October 23, 2024

Andrew McKeon, Executive Director
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RE: RGGI Program Review Comment

Dear Mr. McKeon and Members of the RGGI Board:

The Third Program Review Update materials posted on September 23, 2024, represent a welcome resumption of program review activities. The RGGI states seek comment on the Exploratory Policy Scenario detailed in these materials, as well as considerations related to incorporating additional states into the program. Below we address key elements of the Exploratory Scenario and principles to guide any proposed RGGI expansion.

A. About Constellation

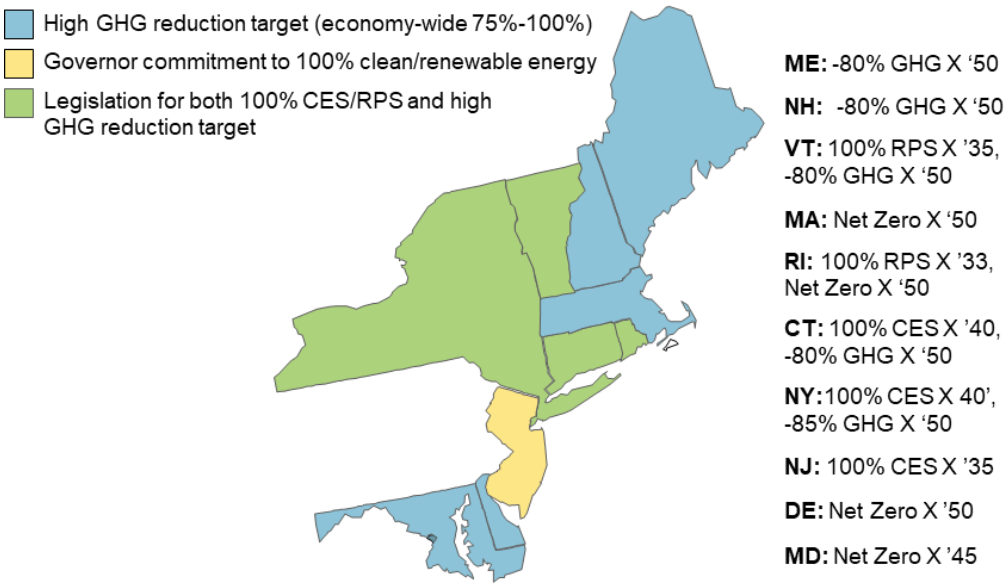
Constellation is the nation's largest producer of clean, carbon-free energy and a leading supplier of energy products and services to businesses, homes, community aggregations and public sector customers across the continental United States, including three fourths of Fortune 100 companies. We own and operate approximately 22,500 megawatts (MW) of carbon-free power generation, which includes the nation's largest nuclear fleet: enough to power the equivalent of 15 million homes and provide about 10 percent of the nation's clean energy. Constellation operates a diverse fleet of power plants, including 23 natural gas-fired or dual-fuel generators across 12 plants with a combined net electric capacity of 8.5 gigawatts. We are accelerating the nation's transition to a carbon-free future by helping our customers reach their sustainability goals. We have also set our own ambitious decarbonization goals of achieving 95 percent carbon-free electricity generation by 2030 and 100 percent by 2040. By providing clean, safe, affordable, and reliable energy and expanding the use of our generation fleet to decarbonize other sectors, we are well-positioned to meet the increasing demand for sustainable solutions and to deliver long-term value to our shareholders.

B. We support the trajectory of the emissions budget in the Exploratory Policy Scenario through 2037

1. The trajectory is roughly consistent with the climate and clean energy policies of member states

The proposed RGGI budget aligns with the climate policies of member states in important ways. All member states have established renewable portfolio standards (RPS) and/or clean energy standards (CES). The proposed budget complements the goals of these programs by incentivizing the adoption of cleaner energy sources both through market price signals and an implied overall restriction on the total quantity of generation that can be supplied by covered sources.

