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MJB&A Issue Brief ■ November 27, 2017

Virginia's Proposed Cap-and-Trade Program

On November 8, 2017, the Virginia Department of Environmental Quality (DEQ) released a draft proposed regulation to implement a declining cap on electric sector carbon emissions that would link with the existing Regional Greenhouse Gas Initiative (RGGI) carbon market.[1] The proposed regulations implement Governor Terry McAuliffe's Executive Directive 11 (ED 11), signed on May 16, 2017. ED 11 directed VA DEQ to develop "trading ready" regulations to "abate, control or limit CO_2 emissions" from the state's electric power facilities.

Democratic Lt. Gov. Ralph Northam, who won Virginia's gubernatorial race on November 8, 2017, is expected to continue efforts of current Governor Terry McAuliffe to ready the state for carbon trading.

VA DEQ's Draft Proposed Regulation

VA DEQ proposes implementing a declining cap on electric sector carbon emissions that would link with RGGI.

- The cap would begin in 2020 and extend through 2030 and beyond, with 2020 acting as a single year control period to align with RGGI. Three-year compliance periods would commence in 2021. The proposal seeks public comment on two proposed base budget options—33 million tons and 34 million tons. Once defined, the base budget will determine the annual budgets and allocations for future years based on a three percent annual reduction.
- Affected sources are defined as fossil fuel-fired electric generating units 25 megawatts (MW) and greater, with fossil fuel representing 10% or greater of total fuel consumption. Affected sources are referred to as "CO_2 Budget Sources."
- VA DEQ proposes to allocate 95% of allowances to CO_2 Budget Sources based on an updating output-based methodology (electricity output averaged over three years). The allowance allocation will be updated in 2021 and every three years thereafter. VA DEQ also proposes to allocate 5% of allowances annually to the Department of Mines, Mineral and Energy (DMME) to assist in the abatement and control of air pollution, particularly CO_2.
- CO_2 Budget Sources and DMME would be required to sell the allowances through a consignment auction. Revenue is returned to CO_2 Budget Sources and entities designated by DMME. Revenue received by CO_2 Budget Sources owned by regulated electric utilities flows to rate payers pursuant to VA State Corporation Commission (SCC) requirements.
- The proposal contains many of the RGGI Model Rule elements including: (1) a minimum reserve price, which establishes a minimum allowable price for each allowance in a specific auction; (2) a cost

[1] The draft proposed regulation is available here:
http://www.townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\Meeting\1\26694\Agenda_DEQ_26694_v1.pdf

containment reserve (CCR), which holds a portion of the annual cap in reserve if prices exceed a certain trigger point, and (3) emission containment reserve (ECR), which holds a portion of the annual cap in reserve if prices fall below a certain trigger point.

Comparison with RGGI's Model Rule

The proposed regulations mirror the RGGI Model Rule and include provisions to ensure the program is "trading-ready" by allowing the use of CO_2 allowances with the RGGI states. Virginia's draft regulations propose a three percent annual reduction in emissions. RGGI has proposed an annual tonnage decline from 2021 through 2030, with a 30% reduction in the Base Cap from 2020 levels. Like RGGI, the proposed regulations would authorize VA DEQ to adjust the cap in 2021 through 2025 to address potential banked allowances from the first compliance period.

