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

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| In the matter of a<br>Part 70 Air Quality Operating Permit<br>Issued by North Carolina Department<br>of Environment and Natural Resources<br>Duke Energy Progress - Richmond County Turbines<br>Facility ID: 7700070<br>Hamlet, NC, Richmond County<br>Permit No. 08759T17 |

September 17, 2014

**THE BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE'S PETITION TO THE ENVIRONMENTAL PROTECTION AGENCY TO OBJECT TO THE TITLE V AIR QUALITY PERMIT ISSUED TO DUKE ENERGY PROGRESS RICHMOND COUNTY TURBINES**

On behalf of the Concerned Citizens of Richmond County ("CCRC") and the Blue Ridge Environmental Defense League ("BREDL") ("Petitioners"), I hereby petition the United States Environmental Protection Agency to object to the issuance of the Title V permit No. 08759T17 ("Permit") issued by the North Carolina Department of Environment and Natural Resources Division of Air Quality ("DAQ") to the Richmond County Combustion Turbine Facility operated by Duke Energy Progress ("Richmond County Turbines" or "RCCTF"). The grounds for this petition are set forth in the following: (1) Comments of the Blue Ridge Environmental Defense League to NC Division of Air Quality Permitting Chief dated September 9, 2013, (2) Letter from BREDL to EPA Air Permits Section Chief, dated September 23, 2013 and (3) Letter from BREDL and CCRC to EPA Air Permits Section Chief, dated July 21, 2014. Pursuant to the Clean Air Act § 505(b)(2), this petition is submitted within 60 days of EPA's 45-day review period for this permit which ended Sunday, July 20, 2014. The petition is based on objections to the permit that were raised during the DAQ's public comment period and the EPA's review.

Petitioners hereby request that the Administrator object to the issuance of the Permit because of DAQ's failure to assure compliance with applicable requirements under the Clean Air Act. Namely, DAQ failed to:

- Provide for meaningful public participation
- Properly assess common control of the Duke Energy Progress and Piedmont Natural Gas electric power turbines
- Require alternative compliance procedures under MACT
- Show compliance with North Carolina's Title V program
- Address environmental justice issues

Blue Ridge Environmental Defense League is a nonpartisan, grassroots, nonprofit membership organization dedicated to environmental education and governmental accountability. The Concerned Citizens of Richmond County is a chapter of the Blue Ridge Environmental Defense

League with members in Hamlet, NC. BREDL works with our members, chapters and other concerned citizens on environmental problems in the southeastern United States.

**Background**

The Richmond County Turbines, located at the Richmond County Energy Complex, is a Class I_C facility, categorized under standard industrial code SIC 4911. Duke Energy Progress operates seven combustion turbines permitted to burn either fuel oil or natural gas, and three auxiliary boilers burning natural gas. Five of the turbines are simple cycle; two are combined cycle. All seven turbines use dry low NOx combustors and water injection for pollution control. The two combined cycle turbines add selective catalytic reduction. Before permit modification, the electric output of the facility was 1600 MWe.

On April 2, 2009, NC DAQ issued to RCCTF construction and operation permit 08759T10 for two natural gas/fuel oil-fired combined/simple cycle combustion turbines ES-13 and ES-14, auxiliary boiler ES-15 and various emission sources including a cooling tower, fuel gas heaters and fuel oil tank. The following email describes a series of permit applications submitted by Duke Energy Progress for the facility:[1]

