Title V operating permits in Georgia. O.C.G.A. §§12-9-3(12), 12-9-4, 12-9-6(b)(3).

Georgia EPD issued a draft Title V operating permit amendment for the Bowen Steam-Electric Generating Plant (“Plant Bowen” or “Facility”). Georgia EPD granted the public a thirty-day period to comment on this draft permit. This public comment period ended on January 28, 2002. See Ex. 1 at Addendum, 1st Page. The fact that Georgia EPD claims in the Narrative Addendum that the comment period ends on December 8, 2001 is of no moment. To begin, December 8, 2001 is a Saturday. Thus, the comment period could have ended no sooner than December 10, 2001, which was the next business day. See O.C.G.A. § 1-3-1(d)(3). In addition, Georgia EPD did not hold its public hearing until January 28, 2002. Thus, the public had the right to submit comments up until January 28, 2002. Sierra Club, Georgia ForestWatch and Colleen Kiernan submitted written comments to Georgia EPD on December 10, 2002 and then submitted additional oral comments on January 28, 2002. See Ex. 2.

We will assume for the sake of this petition that some time after January 28, 2002 Georgia EPD proposed the Bowen Permit Amendment to EPA. EPA’s 45-day comment period on the proposed permit expired on May 10, 2002. See Ex. 3 at 2. Thus, the public’s 60-day period in which to petition the EPA for an object expires on July 9, 2002. See 40 CFR 70.8(d).

#### IV. FACTS

According to NAFTA's Commission for Environmental Cooperation, Plant Bowen is the largest electric utility polluter of toxic substances in North America. It is also one of the major sources of sulfur dioxide in a region that is plagued by ambient concentrations of pollutants formed from sulfur dioxide. These ambient concentrations of pollutants cause numerous illnesses and even deaths and cause billions of dollars in economic damage from lost tourist dollars and damage to agriculture and buildings. In addition, Plant Bowen is Georgia's second largest source of Nitrogen Oxides (NOx), second only to Georgia Power's Plant Scherer. This NOx plays a major role in the fact that the 13 county Metro-Atlanta area has been nonattainment for ozone for over 2 decades and many, many more counties will be designated nonattainment shortly. This also explains why even the Atlanta City Council President submitted comments critical of the Bowen Permit Amendment. See Ex. 4.<sup>5</sup>

Of course, EPA is well aware of the travesty that is Plant Bowen. In November of 1999, the EPA filed a lawsuit against Plant Bowen over its illegal and excessive air emissions. The EPA Administrator stated that: "This action will dramatically reduce the harmful smog and acid rain that directly threatens public health and the environment throughout the Midwest and up and down the East Coast." Ex. 5 at 2.

Meanwhile, Georgia EPD issued the Title V Amendment that will allow Georgia Power to move in the opposite direction on increasing overall pollution that directly threatens our environment, upon which our public health depends. Georgia Power

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<sup>5</sup> While a Georgia SIP provision will require Plant Bowen to make substantial reductions in NOx emissions in May of 2003, that obviously is not doing anything to help the people of Georgia in 2002. In addition, the fact that the Georgia SIP provision is based on a 30 day averaging time gives the petitioners serious reservations about solving one-hour or eight-hour ozone violations.

installed additional emission units at its Plant Wansley but requires NOx offsets before Georgia Power can operate these new units. The Plant Bowen Title V Permit Amendment being challenged in this petition is Georgia EPD's attempt to create the offsets. However, the Title V Permit Amendment represents what one would be hard pressed not to classify as one of the most absurd regulator decisions of all time.

