

**NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

**COMMENTS OF THE NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.
ON
REGULATORY PRE-PROPOSAL FOR A
REGIONAL GREENHOUSE GAS INITIATIVE**

I. Introduction

The New York Independent System Operator, Inc. (“NYISO”) appreciates this opportunity to comment on the regulatory pre-proposal by the Department of Environmental Conservation (“DEC”) to amend Part 242 of its Rules and Regulations to create a Regional Greenhouse Gas Initiative (“RGGI”). The NYISO is the independent, not-for-profit corporation that operates New York State’s high-voltage bulk electric power grid and administers the State’s competitive wholesale electricity markets. The NYISO has participated since the inception of the RGGI stakeholder process as a resource panel member and has contributed to numerous workshops held over the past two years.

II. Summary

Given the policy decision that DEC has made to require affected sources to purchase 100% of their necessary CO₂ emission allowances, the NYISO supports the use of an auction mechanism for allowance pricing and allocation purposes. The NYISO also supports the auction design objectives which DEC has set out in Part 242-5.3(a)(3) of the pre-proposal. DEC must ensure that its auction design precludes gaming, hoarding or any other market manipulation which can artificially increase allowance prices or cause early retirement decisions.

However, the NYISO does not support DEC’s proposal, in Section 242-5.3(a)(4), to distribute allowances to energy efficiency entities if the auction is not up and running in time to implement this new program in 2009. This distribution scenario does not protect against market or price manipulation nor does it ensure that allowances will be available to the generators who need them. The NYISO recommends that DEC drop this approach.

The NYISO also recommends that DEC increase the availability of CO₂ offset allowances. NYISO analysis has shown that CO₂ allowance sufficiency in New York will be highly correlated with the incremental cost to burn gas in dual-fuel units. If gas prices rise, relative to oil, New York’s need for allowances could drive up the price of allowances or even exhaust available supply. In a high, relative to oil, gas-price scenario, dual fuel units that are unable to purchase sufficient allowances may be forced to switch to natural gas, stressing an already constrained natural gas infrastructure. New York’s existing gas infrastructure may not be able to deliver sufficient product to keep dual-fuel generators online should CO₂ allowances become scarce.

DEC's proposal could make additional CO₂ offset allowances available, in such a situation, but only if CO₂ allowance prices meet the pre-set, Stage-one or Stage-two trigger events. The NYISO cannot assume, however, that these allowance prices will be reached, or that these offsets will be available in a timely manner, or in sufficient quantities, to avoid compromising electric supply reliability. In the absence of any market experience with the price of CO₂ allowances, DEC should not rely solely on price triggers to make additional CO₂ offset allowances available.

Finally, the NYISO urges DEC to pursue regional CO₂ allowance auctions. A vibrant set of allowance suppliers (the nine RGGI states) and buyers (power plants from across the region) that a regional auction will attract is vital to avoiding market manipulation practices that could doom efficient CO₂ trading from the start.

III. Good Auction Design is Crucial to the Success of the CO₂ Budget Trading Program

As mentioned, given the policy decision to require affected sources to purchase 100% of necessary CO₂ emission allowances, the NYISO supports the auction mechanism and objectives which DEC has set out in Part 242-5.3(a)(3). Poorly designed auctions may reduce allowance availability, whether due to hoarding or other manipulation, and jeopardize reliability. Poorly designed auctions may also create uncertainty around the true costs of new generation in New York, adversely affecting the interest that financial markets may have in investing in generation expansion.

In addition to implementing these auction design principles, however, DEC should plan for a transparent, iterative auction design review process during which entities that will actually use the auction can provide real input into its design. Questions surrounding the life of the allowances, periodicity of the auctions, eligible auction participants and limits (if any) on auction participation also need to be answered.

Finally, the NYISO suggests that DEC schedule the initial auction to coincide with the NYISO's first capacity market auction in early 2009. DEC should then schedule its development and review process around that end-date. NYISO requires Suppliers intending to participate in the capacity market to certify their availability and size. Following these annual certifications, NYISO administers a series of auctions through which Loads and Suppliers buy and sell capacity. CO₂ allowance auctions can provide important CO₂ allowance availability and price information to capacity suppliers which should be available before they offer their capacity. Thus, NYISO recommends that DEC's initial CO₂ allowance auction occur prior to the first summer 2009 capacity auction. At the moment, this is slated to begin in mid-March 2009.

