# Blue Ridge Environmental Defense League

www.BREDLorg ~ PO Box 88 Glendale Springs, North Carolina 28629 ~ Phone (336) 982-2691 ~ Fax (336) 982-2954 ~ BREDL@skybest.com

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U.S. Environmental Protection Agency Attention E-Docket ID No. OAR-2001-0004, Legacy Docket ID No. A-90-37

## Comments of Louis A. Zeller, BREDL Clean Air Campaign Coordinator

New Source Review requires that industrial plants add modern air pollution controls when they are upgraded or modified and substantially increase air pollution. In response to petitions filed by environmental groups and states' attorneys general, EPA has agreed to reconsider certain aspects of the new source review rule changes. On behalf of the Board of Directors of the Blue Ridge Environmental Defense League and our members in Virginia, North Carolina, South Carolina, and Georgia, I submit these comments.

- We support the legal challenge brought by these nine northeastern states and Earthjustice, NRDC, Communities for a Better Environment, and others.
- We oppose the unprecedented rollback in the federal Clean Air Act which has been a cornerstone of national environmental policy for three decades.
- We agree with New York Attorney General, Eliot Spitzer, who said, "The Bush administration has taken an action that will bring more acid rain, more smog, more asthma and more respiratory disease to millions of Americans."
- We charge the Bush Administration with putting the financial interest of the oil, gas and coal companies above our vital interest of public health and clean air.
- We call upon the EPA to use all measures at its disposal to enforce the original intent of the Clean Air Act and Amendments including New Source Review.

#### Electric Utilities' Coal Fired Plants Violate of New Source Review

In 1999 the Environmental Protection Agency sued numerous coal-burning power plants for violations of the existing New Source Review provisions of the Clean Air Act.

## **Duke Energy**

The EPA called for the shut down of Duke coal-fired power plants because they were modified without approval. Major modifications of pollution sources requires the owner-operator to submit to a review of the modernization under New Source Review.

Duke Energy's 2001 Annual Report states:

In 2000, the U.S. Justice Department, acting on behalf of the EPA, filed a complaint against Duke Energy in the U.S. District Court in Greensboro, North Carolina, for alleged violations of the New Source Review (NSR) provisions of the CAA. The EPA

claims that 29 projects performed at 25 of Duke Energy's coal-fired units were major modifications, as defined in the CAA, and that Duke Energy violated the CAA's NSR requirements when it undertook those projects without obtaining permits and installing emission controls for sulfur dioxide, nitrogen oxide and particulate matter. The complaint asks the court to order Duke Energy to stop operating the coal-fired units identified in the complaint, install additional emission controls and pay unspecified civil penalties. This complaint is part of the EPA's NSR enforcement initiative, in which the EPA claims that utilities and others have committed widespread violations of the CAA permitting requirements for the past 25 years. The EPA has sued or issued notices of violation of investigative information requests to at least 48 other electric utilities and cooperatives. http://media.corporate-ir.net/media\_files/NYS/DUK/reports/duke2001ar/downloads/financial.PDF

The Title V permit for Belews Creek was drafted earlier this year; the EPA comment period ended June 23, 2003. The Permit Shield for Nonapplicable Requirements (Section 2.2), holds that Duke Energy remains in violation of important provisions of the Clean Air Act. The language in the draft permit is intended as a "placeholder" to allow permit approval pending ongoing enforcement action by the U. S. Environmental Protection Agency. Section 2.2 stipulates that the permit "may be subject to reopening" to correct illegal actions by the company. The draft permit states:

This condition is to clarify that issuance of this permit provides no shield from the Act, or regulations promulgated thereunder, including state regulations, pertaining to requirements of the New Source Performance Standards or major or minor new source preconstruction review requirements, which EPA is currently alleging as having been violated by the Permittee. The permit may be subject to reopening to include a compliance plan and schedule addressing any judicial or administrative order establishing new applicable requirements arising out of past or ongoing noncompliance with those provisions for any affected emission units. [40 CFR 70.6(c)(3), 70.6(f) and 70.7(f)]

The Permittee is shielded from the following nonapplicable requirements as of the date of issuance of this permit based on information furnished with all previous applications. This shield does not apply to future modifications or changes in the method of operation: [15A NCAC 2Q .0512(a)(1)(B)

NC Division of Air Quality computer modeling of air toxics at Duke Power facilities predicted excessive emissions of three air pollutants: "The results indicate modeled concentrations in excess of the SO<sub>2</sub> NAAQS and the arsenic and chromium Acceptable Ambient Levels (AALs) listed in 15A NCAC 2D. 1004." [Letter from DEHNR to Duke Power Company, July 31, 1990] At Belews Creek the estimated levels for the two air toxics were 170% and 8,273% above the maximum allowable levels for arsenic and cadmium, respectively.

