

Mr. Christopher Recchia
Executive Director
Ozone Transport Commission
Hall of the States
444 North Capitol Street – Suite 638
Washington, D.C. 20001

Re: OTC Candidate Control Measures for Electric Generating Units

Dear Mr. Recchia,

Conectiv Energy (Conectiv) wishes to take this opportunity to provide comment on a pair of control measures that the Ozone Transport Commission (OTC) is currently considering: one for electric generating units (EGUs) and the other for EGU peaking units. Within the Northeast Ozone Transport Region, Conectiv is responsible for operating approximately 4000 megawatts total generating capacity with facilities located in Delaware, Maryland, New Jersey, Pennsylvania, and Virginia. Of this total capacity, approximately 700 megawatts is comprised of peaking units. Any control measure implemented by the OTC is likely to have a profound effect on our operations.

Conectiv supports the efforts of the OTC in crafting a workable strategy designed to demonstrate compliance with the ambient air quality standard for ozone throughout the Northeast. Conectiv facilities have already significantly reduced emissions of nitrogen oxides (NO_x) in compliance with regulations that have taken effect within the past few years, and we expect to make further reductions in support of our common goal to address the ozone problem. Unfortunately, we do not believe that the EGU control measures currently proposed by the OTC have properly balanced the need for NO_x emission reductions with the interests of consumers, businesses, and industry to maintain a continuing supply of reliable and affordable electric power.

Specifically, Conectiv offers the following comments concerning the candidate EGU control measures:

1. In order to be effective, any program of emission controls that goes beyond those required by the CAIR rule must be implemented throughout a wider region than just the Northeast and Mid-Atlantic states.

The transport of air pollution from states outside the OTC region has long been an issue of concern. Even following implementation of the NO_x SIP Call, generators in many Midwest states continue to enjoy a competitive advantage over generators in the East due to disparities in environmental control requirements. Therefore, any additional control measures such as the so-called CAIR-Plus Program that are implemented for EGUs in the

East will enhance this disparity, leading to additional power imports from Midwestern states and further exacerbating the pollution transport problem. In fact, Conectiv is aware of plans for one new 765-kilivolt transmission line that will run from West Virginia to New Jersey which, if constructed, will allow for the importation of even more power than is presently possible given current transmission constraints.

Conectiv understands that representatives of the OTC states have been meeting on a collaborative basis over the past few months with representatives of certain Midwest states (e.g., Ohio, Indiana, Illinois, Michigan and Wisconsin) to explore the possibility of a “super-regional” CAIR-Plus program, and that future meetings are planned. Conectiv strongly endorses this effort, and further suggests that implementation of a CAIR-Plus program be predicated on the participation of all generators within a super-regional area that encompasses these Midwestern sources. Absent this participation, Conectiv believes that the air quality benefits associated with CAIR-Plus will be minimal, and will likely be offset to some degree by increased pollutant transport from outside the OTC region.

2. The OTC is attempting to implement additional control measures for fine particulate in the absence of a compelling reason to do so.

As stated in the EGU control measure summary developed by OTC, the stated rational for the NO_X and SO₂ control measures is that existing rules (CAIR and the Clean Air Mercury Rule) “do not provide reductions that are deep enough or soon enough to adequately address the sector’s contribution to ozone and fine particulate problems.” Conectiv understands that current air pollution control regulations already being implemented or that will be implemented in the coming years may not be enough to demonstrate compliance with the 8-hour ozone national ambient air quality standard (NAAQS) in the most densely populated areas of the OTC region. In this context, additional control measures are necessary in order to make progress toward full compliance with the NAAQS. However, Conectiv does not understand why the OTC also appears to be committed to evaluating additional control strategies for SO₂ that are related to addressing fine particulate matter (PM_{2.5}) problems. Such a strategy is not only unnecessary; it is inconsistent with the OTC’s mission.

