an Initiative of the Northeast and Mid-Atlantic States of the U.S.

RGGI 2016 Program Review: Principles to Accompany Model Rule Amendments December 19, 2017

The Regional Greenhouse Gas Initiative (RGGI) is a cooperative effort of nine Northeast and Mid-Atlantic states to regulate and reduce carbon dioxide (CO₂) emissions from the power sector. In accordance with each state's independent legal authority, Connecticut, Delaware, Maine, Massachusetts, Maryland, New Hampshire, New York, Rhode Island, and Vermont (Participating States) each commit to propose statutory and/or regulatory approval revisions to their CO₂ Budget Trading Programs substantially consistent with the updated Model Rule released on December 19, 2017 (updated 2017 Model Rule). The Participating States further agree on principles that will guide the states in proposing these revisions, in working together to implement their CO₂ Budget Trading Programs, and in seeking to reduce greenhouse gas emissions in the region.

Background on Program Review

As called for in the RGGI 2012 Program Review's *Summary of Recommendations to Accompany Model Rule Amendments*, the Participating States conducted a second program review of the CO₂ Budget Trading Program. Proposed amendments to the program have been incorporated in an Updated Model Rule which will guide each of the Participating States as it follows its own statutory and/or regulatory procedures to propose updates to their individual state CO₂ Budget Trading Program regulations.

The RGGI program review was a rigorous and comprehensive evaluation, supported by an extensive regional stakeholder process that engaged the regulated community, environmental nonprofits, consumer and industry advocates, and other interested stakeholders. The Participating States have been working with program review stakeholders since 2015, convening 9 stakeholder meetings and webinars. The program review has sought to ensure RGGI's continued success – effectively reducing CO₂ emissions while providing benefits to consumers and the region.

Program Review Findings

The Participating States have based their findings upon consideration of relevant information and analyses, including but not limited to:

- Retrospective analyses of CO₂ emissions trends;
- Electricity sector and CO₂ emissions modeling;
- Macroeconomic modeling;
- Customer electricity bills analyses; and
- Stakeholder engagement and comments.

an Initiative of the Northeast and Mid-Atlantic States of the U.S.

The program review revealed:

- The Cost Containment Reserve (CCR) had been triggered on two occasions, in 2014 and 2015, at times when a significant private bank of allowances (allowances in excess of the quantity necessary to surrender for compliance) already existed.
- After the significant cap reduction made as part of the 2012 Program Review, actual emission levels in all years continue to trend below the level of the cap.
- The adjustments for the bank of allowances implemented as part of the 2012 Program
 Review will likely not be sufficient to balance the supply and demand of allowances due
 to the additional allowances injected from the CCR and the trend of actual emission
 levels less than the cap.
- The offset provisions in the Model Rule have not been significantly utilized.
- Each of the RGGI states have made longer-term (to 2030 and in most cases also to 2050) commitments for economy-wide greenhouse gas emission reductions.
 Reductions from the electric sector will be instrumental to achieving economy-wide reductions as the transportation and space heating sectors electrify to meet greenhouse gas emission reductions in those sectors.
- Complementary energy policies implemented by the states are and will continue to be significant drivers of emission reductions of carbon dioxide and criteria pollutants (e.g. sulfur dioxide, particulate matter, oxides of nitrogen, and volatile organic compounds).

Proposed Model Rule Amendments

In response to those findings, the Participating States are proposing to specify a regional cap through 2030, modify the size and trigger prices for the CCR, establish an Emissions Containment Reserve (ECR), and eliminate two of the existing offset categories, as outlined below and in the Updated Model Rule:

- 1. <u>Revised Regional Cap</u>: The Participating States will specify a regional cap through 2030 which continues the downward trajectory of the existing cap. The lower regional CO₂ emissions cap will align the cap more closely with current emissions trends.
 - A regional cap of 75,147,784 tons of CO₂ in 2021, which will decline by 2.275 million tons of CO₂ per year thereafter, resulting in a total 30% reduction in the regional cap from 2020 to 2030.
 - The Participating States will address the bank of allowances held by market participants with a third adjustment for banked allowances. The third adjustment will be made over a 5-year period (2021-2025) based upon the size of the bank at the end of 2020.

an Initiative of the Northeast and Mid-Atlantic States of the U.S.

