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October 12, 2009

The Honorable Charles W. Albertson, Co-Chair The Honorable Daniel G. Clodfelter, Co-Chair The Honorable Lucy T. Allen, Co-Chair The Honorable Pryor A. Gibson, Co-Chair Environmental Review Commission

Subject: Emissions Reductions Beyond the Clean Smokestacks Act

Dear Senator Albertson, Senator Clodfelter, Representative Allen, Representative Gibson:

SL2002-4 Section 11 (attached) instructs the Environmental Management Commission (EMC) to study the desirability of requiring and the feasibility of obtaining reductions in emissions of oxides of nitrogen (NO_x) and sulfur dioxide (SO_2) beyond those required by the Clean Smokestacks Act (CSA). The EMC is also to report its findings and recommendations annually to the General Assembly and the Environmental Review Commission.

Since the CSA was passed in June 2002, significant Federal regulatory changes have occurred. The federal Clean Air Interstate Rule (CAIR) was promulgated to require North Carolina's neighboring states to achieve major reductions in NO_x and SO_2 —reductions that require installation of state-of-the-art control equipment. Installation of state-of-the-art emissions control equipment was already required by the CSA; however CAIR may require controls on additional generating units. Although on July 11, 2008 the D. C. Circuit Court vacated CAIR, on December 23, 2008 the Court granted USEPA's petition to remand the case without vacatur, allowing CAIR to remain in effect until a replacement rule is promulgated. On August 7, 2009, consistent with the Court's order, USEPA proposed approval of North Carolina's Clean Air Interstate Rules (NC-CAIR) into the State Implementation Plan (SIP). This approval is based, in part, on North Carolina's use of the NO_x and SO_2 budgets outlined in the remanded rule. CAIR NO_x and SO_2 emissions allowances for North Carolina utilities are even lower than those set by the Clean Smokestacks Act. Final SIP approval by USEPA will likely occur in late October 2009.

Environmental Review Commission Co-Chairs October 12, 2009 Page 2 of 3

On March 12, 2008, USEPA promulgated a more stringent 8-hour standard for ozone, revising the standard for the first time in more than a decade. In March 2009, the North Carolina Division of Air Quality made recommendations to USEPA on what areas of the state should be designated as nonattainment under the new standard. However, on September 16, 2009 the USEPA announced it would reconsider the 2008 ozone standard. The USEPA will propose a more-stringent ozone standard in December 2009 and issue a final decision by August 2010. The state's attainment demonstration SIP will be due to USEPA in December 2013 identifying any new NO_x control strategies that may be needed to attain the new standard. That analysis may require additional targeted emission reductions beyond CSA in certain critical areas in North Carolina and in other states.

On July 15, 2009 USEPA proposed a revision to the current annual NO₂ standard by adding a 1hour daily NO₂ standard. Although this proposal seems to be aimed at emission reductions from sources other than utilities, the North Carolina Division of Air Quality is studying the potential effect of this new proposal on all emission sources.

In judicial actions pursuant to Section 10 of the Clean Smokestacks Act authorizing other actions to achieve emissions reduction in NO_x and SO_2 from other states and entities, the North Carolina Attorney General on January 20, 2006 filed suit alleging that NO_x and SO_2 emissions from Tennessee Valley Authority (TVA) power plants were inadequately controlled and created a public nuisance. On January 13, 2009 the federal District Court in Asheville found four TVA coal-fired generating facilities within 100 miles of North Carolina to be creating a public nuisance in the state. The court ordered that each unit at each of these facilities meet emission limits for NO_x and SO_2 consistent with the installation and continuous operation of modern pollution controls no later than December 2013. TVA has appealed the decision of the Court.

In other actions by the North Carolina Attorney General, a petition was filed under §126 of the Clean Air Act requesting that USEPA impose NO_x and SO_2 controls on large coal-fired utility boilers in 13 upwind states that impact air quality in North Carolina. Although USEPA originally denied both the petition and administrative reconsideration, the State petitioned the D.C. Circuit for judicial review. Based in part upon the outcome of the CAIR case, USEPA conceded that it must reconsider its earlier denial and the court remanded the matter back to the USEPA on March 5, 2009.