40 CFR Part 70 requires a compliance schedule to be included in a Title V permit if a source is operating outside of the law; BREDL comments submitted during the public hearing for the air permit called for the inclusion of a compliance schedule. But for the loophole in New Source Review, Duke would face fines of \$27,500 per day per facility. Duke Energy is still out of compliance.

**Progress Energy** 

Progress Energy Inc. of Raleigh, N.C., participated in the utility industry's effort to lobby the Bush administration for changes to the New Source Review program. The company's most recent annual filing to the SEC states:

The U.S. Environmental Protection Agency (EPA) is conducting an enforcement initiative related to a number of coal-fired utility power plants in an effort to determine whether modifications at those facilities were subject to New Source Review requirements or New Source Performance Standards under the Clean Air Act. Both CP&L and Florida Power were asked to provide information to the EPA as part of this initiative and cooperated in providing the requested information. The EPA initiated enforcement actions against other unaffiliated utilities as part of this initiative, some of which have resulted in settlement agreements calling for expenditures, ranging from \$1.0 billion to \$1.4 billion. A utility that was not subject to a civil enforcement action settled its New Source Review issues with the EPA for \$300 million. These settlement agreements have generally called for expenditures to be made over extended time periods, and some of the companies may seek recovery of the related cost through rate adjustments. The Company cannot predict the outcome of this matter. [FORM 10-K, CAROLINA POWER &LIGHT CO - PGN, Filed: March 21, 2003]

What we can predict is that many more people will become ill and more deaths will result from the power plants operated by Progress Energy, Duke Energy and others because of changes to NSR adopted by EPA in December 2002.

# Cost Savings Increase Emissions, Increase Risk to Public Health

EPA's investment-based exemption from NSR allows plant owners to modify facilities and avoid installing modern air pollution controls, resulting in increases in air pollution. The installation of new equipment, such as energy management systems, should subject coal-fired power plants to NSR.

For example, the Title V permit for Duke Power's EUSGU at Belews Creek allows the company to obtain an air permit to install current trimming devices also called energy management systems, or EMSon its electrostatic precipitators. The permit states:

Emissions of particulate matter from these boilers shall not exceed 0.15 pounds per million Btu heat input. Emissions of particulate matter are controlled by the electrostatic precipitators (ESPs). The Permittee shall obtain an air permit before installing Energy Management System (EMS) capability. The permittee shall perform annual stack test, and submit the results and the report to assure compliance with this requirement. [Air Permit No. 01983T15, Section 2.1-A.5.b]

Regarding EMS, the North Carolina Division of Air Quality wrote: "...a substantial decrease in power utilization might be realized with the use of Power Management controllers while not significantly adding to the emissions from the ESP." [Gary Saunders' email of February 3, 2000] The primary motivation for EMS systems is to save energy costs. But using opacity monitoring to ramp down the voltage on electrostatic precipitators which control particulates puts public health at risk.

Dr. George D. Thurston is Associate Professor of Environmental Medicine at the New York University School of Medicine and Director of the National Institute of Environmental Health Sciences' Community Outreach and Education Program at NYU. Dr. Thurston testified before the United States Senate last year. His views on the meaning of the Clean Air Act and his candid assessment of the impact on human health caused by the rollback of New Source Review must not be overlooked by you who are in charge of the ongoing proceeding. I have excerpted the salient passages from his testimony and also attached the full document to my comments. Dr. Thurston said:

