Independent Power Producers of New York, Inc. (IPPNY)

19 Dove Street, Suite 302
Albany, NY 12210
phone: 518-436-3749
fax: 518-436-0369
www.ippny.org
Gavin J. Donohue, *President & Chief Executive Officer*

October 13, 2010

Mr. Jonathan Schrag
Executive Director of RGGI, Inc.
Regional Greenhouse Gas Initiative, Inc.
90 Church Street, 4th Floor
New York, NY 10007

Dear Mr. Schrag:

The Independent Power Producers of New York, inc. (IPPNY) is a not-for-profit trade association representing the independent power industry in New York State. IPPNY and its members participated actively in the development of the Regional Greenhouse Gas Initiative (RGGI), at both the regional and New York State levels.

IPPNY's members are companies involved in the development of electric generating facilities, the generation, sale, and marketing of electric power, and the development of natural gas facilities in the State of New York. The companies provide almost 75 percent of New York's electricity using a wide variety of generating technologies and fuels, including hydro, nuclear, wind, coal, oil, natural gas, energy-from-waste, and biomass. All of the views expressed in IPPNY's comments do not necessarily represent the positions of each of our members. Since IPPNY represents a broad spectrum of companies, we anticipate some of our members also may submit comments on their own. In addition, nothing in these comments should be deemed to waive any rights that IPPNY or any of its members may have to challenge the procedural or substantive legality of the RGGI program, any variation of the existing program, or any element thereof.

At the September 13, 2010 RGGI regional stakeholder meeting, the RGGI Participating States began preparing the support necessary for the 2012 program review required in the RGGI Memorandum of Understanding (MOU). As the MOU specifies, program review will be a comprehensive evaluation of all components of the program, including but not limited to, program success, program impacts, additional reductions, imports, emissions leakage, and offsets.

The stated purpose of the September 13, 2010 meeting was to begin to provide feedback on the development of a reference case that will be used for the modeling effort under the scheduled

review of the RGGI program in 2012. The modeling is being done by ICF International, using its Integrated Planning Model (IPM).

Specifically, the RGGI planners expressed an interest in seeking public input on materials that were the subject of the September 13 meeting (http://www.rggi.org/stakeholder_meeting) and whether: (1) any other input assumptions or sources of data should be included in the reference case; (2) comments on the key assumptions, and (3) what sensitivities should be included in the evaluation.

Overall, IPPNY agrees with the assumptions towards which RGGI, Inc. is leaning for the reference case. The assumptions seem reasonable and largely consistent with other IPM modeling exercises. However, IPPNY provides feedback below on assumptions for which additional improvements could be included, as well as sensitivity analyses that should be preformed. Also, the review should include an examination of where the program is today in relation to where it was projected to be and account for the difference in the status, especially due to the state's economic decline.

1. Sources of Data

In order to help assure greater consistency and translatability of the modeling effort to existing and future planning efforts, the modeling analysis would benefit from the work that New York has done during the 2009 New York State Energy Plan and the 2010 New York Independent System Operator's (NYISO) Reliability Needs Assessment (RNA) process.

Specifically, the NYISO's Load & Capacity Report ("Gold Book") and its RNA provide sources of data and analysis for the IPM on load and generation in the New York Control Area (NYCA). Information developed in connection with NYISO's economic planning process - the Congestion Assessment & Resource Integration Study (CARIS) – also may provide useful information on load and generation in the NYCA, over the longer term.

Furthermore, the NYISO's capacity market is based on separate demand curves for the individual capacity zones. The parameters of each demand curve rests on a regionally specific structure of per-kW costs of "new entry." IPM may want to consider using the demand curve assumptions, in determining regional differences in capital costs.

2. Feedback on Elements of the Reference Case

Specifically, the elements of the reference case involve areas, such as:

A. Firmly planned generation and transmission additions & retirements

The planners are leaning toward using information from ISO studies and queues, supplemented with additions by states (including additions for Cape Wind, Bluewater Wind, continued operation of Indian Point and retirement of Vermont Yankee).

As a point of information, the maximum summer capacity for the Bluewater Wind project should be 450 MW and not 250 MW, as it is current listed in the meeting materials.

The planners also are contemplating that the retirement of Indian Point could be a sensitivity study, and IPPNY agrees with this intention.

Additionally, IPPNY suggests that a scenario be examined in which no unit retirements are "hard wired" into the model, since economic conditions could change by the time planned retirements occur. Overestimating the retirement of existing units, such as nuclear facilities, may overestimate the need to build new generation with associated emissions.

