October 23, 2024

Andrew J. McKeon
Executive Director
Regional Greenhouse Gas Initiative, Inc.
90 Church Street, 4th Floor
New York, NY 10007

Filed electronically to info@rggi.org

Re: Regional Greenhouse Gas Initiative (RGGI) Third Program Review Comments

Dear Mr. McKeon:

Alpha Generation, LLC (AlphaGen) and CPV Shore, LLC (CPV) appreciate the opportunity to provide these comments with respect to the RGGI Third Program Review.

AlphaGen manages and operates 14,000 MW of power generation facilities predominantly located in the RGGI-participating states, including a portfolio owned by Parkway Generation, LLC (Parkway) consisting of nine modern and highly efficient natural gas-fired generation facilities that provide critical capacity, energy and ancillary services resources to New Jersey and Maryland near large, densely populated load centers. The efficient, fast-ramping output provided by the Parkway portfolio will allow for the integration of intermittent renewable resources in the Maryland and New Jersey electricity markets over the coming decades.

CPV owns and operates the CPV Woodbridge Energy Center (WEC), a 772.9 MW (nameplate) combined-cycle electric generating facility located in Woodbridge Township, Middlesex County, New Jersey which went into operation in early 2016. The facility utilizes advanced generation technology, making it one of the nation's cleanest and most efficient power generation facilities. Because the WEC is so efficient, it reduces New Jersey's dependence on older and less efficient power generating facilities by displacing them within the generation supply stack. The facility is interconnected to the transmission system owned by Jersey Central Power & Light Company and operated by PJM Interconnection.

AlphaGen and CPV have a strong interest in ensuring a RGGI framework that is functionally sound and works toward the Program's overarching goals of reducing greenhouse gas emissions and facilitating the transition to a clean energy future for the region. To that end, we are proposing changes to RGGI's structure. In these comments, AlphaGen and CPV focus on RGGI's impacts in PJM because: (a) any expansion of RGGI will likely be in PJM; (b) increases to economic and environmental leakage are disproportionately borne by participating PJM generators; and c) the current and proposed RGGI structures penalize

more efficient and clean gas generators in certain PJM states, i.e., generators in New Jersey and Maryland. Leakage impacts associated with RGGI are a continuing and growing concern in PJM and can impede reductions in greenhouse gas emissions and the region's transition to a clean energy economy.

While there are a host of complex issues that define a successful allowance trading program, AlphaGen and CPV recommend that RGGI and its member states evaluate the Program and any changes through the following three (3) key objectives:

a) Does the Program result in reduced greenhouse gas emissions? This is, of course, the very reason for the program's existence. It is critical that this issue be evaluated on a holistic/global basis. The Program is ONLY successful if it reduces emissions. It is not successful if it reduces emissions in a member state only to cause emissions in a non-member state to increase by a greater amount, which leads to increased emissions globally. This issue – leakage – becomes of increasing concern as allowance prices increase and has become detrimental to the program in RGGI's PJM member states.

   With 100% state participation in the New York ISO - ISO New England block, the generation there is more insulated from leakage effects. By comparison, RGGI generators in the highly competitive PJM energy market are at an increasing economic disadvantage. Older natural gas-fired and even coal-fired generators in non-RGGI states are increasingly dispatched over RGGI generators even when those RGGI generators are more efficient with lower emission rates. The result of such leakage means a shift in energy production to non-RGGI states – and higher greenhouse gas emissions, subverting the very purpose of RGGI. **Any RGGI structure that leads to this result should be addressed by RGGI and its member states.**

b) Does the Program cause unacceptable levels of electric rate increases to customers? The issue of "affordability" has become of increasing importance across all the RGGI states. Certainly, "affordability" is a subjective term, and each state and state utility commission will make its own determination. To support these decisions, the rate impacts from the Program and any rule changes under review should be transparent and available to decision-makers and the public.

Analysis Finds PJM State Participation in RGGI Increases Emissions

To support RGGI and member states in this review, AlphaGen and CPV drew from the modeling results provided by RGGI in its September 23 Notice (Notice) and has conducted additional analysis. These analyses focused on the change in dispatch of generation (and resulting emissions and costs) under the current RGGI policy structure and under "Exploratory Policy Scenarios" as defined by the Notice.

A key factor for the analyses is how the generation supply stack in each RTO is impacted by RGGI, where generators lower in the supply stack are dispatched first. As allowance prices

increase, they have an increasing impact on this stack, specifically when generators in the RGGI region must compete in the supply stack (and dispatch) against generators in non-RGGI states. This can result in generation and emission leakage whereby higher emitting generators in non-RGGI states become lower in the supply stack than more efficient generation in a RGGI state and their output and emissions artificially increase solely because of the RGGI allowance price penalty.

The modeling provided in the Notice is limited and does not capture a critical element of RGGI's impacts. Specifically, the modeling does not evaluate the all-in impact of RGGI resulting from a given state's participation. For example, it is important to look at whether New Jersey's participation in RGGI (under a given RGGI structure) is adding or reducing emissions in total. This issue is particularly applicable to RGGI's impact in PJM, which contains a high proportion of states (all or parts of Pennsylvania, Virgina, West Virginia, Indiana, Illinois, Kentucky, North Carolina, Ohio, and Tennessee) which are not in RGGI.