Figure 1: GHG Goals and Clean/Renewable Energy Standards



Source: DSIRE

The zero-by-2035 trajectory in the emissions budget for the period of 2027 to 2033 is consistent with the clean energy policies of Rhode Island, which has an RPS of 100 percent by 2033, and Vermont, which has an RPS of 100 percent by 2035. The decline in the emissions budget from 2033 to 2037 follows a zero-by-2040 trajectory, and it aligns with the 100 percent by 2040 clean energy standards of New York and Connecticut. Further, as shown above, all of the RGGI states except New Jersey have economywide GHG goals or targets requiring at least an 80 percent reduction in CO_2 emissions (from a baseline year) by 2050 at the latest.

2. A meaningful and ambitious cap on fossil generator emissions is a critical complement to investments in clean energy resources

The state level climate policies outlined above largely operate by supporting and expanding the carbon-free supply of electricity. RGGI creates a natural complement to these programs by maintaining a meaningful economic incentive to limit carbon emissions from fossil generators. This program review, with the extension of the cap and various cost thresholds to 2037, provides additional longer-term certainty with respect to the constraints and incentives that states, generators, and system operators can use in planning and risk analysis. And as the power sector transitions from a period of flat or declining demand growth to one in which demand is expected to increase, potentially sharply, due to economywide electrification and burgeoning data center development, the program cap will continue serving as an important emissions backstop.

C. The long-term outlook for the power sector in the RGGI states should be addressed

1. The RGGI states should provide analysis and scenarios for the post-2037 period

Unlike in the Zero-by-2040 scenarios presented in September 2023, the emissions budget in the Exploratory Policy Scenario falls to roughly 7.5 million tons in 2037 but remains constant thereafter. Whether this change reflects the preference of RGGI states, or if it signifies a desire to leave the difficult question of how a potential zero cap would work in practice to be addressed later is unclear. Whichever the case, two things are certain - the best available scientific guidance indicates that power

sector emissions (as well as CO_2 emissions economywide) must reach net-zero not long after the end of the period contemplated in the Exploratory Policy Scenario, and the implications of a zero cap for RGGI are significant. Without employing carbon capture, utilization, and storage (CCUS) capable of capturing 100 percent of CO_2 emissions, switching covered sources to hydrogen or another fuel with zero or negative lifecycle emissions, potentially holding some quantity of allowances in reserve after all auctions cease, or purchasing allowances from a linked program with a non-zero budget, regulated sources would need to discontinue operating. For the RGGI region, any of the lost output from these resources would need to be supplied by some combination of zero-carbon generators, imports, and increased output from non-regulated fossil generators (i.e., those under 25 MW or 15 MW in NY).

The responsibility for ensuring that sufficient resources exist to meet electricity demand exists separate and apart from RGGI itself, but the program should not be silent on the matter. January 1, 2038, is just slightly more than 13 years from now. Power sector infrastructure investment planning and commercial engagements executed today extend well beyond that point in the future. Even if resolving the post-2037 cap trajectory proves too difficult to address during the current program review cycle, an analysis of post-2037 cap trajectory scenarios would provide important insights into the issues and conditions that stakeholders may eventually face. At minimum, results from the current modeling and previous rounds of analyses through 2050 should be made available.

2. Even under a zero cap, there may be a continued role for the cost containment reserve

Unlimited banking would still permit market participants to hold allowances after the emissions cap falls to zero and formal auctions are discontinued. Presumably there will still be a secondary market for those allowances and some level of price transparency. Currently, the cost containment reserve is triggered in the event auction prices exceed a pre-defined threshold. In the case of a zero cap, a reserve mechanism could be structured to release allowances if an agreed-upon secondary market index exceeds a threshold price, either one consistent with CCR Trigger #2, or perhaps an alternative value such as the social cost of CO_2, if it or a related metric is still in use at that time. The reserve allowances could be offered at ad-hoc auctions where the reserve price would be the same as the secondary market index threshold price. Any CCR mechanism under a zero cap would need to be consistent with each state's targets for power sector and economywide emissions reductions, but it could provide useful additional runway for the power system to adapt to a net-zero emissions framework.

