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By Electronic Delivery: [info@rggi.org](mailto:info@rggi.org)  
September 20, 2010

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

Re: Comments of Dominion Energy New England, Inc. on the Proposed RGGI  
Integrated Planning Model Assumptions and Sensitivity Cases

Dear Mr. Schrag:

Dominion Energy New England, Inc. ("Dominion") appreciates the opportunity to submit comments to the Regional Greenhouse Gas Initiative (RGGI), Inc. on issues and assumptions related to development of a reference case for analysis of electricity and CO<sub>2</sub> allowance markets using the Integrated Planning Model (IPM). Dominion owns three fossil fired generating stations in the RGGI region subject to state RGGI implementation rules, which include Dominion Energy Brayton Point in Somerset, Massachusetts, Dominion Energy Salem Harbor in Salem, Massachusetts and Dominion Energy Manchester Street in Providence, Rhode Island.

Dominion appreciates and attended the stakeholder meeting held by RGGI Inc. on September 13, 2010. As a result, we have several areas we would like to provide feedback on relative to the IPM modeling efforts.

#### **Process Transparency and Schedule**

Based on the information released to date, it is unclear as to when the base case and sensitivity modeling runs will actually occur. Additionally, it is unclear as to what sensitivity cases will actually be run. For example, we would like an opportunity to comment on which sensitivity cases or policy scenarios have been chosen *prior* to actual model runs. Additionally, it would be helpful for stakeholders to know what the proposed schedule is for the modeling runs and what the proposed schedule is for the 2012 program review. We request RGGI Inc. to maintain a high level of public transparency as the preparation work for the IPM model runs and 2012 RGGI program

review develops by releasing a proposed detailed schedule with milestones and providing opportunity for public comment *prior* to decision points.

### **Nuclear Cost Estimates Low**

The assumption for overnight capital cost of new advanced nuclear capacity is shown at approximately \$4,700/kW (\$2008), based on publicly available sources. Although we cannot offer a specific value, it is our experience that this number is low and will cause the IPM model to choose new nuclear over time in order to satisfy demand needs as the model runs. As a conservative measure, RGGI Inc. may want to consider directing its consultant, ICF International, to use a higher overnight capital cost of new advanced nuclear capacity, so that model runs have a higher degree of accuracy.

### **Coal and Nuclear Plant Construction in the RGGI Region**

RGGI Inc. indicated in the stakeholder meeting and slide presentations that they are leaning towards the IPM assumption of “only coal with carbon capture can be built in the RGGI region” and that “nuclear can be built on an economic basis at existing plant sites.” This will cause the IPM model to choose new coal and new nuclear over time in order to satisfy demand needs. We believe new coal and new nuclear units are unlikely to be successfully and economically sited in the RGGI region. Existing sites are often space constrained and any new unit with the required environmental controls (emissions, water, etc.) will require a footprint in excess of available real estate. Therefore, we request RGGI Inc. to direct its consultant, ICF International, to *disallow* new coal and advanced nuclear capacity in the RGGI region, so that model runs have a higher degree of accuracy; or at a minimum, run this as a sensitivity case.

### **Regional Energy and Peak Demand in the RGGI Region**

RGGI Inc. indicated that they are leaning towards “ISO projections, adjusted for efficiency as provided by the states” for the IPM assumptions regarding regional energy and peak demand. As seen from the additional slides provided at the stakeholder meeting, ISO New England is shown to have a negative load demand, which is primarily driven by the aggressive energy efficiency investment policies expected to be implemented in Massachusetts, as required by state statutes. Other states show a decreased load demand when adjusted for energy efficiency. We request that RGGI Inc. direct its consultant, ICF International, to 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 each state does not invest these dollars.

### **Offsets**

RGGI Inc. indicated that they are leaning towards using “EPA domestic (scaled to RGGI) and international marginal abatement cost curves, adjusted to reflect recent

market activity in U.S. and international markets” for offset assumptions. Since no RGGI offset projects have been submitted or approved to date, we request that RGGI Inc. direct its consultant, ICF International, to run a sensitivity case which does not allow RGGI offsets so the public can understand RGGI program impacts if no offsets are used for compliance.

## **Leakage**

As indicated in the stakeholder meeting, ICF International stated that it did not account for leakage as part of the modeling assumptions. However, ICF indicated that they could adjust the model to respond to leakage on a “limited basis.”

The original RGGI IPM modeling done for RGGI Inc.’s 2008 leakage report<sup>1</sup> generally projects an increase in imports, with associated emissions leakage in the cap scenarios relative to the business-as-usual cases. Taking all of the modeling into account, 25-50% of the CO<sub>2</sub> emissions benefits of the RGGI program could be lost. In fact, as pointed out in the April 2006 proposal and notes for discussion presented to the RGGI staff working group by Richard Cowart of the Regulatory Assistance Project entitled *Addressing Leakage in a Cap-and-Trade System: Treating Imports as Sources*, it only takes a small shift in purchasing patterns to result in quite large leakage percentages. It is possible that it could easily turn out to be in the 40% to 60% range, if not controlled. However, the 2008 leakage report paints a much more optimistic picture of the IPM modeling stating that “under a “middle-of-the-road” scenario, cumulative emissions leakage was estimated at 27% of net CO<sub>2</sub> emissions reductions through 2015.”

Since leakage remains an important concern in RGGI program implementation, we request that RGGI Inc. direct its consultant, ICF International, to account for leakage under any future base case or sensitivity model runs.

## **Pollution Control Costs**

During the stakeholder meeting, ICF International indicated that EPA had just released a new cost for flue gas desulfurization of \$500/kW. However, RGGI, Inc. was “leaning” towards using an average value of approximately \$425\$/kW based on a 2004-2006 number of approximately \$300/kW released by EPA and industry reports such as Generators for Affordable Power (GAP) of approximately \$650/kW. We request RGGI Inc. to raise the “leaning” cost to an average of the new EPA cost for flue gas desulfurization of \$500/kW and the GAP cost estimate which is \$575/kW.

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<sup>1</sup> *Potential Emissions Leakage and the Regional Greenhouse Gas Initiative (RGGI)*, Final Report of the RGGI Emissions Leakage Multi-State Staff Working Group to the RGGI Agency Heads, (2008).

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Once again, we appreciate the opportunity to comment and your consideration of these issues and if you have any questions, please call Paula Hamel at 804-273-3024 or e-mail at [paula.a.hamel@dom.com](mailto:paula.a.hamel@dom.com).

Sincerely,

A handwritten signature in black ink that reads "Pamela F. Faggert". The signature is written in a cursive style with a large, looped "P" at the beginning.

Pamela F. Faggert

cc: D.Weekley, Dominion