> (2) The Permittee submitted an application (**7700070.11A**), received by DAQ on June 13, 2011, precisely to take care of the Title V permitting requirements for the above equipment. There was not any request for approval for any new equipment in this application. The draft permit (**08759T15**) was noticed on the DAQ's website for public comments on August 9, 2013, providing for a 30-day comment period, which has ended on September 8, 2013. The draft permit was also sent to EPA for their 45-day review as required under the Title V permitting program. This draft permit has not yet been finalized or issued by NC DAQ.
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> (3) Separately, the Permittee submitted a PSD application (**7700070.12B**) on August 30, 2012, to increase the permitted operations of existing simple cycle combustion turbines (ID Nos. Units 1 through 4, and 6), from 2,000 hours to 8,760 hours annually on a full load equivalent basis for each of these turbines, when burning natural gas. DAQ reviewed this application under both the PSD (15A NCAC 2D .0530) and Title V (15A NCAC 2Q .0500) programs and noticed the draft permit (**08759T15**), as required, in the local newspaper (Richmond County Daily Journal) for comments on October 18, 2013. The 30-day comment period for this draft permit will end on November 17, 2013 and the EPA's 45-day review will end on December 2, 2013. DAQ will finalize this permit revision once the public comment and the EPA review periods end.

The following table tracks the various permits during the last few years:

| Permit No. 08759 | T14 | T15 | T16 | T17 |
|---|---|---|---|---|
| Application No. | 13A | 12B | 13B | 11A |
| Application Date | 4/29/13 | 12/3/12 | 12/2/13 | 6/13/13 |
| Permit Issue Date | 5/20/13 | 11/21/13 | 12/3/13 | 7/18/14 |

As outlined above, the DAQ used Permit No. 08759T15 for two separate permit applications, 7700070.11A and 7700070.12B. Subsequently, Application 11A was also used as the basis for Permit No. 08759T17, issued by DAQ on July 18, 2014. Title V permit renewals and

[1] Email from Rahul Thaker, P.E., QEP, Environmental Engineer, Permitting Section, NCDENR Division of Air Quality to Louis Zeller dated October 22, 2013

modifications must be noticed by the permitting agency to allow opportunities for interested persons to comment and request a hearing. However, Petitioners have been unable to locate a public notice for the extant permit in news publications or the DAQ website.

**Issue**

The Permit modifications requested by Duke Energy Progress and granted by DAQ allowed multiple changes in the facility: 1) added two 190 MWe Siemens SGT6-5000F combustion turbine generators (ES-13 and ES-14), 2) added a new natural gas fired auxiliary boiler (ES-15), 3) modified the existing natural gas fired auxiliary boiler (ES-10) and 4) removed six units from the permit, although they still operate within the facility fence line. Duke Energy Progress has been permitted to increase its power by 36% to approximately 2000 MWe. The permit modifications made by DAQ failed to provide for meaningful public participation, appropriately address environmental justice issues and/or demonstrate compliance with North Carolina's Title V permitting program.

**Rule**

The federal Clean Air Act Title V operating permit program requires that major industrial sources and certain other sources obtain a permit that consolidates all of the applicable requirements for a facility into one document. The purpose of Title V permits is to reduce violations of air pollution laws and improve enforcement of those laws.

Pursuant to 40 CFR 51.166 (b)(1)(i)(*c*), prevention of significant deterioration of air quality, "Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1) of this section, as a major stationary source if the change would constitute a major stationary source by itself."

Under the federal Clean Air Act, permits for air pollution control are supposed to protect public health and welfare. Under the Act, the interested public may object to the issuance of permits in accordance with the law as stipulated:

> If the Administrator does not object in writing to the issuance of a permit pursuant to paragraph (1), any person may petition the Administrator within 60 days after the expiration of the 45-day review period specified in paragraph (1) to take such action. A copy of such petition shall be provided to the permitting authority and the applicant by the petitioner. The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period). The petition shall identify all such objections. If the permit has been issued by the permitting agency, such petition shall not postpone the effectiveness of the permit. The Administrator shall grant or deny such petition within 60 days after the petition is filed. The Administrator shall issue an objection within such period if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of this chapter, including the requirements of the applicable implementation plan. Any denial of such petition shall be subject to judicial review under section 7607 of this title. The Administrator shall include in regulations under this subchapter provisions to implement this paragraph. The Administrator may not delegate the requirements of this paragraph.

*See* Title 42, Chapter 85, Subchapter V § 7661D(b)(2).

**Argument**

The DAQ has improperly sanctioned both the addition of new air pollution sources and the removal of others from the Permit. The DAQ did not perform a proper MACT analysis. Duke Energy Progress trimmed its application to escape requirements of BACT and MACT.

