

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

NOV 25 2003

OFFICE OF AIR AND RADIATION

Mr. Bruce McClenathan Authorized Account Representative Conectiv Atlantic Generation, LLC Director of Generation P.O. Box 6066 Newark, DE 19714-6066

Re:

Petition to Retain Low Mass Emissions Unit Status for Units 002001, 003001, and 004001 at the Cedar Station (Facility ID (ORISPL) 002380)

Dear Mr. McClenathan:

This is in response to your June 6, 2003 petition under § 75.66(a) in which Conectiv Atlantic Generation, LLC (Conectiv) requested permission to retain low mass emissions (LME) unit status under §75.19 for three units at the Cedar Station. During the 2002 ozone season, each of the units in question exceeded the 50-ton nitrogen oxides (NO<sub>x</sub>) emission limit in §75.19(a)(1)(i)(A)(3), resulting in disqualification from using the LME methodology. EPA approves the petition, with conditions, as discussed below.

## Background

Units 002001, 003001 and 004001 at Conectiv's Cedar Station in New Jersey are aircraft derivative combustion turbines. These units are operated at times of peak energy demand, as directed by the Pennsylvania-New Jersey-Maryland Interconnection, LLC. The units combust primarily diesel fuel. The units are subject to the NO<sub>x</sub> Budget Program, under N.J.A.C. 7:27-31.14(i), which requires Conectiv to continuously monitor and report NO<sub>x</sub> mass emissions and heat input for these units during each ozone season (i.e., from May 1<sup>st</sup> through September 30th), in accordance with Subpart H of 40 CFR Part 75.

Under Part 75, there are three possible compliance options for  $NO_x$  emission monitoring. The owner or operator may either: (1) install continuous emission monitoring systems (CEMS); or (2) use the methodology in Appendix E (for oil- and gas-fired peaking units, only); or (3) use the low mass emissions (LME) methodology in § 75.19 (for qualifying oil- and gas-fired units, only). Units 002001, 003001 and 004001 initially qualified as LME units, and Conectiv elected

to use this methodology to satisfy the emission monitoring requirements of the NO<sub>x</sub> Budget Program.

In the 2002 ozone season, Units 002001, 003001, and 004001 failed to operate within the 50-ton  $NO_x$  ozone season limit specified in § 75.19(a)(1)(i)(A)(3). As a result, these units were disqualified from using the LME methodology and, in accordance with § 75.19 (b)(2)(ii), Conectiv is required to install, certify, and report  $NO_x$  emissions data and heat input data from continuous monitoring systems that meet the requirements of § 75.12, no later than December 31, 2003. According to § 75.19(b)(5), when a unit loses its LME status, the unit may only re-qualify to use the LME methodology if at least three full ozone seasons of actual, monitored emissions data are obtained, showing that the unit emits no more than 50 tons of  $NO_x$  during the ozone season.

In the June 6, 2003 petition, Conectiv requested permission from EPA to retain LME status for Units 002001, 003001 and 004001, based upon the fact that water injection technology, which significantly reduces  $NO_x$  emissions, has been installed on each unit, pursuant to an Administrative Consent Order (NEA #020001-65001) from the New Jersey Department of Environmental Protection (NJDEP). In the June 6, 2003 petition, Conectiv also asked permission to use default  $NO_x$  emission rates of 0.254, 0.266, and 0.292 lb/mmBtu for Units 002001, 003001, and 004001, respectively, for the purposes of  $NO_x$  mass emission reporting. These emission rates were obtained by stack testing at full load after the  $NO_x$  emission controls were installed.

## EPA's Determination.

EPA conditionally approves Conectiv's request for the units at the Cedar Station to retain eligibility for monitoring as LME units under §75.19. EPA's approval is conditioned on Conectiv obtaining from NJDEP a federally enforceable permit limit of 50 tons of NO<sub>x</sub> emissions, per unit, per ozone season for each of the units. Under §75.19(b)(5), a unit may requalify for LME status only by collecting three years of actual, monitored data showing that the unit emits less than the applicable number of tons required for LME qualification. However, if Conectiv commits to, and obtains, a federally enforcable permit limit for each unit at the same tonnage level as required for LME status, that will provide significant assurance that the units will in fact operate within the tonnage limit. Under that circumstance, EPA maintains that requalification for LME status is appropriate without prior collection of three years of actual data.

If Conectiv's application for the permit modification is denied by NJDEP, then, Conectiv must install and certify monitoring systems that meet the requirements of Part 75 within six months (180 days) of the date on which the application is denied. If a federally-enforceable permit limit of 50 tons of  $NO_x$  emissions, per unit, per ozone season is not in place prior to May 1, 2004, the units will be immediately disqualified from using the LME methodology and Conectiv shall report the maximum potential  $NO_x$  emission rate and the maximum potential

hourly heat input for each hour of operation until either a CEMS or other Part 75-compliant monitoring methodology has been installed and certified.

EPA also notes Conectiv requested to use default  $NO_x$  emission rates of 0.254, 0.266, and 0.292 lb/mmBtu for Units 002001, 003001, and 004001, respectively, for the purposes of reporting under the  $NO_x$  Budget Program. This request is not necessary provided that Conectiv is able to retain LME qualification for these units. The fuel-and-unit specific default rates for a LME unit may be updated whenever appropriate testing is performed and reported in a manner consistent with the requirements of Part 75 (see § 75.19(c)(1)(iv)). Also note that, in accordance with § 75.19(c)(1)(iv)(H) and § 75.19(e)(5), these emission rates may only be reported for operating hours in which the water-to-fuel ratios are documented to be within the acceptable range of values defined in the quality-assurance plans for the units. When such documentation is unavailable, Conectiv must report the appropriate generic default  $NO_x$  emission rate from Table LM-2 in § 75.19.

EPA's determination relies on the accuracy and completeness of Conectiv's June 6, 2003 petition, and is appealable under Part 78. If you have any questions regarding this correspondence, please contact Matthew Boze at (202) 564-1975.

Sincerely,

Samuel Napolitano, Acting Director

Clean Air Markets Division

cc: Ann Zownir, EPA Region II John Preczewski, NJDEP Jim Klickovich, Conectiv Matthew Boze, CAMD