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May 28, 2009

Via Certified and Electronic Mail

Trina Vielhauer, Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
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Jeffery F. Koerner, Administrator
New Source Review Section
Florida Department of Environment Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400
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RE: Seminole Generating Station
Project No. 1070025-011-AC (PSD-FL-375A)
PSD Permit Revisions and Recognition of Unit 3 as a Minor HAP Source

Dear Ms Vielhauer and Mr. Koerner,

I am writing to notify the Florida Department of Environment Protection (FDEP) about an April 30, 2009, letter sent from the U.S. Environmental Protection Agency, Region 4, to the North Carolina Department of Environmental and Natural Resources, which is relevant to Seminole Electric Cooperative's request that FDEP recognize Unit 3 of the Seminole Generating Station as a minor source of hazardous air pollutants (HAPs). (EPA letter attached hereto.)

On December 22, 2008, Seminole submitted an application to modify its original air construction permit for the proposed new Unit 3 at the existing Seminole Generating Station in Palatka, Florida. One of the purposes of the application is to recognize the Unit 3 project as a minor source of hazardous air pollutants. The application contains proposed potential to emit provisions that are intended to enable the source to avoid "major source" status for HAPs and

thereby avoid case-by-case MACT review, which would otherwise be required by 40 C.F.R. §§ 63.40-63.44.

The Region 4 letter is highly relevant to Seminole's permit application. It states:

> On March 15, 2009, the North Carolina Department of Air Quality (NCDAQ) issued permit No 04044T29 and related technical background documents for the Duke Energy Carolinas (Duke), LLC – Cliffside Steam Station. ...
>
> To demonstrate that the source operates below the HAP applicability threshold of a major source, we recommend that the monitoring plan currently outlined by the State of North Carolina be modified to require continuous emissions monitoring sufficient to verify compliance with the area source determination at all times. Specifically, we recommend that such monitoring include installation of a hydrogen chloride (HCl) continuous emissions monitoring system (CEMS). While there are monitoring alternatives to an HCl CEMS, an HCl CEMS is expected to provide the most reliable assurance of compliance.
>
> Our concern arises from questions and uncertainties associated with the unit's operating assumptions. For example, the current analysis specifies that both spray dry absorber and the flue gas desulfurization units (scrubber systems) have to achieve a very high removal efficiency (99.31%) at 3209 parts per million (ppm) coal chlorine content for the Unit to stay below major source thresholds. This removal efficiency is sufficiently tight that a small deviation of the annual removal efficiency, such as might occur during periods of start-up, shut-down, or malfunction, would cause the unit's emissions to exceed the major source threshold for HCl.
>
> These technological considerations and the associated assumptions make it prudent to continuously monitor HCl on Unit 6 to assure compliance with Unit 6's area source status.

Based on the reasoning in the EPA Region 4 letter, FDEP should require Seminole to install HCl CEMS on Unit 3 of the Seminole Generating Station. Seminole relied on the Cliffside Steam Station permit application in support of its permit application. Thus any developments in that permit application are relevant to an evaluation of Seminole's application. Like Cliffside, Seminole offers extremely optimistic operating assumptions regarding removal efficiency. Seminole estimates that HCl emissions control will be 99.7% efficient. As FDEP noted in its Request for Additional Information, if this projection is off by 0.1%, the facility would emit 11.6 tons of HCl per year and the project would qualify as a major HAP source. Given the parallels in the Cliffside and Seminole minor source applications, Region 4 is likely to raise the same objections if FDEP does not require HCl CEMS for the Seminole facility. Therefore, based on these technological considerations and the associated assumptions, FDEP should require Seminole to continuously monitor HCl on Unit 3 of the Seminole Generating Station.

If you have any questions regarding this matter, please feel free to contact me at 415-977-5725 or joanne.spalding@sierraclub.org.

Sincerely,

Joanne Spalding
Senior Attorney
Sierra Club

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

APR 30 2009

Mr. Dee Freeman
Secretary
North Carolina Department of
Environment and Natural Resources
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

Dear Secretary Freeman: Dee:

On March 13, 2009, the North Carolina Department of Air Quality (NCDAQ) issued Permit No. 04044T29 and related technical background documents for the Duke Energy Carolinas (Duke), LLC - Cliffside Steam Station. Included in these documents is a determination by NCDAQ that Unit 6 at Cliffside is an area source for Hazardous Air Pollutants (HAPs). While NCDAQ has included measures to strengthen the permit, the U.S. Environmental Protection Agency is concerned about the Unit 6 HAP potential to emit (PTE) analysis and permit conditions NCDAQ established to ensure continued HAP area source status for this unit.

To demonstrate that the source operates below the HAP applicability threshold of a major source, we recommend that the monitoring plan currently outlined by the State of North Carolina be modified to require continuous emission monitoring sufficient to verify compliance with the area source determination at all times. Specifically, we recommend that such monitoring include installation of a hydrogen chloride (HCl) continuous emission monitoring system (CEMS). While there are monitoring alternatives to an HCl CEMS, a HCl CEMS is expected to provide the most reliable assurance of compliance.

Our concern arises from questions and uncertainties associated with the unit's operating assumptions. For example, the current analysis specifies that both the spray dry absorber and the flue gas desulfurization units (scrubber systems) have to achieve very high removal efficiency (99.913%) at 3209 parts per million (ppm) coal chlorine content for the Unit to stay below major source thresholds. This removal efficiency is sufficiently tight that a small deviation of the annual removal efficiency, such as might occur during periods of start-up, shutdown, or malfunction, would cause the unit's emissions to exceed the major source threshold for HCl.

These technological considerations and the associated assumptions make it prudent to continuously measure HCl on Unit 6 to assure compliance with Unit 6's area source status. I appreciate your continued work to improve and protect air quality in North Carolina. If you have any questions or wish to discuss this further, please contact me or Carol L. Kemker, Acting Director, Air, Pesticides and Toxics Management Division, at (404) 562-8975.

Sincerely,

A. Stanley Meiburg
Acting Regional Administrator

cc: B. Keith Overcash, P.E., NCDAQ