Combustion Units Added

The Duke Energy Progress - Richmond County Turbines are listed in the NC SIP, 15A NCAC 2D .1417, as "CP&L Marks Creek, Richmond County" with a power rating of 1628.4 MWe and nitrogen oxide limits totaling 189 tons/season on seven units @ 27 per unit. The rule states:

> (A) Except as allowed under Paragraph (d) of this Rule, sources named in the table in this Subparagraph shall not exceed the nitrogen oxide (NOx) emission allocations in the table beginning May 31 through September 30, 2004 and May 1 through September 30, 2005 and each year thereafter until revised according to Rule .1420 of this Section.

Previously, the proposed project was subject to state-only BACT requirements (15A NCAC 2D .0530(h)) when cost recovery was sought pursuant to the NC Clean Smokestacks Act (G.S. 62-133.6). However, Duke Energy Progress (DEP) will not seek cost recovery. The DAQ's review states:[2]

> DEP will not be requesting cost recovery under G.S. 62-133.6 (Clean Smokestacks Act) for this project at RCCTF. Therefore, DEP requested that all references to $SO_2$ BACT emission limits and operating constraints for the new combustion turbines (ID Nos. ES-13 and ES-14) be removed from the permit as a result of this revised regulation. DAQ agrees that BACT requirements listed in the rule have changed, and thus the facility is not subject to State-only BACT. Therefore Section 2.1.F.5 has been removed from the permit.

For reasons stated *infra*, DAQ's decision to remove the BACT emission limits for units ES-13 and ES-14 is not in accord with the State Implementation Plan and should be reversed by the EPA.

Moreover, pursuant to 40 CFR 51.166 (b)(1)(i)(*c*), Prevention of significant deterioration of air quality, "Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1) of this section, as a major stationary source if the change would constitute a major stationary source by itself."

Combustion turbines ES-13 and ES-14 are classified as new stationary sources for the purpose of MACT (maximum achievable control technology). Any new or reconstructed unit which is a *lean premix oil-fired stationary combustion turbine* commencing operation after March 5, 2004 must comply with the emissions and operating limits in 40 CFR § 63.6095(a)(2). In the issued permit, these units are permitted to burn fuel oil up to 1000 hours per year and natural gas up to 8760 hours per year. Notwithstanding the US EPA stay of standards which applies to *lean premix gas-fired stationary combustion turbines*, as referenced in the DAQ's Air Permit Review,

[2] North Carolina Division of Air Quality Air Permit Review (PROPOSED), Application No. 7700070.11A, Permit No. 08759T17, Section 5.3 Removal of State-only BACT requirements

these two units must meet the standards of 40 CFR § 63 including MACT.[3] In lean-premix combustors the fuel is mixed before entering the power producing combustion chamber. The purpose of Subpart YYYY of this rule is to limit hazardous air pollutants from stationary combustion turbines located at major sources of HAP emissions, and requirements to demonstrate initial and continuous compliance with the emission and operating limitations.

The facility is already a major source of hazardous air pollutants, but the new permit would allow increases in emissions of HAPs. We have run an EPA model to calculate ambient levels of formaldehyde and benzene in the air around the Richmond County Turbines. The calculations are in the documents of record for this facility.[4] The results are as follows.

Including emissions from natural gas-fueled Units 1, 2, 3, 4, 6, 7, 8, 10, 13, 14, 15, 19 and 20, the model indicates the level of formaldehyde is above NC acceptable ambient levels (AALs) as far as 3,500 meters (2.17 miles) from the RCCTF sources burning natural gas only. Including the emissions from fuel oil-burning Units 1, 2, 3, 4, 6, 7, 8, 13 and 14, the model indicates the level of formaldehyde is above NC AALs 2,100 meters (1.3 miles) from the RCCTF sources burning fuel oil #2 only. Finally, the model indicates the level of formaldehyde emitted from Units 13 and 14 alone burning only natural gas would be above NC AALs 1,600 meters (1 mile) from the RCCTF.