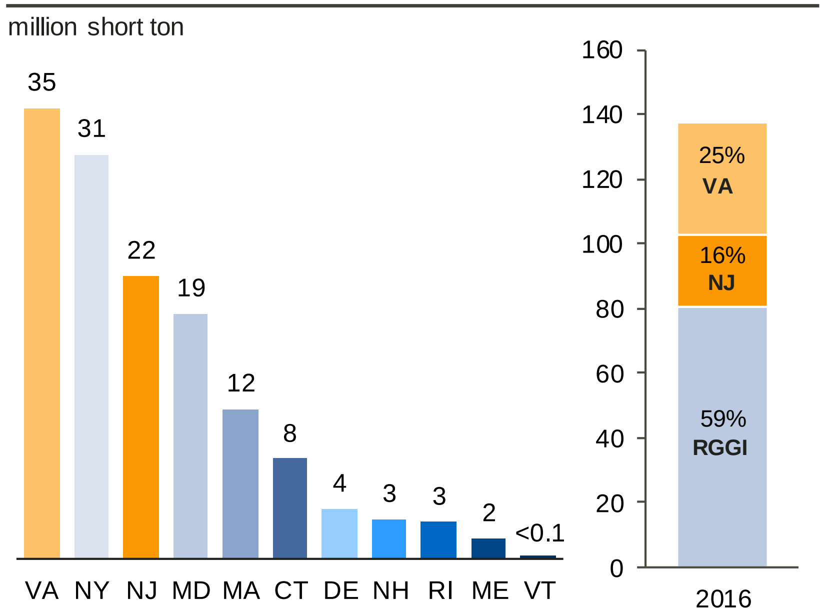
RGGI recently released a statement on the proposed Virginia regulations that noted the proposed regulation's consistency with the existing RGGI program:

> *"We are pleased to note that it appears consistent with the RGGI program in a number of key ways. In particular, the Virginia proposal shares many of the recently announced proposed improvements to the RGGI program through 2030, including: a cap that declines 30% between 2020 and 2030; incorporation of a Cost Containment Reserve; and an Emissions Containment Reserve to enhance market stability. Virginia's proposal to conduct consignment auctions is indicative of their support of RGGI's market-based approach to pricing emissions."*[2]

Potential Impact on RGGI

Adding Virginia to the RGGI market would be a significant expansion of the program. The bar chart plots 2016 power plant emissions for each RGGI state as well as Virginia and New Jersey (another potential addition to the RGGI market). Virginia is the largest source of emissions among the current and potential future RGGI states (see chart below).

2016 CO_2 Emissions



Note: State data from EPA Clean Air Markets; total emissions from RGGI-covered sources for current RGGI states. Virginia and New Jersey totals include fossil sources only.

Linking versus Joining RGGI

States may participate in the RGGI CO_2 allowance market by either joining or linking with the program. First, a state may join as a full participating member. In doing so,

[2] The full statement from RGGI is available here: https://www.rggi.org/docs/PressReleases/Virginia_Statement_2017_11_9.pdf

the state commits to adhere to RGGI's full program design by adopting the model cap-and-trade program outlined in RGGI's Memorandum of Understanding (MOU) for state regulatory or legislative approval. To accept a state that intends to join the program, current members of RGGI publish a corresponding amendment to the program's MOU.[3]

Alternatively, states can choose to link with RGGI by adopting regulatory or legislative text that mirrors that of the RGGI Model Rule. The market implications of linking versus joining would be the same. The most important aspect for the market is fungibility of the allowances for compliance purposes across participating states. RGGI states recently affirmed that jurisdictions can link with and participate in RGGI through informal means. Briefing materials released ahead of a June 27 RGGI stakeholder meeting in New York stated, "In cases where jurisdictions may not wish or not be able to fully adopt the RGGI Model Rule, their program may still allow for trading allowances with the RGGI program."

While there has been some discussion on whether Virginia would join RGGI versus link with RGGI, the regulations suggest Virginia intends to link by allowing electric generators to use RGGI allowances for compliance purposes. Further, the structure of the VA DEQ proposed regulation and the positive statement from the RGGI states indicates a strong likelihood of allowance fungibility across all states.

Next Steps

On November 16, 2017, VA DEQ presented the proposed draft regulation to the State Air Pollution Control Board. During the meeting, the Board voted unanimously to approve DEQ's proposal, and VA DEQ announced its intent to hold at least one public hearing on the proposed regulations. The Air Pollution Control Board also decided to officially move forward with the proposal for Virginia to link with RGGI.

The Virginia State Air Pollution Control Board will take public comments for 60 days once the proposed regulations are published in the Virginia Register.

3 For example, when Maryland joined RGGI, each state signed an amendment to the MOU. https://www.rggi.org/docs/mou_second_amend.pdf

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