## **V. SUMMARY OF THE ARGUMENT**

1. The offsets created by the Plant Bowen Title V amendment are not permanent, as required by regulation, because they are only for 2002. No reasonable person could define one year as permanent.
2. The offsets created by the Plant Bowen Title V amendment are not real, as required by regulation, because the Amendment only restricts emissions from two units of a four unit facility. Thus, in a phenomenon known as emissions leakage, Georgia Power could simply use the two units controlled by the amendment less, use the two units not controlled by the amendment more and end up with the same amount of total pollution in the ambient air. The fact that Georgia EPD hopes that Georgia Power will meet the Amendment requirements by using a pollution control device is completely irrelevant because the Amendment does not contain such a requirement.
3. The offsets created by the Plant Bowen Title V Permit Amendment are not surplus, as required by regulation, the baseline emissions are in violation of the New Source Review and New Source Performance Standards. EPA has issued a notice of violations and has filed a lawsuit regarding these violations.
4. Georgia EPD did not make available to the public all relevant information during the public comment period.

## **VI. ARGUMENT**

### **A. LEGAL BACKGROUND AND STANDARD OF REVIEW**

The Clean Air Act is “Congress’s response to well-documented scientific and social concerns about the quality of the air that sustains life on earth and protects it from . . . degradation and pollution caused by modern industrial society.” *Delaware Valley Citizens Council for Clean Air v. Davis*, 932 F.2d 256, 260 (3rd Cir. 1991). A key component of achieving the Clean Air Act’s goal of protecting our precious air is the Title V operating permit program. Title V permits are supposed to consolidate all of the requirements for a facility into a single permit and provide for adequate monitoring and reporting to ensure the regulatory agencies and the public that the permittee is complying with its permit. *See generally* S. Rep. No. 101-228 at 346-47; *see also In re: Roosevelt Regional Landfill*, (EPA Administrator May 11, 1999) at 64 FR 25336.

When a state or local air quality permitting authority issues a Title V operating permit, the EPA will object if the permit is not in compliance with any applicable requirement or requirements under 40 CFR Part 70. 40 CFR § 70.8(c). However, if the EPA does not object, then “any person may petition the Administrator within 60 days after the expiration of the Administrator’s 45-day review period to make such objection.” 40 CFR § 70.8(d); 42 U.S.C. § 7661d(b)(2)(CAAA § 505(b)(2)). “To justify exercise of an objection by EPA to a [T]itle V permit pursuant to Section 505(b)(2), a petitioner must demonstrate that the permit is not in compliance with applicable requirements of the Act, including the requirements of Part 70. [40 CFR] § 70.8(d).” *In re: Pacificorp’s Jim Bridger and Naughton Plants*, VIII-00-1 (EPA Administrator Nov. 16, 2000) at 4.



**B. THE FACILITY’S PERMIT IS NOT IN COMPLIANCE WITH APPLICABLE REQUIREMENTS OF THE CLEAN AIR ACT.**

**1. THE OFFSETS CREATED ARE NOT PERMANENT<sup>6</sup>**

The Plant Bowen Title V Permit Amendment is to create emission offsets for Plant Wansley’s new emissions units. Ex. 1 at 3. The emissions offsets requirement is found in Georgia Rules for Air Quality Control (Rules) 391-3-1-.03(c). This provision provides, in relevant part, that no permit shall issue unless, “by the time the source is to commence operation, sufficient offsetting emissions reductions have been obtained,” so that the total emissions from the existing region are less than total emissions before the new source commences operations. Rule 391-3-1-.03(c)1. The Rules go on to provide:

15. Additional Provisions for Electrical Generating Units Located in Areas Contributing to the Ambient Air Level of Ozone in the Metropolitan Atlanta Ozone Nonattainment Area.

(i) In Banks, Barrow, Butts, Chattooga, Clarke, Dawson, Floyd, Gordon, Haralson, Heard, Jackson, Jasper, Jones, Lamar, Lumpkin, Madison, Meriwether, Monroe, Morgan, Oconee, Pickens, Pike, Polk, Putnam, Troup and Upson counties, the terms “major source” and “major stationary source” include any stationary source or group of sources located within a contiguous area and under common control, containing an electrical generating unit, and that emits, or has the potential to emit, at least 100 tons per year of nitrogen oxides from electrical generating units.

. . .

(iv) For purposes of satisfying the emission offset requirements of this subsection, the ratio of total emission reductions of nitrogen oxides to total increased emissions of such pollutant from the new or modified electrical generating units shall be at least 1.1 to 1 for emission offsets external or internal to the contiguous area under common control at which the proposed new or modified major stationary source is located. . . .