Including emissions from natural gas-fueled Units 1, 2, 3, 4, 6, 7, 8, 10, 13, 14, 15, 19 and 20,the model indicates the level of benzene is above NC AALs 10,000 meters (6.2 miles) from the source when burning natural gas only. In fact, at 10 kilometers, the ambient level is still 460% above NC AALs for benzene if it is considered an area source. If considered a volume source, 400% above. Also, counting emissions from fuel oil-burning Units 1, 2, 3, 4, 6, 7, 8, 13 and 14, the model indicated that the level of benzene is far above NC AALs 10,000 meters (6.2 miles) from the source when burning fuel oil #2 only. At 10 kilometers, if considered an area source, benzene levels are 27 times above NC AAL of 0.00012 $mg/m^3$.

Combustion Units Removed

The Richmond County Turbines plant has three natural gas fired heaters (ES-21, ES-22 and ES-23) with a heat input of 8.75 MMBtu/hr each. In their permit application submitted in 2008, three additional natural gas fired heaters (ES-16, ES-17 and ES-18) with a heat rating of 5.0 MMBtu/hr were to be added to the permit. However, Duke has now requested that the DAQ remove all six of these natural gas fired units from their permit. These heaters are located within the fence line of the Richmond County facility but, according to DAQ, are owned and operated by Piedmont Natural Gas.

The federal Clean Ait Act Title V operating permit program requires that major industrial sources and certain other sources obtain a permit that consolidates all of the applicable requirements for a facility into one document. The Richmond County Energy Complex is a single site with co-located air pollution emission sources. The purpose of title V permits is to

[3] 40 CFR 63, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

[4] Letter from Louis Zeller to Heather Ceron, EPA Air Permits Section Chief, dated September 23, 2013

reduce violations of air pollution laws and improve enforcement of those laws. The EPA cannot permit these six combustions sources to be separated from the extant permit.

According to 42 USC § 7412 - Hazardous air pollutants, the term "major source" means "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants." The DAQ has adopted a truncated view of the meaning for common control by labeling it "legal control." The state permit review holds that:

> Although these heaters are located within the RCCTF fence line, the equipment is owned, operated and maintained by Piedmont Natural Gas. Even though this equipment was originally included in the applicable permit application, the definition of "stationary source" according to the DAQ indicates that inclusion of equipment owned, operated and maintained by Piedmont Natural Gas is not considered part of the stationary source that is owned, operated and maintained by Duke.
>
> 40 CFR 51.166(b)(5) defines "stationary source" as any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.
>
> Additionally, 40 CFR 51.166(b)(6) defines "building, structure, facility, or installation" as all of the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e. which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972....
>
> These two definitions outline three distinct and independent criteria that must all be satisfied in order to be considered part of a single stationary source:
>
> (1) Common legal control
> (2) Contiguous or adjacent properties
> (3) Part of the same 2-digit SIC code
>
> At RCCTF, the M&R Station will be located on contiguous property and share the same 2-digit SIC code, however, is not under common legal control. Therefore, the natural gas fired heaters are not required to be included in the RCCTF Title V permit and the heaters have been removed from the permit.[5]

Emphases added. The difference between "legal control" and "common control" here seems to be the nexus of the state's allowing Duke Energy Progress to pare off six combustion units from the Permit. They are within the same fence line. Piedmont Natural Gas units are numbered consecutively with Duke Energy Progress units. If it were so that Duke and Piedmont were not under "common legal control," would it have been necessary for Duke Energy Progress to modify its existing permit to remove certain combustion units, as the company requested in Application No. 7700070.11A? Federal regulations state:

> Under the definition the "enterprise" includes all related activities performed through "common control" for a common business purpose.... "Common" control includes the sharing of control and it is not limited to sole control or complete control by one person or corporation. "Common" control therefore exists where the performance of the described activities are controlled by one person or by a number of persons, corporations, or other organizational units acting together. This is clearly supported by the definition which specifically includes in the "enterprise" all such activities whether performed by "one or more corporate or other organizational units."