The Ozone Transport Commission was formed under the Clean Air Act because Congress recognized that the ozone problem is a regional phenomenon and needed to be dealt with on a regional basis. Individual states, acting alone on a parochial basis, could not be counted on to take sufficient action to effectively address the problem. The fine particulate problem is similar to the ozone problem in that, to a large degree, it is caused by the transport of secondary precursor emissions (i.e., SO₂ and NO_X). Unlike the situation with the 8-hour ozone standard, however, the modeling performed to date by EPA indicates that, with one exception, the OTC region will be in attainment with the PM_{2.5} standard in 2010 after reductions from CAIR and existing Clean Air Act programs are achieved. The lone exception involves one small area in Western Pennsylvania that is impacted by local sources of PM_{2.5}. For this reason, Conectiv can see no justification for SO₂ control measures beyond those required by CAIR.

3. The OTC should abandon, or at least substantially modify, its proposal for EGU peaking units.

As mentioned previously, Conectiv operates approximately 700 megawatts of peaking capacity within the ozone transport region. Most of this capacity will be subject to the emission budget set forth in CAIR. Due to the limited utilization and low mass emissions typical of these units, Conectiv believes that it is inappropriate to place further controls on these units.

The OTC proposal for EGU peaking units contains two candidate control measures: the first involves the installation of water injection technology on these units by 2009, and the second requires that all existing aeroderivative turbines be replaced with newer dry-low NO_x based simple-cycle turbines by 2012. OTC estimates the incremental cost of control for the first option is approximately \$44,000 per ton. This cost came estimate came from a presentation that Conectiv made to the New Jersey Stationary Combustion Source Workgroup. The \$44,000 per ton estimate was the average cost to install water injection on eleven peaking units, amortized over 20 years. If we change the life of the controls from 20 years (2006-2025) to 7 years (2006-2012) the cost estimate increases to \$80,000/ton. If the life of the controls is reduced to 4 years (2009-2012) the cost estimate increases to \$124,000/ton. As NO_x control costs go, this is astronomical.

In addition to the exorbitant costs, Conectiv has three additional objections to the candidate control measures for EGU peaking units. First, OTC has provided no evidence in the form of modeling that the costs could be justified by the resulting improvements to air quality. OTC and its member states should perform modeling to determine the effectiveness of the proposed reductions. Second, the installation of water injection creates collateral increases in carbon monoxide. The increase in CO may trigger new source performance standards, new source review, and/or combustion turbine maximum achievable control technology standards, further raising the cost of compliance. Lastly, the control option of replacing existing generators with new units appears to be unprecedented, and Conectiv questions whether states would have the authority to impose such a requirement.

If the OTC continues to pursue additional NO_x reductions from EGU peaking units as part of a CAIR-Plus program, Conectiv strongly recommends that owners/operators of affected units be provided with the flexibility to obtain equivalent reductions from other sources, including reducing emissions at non-peaking units, surrendering banked allowances, or obtaining reductions from mobile sources.

4. Establish separate SO₂ emission limitations for residual oil-fired units.

The Phase 2 proposal calls for an SO₂ cap that is based on an assumed emission rate of 0.14 lb/mmBtu. Such a low limit is unreasonable and would force most residual oil-fired steam units to burn ultra low sulfur fuel along with natural gas to achieve compliance, reducing fuel diversity and driving up the cost of fuel. Installing flue gas desulfurization (FGD) on these units is an extremely costly option, and it is untested as there doesn't appear to be any existing oil-fired steam electric generating units in the U.S. equipped with FGD for control of SO₂ emissions. Most of these units are used for peaking or intermediate service, and the cost of installing FGD on oil-fired units burning relatively low sulfur oil would not be cost-effective when viewed on the basis of \$/ton of SO₂ removed. For this reason, Conectiv suggests that the OTC develop a separate SO₂ emission limitation for residual oil-fired units based on percent sulfur, which represents the lowest fuel sulfur content commercially available in sufficient quantities for this fuel.

If you would like to discuss the comments above, please contact me at 302-451-5077.

Sincerely,

M. Gary Helm
Sr. Environmental Coordinator
Conectiv Energy