For transmission, the planners are leaning toward using information from the ISOs on timing for capability expansion, along with TrAIL in 2011, the Mid-Atlantic Power Pathway (MAPP) in 2014, the Potomac-Appalachian Transmission Highline (PATH) in 2015, and the Susquehanna-Roseland (S-R) power line project by 2014.

In regards to transmission constraints, the planners are leaning toward using capabilities based on ISO reports and modeling. The planner's assumptions involve transmission capability on an economic basis, with no specific assumptions yet about imports from Canada.

IPPNY observes that in-service dates more likely will be 2015 for MAPP and for the western portion of S-R.

B. Assumptions about new coal plant construction

The planners are considering these potential scenarios: (1) disallowing coal capacity additions in the RGGI region; (2) allowing coal additions on an economic basis without limit; and (3) requiring that new coal capacity meet emission rate standards or be equipped with specific controls.

The planners are leaning toward an assumption that only new coal plants with carbon capture can be built in the RGGI region. IPPNY generally agrees with this assumption.

The planners intend to allow coal units to be built on an economic basis, while meeting emission limits. The model also would allow coal units to be built outside of RGGI on an economic basis. Issues about assumptions will be worked out with the ISOs.

The planners intend that the assumptions include the cost of carbon capture and sequestration, based upon EIA's projections, with the inclusion of subsidies that may come into place. The assumed carbon capture rate is 90 percent. The United State Environmental Protection Agency's (EPA) Tailoring Rule is part of the assumptions for coal units. The planners intend to conduct a sensitivity analysis involving a CO_2 performance standard. The model also could look at incorporating liability costs for carbon capture and sequestration, to the extent that they can be defined.

IPPNY agrees with each of the analysis scenarios mentioned above. IPPNY also suggests that the RGGI modelers include a sensitivity run that disallows new coal capacity in the RGGI region, to account for the possibility that new units may not be sited successfully or economically.

C. Assumptions about new nuclear plant construction

The planners are considering: (1) limiting nuclear additions to existing sites; (2) disallowing new nuclear additions in the RGGI region, and (3) allowing nuclear additions on an economic basis without limit. IPPNY agrees that each of these scenarios should be examined.

The planners are leaning toward the assumption that nuclear units can be built on an economic basis at existing plant sites. The leaning contemplates that units could be built on three sites in the region outside of New York.

IPPNY also suggests that the RGGI modelers include a sensitivity run that disallows new advanced nuclear capacity in the RGGI region, to account for the possibility that new units may not be sited successfully or economically.

D. Regional Peak and Load Requirements

The RGGI planners are leaning toward using the ISOs' projections adjusted for energy efficiency as provided by the states. As an alternative, IPPNY recommends that the RGGI modelers use the ISOs' projections for the reference case assumptions. Instead of the current leaning of the planners, IPPNY suggests a sensitivity run that involves the ISOs' projections adjusted for energy efficiency as provided by the states.

IPPNY also urges that the modelers run a sensitivity case, which does not adjust for energy efficiency investment, so the public can understand the magnitude of the impact of this investment on the modeling results, in the event this investment does not materialize.

IPPNY suggests that the modelers also run sensitivity cases with high and low load forecasts. Additionally, IPPNY would like to see more specifics on addressing sensitivities, such as economic growth and load growth. A mechanism should be established and included to allow for some annual variability to the CO_2 cap plus or minus a certain percentage to account for short-term variability in emissions due to economic conditions (such as the load levels return to the pre-recession levels) and weather variability.

The modeling effort should evaluate high, medium, and low realization of energy efficiency goals. The high scenario can be similar to the original RGGI analysis sensitivity scenario from 2004-2006 that assumes an unlimited (i.e., constrained by economics only) replacement of load with energy efficiency. The medium scenario can be the scenario towards which RGGI planners are leaning. The low scenario can be the assumption that energy efficiency spending remains at current levels throughout the modeling horizon.

E. Installed Reserve Margins & Locational Requirements

The planners are leaning toward using the latest ISO projections for PJM and ISO-NE, projected 2010 reserve margin for the NYISO held constant, and NYISO Zone J and K local requirements. IPPNY agrees with this leaning.

IPPNY also suggests that demand response initiatives that have cleared in capacity auctions count toward satisfying reserve margins. Additionally, IPPNY urges the RGGI modelers to clarify how imports to the region contribute towards meeting reserve requirements.