*See* 29 CFR § 779.221 "Common control" defined. The operation of ES-21, ES-22 and ES-23

[5] *Op.Cit.* Section 5.4, Removal of Natural Gas Fired Heaters (ID Nos.: ES-16, ES-17, ES-18, ES-21, ES-22, ES-23)

are vital to the safe operation of the RCCTF because of the thermodynamic phenomenon known as the Joule–Thomson effect.[6] The DAQ permit review states:

> According to DEP natural gas is delivered to RCCTF via a natural gas pipeline. Natural gas transmission pressures are different from those required at the facility. Therefore, the fuel will pass through a metering and regulating (M&R) station where the pressure of the incoming gas will be reduced. As the pressure of the gas decreases, the temperature will also decrease, which could lead to "freezing" of the piping, connections and valves.

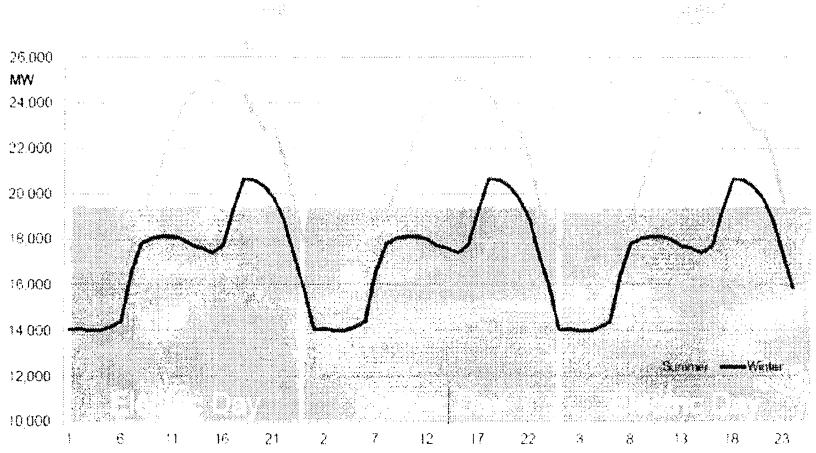
In fact, the plant cannot operate without these three natural gas heaters and therefore must be under common control.

Further, electric plants and pipelines have what is known in the industry as a "planning gap" which is described as:

> [T]he gas day begins the day during the morning "pick-up", and the electric day begins during the midnight "drop-off". The apparent phase shift observed during the two industry's operating/planning days creates some inherent challenges during the coordination, scheduling, and nomination processes.

The planning gap exists because "the two industries operates on different schedules (local midnight-to-midnight for electric and 9 a.m. to 9 a.m. EST for gas), creating a planning gap because generators must estimate their gas needs several hours before they have finalized operational plans for the next day." See Figure A.[7]

Figure A. Typical Electric Load Patterns: Gas Day v. Electric Day



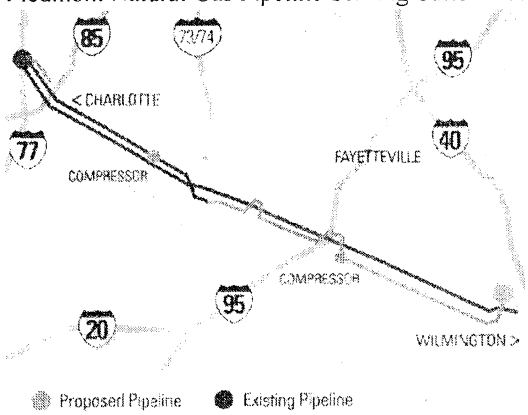

[6] At room temperature, all gases except hydrogen, helium and neon cool upon expansion by the Joule–Thomson process. As a gas expands, the average distance between molecules grows. Because of the attractive part of the intermolecular force, expansion causes an increase in the potential energy of the gas. If no external work is extracted in the process and no heat is transferred, the total energy of the gas remains the same because of the conservation of energy. The increase in potential energy thus implies a decrease in kinetic energy and therefore in temperature.