IV. The Alternative to the Distribution of Allowances by Auction Should Be Deleted

The NYISO is concerned with DEC's proposal to allocate emission allowances to "energy efficiency service providers" in the event that the DEC, or its agent, is unable to carry out the auction "for any reason." The pre-proposal at part 242-5.3(a)(4) states:

“If for any reason the Department or its agent is unable to carry out the sale by auction of the allowances called for by this Section, then the Department or its agent shall directly allocate the allowances...to energy efficiency service providers...”

This proposal contains so little detail that the NYISO cannot assure itself that allowances will even reach the generators that need them much less that they will be available in a timely manner or at prices that have been established free of price manipulation. Generators who have no certainty that they will be able to obtain allowances in a timely fashion may take themselves out of the market, negatively impacting electric supply reliability. As well, this uncertainty could negatively effect future power plant investment decisions. In the event that the DEC cannot hold an auction, the NYISO suggests that DEC simply delay the start of the CO₂ Budget Trading Program until it can hold the auction.

V. DEC Should Broaden the Use of CO₂ Offset Allowances

New York enjoys significant oil and oil / gas fired capacity. NYISO’s 2006 Gold Book indicates 44% of NY’s capacity is oil or oil / gas fired. Not surprisingly, the choice of fuel burned in the dual fuel units is price driven.

Attachment I provides the NYISO’s calculation of the number of CO₂ allowances that would have been necessary had RGGI been in place in 2004, 2005 and 2006. The dramatic difference in required allowances across this three year period is directly related to the relative price of oil and natural gas to New York generators.¹ This analysis indicates that the adequacy of New York’s CO₂ allowance allocation (64.3 million tons/year) is highly dependent on the ratio of the price of natural gas to oil. This analysis also assumes continued high availability factors for New York State’s nuclear facilities. If for some reason any of the New York State nuclear facilities experience an extended outage, the existing cap may not provide for enough allowances to support replacement power and this, too, could impact electric supply reliability.

The second page of Attachment I provides New York energy production, by primary fuel type, between 2005 and 2006. The drop in the relative price of natural gas versus oil from 2005 to 2006 is illustrated by the dramatic decline in oil consumption and the corresponding increase in gas consumption between those two years. This decrease in oil consumption is also reflected in the NYISO’s calculated, but hypothetical, reduced use of allowances for 2006 compared to 2005. When gas becomes less expensive than oil, New York’s need for CO₂ allowances decreases.

Current futures markets, however, are favorable for oil. This could drive 2009 CO₂ emissions to the 64 million ton cap reached in NYISO’s 2005 scenario. Reaching the ceiling on carbon allowances pushes dual fuel facilities to burn natural gas, the uneconomic fuel. This will further increase electricity prices.

¹ NYISO evaluated the relative break even points for units of varying fuel types and varying carbon allowance prices. This evaluation indicated that the CO₂ allowance price does not have as dramatic an impact on choice of fuels as does fuel price.

Reaching the CO₂ allowance ceiling is also likely to result in greater demand for natural gas by dual fuel facilities. The delivery system for natural gas, however, is constrained. New York remains at the end of the natural gas transmission system and already faces operational flow orders and reduced gas availability during high load winter months. The gas delivery system also faces a predicted increase in demand from Load growth and new electric generating facilities.² It is not evident to the NYISO that New York's existing gas infrastructure would be able to deliver sufficient product to keep dual-fuel generators online should CO₂ allowances become scarce. An increased demand for natural gas as a generator fuel, over historic usage, can negatively impact reliability if it increases gas pipeline interruptions and operational flow orders.

Pressures on the sufficiency of the natural gas infrastructure are seen already in New York City and on Long Island. Pursuant to an electric system reliability rule, Con Edison and LIPA manage fuel used in dual fuel facilities in order to avoid the possibility that a natural gas interruption could cause the loss of electric supply. When certain load levels are reached, Con Edison and LIPA require specified dual-fuel facilities to burn minimum amounts of alternative fuels pursuant to New York State Reliability Council's reliability rule number I-R3.³

CO₂ offset allowances can ameliorate these reliability risks by offering an alternative compliance strategy, but only if they are available. DEC predicates additional CO₂ offset allowance availability on the appearance of Stage one and Stage two trigger events. Without any experience with a CO₂ allowance market, however, NYISO cannot assure itself that the trigger events proposed by DEC will be reached in time to make sufficient CO₂ offset allowances available when needed. Because of the potential reliability impacts that can result if CO₂ allowances are scarce, the NYISO recommends that DEC increase the number of CO₂ offsets a generator can use to comply with its CO₂ budget emissions limit regardless of CO₂ allowance prices. Broadening the availability of CO₂ offset allowances may also offer the additional benefit of dampening CO₂ allowance price volatility.