D. Incorporating more states into the program can provide myriad benefits

1. States that plan to adopt the most recent model rule can be readily incorporated

RGGI has effectively managed the addition and departure of states. Establishing and maintaining continuity despite such developments is a hallmark of a well-structured and durable program. Participation from states not currently in RGGI should be seamless if the state(s) adopt the most recent version of the model rule, agree to accept subsequent model rule revisions, and negotiate an appropriate emissions budget and cap trajectory. The program can continue to function even if there are minor differences in pertinent state regulations. For example, though the rest of the participating states adopted the emissions containment reserve after the Second Program Review, Maine and New Hampshire chose not to implement it. The goal is not to require every state to adopt entirely identical rules. As articulated in the principles guiding the Second Program Review, each state "commits to

seek to establish in statute and/or regulation" a program that is "*substantially consistent with*" (emphasis ours) the updated model rule.[1]

2. Integration of states that have not adopted the cap trajectory resulting from the Third Program review is still possible and likely beneficial.

An expanded RGGI footprint offers a variety of important benefits. A consistent regulatory framework across states, especially among those that are part of a common or adjacent energy markets, ensures efficient system dispatch and market outcomes. The regulatory burden is less onerous for compliance entities operating in multiple jurisdictions. There are fewer opportunities for regulatory arbitrage. A larger universe of regulated sources, coupled with a higher overall emissions budget, provides additional liquidity in the market for emissions allowances. Increased liquidity, in turn, improves price discovery and helps to mitigate price volatility. And while individual circumstances may vary, emissions leakage should diminish as more members, and especially those in the same balancing area, agree to join the current RGGI states.

The degree which program integration contributes the benefits listed above is likely an empirical question, so RGGI states should leverage the same type of analysis used to inform the model rule development in all the program reviews thus far. If it can be shown that expected emissions allowance prices in RGGI and one or more separate state programs are roughly similar, and there is general consistency in the structure of the various price adjustment mechanisms employed in each program, then full transferability of allowances between programs should be permitted. If pronounced differences exist between programs in relative emissions budget stringency and trajectory, and there is concern that the availability of excess allowances from one program may hinder the expected emissions outcomes in the other, then imposing restrictions on allowance transfers between programs may restore a desired balance. A variety of approaches are worth considering, including volumetric limits on allowance transfers, static or dynamic allowance transfer ratios, and allowance banking restrictions. Price triggers and other refinements could be incorporated into any of these approaches. Regardless of which implementation is chosen, there should be a bias toward clarity and simplicity even if it means accepting suboptimal emission outcomes in the short term, because it will facilitate continued expansion of the program and signal that an ever-growing collection of fossil generators will need to account for their climate pollution.

<u>E. Consideration should be given to interaction between RGGI and existing, proposed, and potential federal action to limit climate pollution</u>

In May 2024, the Environmental Protection Agency (EPA) finalized a GHG regulation for existing coal-fired and new gas-fired generators. EPA also stated in February 2024 that it will propose GHG regulation for existing gas-fired generators. The upcoming election will either reinforce the likelihood of GHG requirements for new and existing power plants or usher in another era of state-led action to address the climate crisis. In either case, states are about to embark on a new era of climate action – an opportunity that RGGI's program review should embrace by:

- Raising the reserve price, consistent with the Exploratory Policy Scenario. An elevated reserve price will improve the ability of states participating in RGGI to demonstrate equivalency with 111 requirements without the need for further program revisions.

[1] *RGGI 2016 Program Review: Principles to Accompany Model Rule Amendments*. (2017). Available at https://www.rggi.org/sites/default/files/Uploads/Program-Review/12-19-2017/Principles_Accompanying_Model_Rule.pdf

- Commissioning analysis of the proposed and final EPA GHG rules will be an important part of supporting the state plan development process of RGGI member states.
- Adopting model rule revisions that ensure states at any stage of decarbonization have a reasonable pathway for joining RGGI. RGGI's program review should recognize that the environmental impact of expanding RGGI may be just as significant as strengthening the requirements for the existing 10-state bloc.

We look forward to working with state officials and the stakeholder community to ensure the success of the program review.

Sincerely,

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