

March 15, 2012

By Electronic Delivery

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RE: Written Comments on Proposed CO₂ Performance Standards for Major
Electric Generating Facilities, 6 NYCRR Parts 200 and 251

Mr. Jennings;

The New York Independent System Operator, Inc. (“NYISO”) hereby submits written comments to the New York State Department of Environmental Conservation (“DEC”) on the proposed revisions to Part 200 and Part 251 of the DEC’s regulations concerning CO₂ Performance Standards for Major Electric Generating Facilities.¹

The NYISO is the not-for-profit corporation responsible for operating New York’s bulk electricity grid, providing non-discriminatory access to transmission service and administering wholesale markets for electricity and transmission products in New York. The NYISO monitors the development of environmental regulations impacting power generation resources in New York for reliability implications, if any. The NYISO provides comments to the initiating regulatory agency when the regulations respond appropriately to an accurate and sufficient analysis of their reliability impacts. The NYISO also responds when issues of concern arise.

The DEC is proposing to impose a minimum performance standard on the CO₂ emissions of facilities subject to Article X of the Public Service Law (“Article X”). Article X provides for a siting review of new and repowered or modified Major Electric Generating Facilities in New York State by the Board on Electric Generation Siting and the Environment. These minimum performance standards for CO₂ emissions are being promulgated pursuant to the new Section 19-0312 of the Environmental Conservation Law.² As the DEC has stated, these performance standards for new and repowered facilities, in conjunction with the Regional Greenhouse Gas Initiative (RGGI), will lessen the State’s contribution to atmospheric concentrations of Greenhouse Gases and

¹ *Proposed Rule Making, CO₂ Emissions from Major Electric Generating Facilities*, New York State Register, Volume XXXIV, January 18, 2012 (“Proposed Rule”).

² *Regulatory Impact Statement, 6 NYCRR Parts 251 and 200*, New York State Department of Environmental Conservation (“RIS”) p.1.

thereby lessen the danger to public health and welfare from global climate change.³ Among the Greenhouse Gases, CO₂ is the chief contributor to climate change and electricity generation is responsible for about 19 percent of all GHGs emitted in New York State.⁴

DEC states that the standards it is proposing are based on the CO₂ emission rate of existing technology that results in the lowest CO₂ emissions profile for that emission type. For boilers burning a minimum of 70% fossil fuel, combined cycle facilities and stationary internal combustion engines firing only gaseous fuel the standard is 925 lbs of CO₂/MW hour (or 120 lbs/mmBtu).⁵ DEC states that this is the rate achievable by a new combined cycle natural gas-fired power plant.⁶

DEC states that it has taken electric grid reliability into account by establishing a separate emission standard for simple cycle combustion turbines whether they burn oil or natural gas. These facilities, DEC explains, are needed during periods of peak load operation and can come on-line in minutes. These facilities, simple cycle combustion turbines or stationary internal combustion engines, which fire on liquid or gaseous fuel (they do not fire on both simultaneously), must meet a standard of 1450 lbs/MW output or 160 lbs/mmBtu.⁷

Both standards were established after DEC reviewed factors that support the promotion of electrical system supply reliability such as the precautionary measures that may be needed in the event of a sudden loss of natural gas supply. These measures typically require the burning of back-up oil supplies. DEC also considered the time periods when the firing on oil may be necessary (such as during seasonal peak demands in residential heating (notably New York City (“NYC”) and Long Island (“LI”)) and when natural gas usage by the generating sector is curtailed to serve residential heating.

DEC estimates that combined cycle combustion turbines could operate on oil and comply with the standard set for them 40-45 days/year and that a simple cycle combustion turbine could operate 85-100 percent of its operating time on oil.⁸ The NYISO appreciates the analysis performed by the DEC and agrees with these observations. The DEC is correct that electric grid reliability requires the use of oil as a generating fuel on occasion. The NYISO believes these CO₂ standards support the occasional reliability-required oil burn and do not present short-term reliability concerns.

DEC also states that it understands fuel diversity has been identified by the NYISO (in its 2010 RNA) as a component of risk in future supply reliability that requires ongoing study and monitoring. DEC states that it also took into account the historic market trend towards construction of natural gas

³ RIS pp. 4-5 citing the EPA’s “Endangerment Finding” at 74 FR 66496, Dec. 15, 2009.

⁴ RIS at p. 5.

⁵ Proposed Rule, Section 251.3

⁶ RIS p. 10.

⁷ Proposed Rule, Section 251.3

⁸ RIS p. 11

combustion units by setting a standard that will “allow for dual-fuel fired resources with a significant allowance to fire oil.”⁹ The NYISO agrees this “significant allowance to burn oil” should cover short-term reliability issues that could require the use of oil.

DEC acknowledged that an emergency situation could arise, perhaps from an unforeseeable event, which would require a regulated emission source to operate in a manner that would result in emissions that contribute to a violation of this carbon standard. In that event, DEC advises the owner or operator of the regulated source to rely on the affirmative defense provided in its regulations (6 NYCRR Section 201-1.5 and 201-6.6 (c)).¹⁰

This is an insufficient strategy to deal with significant emergencies such as a catastrophic loss of natural gas to New York. The use of natural gas as a fuel in New York is growing and with it the dependency of New Yorkers on a steady flow of natural gas to keep the lights on. Of the 8,650 MWs of electric generating capacity added in New York since 2000, 1,336 MW are powered by wind and the vast majority of the other 7,314 MW fire on natural gas.¹¹ Moreover, in the NYC and LI area, 9,628 MW of capacity is now operating beyond its original design life span of 30 years. 8,938 MW of this is dual fuel capacity. It is reasonable to expect that much of this capacity will be replaced in the next decade, and it is very likely to be replaced with gas burning facilities.

While DEC acknowledges New York’s growing dependency on natural gas as a generating fuel¹² it has not responded adequately to the very significant reliability impacts that would result from a catastrophic loss of the fuel. This significant dependency on natural gas as a generating fuel requires an increased sensitivity to the potential for its loss. In an instant, dual fuel units may be needed to operate on oil just to keep the lights on.

DEC suggests that the availability of an affirmative defense of emergency provides sufficient assurance that these units will operate on oil, potentially exposing them to financial penalties for violating their environmental requirements.¹³ The NYISO disagrees. When generators are asked to operate in a manner that may violate their carbon standard, the NYISO needs to be assured that they will comply without question. The vague opportunity to assert an affirmative defense of emergency after a determination that a violation has occurred does not offer that level of assurance.

The NYISO would like to be prepared for such a circumstance with a specific protocol and set of compliance options that would allow such units to understand in advance that they could continue to operate without fear of penalty for violating the carbon standard. The NYISO would like to work

⁹ RIS pp. 16-17.

¹⁰ RIS p. 17.

¹¹ *Power Trends 2011*, NYISO pp. 14, 29; *See also*: 2011 Load and Capacity Data, NYISO (April 2011). Of the 4211 MW of new capacity that has been installed in NYC and LI, 2537 MW is dual fuel capacity.

¹² RIS p. 17.

¹³ *Id.*

with the DEC to develop such a protocol and set of compliance options. We recommend that the DEC acknowledge this as a necessary future effort.

The NYISO appreciates DEC's consideration of these written comments and respectfully requests the DEC accept the recommendations set forth for the reasons stated herein. Please contact Peter Carney or me should you have any questions concerning this filing.

Respectfully submitted,

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