F. Fuel Price Forecasts

The planners are considering: (1) the EIA's AEO for 2010; (2) the New York Mercantile Exchange (NYMEX) futures; (3) historical trends, and (4) other public third party projections. For oil and gas prices, the planners are leaning toward using NYMEX information in the near-term (through 2014) and then phasing into EIA's AEO for 2010 for the long-term, with transportation costs based on 10-year historical averages. For coal prices, the planners are leaning toward using ICF supply curves calibrated to the EIA's AEO for 2010.

IPPNY suggests that the RGGI modelers use the EIA's AEO 2010 projections, starting in 2013. Additionally, the modeling effort should evaluate high, medium, and low natural gas resource availability assumptions. The high scenario can be similar to the assumptions in the primary EPA IPM v4.10 base case used to model EPA's proposed Transport Rule. The medium scenario can be the one towards which the RGGI states are leaning. The low scenario can be a resource limited scenario, where natural gas prices are, on average, 30-40 percent higher than the RGGI reference scenario. Furthermore, IPPNY suggests a scenario to examine the impact of potentially higher natural gas prices, in anticipation of greater restrictions on shale gas.

G. Renewable Portfolio Standards (RPS)

The planners are considering the following potential assumption/source(s) for the RGGI program review: (1) state generation requirements as provided by states and modeled in three regional markets by ISO, with alternative compliance payment (ACP) levels specified by the states: (2) state-specific markets; and (3) one regional market.

The modelers also intend to take into account RPS programs in other states. Additionally, the modeling will look at banked renewable energy credits (RECs) that can be carried forward from previous years. The planners are leaning toward examining three regional markets, by ISO, with regional ACPs specified by states.

IPPNY agrees with the approach outlined above and suggests sensitivity cases for high and low RPS requirements.

H. Cost and Performance of Emission Controls

The planners are leaning toward using the Midwest Ozone Group analysis for flue gas desulfurization (FGD) and selective catalytic reduction (SCR), using EPA information for activated carbon injection (ACI), and having the states provide details for firm controls.

During the stakeholder meeting, ICF indicated that EPA just had released a new cost for FGD of $500/kW. However, RGGI, Inc. was "leaning" towards using an average value of approximately 425/kW, based upon a 2004-2006 number of approximately $300/kW released by EPA.

IPPNY requests that RGGI Inc. raise the "leaning" cost closer to the new EPA cost for FGD of $500/kW or greater, which is consistent with the EPA analysis and the expectation that smaller coal units will be affected by the next stage of control implementation.

I. State Environmental Policies

The planners are leaning toward evaluating existing requirements (those that are currently in effect) to be provided by individual states. The planners also are seeking comments on whether to include proposed regulations. IPPNY agrees that an evaluation of the New York State Department of Environmental Conservation's (DEC) draft Best Technology Available Policy for Cooling Water Infrastructure is an important sensitivity study.

Since the RGGI program was established, the DEC has promulgated its version of the federal Clean Air Interstate Rule to reduce emissions of SO_2 and NO_x and intends to revise its regulations in the future to address the requirements of the EPA's Transport Rule. In order to control NO_x, SO_2, and PM emissions further, the DEC recently has adopted its Best Available Retrofit Technology (BART) Determinations Rule and its Reasonably Available Control Technology for the Control of Nitrogen Oxides (NO_x RACT) Rule. The DEC already had promulgated its versions of the Clean Air Mercury Rule and the New Source Review Rule, both in a stricter manner than Federal requirements, and has policies in place to address fine particulate matter ($PM_{2.5}$) and environmental justice. Furthermore, the DEC has adopted policies on Greenhouse Emissions and the State Environmental Quality Review Act and on Climate Change and DEC Action.

In addition, New York Governor Paterson's Executive Order #24 established an ambitious goal to reduce greenhouse gas emissions in New York State by 80 percent below the levels emitted in 1990 by the year 2050. The order created a Climate Action Council, with a directive to prepare a draft Climate Action Plan by November 1, 2010.

Furthermore, the New York State Public Service Commission (PSC) and the New York State Energy Research and development Authority (NYSERDA) are implementing the RPS program to increase the use of renewable energy sources and the Energy Efficiency Portfolio Standard to reduce electricity consumption.

The NYISO's 2010 RNA looked at several risk scenarios that adversely could impact electric system reliability, including the following:

- A stronger than expected economic recovery could pose reliability risks in 2019, absent the projected impact of energy efficiency programs.

- The Indian Point retirement scenario showed reliability violations in 2016, if both units retired when their current licenses expire. Impacts would include loss of power supply and transmission voltage support, affecting the metropolitan New York region.

