

Joint Stakeholder Comments on the 2016 RGGI Program Review February 19th, 2016

Our organizations welcome the opportunity to submit comments on policy scenario modeling for the Regional Greenhouse Gas Initiative (RGGI). Some of our groups have submitted or will submit separate comments on improving the reference case assumptions to more accurately reflect expected “business-as-usual” in the RGGI region, including existing state policies in effect independent of the RGGI Program Review and future costs and deployment of clean energy.

Policy Scenarios for Modeling

Here, we provide joint feedback on the policy scenarios that the RGGI states should model in addition to the reference case, as well as input on the types of modeling analyses that would be helpful. We appreciate the opportunity to offer input on this topic, and we look forward to further engagement as the RGGI states consider how to continue their leadership going forward.

As we have previously commented,¹ to achieve the states’ targets of reducing economy-wide greenhouse gas emissions by 35-45 percent by 2030 and at least 80 percent by 2050, the RGGI states must adopt a 2030 cap for the power sector that cuts carbon pollution further and faster than EPA’s Clean Power Plan requires. As the RGGI states model potential policy scenarios for the region post 2020, it is critical to include future cap scenarios consistent with achieving these climate goals. Modeling these scenarios will provide vital information to the states regarding opportunities to achieve greater emissions reductions cost effectively.

At the February 2nd stakeholder meeting in Wilmington, Delaware, the RGGI states presented two potential policy scenarios to model: (1) continuation of the 2020 RGGI cap, combined with limits on the use of the Cost Containment Reserve (CCR) and offsets to ensure that power sector emissions would be no higher than the RGGI states’ combined Clean Power Plan targets; and (2) continued reductions in the RGGI cap post-2020 at the rate of 2.5% of the 2020 cap level (i.e., 1.95 MT CO₂) per year, reaching a cap of 56.7 MT CO₂ in 2031, and elimination of the CCR and offsets. The states suggested that they might model two or three initial policy scenarios, and requested feedback, including recommendations on other policy scenarios to model beyond the states’ proposals.

As explained further below, we support modeling the states’ two proposed policy scenarios, as well as a third scenario that would reduce the RGGI cap by 5% of the 2020 cap level per year, while eliminating the CCR, and result in a 2030 cap just under 40 MT CO₂.

The RGGI states appropriately recognize that modeled policy scenarios must at a minimum achieve compliance with the Clean Power Plan. While we understand the value of modeling minimum effort to achieve CPP compliance, we believe that scenarios based on continuing cap reductions better align with states’ GHG reduction requirements. We are encouraged that one of

¹ *Joint Stakeholder Comments on the 2016 Program Review* (Dec. 4, 2015), available at http://www.rggi.org/docs/ProgramReview/2016/11-17-15/Comments/Joint_Stakeholder_Comments.pdf.

the proposed scenarios eliminates the CCR, which, as ICF's reference case modeling shows, increases emissions and could prevent the states from achieving both the RGGI cap and their Clean Power Plan targets, let alone the states' more ambitious mid- and long-term climate targets. As we have explained in earlier comments and address further below, the current CCR enables fossil fuel-fired power plants to exceed the RGGI cap by tens of millions of tons of CO₂, and should be eliminated or reformed.²

Consistent with achieving states' mid- and long-term climate goals, we urge the states to consider a range of policy scenarios that go beyond the Clean Power Plan's minimum requirements. A range of strong and realistic modeling scenarios will provide important information for states' emission reduction strategies. For this reason, we support including the proposed 2.5% annual reduction scenario, which would ensure that the RGGI states continue to make progress in reducing emissions from the power sector. Such progress is needed to cement the RGGI states' leadership on climate change, and given the significant economic, health, and environmental benefits that the states have achieved under RGGI's declining cap to date, it is prudent to explore continuing emissions reductions.³

While a 2.5% annual reduction in power sector emissions would lead to further progress, it may be insufficient to meet the states' 2030 economy-wide emissions targets and will make it difficult for states to meet their even more aggressive 2050 climate targets. To achieve these targets, it will not be enough for the power sector to simply achieve a "proportional share" of reductions relative to other emitting sectors. Studies have shown that the power sector has lower cost emissions reduction opportunities than do other sectors and that the power sector must cut emissions faster than other sectors to achieve long-term climate goals in a cost-effective manner.⁴ A cleaner power sector is further needed to unlock emissions reduction opportunities in transportation and other sectors through electrification. Recent analysis of the RGGI states' 2030 economy-wide greenhouse gas emissions targets further shows that the power sector must play an outsized role in reducing emissions, beyond a 2.5% emissions reduction rate per year.⁵

Accordingly, we urge the states to model a third policy scenario that would reduce emissions faster than 2.5% per year. We recommend that this third scenario reduce emissions by 5% of the 2020 cap level (i.e., 3.9 MT CO₂) per year, which would result in a 2030 power sector emissions

² *Id.* at 4-6.