In April 2008, USEPA exempted sources of NO_x in Georgia from any summertime NO_x emissions cap. The NO_x cap had been required by a separate federal rule designed to help downwind states reduce ambient levels of ozone. Sources in Georgia are also exempt from summertime NO_x controls for ozone under the remanded CAIR. On June 20, 2008 the North Carolina Attorney General petitioned the D.C. Circuit for a review of USEPA's April 2008 action to exempt Georgia and a decision is expected on this petition in early 2010. The outcome of this case could impact the extent to which Georgia sources are controlled or participate in Federal cap and trade programs. The Division of Air Quality will need to analyze the downwind impacts in North Carolina as they study whether additional reductions are needed beyond CSA.

SL2009-390, passed in the 2009-2010 legislative session, has the potential to further reduce power plant emissions of NO_x and SO₂ from Progress Energy. SL2009-390 amends G.S. §62-110.1 by allowing an expedited certification process through the Utilities Commission when coal-fired generating units are retired and replaced by natural gas generating units. When compared to coal, natural gas will achieve reductions of NO_x and SO₂ and other air pollutants, promoting cleaner air. Progress Energy has formally announced that three coal-fired boilers at its Lee Plant in Wayne Environmental Review Commission Co-Chairs October 12, 2009 Page 3 of 3

County, N.C. will be replaced by gas-fired turbines by 2013. It is anticipated that federal climate change legislation may also result in further reductions of NO_x and SO_2 emissions as utility companies decide how to most economically address future required reductions of carbon dioxide emissions.

Given the recent actions by the state, the federal government, the Asheville federal District Court and the D.C. Circuit Court affecting power plant emissions and NO_x and SO_2 regulation, and given possible federal climate change legislation, it is recommended that the study of further State action to achieve additional reduction of these air contaminants be presented on December 1, 2013. That reporting date will:

- Allow the affected public utilities in North Carolina time to implement their control strategies to meet the compliance deadline under CSA,
- Give the Division of Air Quality time to quantify air quality impacts from CSA compliance, and
- Give industry and the Division time to implement new Federal rules and court actions.

Any reports made prior to the implementation of these control strategies would likely provide little new or beneficial information beyond the Division's ongoing analyses to meet other obligations, such as the federal Clean Air Act requirements. Furthermore, since evolution of new control technologies is fairly long-term, I recommend that reporting thereafter be on a three-year basis.

In the meantime, the EMC will continue to provide annual updates on the progress of past actions as well as assessments of other non-CSA activities that will reduce SO2 and NOx in North Carolina.

Sincerely,

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Stephen T. Smith Chairman N.C. Environmental Management Commission

STS/lpc

Attachment

cc: Keith Overcash, DAQ Sheila Holman, DAQ Donnie Redmond, DAQ Elizabeth Biser, DENR

GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2001 SESSION LAW 2002-4 SENATE BILL 1078

AN ACT TO IMPROVE AIR QUALITY IN THE STATE BY IMPOSING LIMITS ON THE EMISSION OF CERTAIN POLLUTANTS FROM CERTAIN FACILITIES THAT BURN COAL TO GENERATE ELECTRICITY AND TO PROVIDE FOR RECOVERY BY ELECTRIC UTILITIES OF THE COSTS OF ACHIEVING COMPLIANCE WITH THOSE LIMITS.

The General Assembly of North Carolina enacts: ...

SECTION 11. The Environmental Management Commission shall study the desirability of requiring and the feasibility of obtaining reductions in emissions of oxides of nitrogen (NOx) and sulfur dioxide (SO2) beyond those required by G.S. 143-215.107D, as enacted by Section 1 of this act. The Environmental Management Commission shall consider the availability of emissions reduction technologies, increased cost to consumers of electric power, reliability of electric power supply, actions to reduce emissions of oxides of nitrogen (NOx) and sulfur dioxide (SO2) taken by states and other entities whose emissions negatively impact air quality in North Carolina or whose failure to achieve comparable reductions would place the economy of North Carolina at a competitive disadvantage, and the effects that these reductions would have on public health, the environmental Management Commission may consult with the Utilities Commission and the Public Staff. The Environmental Management Commission shall report its findings and recommendations to the General Assembly and the Environmental Review Commission annually beginning 1 September 2005.

In the General Assembly read three times and ratified this the 19th day of June, 2002.

(Note: The initial reporting date was changed to 1 September 2007 by Senate Bill 1590, Section 12, Session 2005.)