- The combined impact of proposed environmental regulations, including control technology requirements for NO_x as well as a proposed policy requiring power plants to utilize closed cycle cooling and other regulatory initiatives, could result in unplanned plant retirements that may impact reliability.

- The retirement of more than 1,000 MW of generating capacity from the Long Island, New York City or Lower Hudson Valley regions would pose reliability risks. Additionally, specific plant retirements could cause transmission problems.

In similar fashion, IPPNY urges that the RGGI program review and evaluate the cumulative impact of DEC's regulatory and policy initiatives (noted above). Once evaluated, the RGGI states should plan to address the potential impact of the NYISO's indentified scenarios on the program as sensitivity cases.

J. Federal Environmental Policy - SO_2 and NO_x; Hazardous Air Pollutants; Waste and Water

The planners are considering the following potential assumption/source(s) for the RGGI program review: (1) the EPA's approach to existing federal programs, such as the Clean Air Interstate Rule for SO_2 and NO_x; (2) the EPA's proposed programs (Clean Air Transport Rule for SO_2 and NO_x; coal combustion residuals); (3) proposed and expected regulations (hazardous air pollutants MACT; Clean Water Act 316(b) Phase II), and (4) legislative proposals (Senator Carper's Clean Air Act Amendments of 2010).

The planners are leaning toward evaluating existing regulations, with the addition of the Clean Air Transport Rule for SO_2 and NO_x (EPA's preferred approach) and Mercury MACT (90% removal from input). The planners noted that the EPA's requirements for cooling and ash still have unresolved questions, and the leaning is to leave these items out for the analysis to avoid judgment calls. The planners indicated that they did not intend to include industrial boiler MACT in the analysis. The planners intend to examine any plant retirements as a sensitivity case.

IPPNY suggests that the planners conduct a cumulative analysis of existing and probable Federal requirements, in combination with the state initiatives discussed above.

K. Offset Supply

For domestic offsets, the planners are leaning toward using EPA's U.S. marginal abatement cost curves (MACCs) by source category, scaled to the RGGI region based on relevant data. The planners also intend to use international MACCs, adjusted to reflect recent market activity in U.S. and international markets.

However, according to the RGGI CO_2 Allowance Tracking System, no offset projects are mentioned in the public reports. As a result, no actual data is available on RGGI offsets. A sensitivity analysis should be conducted, due to no RGGI offsets being in place and the need to assess the price of offsets in the future.

Additional work needs to be done on the role of offsets, including clarifying the use of offsets going forward. In addition, the process for expanding offsets categories has not been publicly transparent, nor has it been completed. For example, RGGI Inc.—in coordination with the states, the Western Climate Initiative (WCI) and the Midwestern Greenhouse Gas Accord (MGGA)—released a document last May on offsets with absolutely no stakeholder input on the policy decisions that were made for the "standardized" criteria regarding offsets projects.

Finally, no template MOU for offsets has been developed, which will be necessary if states want to have reciprocal agreements on the use of offsets.

In addition, because RGGI's offsets program is so limited in operation, expanding the overall coverage of the program to other sectors would not significantly affect electric generators' use of offsets.

3. Leakage

As indicated in the stakeholder meeting, ICF stated that it did not account for leakage as part of the modeling assumptions. However, ICF indicated that it could adjust the model to respond to leakage. The original RGGI IPM modeling done for RGGI Inc.'s 2008 leakage report generally projects an increase in imports, with associated emissions leakage in the cap scenarios relative to the business-as-usual cases. No reason exists to believe that leakage could not continue in the future, and leakage may increase, if prices are higher going forward. The issue of how to address leakage needs to be resolved, including updated information on the collateral impacts on SO_2, NO_x and CO_2 emissions outside of RGGI.

Additionally, the RGGI program review should examine the impact of tighter limits or higher costs on total air quality in the RGGI region and neighboring states. Since leakage remains an important concern in RGGI program implementation, IPPNY requests the modeling for the program's review account for leakage under any future base case or sensitivity model runs and include reports on the amount of leakage and NO_x and SO_2 output expected under the various model scenarios.

Thank you for the opportunity to provide these comments. IPPNY urges you to incorporate our recommendations into the RGGI states' decision-making process on the 2012 RGGI program review. IPPNY appreciates your taking the time to review and act on our comments. If you have any questions or need additional information, please feel free to contact me.

Sincerely,

Radmila P. Miletich
Legislative & Environmental
Policy Director

cc: Governor Paterson's Deputy Secretary for Energy Thomas Congdon
DEC Commissioner Pete Grannis
PSC Chairman Garry Brown
NYSERDA President Frank Murray