³ See Analysis Group (2015), *The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States: Review of RGGI's Second Three-Year Compliance Period (2012-2014)*, available at http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/analysis_group_rggi_report_july_2015.pdf; Analysis Group (2011), *The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States: Review of the Use of RGGI Auction Proceeds from the First Three-Year Compliance Period*, available at http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/economic_impact_rggi_report.pdf; Acadia Center (2015), *The Regional Greenhouse Gas Initiative: A Model Program for the Power Sector*, available at http://acadiacenter.org/wp-content/uploads/2015/07/RGGI-Emissions-Trends-Report_Final.pdf.

⁴ See, e.g., EPA Analysis of the Waxman Markey Discussion Draft, 2009, available at <http://www3.epa.gov/climatechange/Downloads/EPAactivities/WM-Analysis.pdf>.

⁵ Synapse Energy Economics (2016), *The RGGI Opportunity: RGGI as the Electric Sector Compliance Tool to Achieve 2030 State Climate Targets*, available at [https://www.dropbox.com/s/zpjz7iz5qrqe7g/The-RGGI-Opportunity%20\(1\).pdf](https://www.dropbox.com/s/zpjz7iz5qrqe7g/The-RGGI-Opportunity%20(1).pdf).

cap of slightly under 40 MT CO₂. This rate of reduction is consistent with what the nine RGGI states have already achieved over the first seven years of the program: between 2009 and 2015, power sector emissions in RGGI have declined by an average of 3.8 MT CO₂ per year.⁶ As with the states' proposed 2.5% annual reduction scenario, we also recommend that the new 5% scenario assume elimination of the CCR.

Including a more ambitious 5% per year emissions reduction scenario will help the states and stakeholders examine and understand the reductions needed to achieve state climate goals and will provide a range of potential cap levels for the states to consider. As further explained below, the RGGI states should also ensure that their analysis of potential policy scenarios includes modeling of the full range of economic, environmental, and public health benefits of the different modeled scenarios, and that this information is publicly disseminated, so that both states and stakeholders can understand the potential benefits and costs of future cap levels.

Reforming or Eliminating the Cost Containment Reserve (CCR)

As noted above, the RGGI states have proposed to model a policy scenario in which the CCR is eliminated, a measure that, in practice, would strengthen RGGI's environmental performance. Through its first two years of operation, all 15 million available CCR allowances have been purchased, which effectively raises the RGGI cap and undermines the program's environmental integrity. If the CCR remains in place as currently structured, up to 65 million additional tons of CO₂ could be allowed in the RGGI states from 2014-2020.

If the RGGI states choose to retain the CCR, two modifications will be necessary to achieve the CCR's intended purpose without jeopardizing achievement of environmental goals. The first of these changes to the CCR must be to draw allowances from beneath the cap, rather than creating new allowances when price thresholds are met. This would ensure that aggregate emissions limits are not exceeded, while preserving a mechanism to mitigate price volatility. This approach is currently being used in California's emissions trading program where prices have been stable.⁷ Like the RGGI CCR, in California's program additional allowances become available for purchase when price thresholds are met. Unlike the RGGI CCR, about 4% of CA's original number of allowances from the capped budget is held back in the allowance price containment reserve. If this reserve of allowances is exhausted, there is limited "borrowing" allowed from the latest program years, and therefore the cumulative supply of allowances – and permissible emissions – is not increased.⁸

The second necessary CCR modification would be an increase to price thresholds. The presence of a CCR is justifiable if it serves to mitigate price spikes in times of unexpected and exceptional circumstances. CCR allowances should not be expected to be purchased under normal market

⁶ According to RGGI COATS data, covered sources in the nine current RGGI states emitted 105.96 MT CO₂ in 2009 and 83.16 MT CO₂ in 2015, for an average emissions reduction of 3.80 MT CO₂ per year. RGGI, Inc., *RGGI COATS Data*, available at <https://www.rggi.org/market/tracking/public-reporting>.

⁷ EDF, *Carbon Market California: A Comprehensive Analysis of the Golden State's Cap-and-Trade Program*, http://www.edf.org/sites/default/files/content/carbon-market-california-year_two.pdf

⁸ Explanation of California's Allowance Price Containment Reserve: <http://www.arb.ca.gov/regact/2010/capandtrade10/capv3appg.pdf>

conditions, as they have been in 2014 and 2015. By raising the CCR price thresholds, the RGGI states will dissuade market participants from triggering the CCR under business-as-usual circumstances. This is the approach that California has successfully used for setting CCR trigger prices. California's 2016 reserve allowances first become available at \$47.54 per allowance,⁹ while the market's last 2015 auction settlement price was \$12.73.¹⁰ The RGGI states should set annual price triggers based on a similar ratio to recent RGGI auction clearing prices.

Whether the RGGI states choose to eliminate the CCR or make the necessary improvements, these changes should be made as soon as possible. Implementing CCR reform beginning in 2018 rather than 2020 would potentially prevent 20 million tons of CO₂ emissions.

