BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE

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Dear Mr. Derting:

Comments regarding Draft Clean Air Act Title V permit #SWRO10236 for the American Electric Power Clinch River Power Plant in Russell County, Virginia

I am submitting comments on behalf of both the Board of Directors of the Blue Ridge Environmental Defense League (BREDL) and the Steering Committee of Virginia Forest Watch (VAFW). BREDL is a regional, community-based, non-profit environmental organization. Our founding principles are earth stewardship, environmental democracy, social justice, and community empowerment. BREDL has chapters throughout the Southeast, including five in Virginia. VAFW is a grassroots based coalition of individuals and environmental groups organizing throughout the Commonwealth of Virginia. Our mission is "to maintain and restore the natural ecology and biodiversity of woodlands across Virginia through education and citizen participation."

BREDL and VAFW members may submit additional comments. All comments should be accepted.

Title V Draft Permit is invalid

This Title V Permit is invalid as presented in its Draft form because there is an outstanding violation of PSD. The Virginia Dept. of Environmental Quality has failed to require this facility to obtain a PSD permit despite upgrades at the plant which were not "routine maintenance, repair, or replacement". We understand that this issue is still in active litigation.

A March 19, 1996 AEP letter declares:

> "Only Clinch River Unit 1 was able to achieve the 235 MW Capacity due to the new Primary Superheater, Secondary Superheater and Reheat Superheater Sections of the Unit 1 Boiler, installed in the Fall 1995.
>
> Unit's 2 and 3 continue to have the reduced Unit Capacity due to the new High Pressure/Reheat Turbine Assembly installed in the Spring 1993 on Unit 2 and the Fall 1992 on Unit 3. These Units will receive the new sections in their Boiler's in the near future which will increase the Capacity of both Units."[1]

In 1999, New York notified American Electric Power of its intent to sue AEP for violations of the NSR and PSD provisions of the Clean Air Act regarding the Clinch River Power Plant. According to the New York Attorney General:

> "In approximately 1995-1996, the company replaced the primary, second and reheat superheater banks on Units 1,2 and 3 at the plant. As a result of this extensive work, nitrogen oxide (NOx) emissions at the plant increased from 26,375 tons in 1995 to 35,086 tons in 1997, an increase of approximately 33 %. Sulfur Dioxide (SO2) emissions increased by a comparable amount. Thus, the rebuilding of the superheaters resulted in a significant net emissions increase (as defined in 9 VAC 5-80-1710) in emissions of SO2 and NOx from the plant, thereby triggering the PSD requirements."[2]

As Eliot Spitzer, Attorney General of the State of New York, further stated:

> "We believe that these modifications were subject to the pre-construction review requirements of the PSD program. However, the record indicates that the company failed to apply for a PSD permit for the modifications, and has not, to this date, installed BACT to control emissions of NOx and SO2 from the plant or complied with any other substantive requirements of PSD review. Further, the company failed to assess the impact of the increased emissions on interstate air quality, thereby depriving both environmental regulatory agencies and the public of the opportunity to evaluate the impact of the proposed emissions on air quality in downwind states."[3]

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[1] American Electric Power March 19, 1996 letter from Kerry Eans, Plant Engineer
[2] New York Attorney General September 15, 1999 Notice of Intent to Sue
[3] Ibid.

The November 22, 1999 U.S. EPA Notice of Violation states:

> "For each of the modifications…that occurred at the Clinch River Power Plant, neither AEP nor Appalachian Power Company obtained a PSD permit pursuant to 40 CFR 52.21, or a minor NSR permit pursuant to former Va REG. 120-08-01.C and current 9 Va. Admin. Code 5-80-10.C. In addition, for modifications after 1992, no information was provided to the permitting agency of actual emissions after the modification as required by 40 CFR 52.21(b)(21)(v)."[4]

In addition, the New York Attorney General pointed out in July 2001 comments to EPA:

> "the NSR enforcement actions do not rely on a new interpretation of the law, but rather on regulations from the 1970s and EPA guidance memoranda from the late 1980s. In fact, the most recent NSR rules were issued by EPA almost 10 years ago, in 1992, during the first Bush Administration. The NSR program only requires pollution controls to be installed if there will be a significant net pollution increase from a project, so efficiency upgrades alone are not at all inhibited. Arguments that the NSR program prevents projects that could increase electricity without increasing pollution are simply untrue." The New York Attorney General further wrote, "Industry also argues that the replacement of major power plant components such as reheaters, superheaters, and pulverizers, constitutes "routine maintenance" and thus is exempt from the NSR requirements. This argument, however, is contradicted by industry's own documents, showing that these replacements took months to undertake, costs millions of dollars, required thousands of hours to complete, were conducted pursuant to "life extension" programs, and had never been undertaken before on the units at issue."[5]

Phase II Acid Rain Permit

AEP has been revising its NOx Averaging Plan on an annual basis. This has included both changes in projected emissions and the number of AEP units included in the Acid Rain Permit Averaging Plan. While the emission allowances in the Acid Rain permit are not limits, per se, those figures do indicate the emissions trend of the facility. Any adjustments in the Acid Rain permit have required a reopening and public review of that permit. Since the Acid Rain permit is incorporated into the Title V permit, we feel that DEQ should notify all who comment on the Title V permit whenever the Title IV permit is reopened, especially since AEP has indicated this will be an annual occurrence.