VI. DEC Should Pursue Multi-State Allowance Trading

Regional, rather than single-state, CO₂ allowance auctions offer the opportunity for greater liquidity and fewer market manipulation opportunities. However, DEC's proposal does not indicate on its face that regional trading will be available. If such trading agreements have not yet been struck, the NYISO encourages DEC to pursue all avenues available with its sister RGGI states to develop one regional auction or series of auctions rather than nine (or more) state-only auctions. Multi-state auction participation assists in creating a liquid allowance market and in minimizing opportunities for market manipulation by simply increasing the number of auction participants. A regional auction could increase the size of power supplier participation in the auction by approximately fifty percent when

² See the Interconnection queue for the significant additional gas-fired generation proposed for downstate New York: http://www.nyiso.com/public/webdocs/services/planning/interconnection_process_and_studies/nyiso_interconnection_process/nyiso_interconnection_queue.pdf

³ Alternative fuels, such as oil, can avoid a disruption in electric supply, should natural gas supplies to those facilities be interrupted, by ensuring that the loss of gas does not cause dual-fuel electric facilities to trip offline.

compared to a New York-only auction.⁴ The NYISO strongly encourages the use of a regional auction.

VII. Conclusion

The NYISO asks that DEC incorporate the suggestions provided here into its final proposed regulations implementing the RGGI program. The NYISO looks forward to continuing its cooperation with the DEC, DPS and NYSERDA to create a workable CO₂ emission allocation program including a vibrant, efficient and transparent auction.

Respectfully submitted,

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⁴ This analysis included Massachusetts and Rhode Island in addition to the seven original RGGI states and also includes estimates of new capacity.

ATTACHMENT I

Preliminary Estimate of 2006 NY State CO2 Emissions **From RGGI Affected Units**

This estimate was developed using the preliminary generator MWh production data submitted as GADS. The latest available USEPA eGRID CO₂ emission rate data from 2004 was used with local adjustments as necessary.

The estimated emissions are shown in the table below.

Data Source	2000	2001	2002	2003	2004	2005	2006
NYISO-eGRID					61.2	64.1	57.0

The estimated CO₂ emissions for 2006 show a marked decrease, which is consistent with several other noticeable changes in the generation marketplace in 2006. There was a significant reduction in the use of units for which oil is the primary fuel which is accompanied by a marked increase in the production from units for which natural gas is the primary fuel. There was also a notable increase in renewable energy production. Coal and nuclear production were essentially constant. Of further note was the increase in imports for which we do not have emissions data. The table below details the changes in energy production.

**NYISO Generation Production Comparison
on the Basis of Primary Fuel Selection**

Primary Fuel	2005 MWH	2006 MWH	delta
Coal	21,052,572	21,012,268	-40,304
Nat Gas	35,181,671	41,305,974	6,124,303 +17.4
FO 6	19,037,672	11,805,744	-7,231,928 (-38%)
Hydro	27,582,740	28,422,089	839,349
FO 2	598,017	242,102	-355,915 -60%
Kero	652,813	340,432	-312,381
Refuse	1,899,156	1,902,261	3,105
Wood	253,121	260,292	7,171
Wind	100,937	518,427	417,490
Biogas	242,995	325,609	82,614
Nuclear	42,431,568	42,223,256	-208,312
Total	149,033,262	148,358,454	-674,808
NG+FO6	54,219,343	53,111,718	-1,107,625
FO6+FO2+Kero	20,288,502	12,388,278	-7,900,224
Fossil	78,421,901	76,608,781	-1,813,120
RGGI Affected	75,140,234	71,329,021	-3,811,213
RGGI Affected % of All Fossil	95.8%	93.1%	-2.7%
RGGI Affected % of Total	50.4%	48.1%	-2.3%
Renewable	28,179,793	29,526,417	1,346,624