(vii) For the purpose of this subsection, “electrical generating unit”

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<sup>6</sup> This issue was raised within Petitioners’ Comment 1 at pages 1-2, attached as Ex. 2. Therefore, Petitioner has satisfied the requirement of 40 CFR § 70.8(d) that the petition points were raised with reasonable specificity during the public comment period.

means a fossil fuel fired stationary boiler, combustion turbine, or combined cycle system that serves a generator that produces electricity for sale.

Rule 391-3-1-.03(c)15.

Offsets must be real, permanent, quantifiable, enforceable, and surplus. Rule 391-3-1-.03(13)(b)(1). See also Plant Wansley Title V Permit, condition 3.4.7 found at <http://www.air.dnr.state.ga.us/sspp/permits/1490001/tv12224/1490001p.pdf>.

In this case the Amendment states that the Permittee must reduce its NOx emissions “during the 2002 ozone season. For the purposes of this permit, the 2002 ozone season shall be defined as May 1, 2002 through September 30, 2002.” Ex. 6 at 1, Condition 3.2.5. Outside of a George Orwell novel, no reasonable government entity could say that a 5 month period is permanent.

Georgia EPD’s response to comments shows the absurdity of this permitting action. Georgia EPD states that “The reductions in NOx emissions imposed by this permit amendment are permanent for 2002 and that is the sole purpose of this permitting action.” Ex. 1 at Addendum, first and second page. Georgia EPD engages to “newspeak” to redefine the questions so they can come up with an answer. While Georgia EPD may believe that the “purpose” of this permitting action is to create offsets for only 2002, there is no such thing as offsets for 2002. Offsets have to be permanent. The one year period of 2002 is not permanent. Therefore, EPA should object to the Amendment because it does not comply with the applicable requirement that offsets be permanent.

## 2. THE OFFSETS ARE NOT REAL<sup>7</sup>

As explained above, offsets must also be real. Real means that the pollution in our air is reduced as opposed to a paperwork exercise that does not actually benefit the environment. As explained below, the emission offsets in the Amendment are not real because of a concept called “emission leakage.”

Plant Bowen has four steam generating units: SG01, SG02, SG03, and SG04. See Ex. 6, Condition 3.1.1. Each one of these emission units is essentially a massive, coal-fired boiler. For each unit, two factors influence the total amount of pollution that comes out the stack. The two factors are: the rate of emissions per amount of fuel and the amount of fuel burned. The amount of fuel burned in a coal-fired power plant is usually called the heat input. It is usually expressed as millions of British Thermal Units, which is designated “MMBtu.” The rate of emissions per amount of fuel is usually called the emissions rate and is usually expressed as pounds of pollution per MMBtu. Thus, there are two ways to reduce the total pollution coming out the stack. One way is to reduce the emissions rate and the other way is to reduce heat input. An example will follow.

A particular unit at Plant Bowen, for example SG01, may put out 10,000 tons of NOx per year. If the emission rate was .4 pounds of NOx per MMBtu, that would mean that the total heat input would be 50,000,000 MMBtu. (50,000 MMBtu \* .4 pounds per MMBtu / 2000 pounds per ton = 10,000 tons). If Georgia Power needed to reduce the total NOx emissions at unit SG01 to 5,000 tons per year, it could reduce the total NOx emissions by either reducing the emissions rate or reducing the heat input. Thus, Georgia

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<sup>7</sup> This issue was raised within Petitioners’ Comment 1 at pages 1-2, attached as Ex. 2. Therefore, Petitioner has satisfied the requirement of 40 CFR § 70.8(d) that the petition points were raised with reasonable specificity during the public comment period.

