



**Northeast
Utilities System**

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Franz Litz, Esq.
Chair of the Regional Greenhouse Gas Initiative
and Senior Attorney
New York State Department of Environmental Conservation
625 Broadway, 14th Floor
Albany, NY 12233-1500

RE: RGGI Draft Model Rule Comments

Dear Chairman Litz:

Northeast Utilities Service Company, on behalf of The Connecticut Light and Power Company, Northeast Generation Services, Holyoke Water Power Company, Public Service Company of New Hampshire, Western Massachusetts Electric Power Company and Yankee Gas Services Company (collectively referred to as NU), appreciates the opportunity to comment on the Regional Greenhouse Gas Initiative (RGGI) Draft Model Rule. NU is an electric generation and electric and natural gas delivery service company. However, as an official stakeholder in the RGGI Working Group, NU was invited to represent only the interests of an electricity distribution company. Regardless of our role as a stakeholder, our comments represent all of the company's interests and remain consistent with our earlier comments on the Memorandum of Understanding (MOU) and the impacts of RGGI on electric system reliability and economic growth. NU sees serious flaws with the Draft Model Rule, which jeopardize its objectives for a successful carbon dioxide (CO₂) cap-and-trade system.

Any greenhouse gas (GHG) emission reduction program must sustain the reliability of the electric system, minimize increased energy prices and economic burdens, and rely upon accurate modeling results. In addition, a GHG program must clearly define CO₂ reduction requirements and create an open and transparent trading market.

The Draft Model Rule, as proposed, does not meet these requirements. RGGI must address these critical issues as further discussed below.

- **Continued Reliability and Fuel Diversity** – Reliability of the electric system is crucial. Possible curtailment or early retirement of existing coal generation will limit the region's generating capacity. Furthermore, loss of existing generation dramatically limits the

region's fuel diversity. Fuel diversity is vital for electric system reliability and limiting energy cost increases.

- **Economic Impacts of the Program** – The MOU and the Draft Model Rule will force a shift to higher cost generation and drive the demand for imported electricity. Moreover, the unnecessary barriers to the use of offsets will increase production costs on existing generation.
- **Application of the Modeling Results** – Overly optimistic assumptions into and incorrect conclusions drawn from the modeling significantly underestimate the impacts the Draft Model Rule will have on system reliability, fuel diversity and increased costs.

The goal of a GHG reduction program should be first to reduce the growth of emissions, then stabilize emissions, and finally reduce emissions. Unfortunately, there currently is no control technology available to generators and the Draft Model Rule fails to provide the incentives for the development of new technologies necessary to achieve emission reductions over a realistic period of time. By trying to stabilize emissions as the first step, the RGGI program will create electric system unreliability, loss of fuel diversity, increased energy costs and jeopardize State and regional economic growth.

I. Electric Reliability and Fuel Diversity are Vital

NU is an advocate for market-based economic incentive programs that balance real, measurable environmental benefits with system reliability and fuel diversity. Cap-and-trade programs allow affected sources to determine the most economic means of compliance by comparing the cost of installing emissions control equipment to the cost of purchasing allowances. However, without commercially available control technology to reduce CO₂ emissions, existing generating facilities have lost the single most valuable component required for a successful cap-and-trade program.

Unfortunately, the MOU and the Draft Model Rule have failed to balance economic and environmental interests. Without commercially available control technology for electric generation sources, the proposed program reduces the reliability of the electrical system with overly restrictive offset requirements and limited incentives for new technology force the curtailment (i.e., limiting generation supply) of existing generation, primarily coal fired generation. This curtailment requires the operation of units with higher cost fuels, thus reducing fuel diversity and decreasing system reliability within the region.

II. RGGI Increases Regional Energy Costs

The proposed cap-and-trade program contained in the Draft Model Rule will increase the costs to produce electricity at existing generating facilities and, consequently, increase energy costs for consumers. These increased costs are due to numerous factors including the increase in the price of

coal, curtailment or retirement of coal-fired generation, over-reliance on natural gas and the unavailability of low cost compliance options through the limited use and complex creation of offsets. A less burdensome rule would create incentives for new technologies to reduce emissions and emphasize reducing the growth of emissions instead of imposing excessive administrative requirements.

A. The RGGI Program Ignores Cap-and-Trade Fundamentals

As NU has stated above, the fundamental concept of a cap-and-trade program is the economic incentive to find the least cost compliance option, by either reducing on-site emissions with control equipment or purchasing emission allowances. However, without such control technology, a facility's only choice to achieve on-site reductions would be fuel switching or curtailment, neither of which is realistic for coal-fired electric generating facilities given the current energy supply and demand in the region.

Recognizing that there is no commercially available CO₂ reduction technology, the State Working Group (SWG) and Commissioners have introduced offsets as a proxy for such technology. However, the Draft Model Rule and the MOU then proceed not only to unnecessarily limit the use of offsets, but also to propose complex triggers with shifting geographic boundaries. Thus, the value of the offsets is questionable as well as indeterminate. While these efforts seek to limit the compliance costs of affected units when costs of CO₂ allowances are above specific thresholds, the Draft Model Rule's unintended result creates too many market variables for consistent and essential long-term planning.