[7] North American Electric Reliability Corporation, "A Primer of the Natural Gas and Electric Power Interdependency in the United States," Figure 7-8, page 96 (2011)

Electrical grids have excess capacity for reliability, while pipelines serve contract demand. Interruptible gas pipeline service—for electric generating units and other customers—is available only when contract capacity is not being used.

In addition to operating plants at Richmond Combustion Turbines, Piedmont Natural Gas is a natural gas supply company for more than a million residential and business customers in North Carolina, South Carolina and Tennessee. Their pipeline crosses Iredell, Mecklenburg, Cabarrus, Anson, Richmond, Scotland, Robeson, Bladen, Columbus, Brunswick, and New Hanover counties (Figure B).

Figure B. Piedmont Natural Gas Pipeline Serving Sutton Power Plant [8]




Are the six units owned by Piedmont Natural Gas—emission sources 16, 17, 18, 21, 22, and 23—under totally independent operation? Are they shut down without alerting Duke Energy Progress? Are Duke's and Piedmont's turbines operated for a common business purpose? Does Duke work with Piedmont to coordinate daily gas supply needs from a common source? The DAQ's assessment that there is no common legal control is not based on facts on the ground.

The DAQ's judgment call, that Piedmont and Duke lack common legal control at the Richmond Combustion Turbines, is incorrect and out of compliance with § 779.221. Common control need not be sole or complete by one entity, but merely when performance is controlled for common business purposes. The common business purpose—i.e., the enterprise—for Duke and Piedmont at Richmond Combustion Turbines is the production of electricity via the combustion of a common fuel.

Insufficient Pollution Control

Combustion turbines are remarkable for their lack of efficiency in converting chemical energy to mechanical energy. Part of the output is lost the in compressor where intake air is compressed up to 30 atmospheres of pressure, before the fuel is burned. Accordingly, "More than 50 percent of the shaft horsepower is needed to drive the internal compressor and the balance of recovered shaft horsepower is available to drive an external load."[9] The two types of turbines utilized at the Richmond County facility are simple-cycle and combined-cycle. The simple cycle has a

[8] http://www.piedmontng.com/about/pipelineprojects/sutton.aspx
[9] US EPA Air Pollution Emission Factors, AP-42, Stationary Gas Turbines, Section 3.1.2 Process Description

thermal efficiency of only 15 to 42 percent. Combined cycle units add a *heat recovery steam generator* to boost efficiency to between 38 and 60 percent. So, from 40 to 85 percent of the fuel burned produces no electric power. But air pollution and global warming gases are created by combustion whether power is produced or not.

Moreover, how the turbine is operated affects air pollution emissions and efficiency. Duke Energy Progress has trimmed its application to escape requirements of BACT and MACT by reducing hours of operation for some units with negative consequences; e.g., Turbine Units ES-13 and ES-14 could operate for 1000 hours per year burning fuel oil and 2000 hours burning natural gas. This could result in underestimated levels of toxic air pollution.

> Available emissions data indicate that the turbine's operating load has a considerable effect on the resulting emission levels. Gas turbines are typically operated at high loads (greater than or equal to 80 percent of rated capacity) to achieve maximum thermal efficiency and peak combustor zone flame temperatures. With reduced loads (lower than 80 percent), or during periods of frequent load changes, the combustor zone flame temperatures are expected to be lower than the high load temperatures, yielding lower thermal efficiencies and more incomplete combustion.[10]

The products of incomplete production—carbon monoxide and PM-10—increase with reduced operating loads. So in addition to escaping Clean Air Act provisions, the operator's regulatory stratagem of reducing hours of operation could create higher levels of pollution per kilowatt-hour. The EPA should assess the impact of gaming the system. Best available control technology for criteria pollutants and maximum achievable control technology for hazardous air pollutants are the standards which must be required for the Richmond County Combustion Turbines Title V permit.

The permit fails to incorporate best available control technology to limit greenhouse gases. RCCTF Units 1, 2, 3, 4 and 6 are subject to PSD review for global warming impacts. According to the EPA's own review, a numeric emission limit in $CO_2$ equivalent per megawatt hour should have been included in the permit issued by DAQ. Yet the DAQ has refused to do so and has failed to justify the exclusion.