Power could reduce the emissions rate to .2 pounds of NO<sub>x</sub> per MMBtu and with the same heat input of 50,000,000 MMBtu, the total emissions would be 5,000 tons of NO<sub>x</sub> per year. (50,000,000 MMBtu \* .2 pounds per MMBtu / 2000 pounds per ton = 5,000 tons). However, Georgia Power could also reduce the heat input to 25,000,000 MMBtu to get the same reduction to 5,000 tons per year. (25,000,000 MMBtu \* .4 pounds per MMBtu / 2000 pounds per ton = 5,000 tons).

“Emissions leakage” is when a company reduces the heat input at one unit and increases the heat input at another unit. See e.g. Ex. 2, Attachment 1, Letter from James A. Capp to Charles Huling and Douglas Cloud at 3. Thus, the emissions leak from one unit to the other. In our case, the Permit Amendment requires Georgia Power to reduce the total pollution from Units SG01 and SG02. However, the Permit Amendment does not require Georgia Power to reduce or maintain the total emissions from Units SG03 and SG04. Thus, the Permit Amendment leaves Georgia Power free to simply decrease the heat input into Units SG01 and SG02 and increase the heat input by a similar amount in Units SG03 and SG04. Under this scenario, the total amount of NO<sub>x</sub> dumped into the Metro-Atlanta area would be the same from Plant Bowen but would be increased from Plant Wansley’s new combustion turbines. This would thwart a fundamental goal of the Clean Air Act and increase the risk of health injuries to the 3.8 million people in the Metro-Atlanta nonattainment area.

Georgia EPD responded that they “believe” that the emission reductions will come from the use of selective catalytic reduction (SCR) emission control device and not through the shutdown of the non-regulated units. Ex. 1 at Addendum, First Page. To begin with, the petitioners are concerned that Georgia Power may reduce the heat input of

the unregulated units. Georgia Power can certainly reduce the heat input without shutting down the units. Furthermore, Georgia EPD's "belief" is not relevant. In addition to being real, offsets must be enforceable. Georgia EPD's belief is not enforceable. Georgia EPD could have included an enforceable requirement that the emission reductions be achieved by operation of the SCR under set parameters. However, Georgia EPD did not include such an enforceable requirement. Therefore, EPA should object to the Plant Bowen Title V Permit Amendment because the offsets are not real and Georgia EPD's belief that they are real is not enforceable.

### **3. THE OFFSETS ARE NOT SURPLUS<sup>8</sup>**

The offsets must also be surplus. The requirement that emissions offsets be surplus means that one cannot "double count." That is, if a regulation other than Rule 391-3-1-.03(c) requires a reduction in NO<sub>x</sub>, a company cannot count those reductions as an emissions offset under Rule 391-3-1-.03(c). In our case, Plant Bowen's current emission levels of NO<sub>x</sub> are in violation of the Clean Air Act's New Source Review (NSR) and New Source Performance Standards (NSPS), which are found in Rules 391-3-1-.02(7) and 391-3-1.02(8). EPA issued a notice of violation when it determined that Plant Bowen's emissions are currently illegally above the levels required by NSR and NSPS. EPA is currently suing Plant Bowen to force it to come into compliance with the New Source Review and New Source Performance Standards. *See United States of*

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<sup>8</sup> This issue was raised in Petitioners oral comments at the public hearing. Georgia EPD is required to provide EPA with a copy of all public comments including oral comments the public hearing. The fact that EPA Region 4 may inform Georgia EPD that it is not interested in reviewing public comments is not the Petitioners fault. Therefore, Petitioner has satisfied the requirement of 40 CFR § 70.8(d) that the petition points were raised with reasonable specificity during the public comment period.

*America v. Georgia Power Company*, 99CV2859-JEC (N.D.Ga. 1999). Attorney General Ashcroft has recently re-affirmed the validity of this and other enforcement actions. Thus, EPA has already established that Plant Bowen's NOx reductions are not surplus, because the reductions required in the Plant Bowen Title V Permit Amendment are already required, according to EPA by NSR and NSPS. Thus, EPA should object to the permit because it does not comply with the applicable requirement that offsets be surplus.

## **VI. CONCLUSION**

Therefore, for the reasons explained above, Petitioners request that EPA object to the Plant Bowen Title V Amendment.

Respectfully Submitted,

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