## STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION





April 24, 2009

Gordon van Welie President and Chief Executive Officer ISO-NE One Sullivan Road Holyoke, MA 01040-2841

Re: Strategic Planning for Connecticut's Energy and Environmental Future

Dear Mr. van Welie:

I understand that ISO New England, Inc. (ISO-NE) is on the verge of making critical decisions about Connecticut's transmission system and generation resources. The path ISO-NE chooses will have a significant and persistent impact on Connecticut's air quality and energy infrastructure. Connecticut Department of Environmental Protection (CTDEP) has appreciated your willingness to hear our concerns about the impact of the regional bulk power system on environmental quality, so that we might both make decisions cognizant of the interrelationships of fulfilling reliability needs, furthering our air quality goals, and controlling costs for ratepayers. In this spirit of informed decision making, I would like to set out key elements of Connecticut's air quality plans. While these plans may not be evident from our formal rulemaking processes at this time, we are actively developing new strategies to reduce emissions from electric generating units (EGUs), and our intentions may have some bearing on how you choose to proceed.

CTDEP's focus remains centered on the need to attain and maintain the health-based national ambient air quality standards (NAAQS), which are adopted by the U.S. Environmental Protection Agency (EPA) and periodically revised based on scientific advances concerning the health impacts of pollutant exposures. EPA recently tightened the NAAQS for ozone and fine particulate matter, beginning a new planning cycle for each pollutant, which involves determining whether and to what degree the state's air deviates from the new NAAQS, identifying the magnitude of emissions reductions needed to attain the NAAQS, developing control strategies, and adopting regulations to implement the control strategies.

Compliance with the ozone NAAQS is particularly challenging. The entire State of Connecticut is designated as nonattainment for the 1997 8-hour ozone NAAQS, and EPA is now in the process of designating the entire state nonattainment for the more stringent 2008 8-hour ozone NAAQS, meaning that approximately 4 million people are forced to breathe unhealthy air until Connecticut and upwind states take steps to reduce pollutant emissions to a level sufficient to meet the NAAQS. To meet the 1997 ozone NAAQS, we have implemented a wide array of control strategies upon a range of industrial activities, beginning with those strategies with the lowest cost and yielding the highest emissions reductions. In collaboration with other states in the Northeast, we are now focused on determining exactly what level of emissions reductions

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will be necessary to meet the 2008 8-hour ozone NAAQS and developing the requisite control strategies. Preliminary modeling indicates that nitrogen oxide (NOx) emissions may need to be halved to achieve the 2008 ozone NAAQS. In accordance with the federal Clean Air Act, we expect to have regulations in place that implement control strategies no later than 2012.

Reducing emissions from the power generation sector is a key component of our 2008 ozone NAAOS attainment strategy. In the past, we have implemented seasonal restrictions on NOx emissions from large EGUs and boilers, including a cap-and-trade program. We are now working not only to update these existing control strategies with more stringent emissions limitations, but also to develop new approaches that take into account daily fluxes in emissions and address multi-pollutant issues. On the highest electric demand days (HEDD) of summer, Connecticut's NOx emissions increase significantly because load-following boilers operate more than on typical electric demand days. See the attached figure where these load-following boilers are identified along with the associated emissions and percent operating times. CTDEP has agreed with other states in the region to adopt a mechanism to achieve a reduction of 11.7 tons of NOx per HEDD, a significant amount in air quality planning terms. If the load-following boilers continue to operate as in recent years, CTDEP will adopt emissions limitations that will require pollution control equipment to be installed on the load-following boilers. If these emissions units are shut down for economic considerations, as the unit owners have indicated may occur, CTDEP's HEDD air quality goals would be advanced, abrogating the need for the potentially costly investment in controls on these old, inefficient units. The energy needs met by the loadfollowing boilers would then be met through a combination of strategies including the new, clean generation that the Connecticut Department of Utility Control (CT DPUC) has authorized under the Energy Independence Act, transmission upgrades, and energy efficiency measures.

In addition to regulating HEDD emissions or allowing market forces to achieve the environmental result through shut downs, CTDEP has indicated its intention to regulate emissions from fuel-burning in general. We halted a rulemaking specific to NOx emissions from fuel-burning by the EGU sector and others in order to reformulate the proposal to create deeper emissions reductions, encourage efficiency of combustion, and take into account the interactions of simultaneously reducing NOx, sulfur dioxides, carbon dioxide, and particulate matter. We are now waiting for EPA to indicate the direction of certain pending federal efforts before we move forward with a more comprehensive rule. In addition, energy market transformation that reduces EGU emissions as a result of generator shut downs would also achieve the desired environmental result, without requiring the adoption of regulatory requirements that would demand investment in pollution control equipment.

Ongoing federal efforts may significantly affect the regulation of EGUs in Connecticut. Recently, in response to a federal rule, CTDEP reduced the level of the state cap in our seasonal NOx cap-and -trade program for large EGUs and revised the approach to favor more efficient units. EPA is now revising the underlying federal program, known as the Clean Air Interstate Rule or CAIR, upon a remand of the program by a federal district court of appeals. To comply with the court decision and the new, 2008 ozone NAAQS, the resulting federal replacement program will require deeper emissions reductions and a more limited, if any, trading component. Gordon van Welie April 24, 2009 Page 3 of 3

In addition to the uncertain future of that NOx cap-and-trade program, the new administration has expressed its intention to address climate change, which at fruition will have significant impacts on the electric generating sector. While the specifics are unclear, it is certain that new federal requirements will demand pollution controls on high-emitting EGUs and encourage the most efficient forms of generation.

Given the coming state and federal air quality regulatory framework, it looks like the operation of high-emitting generators will become less and less attractive economically. The pressure of environmental regulation on older, higher emitting generation will be compounded by state and federal policies to encourage energy diversity and renewable energy sources.

I hope this quick overview of our current air quality planning is helpful to you and makes it clear that CTDEP believes a regional energy infrastructure that provides access to low-carbon and renewable energy resources, provides for efficient use of demand-side management, and enables retirement of old, high emitting generation units will position Connecticut to achieve its energy and environmental goals, both for today and for tomorrow.

I would welcome the opportunity to meet with you and the DPUC Commissioners to discuss this information in more detail and help ensure that we plan for an energy future that allows us all to breathe easier.

Yours truly,

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Amey W. Marrella Deputy Commissioner

Enclosure AM/mag

cc: Chairman Downes, CT DPUC Commissioner DelGobbo, CT DPUC

