



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

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OFFICE OF
AIR AND RADIATION

Thomas C. Moorer
Manager, Environmental Affairs,
Chemistry and Radiological Services
Southern Nuclear Operating Company, Inc.
42 Inverness Center Parkway
Birmingham, Alabama 35242

Re: Petition for an Exemption from Part 75, Appendix E Testing for Units 1A through 1F at the Allen B. Wilson Combustion Turbine Plant (Facility ID (ORISPL) 6258)

Dear Mr. Moorer:

The United States Environmental Protection Agency (EPA) has reviewed the June 26, 2012 petition submitted under 40 CFR 96.175 and 75.66 by the Southern Nuclear Operating Company (SNC), in which SNC requested an exemption from Part 75, Appendix E testing for Units 1A through 1F at the Allen B. Wilson Combustion Turbine Plant. EPA approves the petition, with conditions, as discussed below.

Background

The Allen B. Wilson Combustion Turbine Plant, which is located in Burke County, Georgia, is owned and operated by subsidiaries of SNC's corporate parent, Southern Company (collectively, Southern). The facility consists of six 60 megawatt oil-fired combustion turbines (Units 1A, 1B, 1C, 1D, 1E, and 1F). According to SNC these units are subject to the Clean Air Interstate Rule (CAIR) annual SO₂ and NO_x emissions trading programs. Therefore, Southern is required to continuously monitor and report, among other things, SO₂ and NO_x mass emissions for these units in accordance with 40 CFR Part 75. To meet these requirements for these units, Southern has implemented the optional emissions data protocols in Appendices D and E of Part 75 for SO₂ and NO_x, respectively.

Sections 2.1 and 2.2 of Appendix E require an initial performance test and periodic retests of the NO_x emission rate of each affected unit. For each performance test, concurrent measurements of NO_x emission rate and heat input rate are made at four load levels, and a fuel-specific correlation curve is developed. The retests are required at least once every five years (20 calendar quarters). Wilson Units 1A through 1F completed their initial Appendix E performance tests in the third quarter of 2007. Therefore, the retests of these units are due by the end of the third quarter of 2012.

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However, for the past three years Units 1A through 1F have operated at annual capacity factors of 1% or less¹ and have reported SO₂ and NO_x emissions well below the annual threshold values for low mass emissions (LME) units specified in 40 CFR 75.19(a)(1)(i)(A).² In the June 26, 2012 petition, SNC has stated its intention to submit an application for LME status for these units before the end of 2012 and to begin using the LME emissions calculation methodology on January 1, 2013. SNC has therefore requested an exemption from the requirement to perform Appendix E retests of the units by the end of the third quarter of 2012, because the LME methodology does not require NO_x emission rate testing, and if LME status is obtained Southern would discontinue the use of Appendix E at the Wilson units at the end of 2012. According to SNC, if Units 1A through 1F operate in the fourth quarter of 2012, Southern will use standard Part 75 missing data routines to report SO₂ and NO_x emissions.

EPA's Determination

EPA approves SNC's petition for an exemption from performing third quarter 2012 Appendix E retesting of Allen B. Wilson Units 1A, 1B, 1C, 1D, 1E, and 1F, subject to the conditions stated below. The basis of this approval is two-fold:

- (1) Based on the number of reported operating hours for these units in 2009 through 2011, the Wilson units clearly qualify for LME status. Assuming that the units operated at their maximum rated hourly heat input (840 mmBtu/hr) for every operating hour in 2009, 2010, and 2011, and using the appropriate default SO₂ and NO_x emission rates from 40 CFR 75.19 Tables LM-1 and LM-2 in the calculations,³ the highest number of annual tons of SO₂ and NO_x emitted by any of the Wilson units in any of those years would have been 8.2 tons and 19.6 tons, respectively, well below the respective LME thresholds.
- (2) Historically, the Wilson units have operated very little in the fourth quarter of the year. For calendar years 2009, 2010, and 2011, the units, on average, operated for only six hours in the fourth quarter.

Conditions of Approval

The conditions of this approval are as follows:

- (1) In accordance with 40 CFR 75.19(a)(2) and 75.63(a)(1)(ii), Southern shall submit applications for LME status for Allen B. Wilson Units 1A, 1B, 1C, 1D, 1E, and 1F no later than 45 days prior to January 1, 2013;

¹ The highest numbers of operating hours reported for any of the individual Wilson units in 2009, 2010, and 2011, respectively, were 36 hours, 39 hours, and 22 hours.

² To qualify for LME unit status, a unit subject to the CAIR SO₂ and annual NO_x programs must emit no more than 25 tons of SO₂ and less than 100 tons of NO_x annually.

³ The units burn diesel fuel; therefore, the default SO₂ and NO_x emission rates from Tables LM-1 and LM-2 are, respectively, 0.5 lb/mmBtu and 1.2 lb/mmBtu.

- (2) Southern shall begin using the LME methodology in 40 CFR 75.19 for Units 1A through 1F beginning on January 1, 2013;
- (3) Southern shall make appropriate modifications to the electronic monitoring plans required for Units 1A through 1F under 40 CFR 96.174 showing the transition from Appendix D and E monitoring methodologies to the LME methodology;
- (4) If Units 1A through 1F operate in the fourth quarter of 2012, Southern must report the fuel-specific maximum potential NO_x emission rate (as defined in 40 CFR 72.2) for each operating hour; and
- (5) Southern shall provide EPA with a copy of the written approval of the Georgia Department of Natural Resources, Environmental Protection Division, required for the requested exemption from Part 75, Appendix E retesting requirements pursuant to 40 CFR 96.175(b)(1). (This copy should be directed to the attention of Carlos Martínez, whose contact information is provided below.)

EPA reiterates that if, for any reason, Southern should fail to meet any of the stated conditions, the requirement to perform Appendix E retests of the Wilson units no later than September 30, 2012 will remain in effect.

EPA's determination relies on the accuracy and completeness of the information provided by SNC in its June 26, 2012 petition, and is appealable under 40 CFR Part 78. If you have any questions regarding this determination, please contact Carlos R. Martinez at (202) 343-9747 or by e-mail at martinez.carlos@epa.gov. Thank you for your continued cooperation.

Sincerely,



Richard Haeuber, Acting Director
Clean Air Markets Division

cc: David McNeal, USEPA Region IV
DeAnna Oser, Georgia EPD
Carlos R. Martínez, CAMD
Craig Hillock, CAMD