Accounting for Climate and Health Co-Benefits

We commend the RGGI states for conducting a thorough review of RGGI's impact on the electric sector. The results of this round of modeling will provide necessary information for the RGGI states and stakeholders to determine the best path forward for the program. However, when considering what is best for the RGGI region and its citizens, we must also account for impacts outside of the electric sector. During the 2012 Program Review, the RGGI states conducted REMI modeling which produced instructive findings on regional economic impacts, including changes to gross state product (GSP), job creation, and personal income.¹¹ The RGGI states should conduct similar REMI modeling for the 2016 Program Review, but should expand the scope of analysis to include public health and climate benefits.

As the RGGI states are well aware, measures taken to reduce CO₂ emissions result in both climate benefits (mitigating the long-term effects of climate change) and health co-benefits (arising from decreased emissions of co-pollutants). In EPA's Regulatory Impact Analysis for the Clean Power Plan, climate and health co-benefits resulting from achievement of CO₂ reduction targets are measured against a business-as-usual scenario.¹² The RGGI states should undertake a similar analysis to determine the climate and health co-benefits associated with modeled policy scenarios in comparison to the reference case. Specifically, monetized climate and health co-benefits should be estimated using the "benefit-per-ton" approach used by the EPA whereby emission reductions are multiplied by benefit-per-ton estimates (e.g., the Social Cost of Carbon) to determine monetary benefits. While we understand that this will add time and expenses to the Program Review process, accounting for these benefits is crucial to a complete understanding of the program's potential impacts.

In drafting the final Clean Power Plan, EPA received invaluable lessons from RGGI's experience, design and implementation. The RGGI states now have an opportunity to benefit

⁹ 2016 Annual Allowance Price Containment Reserve Notice, December 1, 2015:

http://www.arb.ca.gov/cc/capandtrade/auction/2016_reserve_sale_apcr_notice.pdf

¹⁰ CA-QC Joint Auction Summary Results Report, November 24, 2015:

http://www.arb.ca.gov/cc/capandtrade/auction/nov-2015/summary_results_report.pdf

¹¹ REMI Economic Impact Analysis: Assumptions and Results, June 2013.

http://www.rggi.org/docs/ProgramReview/REMI%2091%20Cap%20Bank%20MR_2013_06_03.pdf

¹² Regulatory Impact Analysis for the Proposed Federal Plan and Model Rules, October 2015.

<http://www.epa.gov/sites/production/files/2015-08/documents/cpp-proposed-federal-plan-ria.pdf>

from EPA's work surrounding the Clean Power Plan, by applying EPA's formulas and assumption for climate and health co-benefits to RGGI's modeled policy scenarios.

Incorporating Meaningful Input from and Addressing Impacts to Environmental Justice Communities

As highlighted in prior comments to RGGI states, environmental justice communities bear a disproportionate share of the pollution burden from power generation. Low-income communities and communities of color frequently live in locations most vulnerable to the direct impacts of climate disruption, often with fewer options available to mitigate these impacts. EPA's Clean Power Plan ("CPP") expressly requires states to take steps to ensure meaningful participation from these impacted communities. Commenters support the efforts to date by states to fulfill these meaningful participation obligations. For states that have not yet commenced the process of engaging environmental justice communities in the CPP and RGGI planning processes, commenters urge those states to expeditiously do so to help ensure the full range of voices are heard from and the process yields results that benefit all affected stakeholders.

In addition to engaging environmental justice communities directly in the stakeholder process, it is important that the modeling analysis that is underway produces results that are meaningful to these impacted communities. There are multiple environmental justice dimensions to the policies under consideration. First, the mix of resources that will be procured and those anticipated to be retired under the different policy scenarios has potentially large implications for environmental justice communities. For example, if one policy scenario results in the retirement and replacement of locally polluting fossil fuel generation sources, that information would be highly relevant to nearby communities and should be made readily accessible to stakeholders. Conversely, if a policy scenario results in a significant build-out of new fossil fuel generation, or necessitates a build-out of significant natural gas transportation infrastructure, the potential siting implications for these facilities should also be considered, especially the potential for cumulative impacts with already impacted communities. Second, RGGI auction proceeds can be directed in ways that benefit environmental justice communities. It is important that the policy scenario modeling project impacts on future auction revenue in order to understand the likely amount of available funds so that potential benefits for impacted communities can be better understood.

Thank you for your consideration.

Signatories:

Acadia Center
Appalachian Mountain Club
Chesapeake Climate Action Network
Chesapeake Physicians for Social Responsibility
Conservation Law Foundation
Environment America
Environment Connecticut
Environment Maine
Environment Maryland
Environment Massachusetts

Environment New Hampshire
Environment New York
Environment Rhode Island
Environmental Advocates of New York
Environmental League of Massachusetts
League of Conservation Voters
Maine Conservation Voters
Maryland League of Conservation Voters
Natural Resources Council of Maine
Natural Resources Defense Council
New Jersey League of Conservation Voters
Pace Energy and Climate Center
Sierra Club