Environmental Justice

Since 2013 we have been in contact with residents living in the vicinity of the RCCTF who report that the plant is disrupting their lives with noise, odor and smoke. In order to document these problems, we asked residents to compile log books and to take photographs of what they experienced. Some of these photographs were submitted to the EPA in a letter dated July 21, 2014. Members of the Concerned Citizens of Richmond County live on Waymon Chapel Road in Hamlet, which is not far from the RCCTF. An email sent on Monday, June 16, 2014 at 9:29 AM by one of these residents contains the following report:

> Around 7:00 am this morning I took these pictures. The smoke was so thick in our community and this metal taste along with this smell of burning. Mingo Mine Pits is

[10] *Id.* Page 3.1-3

> behind my home and Duke Energy is behind the Pit....This is the 7th time I've heard the plant, the noise is loud and usually starts around 3:30 in the middle of the night until afternoon. I think there is an increase with the turbines. Lived here almost 10 years I have never heard the plant until this year, 7th time since May 2014. I have not ever seen so much smoke.

Reports compiled by residents living near the RCCTF indicate that *inter alia* the facility is in violation of the two-hour limit for excess emissions due to startup and shutdown malfunction. The BACT requirements of "combustion control" to meet opacity limits of 20% in the draft permit are not adequate. The EPA cannot approve an ongoing violation. According to Permit 08759T17 condition 2.1.A.1:

> Visible emissions from this source shall not be more than **20 percent opacity** (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. [15A NCAC 2D .0521(d)]

The negative impacts on health, livelihood and well-being of the RCCTF on these residents require immediate attention. The RCCTF is located in a county with a high percentage of African American residents and a high level of people below poverty level. The latest census data reveal Richmond County's population is 31% black, which is 41% above the state average. And 24.8% of residents live below poverty level, compared to the statewide level of 16.8%. In other words, Richmond County has 47% more of its people living below poverty level than other counties in North Carolina.[11] Environmental justice law indicates that the disproportionate impacts of air pollution should be offset by greater attention to pollution sources and the reduction of air pollution wherever possible. Advocates nationwide argue that because poor people of color bear a disproportionate burden of air pollution, their communities should receive a disproportionate share of money and technology to reduce toxic emissions and that laws including the Clean Air Act should close loopholes that allow facilities to escape pollution controls.[12] We submit that this is a case which requires EPA to require a disproportionate share of money and technology to reduce toxic emissions. At present, credible evidence submitted indicates that the Richmond County turbine plant is not in compliance with air quality standards (NAAQS) and, therefore, the permit cannot be approved.

**Conclusion**

As granted by DAQ, the permit for the Richmond County Turbines allows significant modification of the facility. The permit must comply with the air quality permitting program under Title V and 40 CFR Part 70, but the removal of several emissions sources operating within the energy complex, the removal of alternative compliance procedures under several MACT sources and alterations in enforcement of rule requirements make the permit as approved by North Carolina unacceptable. Reports compiled by plant residents of Hamlet and submitted to the EPA indicate that the facility is in violation of NAAQS.

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[11] US Census Bureau Quick Facts, Richmond County, http://quickfacts.census.gov/qfd/states/37/37153.html

[12] *Environmental Justice for All: A Fifty State Survey of Legislation, Policies and Cases*, Fourth Edition, , University of California-Hastings College of the Law, February 15, 2010

The EPA should require the NC Division of Air Quality to:

1. Redraft the permit as a site-wide permit
2. Require Duke Energy Progress to abide by the NC SIP
3. Prevent six combustions sources from being separated from the existing permit
4. Require Duke Energy Progress to upgrade its pollution controls to eliminate the negative impacts on the people living near the facility

In sum, the Permit allows excessive emissions of air pollutants which are having a negative impact on public health and allows an ongoing environmental injustice. We call upon the EPA to object to this permit.

Respectfully,

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