B. The Offset Requirements are Overly Complex and Increase Costs

The proposed offset provisions are far too complex and provide too little regulatory or economic certainty for affected facilities. RGGI should promote and encourage the development of practical control technologies and investments in environmental and energy efficiency projects, not inhibit them. Instead, the proposed provisions for GHG reduction projects create unnecessary administrative burdens for offset sponsors, stifle the development of new technologies, and fail to create a robust offset program necessary to promote innovation.

Moreover, the increase in administrative costs for project sponsors to certify offsets and for States to verify the offsets will create uncertainty in the value of offsets and produce a chilling affect on an offset market. During times of reduced staffing at many State agencies, the resources required to track the average offset price, determine if the price meets a trigger or threshold, and certify offsets may not be practicable. The complexities of the offset provisions simply serve to increase program costs and deter vital market certainty.

1. Creation of Uncertainty in CO₂ Offset and Energy Markets

The Draft Model Rule creates a distinct price discrepancy between offsets and allowances. Allowances may be freely used and traded, whereas, offsets are

limited in use depending on where they are created. This makes offsets an inherently risky purchase.

Furthermore, the trigger provisions that would allow increased use of offsets and eliminate regional restrictions attach additional risks to the purchase of offsets. Early purchases of in-region offsets, which will likely be purchased at a premium, may become far less valuable if one or both of the triggers are implemented and the market later includes out-of-region offsets.

Overall, the proposed offset program creates a system where electric generating facilities cannot adequately identify their financial risks and will impact pricing to the Independent System Operators (ISOs). Without the ability to plan, the Draft Model Rule will force generators to either curtail operations, switch to a higher-cost fuel or bid a higher price to capture the unknown costs of offsets already banked. Any one of these forced options will have significant impacts on the region's power supply planning, electric system reliability, and fuel diversity.

2. "Additionality" adds Unnecessary Complexity

The use of additionality requirements (i.e., regulatory, environmental and/or financial requirements) in creating CO₂ offsets is overly complex and unnecessary. Additionality is the term used to distinguish when some "additional" incentive, such as marketable CO₂ offsets, was the driving force for an action or activity, such that the reductions would not have occurred without this incentive. Additionality, in academic terms, may be a desirable outcome. However, in designing a successful cap-and-trade program, additionality is an impractical and unnecessary complexity. The proposed rule penalizes actions that are also driven by other incentives, such as conservation and load management programs. There are offset-creating actions that can only be realized or would be greatly accelerated with multiple incentives influencing investment. The SWG should develop simple bright-line tests and calculations for CO₂ offsets based on the Clean Development Mechanism research or other certified GHG equations and eliminate the requirement for additionality.

Such clear formulas will simplify the program, reduce administrative complexities, and create incentives. If the desired result of the RGGI program is to reduce GHG emissions, create a program that is easily adoptable by other States and set an example that could be used at a national level, the offsets provisions must be simplified.

III. Integrity of Modeling Conclusions

Noted energy experts and economists have raised significant concerns regarding the inputs into the RGGI modeling and the validity of the outputs. If the RGGI program is founded on overly

optimistic assumptions, grave consequences to the regional electric system will result, for which we will be ill prepared. Competing conclusions from the modeling have similarly predicted higher costs to offsets, premature shutdown of existing generation, decreased fuel diversity and sizeable increases in energy prices.

Due to the divergence of opinions of the modeling results, RGGI must make the modeling data and other data resources used by the SWG fully available for independent review by States and other parties. Only through a complete review of the modeling inputs, assumptions, and conclusions can a State or affected party evaluate the impact and address their concerns. Each participating State should be given the option to review all the modeling data, including the use of a third-party institution and other experts in order to fully evaluate the impacts on the State's economy, electric reliability, fuel diversity and energy costs. Transparency is a critical element in ensuring confidence of the modeling results and in the function of any final rule once implemented by a State.

A. Reliance on Debatable Modeling Outputs

NU is concerned about the SWG's reliance on overly optimistic assumptions and interpretations of the modeling conclusions. For example, the model indicates that 6 gigawatts (GW) of new wind powered generation will be constructed by 2012. This is approximately equal to 13 wind farms the size of the proposed Cape Wind Project being built within the RGGI region in the next 6 years. Such an outcome is highly unlikely, especially considering the significant challenges to siting and permitting the Cape Wind Project has faced.

If a project such as Cape Wind cannot receive approvals, in a State where the Renewable Portfolio Standard for new renewable energy projects offers significant financial benefits and incentives, it is unlikely that 6 GWs of new renewable energy will be installed by 2012. Additional new electric generation facilities, necessary to meet demand, will face similar challenges during the siting and permitting process. The RGGI modeling has vastly underestimated these challenges in the development of new generation.