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[4] November 22, 1999 U.S. EPA Notice of Violation – EPA-CAA-2000-HQ-0006

[5] Comments of Eliot Spitzer, Attorney General of the State of New York, on the U.S. Environmental Protection Agency's 90-Day Review of the Clean Air Act New Source Review Program July 2001 - http://www.oag.state.ny.us/press/statements/epa_clean_air.html

PM2.5

On page 1 - This facility is a major source of both PM10 and PM2.5. 1999 EPA AIR data shows emissions of 283 tons per year for this facility. PM2.5 should be added to the permit.

Visible Emissions

As per 9 VAC 5-40-80. Standard for visible emissions. Unless specified otherwise in this part, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity. Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section.

Opacity monitor reporting by this facility shows numerous exceedences of the 20 percent opacity standard in quarterly opacity reports. The Draft Title V Permit has not included any procedures for reducing exceedences.

This facility uses a transmissometer designed to continuously monitor the opacity of effluent in a duct or stack. The Title V permit, under Fuel Burning Equipment, needs to include an alternative method (such as trained observer) to determine opacity in the case of instrument failure. This should be listed under Monitoring and Recordkeeping.

Current Trimming Software

BREDL has discovered that in North Carolina, Both Duke Energy and Carolina Power and Light use software which ramps down the voltage on the electrostatic precipitators (ESPs) at their fossil-fueled plants. This practice known as "current trimming" keys voltage levels to opacity levels. This practice is dangerous and must be prohibited. The reasons are a) the plants should be considered in violation of particulate emission standards with ESPs used at less efficiency than in stack testing; b) opacity is unrelated to particulate emissions; c) current trimming violates the general duty clause to use pollution control devices at peak efficiency; d) current trimming software should trigger NSPS; e) current trimming has enormous impacts on PSD. [6]

BREDL and VAFW formally request that DEQ inspect the AEP Clinch River facility to determine if this type of energy management software is utilized. In North Carolina, the state inspectors found that during particulate emissions tests the "ESPs were documented to be operating at full power, apparently not controlled by the power-minimization software. This did not appear to be the case when the boilers were observed during

[6] BREDL comments from http://www.bredl.org/air/cpl_titleV.htm and http://www.bredl.org/air/riverbend-danriver.htm

subsequent inspections....". The Title V Permit should include language that prohibits this practice.

Attainment Area Status

The monitoring for criteria pollutants is inadequate. There are no criteria pollutant monitors in the immediate area of the Clinch River facility. The closest Virginia monitors indicate problems in meeting the new particulate matter and ozone health standards. 3-year averages of the fourth daily maximum for the 8-hour ozone standard at the Rural Retreat ozone monitor show that the area will not meet attainment requirements for ozone. In addition, the Bristol particulate matter monitor readings indicate that the area will not meet attainment requirements for particulate matter. These data demonstrate a critical need for more monitoring near the Clinch River facility.

Virginia Impacts

BREDL and VAFW are highly concerned over the worsening of Virginia's natural environment. It has been well documented that ozone pollution is severely impacting our region's forests, especially in higher elevations such as the Mt. Rogers area. Outdated, uncontrolled power plants, such as the Clinch River facility, are the main contributors to this demise. In 1999, the Clinch River facility ranked first in the amount of NOx emissions. The plant ranked fourth in SO2 emissions, seventh in PM2.5 emissions and eleventh in PM10 emissions.

The rate of acid deposition in Virginia's mountains is among the highest in the country. From 1985 through 1997, nitrogen oxides from stationary and mobile sources have increased by 50 percent.[7] Increases in NOx emissions, even if not sustained, can have severe impacts.

> "Recent declines in fish population and species diversity indicate, however, that episodic acidification is taking its toll. In a University of Virginia study on trout reproduction in the Southern Appalachian Mountains, researchers found nearly 100 percent death in the trout eggs and newly hatched fish after a severely acidic rainfall and steep increase in stream water acidity. This sharp acidic surge, due to acidic rainfall, altered stream chemistry, resulting in conditions fatal to fish at young and vulnerable stages. [Trout Unlimited, 1998.]"

In a 1995 EPA Report titled "Acid Deposition Standard Feasibility Study, Report to Congress", the EPA found that the eastern portion of the U.S. is most at risk from

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[7] *Power That Pollutes: A Status Report on Virginia's Outdated Power Plants,* Southern Environmental Law Center/The Izaak Walton League, April 2000

continued acid deposition. The targeted areas were the lakes and streams of the Appalachian Mountains.

The Virginia Trout Stream Sensitivity Study, which was released in October 2000, conducted by Trout Unlimited and analyzed by University of Virginia scientists shows that many of Virginia's streams continue to suffer from acid rain. It showed that the number of "chronically acid" streams increased and will continue to increase. The number of dead streams is expected to more than double in the next 40 years.

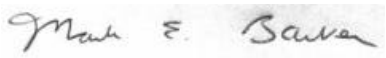
According to the Southern Appalachian Mountains Initiative (SAMI), "the southeastern United States has more frequent episodes of air stagnation than most other areas of the country. During these periods, pollutants can remain over the mountains for several days at a time. The naturally high humidity of the area magnifies the haze generated by airborne particles."

Conclusion and Request for Public Hearing

We formally and respectfully request that this Title V Permit be denied because of an outstanding PSD violation, continuing exceedences of the opacity standard, and inadequate monitoring for criteria pollutants.

The Clinch River Power Plant is one of the top stationary sources for emissions in Virginia. There is a high level of interest and concern regarding this facility. Therefore, we respectfully request a public hearing be held.

Sincerely submitted,



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