Congress in 1977 for the first time created comprehensive emissions standards for new power plants and other industrial sources of pollution. It made these provisions prospective, "grandfathering" plants in existence at the time. However, Congress did not intend to exempt these older plants from modern pollution standards forever. Rather than requiring plants to install modern controls all at once, Congress believed it critical to require pollution control upgrades whenever a plant made major capital improvements to its production capacity that would extend its useful life. In other words, Congress in creating New Source Review adopted the approach, urged time and again by industry, to synchronize pollution control investments with the schedule of normal capital improvements in the company's business cycle. This only makes common sense and ensures that power plants will not be able to extend their grandfather status indefinitely. However, according to EPA, the Justice Department, and a host of state Attorneys General, that is exactly what many power plant owners have been trying to do. In fact, 51 plants have been charged with violating NSR by making investments that should have triggered installation of modern pollution controls. According to the allegations in the cases, the plants were virtually rebuilt from the inside out. Moreover, under NSR, eventually every power plant in the U.S. will have to face a "moment of truth": whether to make life-extending capital investments that trigger the requirement of pollution upgrades, or retire. This is exactly what Congress intended. Congress did not intend to allow plants to be overhauled without installing modern pollution controls.

What are the public health consequences if these power plants are not brought up to modern standards? A recent analysis by Abt Associates, EPA's consultant for quantifying the benefits of its air regulatory programs studied the benefits of modernizing power plant controls. Based on those findings, the Clean Air Task Force, a Boston-based environmental policy group, calculated the health impacts from the 51 plants charged with NSR violations and the benefits resulting from full enforcement of NSR at those plants:http://www.clnatf.org/publications/reports/PowerToKill.pdf, as shown below in Figure 1.

Deaths	Avoidable	Asthma	Avoidable
	Deaths	Attacks	Asthma Attacks
5,500-9000	4,300-7000	107,000-170,000	80,000-120,000

**Figure 1.** Estimates of the health impacts of 51 powerplants charged with NSR violations, and the health benefits to be gained per year from applying NSR to these 51 plants. (The Clean Air Task Force, Power to Kill, 2001)

Requiring modern pollution controls at the 51 plants would avoid between 4,300 and 7,000 premature deaths per year and between 80,000 and 120,000 asthma attacks. This

represents the benefits of cleaning up only 51 of the nation's over 500 power plants. The benefits of enforcing the New Source Review program across-the-board would be much greater. This is what is at stake in the debate over the future of New Source Review and its applicability to power plants.

Thus, the evidence is clear, and has been confirmed independently: Fine particle air pollution, and especially those particles emitted by coal-fired power plants, are adversely affecting the lives and health of Americans. The importance of these particulate matter-health effects relationships is made clear by the fact that virtually every American is directly impacted by this pollution.

Finally, I would like to emphasize the importance of controlling Carbon Dioxide (CO2) from such power plants, along with the precursor gases for PM and ozone. We now know that CO2 concentrations in the atmosphere can adversely affect our climate, and utility power plants are a major source of that CO2. In addition, coal as an energy source emits far more CO2 than other sources providing the same energy. My colleagues and I in a study recently found that a co-benefit of the adoption of readily available technologies to lessen CO2 emissions can avoid many tens of thousands of premature deaths from particulate matter worldwide (Cifuentes et al. 2001.) If we are to continue to use coal as a major source of electrical energy production, while at the same time addressing our growing CO2 emission problem, technology for the removal and sequestering of CO2 will also need to be developed and applied to these coal-fired power plants. [September 3, 2002, http://www.senate.gov/~edwards/issues/enviro/epa\_thurston.html]

Congress adopted the Clean Air Act in 1970 to improve the environment and protect public health by reducing dangerous levels of air pollution. They expected coal-fired dinosaurs to become extinct by the close of the 20<sup>th</sup> Century, not to be put on perpetual life support. The Administration's new rules and regulations are opposed to the letter and the spirit of the law enacted by Congress. Go back to the drawing board, start with a clean sheet of paper and write a clean air act for the 21<sup>st</sup> Century.

Respectfully submitted,

Louis Zeller Blue Ridge Environmental Defense League PO Box 88 Glendale Springs, NC 28629 (336) 982-2691

#### Attachment

Statement of Dr. George D. Thurston, Sc.D. to the Committee on Health, Education, Labor and Pensions Subcommittee on Public Health of the United States Senate, Re: The Clean Air Act and the Human Health Effects of Air Pollution from Utility Power Plants, September 3, 2002, <a href="https://www.senate.gov/~edwards/issues/enviro/epa\_thurston.html">www.senate.gov/~edwards/issues/enviro/epa\_thurston.html</a>