If other modeling assumptions made by the SWG, such as doubling of the region's energy efficiency or unlimited access to natural gas, are also unlikely to occur, then reliance on existing, more CO₂ intensive generation will increase. Increased demand will result in increased output from such generation. This in turn, this will drive CO₂ emissions upwards and put significant pressure on the allowance and offsets markets. If one or more of the modeling assumptions are inaccurate, the costs of the RGGI program will easily be two to three times or more than concluded by the SWG.

B. Comparison to Other Models

Other modeling performed on a similar cap-and-trade program within the RGGI region, as well as modeling of various national greenhouse gas reduction scenarios, all show different absolute outputs. For example, CRA (formerly the Charles River Associates) modeled the

McCain/Lieberman cap-and-trade program, as well as a version including only the RGGI States. The CRA modeling conclusions forecasted the cost of carbon offsets to be \$20 to \$50 during the first 20 years of the program. The carbon costs trends are similar to the RGGI modeling curves, but differ by an order of magnitude.

However, the CRA and RGGI modeling completely diverge when predicting the economic impacts of the programs on the regional and State economies. The CRA modeling results show a significant loss of jobs and State revenue, reduced gross output, and significantly reduced per household spending, while the RGGI modeling showed little economic impact.

The CRA was able to replicate the economic impact of the other models (including the RGGI modeling) only by disabling the additional tax and consequences of increased energy costs within the model. This suggests that the economic model run by RGGI may be incomplete, or may significantly underestimate the impact to the regional economy. Based on the variations of models, NU recommends that an unbiased third-party be enlisted to independently review the RGGI modeling and report its findings.

Interpretation of the RGGI modeling results by the various stakeholders varies widely. Even the ICF consultants, hired by the SWG, cautioned about reading the modeling outputs as absolute numbers rather than relative trends. NU suggests that the SWG has relied too heavily on the absolute results. Thus, the SWG's conclusion that offsets will only cost \$1 to \$2 per ton may not accurately reflect the modeling outputs. If natural gas remains near \$7/MMBtu, the relative increase in the cost of electricity is over 20 percent, and the cost of offsets increase by as much as 300 percent, by 2020.

IV. Conclusions

The stated goals of the RGGI program are to develop a cap-and-trade program to reduce the emissions of CO₂. Successful implementation and compliance with a regional cap-and-trade program will only occur if the RGGI program protects the electric system reliability, maintains the region's fuel diversity and minimizes the impact to the local and regional economies. With that, the interpretation of the modeling results of potential regional impacts that the RGGI Draft Model Rule are subject to highly varying alternative conclusions. The impacts of the program on the region, as well as to the individual participating States, will be significant under any assessment. Therefore, the impacts must be well understood and anticipated accurately.

RGGI must offer the States and other parties the opportunity to review the assumptions and underlying information the SWG relied upon in their modeling. NU suggests that the States engage an unbiased party, such as an academic institute, to review the modeling prior to the adoption of a Final Model Rule.

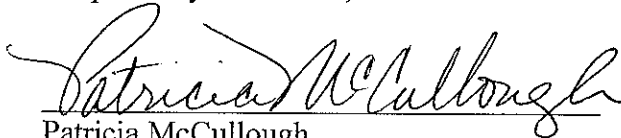
NU appreciates the opportunity to comment on the RGGI Draft Model Rule and urges the SWG to address these comments fully before proceeding to finalize the Model Rule. Should you have any questions regarding our comments please contact Jon Russell, Environmental Strategy Consultant,

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at (860) 665-5946. Further, representatives of NU's affiliate companies are available to discuss the comments provided or answer State specific questions.

ON BEHALF OF THE CONNECTICUT LIGHT AND POWER COMPANY, NORTHEAST GENERATION SERVICES, HOLYOKE WATER POWER COMPANY, PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE COMPANY, WESTERN MASSACHUSETTS ELECTRIC POWER COMPANY AND THE YANKEE GAS SERVICES COMPANY

Respectfully Submitted,

A handwritten signature in cursive script, reading "Patricia McCullough". The signature is written in dark ink and is positioned above the printed name and title.

Patricia McCullough
Director, Environmental Management

cc:

Mr. Michael D. Harrington, Commissioner, New Hampshire Public Utilities Commission
Mr. Clifton Below, Commissioner, New Hampshire Public Utilities Commission
Mr. Robert R. Scott, Director, Air Resources Division
Mr. Michael P. Nolin, Commissioner, New Hampshire Department of Environmental Services
Ms. Gina McCarthy, Commissioner, Connecticut Department of Environmental Protection
Mr. Donald W. Downes, Commissioner, Connecticut Department of Public Utilities Control
Mr. David L. O'Connor, Commissioner, Massachusetts Division of Energy Resources
Mr. Robert W. Golledge, Jr., Commissioner, Massachusetts Department of Environmental Protection