	Base Cap	Bank Adjustment	Adjusted Cap	CCR Trigger Price (\$)	ECR Trigger Price (\$)	CCR Size	ECR Size
2020	78,175,215	21,891,408	56,283,807	\$10.77	N/A	10,000,000	N/A
2021	75,147,784	TBD	TBD	\$13.00	\$6.00	7,514,778	6,845,333
2022	72,872,784	TBD	TBD	\$13.91	\$6.42	7,287,278	6,637,900
2023	70,597,784	TBD	TBD	\$14.88	\$6.87	7,059,778	6,430,464
2024	68,322,784	TBD	TBD	\$15.92	\$7.35	6,832,278	6,223,030
2025	66,047,784	TBD	TBD	\$17.03	\$7.86	6,604,778	6,015,597
2026	63,772,784	N/A	63,772,784	\$18.22	\$8.41	6,377,278	5,808,163
2027	61,497,784	N/A	61,497,784	\$19.50	\$9.00	6,149,778	5,600,727
2028	59,222,784	N/A	59,222,784	\$20.87	\$9.63	5,922,278	5,393,293
2029	56,947,784	N/A	56,947,784	\$22.33	\$10.30	5,694,778	5,185,859
2030	54,672,784	N/A	54,672,784	\$23.89	\$11.02	5,467,278	4,978,425

- <u>CCR</u>: The Participating States will modify the size and the price triggers for the CCR.
 The CCR is a reserved quantity of allowances, in addition to the cap, that would only be
 available if defined allowance price triggers are exceeded.
 - Beginning in 2021, allowances provided within the CCR will be equal to 10% of the regional cap.
 - The CCR trigger price will be \$13.00 in 2021, and rise at 7% per year, ensuring that the CCR will only trigger if emission reduction costs are higher than projected.
- 3. <u>ECR</u>: The Participating States will establish an emissions containment reserve (ECR), which is a quantity of allowances that will be withheld from circulation to secure additional emission reductions if prices fall below established trigger prices.
 - The states implementing the ECR will withhold up to 10% of the allowances in their base budgets per year. At this time, Maine and New Hampshire do not intend to implement an ECR. Allowances withheld in this way will not be reoffered for sale.
 - The ECR trigger price will be \$6.00 in 2021, and rise at 7% per year, ensuring that the ECR will only trigger if emission reduction costs are lower than projected.
- 4. Offsets: The Participating States will eliminate two offset categories, reduction in emissions of sulfur hexafluoride (SF₆) in the electric power sector and end-use energy efficiency in the building sector, and update and retain three categories that some States may continue to implement. Any awarded offset allowances will remain fully fungible across the states.

an Initiative of the Northeast and Mid-Atlantic States of the U.S.

5. <u>Minimum Reserve Price</u>: The Model Rule retains language to increase the minimum reserve price by 2.5 percent each year.

Principles

The following principles will guide the Participating States in proposing individual state revisions to statutes or rules based on the Updated Model Rule, in working together to implement their CO₂ Budget Trading Programs, and in seeking to reduce greenhouse gas emissions in the region.

- I. <u>State Legislation and/or Rulemaking</u>: Each Participating State commits to seek to establish in statute and/or regulation amendments to its CO₂ Budget Trading Program substantially consistent with the Updated Model Rule and to have that State's component of the regional program changes effective as soon as practical and no later than January 1, 2021.
- II. <u>Program Review</u>: The Participating States will conduct ongoing program evaluation to continually improve RGGI. The Participating States intend to initiate comprehensive program review no later than 2021 to consider program successes, impacts, potential additional reductions to the cap post-2030, and other program design elements.
- III. <u>Complementary Energy Policies</u>: The Participating States recognize many benefits of complementary clean energy policies, including:
 - Creating jobs and stimulating economic development through the transition to a clean energy economy;
 - Reducing the costs of compliance with the RGGI cap;
 - Reducing the potential for emissions leakage attributable to increased imports from outside RGGI;
 - Bringing additional functions (i.e., heating, transportation) within RGGI's marketbased mechanism through electrification and the growth of "beneficial load";
 - Assisting each state in meeting its own GHG reduction goals;
 - Supporting the reliability of the electricity grid;
 - Enabling continued progress towards mitigating climate change.

The Participating States are striving to implement complementary policies or mechanisms that will result in carbon emission reductions in the electricity sector and economy-wide. These policies could include programs to promote:

an Initiative of the Northeast and Mid-Atlantic States of the U.S.

- Renewable energy
- End-use energy efficiency
- Energy storage
- Carbon capture and storage
- Electric vehicles and infrastructure
- Transit and transit-related development
- Electrification of heating

The Participating States strive to:

- Continue existing programs, and develop new programs through 2030 at levels needed to achieve each state's GHG reduction goals.
- Collaborate on efforts such as renewable energy policy, electricity system
 planning, and energy markets design and operations in order to achieve these
 goals most cost-effectively.
- Meet periodically to assess progress on achieving these goals and identify additional opportunities for mutually beneficial collaboration.
- Ensure that any future updates or changes to the RGGI program take into consideration the ambitious renewable energy commitments by the RGGI states.
- IV. <u>Emissions Leakage</u>: The Participating States commit to engage in a collaborative effort supported by RGGI state staff and informed by discussions with their respective ISOs, to monitor and track relevant data to evaluate potential emissions leakage, and to work to address any emissions leakage that may be identified through this tracking.
- V. <u>Broader Carbon Markets:</u> The Participating States recognize the benefits of a broader trading market and are open to conversations with other jurisdictions.