AlphaGen conducted a PJM system dispatch simulation using the Enelytix Power Systems Optimizer, a power market simulation engine, and found that **participation in RGGI by the currently participating PJM states, under current allowance prices, fuel prices, and demand scenarios, actually increases carbon emissions.** The simulation compared a case with current RGGI prices to a case where RGGI prices were set to zero as a proxy for eliminating the impacts of leakage by putting generators in the RGGI states of New Jersey, Delaware and Maryland on equal footing as generators in non RGGI states. Comparing the zero price case (that is, if New Jersey, Delaware and Maryland were not in RGGI) to the scenario with these three states in RGGI indicates that their RGGI participation actually increases carbon emissions, with an increase of 1.1 million tons per year along with a large $1.4 billion increase in costs to consumers (as RGGI allowance prices push up the clearing prices for wholesale energy paid by all consumers).

Unless steps are taken to mitigate leakage, this means that participation in RGGI by PJM states is increasing greenhouse gas emissions on an all-in basis. This significant cost impact of leakage and associated emissions increase should be addressed by RGGI and member states with specific mitigation policies as discussed below.

In addition to the adverse greenhouse gas emissions impacts from leakage in PJM, the reduction in production from generators due to the impact of allowance prices on the dispatch stack can lead to pre-mature retirements, at a time PJM can ill afford them, reduce the value of the facilities and thus property tax revenues, and potentially cause unnecessary layoffs of workers.

Based on these results, AlphaGen and CPV recommend that RGGI and member states (most particularly the member states of New Jersey, Maryland, and Delaware) undertake careful reconsideration of both the current structure and the other frameworks being considered, as they may lead to the very opposite result intended by their RGGI membership – **an increase in greenhouse gas emissions.** Instead, AlphaGen and CPV recommend that RGGI

and the member states consider mechanisms that contain prices at a level that will not cause this perverse result.

Recommended Measures

Given these stark results, AlphaGen and CPV recommend that RGGI and its member states consider the following mechanisms to limit leakage and the increased emissions and higher electric rates that would result:

a) **Adopt an explicit auction structure to mitigate leakage**: leakage impacts can be mitigated by focusing policy on more efficient generators so that their generation can support greenhouse gas reductions. It is contrary to achieving RGGI's goals (as well as fundamentally unfair) to impose high RGGI allowance prices on highly efficient (low heat rate) generation. This leads to higher emitting generation outside of RGGI to be dispatched. For example, at a RGGI allowance price of $20, a natural gas generator in RGGI with an efficient heat rate of 7,500 ends up higher in the dispatch supply stack than a natural gas generator in a non-RGGI state with a heat rate of 10,450. RGGI rules can mitigate this impact by establishing set-aside allowances for generators which have heat rates below a specified level, either at a fixed price or by a set-aside auction. Only generators below a specified heat rate would be permitted to buy these allowances, and the volume assigned to this set-aside could be set at levels that result in prices that prevent leakage.

b) **Consider a more gradual reduction in the allowance cap over time.** A significant decrease in the cap leads to higher allowance prices, greater rate impacts, and more leakage in PJM. Moderating this decline will moderate rate impacts and (to some degree) mitigate leakage.

c) **Consider the adoption of the "flat cap" scenario** which yields forecasted allowance prices at a level which will control and limit leakage.

d) **Consider adjustments to the proposed two-tier Cost Containment Reserve (CCR)** to enhance its effectiveness in containing allowance price increases and preventing leakage. RGGI should conduct additional modeling of each of the two tiers of the CCR whereby additional volume is included in both reserves and a reduced CCR price is used. This can provide more rigorous protection against allowance price levels that will increase leakage in a way that is counterproductive to RGGI's goals.

e) **Reconsider non-compliance entity participation.** Consider further regular research and evaluation with respect to whether entities which are purchasing allowances for reasons other than meeting compliance obligations are driving allowance price increases or volatility. Parkway recognizes that secondary markets serve an important role by allowing firms to purchase allowances between auctions.

They can also help to prevent price volatility and provide price signals that help with business planning. At the same time, if not adequately monitored or structured, secondary markets may also create the opportunity for price distortions or anti-competitive behavior that can harm the market, increase prices, and cause leakage.

RGGI periodically issues Reports on the Secondary Market for RGGI Allowances. RGGI is mindful that participation by entities who are buying allowances for purposes other than to operate their generation assets have the potential to increase allowance price volatility or could use other trading approaches that withhold supply and drive prices higher. RGGI's Second Quarter Report provides only a one sentence conclusion on these issues: "As in previous reports on the secondary market, we find no evidence of anti-competitive conduct" (page 22). RGGI should provide more transparency to the public and market participants with respect to its review and analysis of these issues and should increase its monitoring in this area. If problems are found, RGGI should be prepared to introduce limitations on participation and allowance purchasing by investors without compliance obligations. Active oversight and research by RGGI can help shield the allowance market from higher allowance prices that may result from manipulation or withholding.

Accommodating Additional States into RGGI

In its Notice, RGGI requested comments on what policies it could enact to attract additional states. RGGI's interest in developing a structure which can accommodate and incent other states to become members of RGGI can be addressed by the changes recommended above. States will be considerably more interested in joining RGGI if they can be confident that joining RGGI will not shift generation and emissions to other states, nor will they desire to realize rate increases without clear environmental benefits. Inasmuch as new member states are likely to be located in PJM, the recommendations above can also serve to attract and accommodate new members.

AlphaGen and CPV appreciate the opportunity to file these comments and look forward to continued engagement with RGGI and stakeholders.

Sincerely,

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