MEMO

To: RGGI Auction Advisory Committee
From: Rachel Evans, DOER
William Lamkin, DEP
Date: December 22, 2011
Re: Unsold RGGI Allowances from the First Compliance Period

Staff recommends that DOER retire the 16,831,266 unsold RGGI allowances from the First Compliance Period held by Massachusetts, contingent upon agreement from the other participating states committing to similarly retire or hold unsold First Compliance Period allowances held by their respective states. This will allow a clean slate for the participating states to undertake program review in 2012 and consider a potential redesign of the RGGI program, to better achieve the long-term goals set forth in the RGGI MOU. For Massachusetts, this action would also be consistent with the goals and mandates of the Green Communities Act and the Massachusetts Global Warming Solutions Act.

I. The Regional Greenhouse Gas Initiative

In 2003 the states of Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont began discussions to develop a regional cap-and-trade program addressing carbon dioxide emissions from power plants. This effort became the Regional Greenhouse Gas Initiative (RGGI). The intent and purpose of the RGGI program is to:

- create and implement an emission budget and allowance[1] trading system to stabilize and then modestly reduce carbon dioxide emissions emitted from fossil fuel fired electric generating facilities,
- be consistent with continued economic growth, and
- maintain a safe, reliable electric system.

Each of the states listed above committed staff from their respective environmental and energy agencies that were charged with developing and outlining the components of a regional cap and trade program. Under the direction of each of their respective state agencies, staff gathered emissions data and input from outside experts and stakeholders. The states retained electric system consultants and economic modeling consultants to lay the groundwork for the design of the program.

In December of 2005, the director of each state energy and environmental agency ("Agency Heads") gathered to discuss and agree upon program elements and to make key policy decisions including the overall level of the cap, and state by state allocations. These decisions were memorialized in a Memorandum of Understanding[2] (MOU) that was signed by seven of the states in December of 2005. Through the MOU, each state committed to propose, for legislative or regulatory approval, the RGGI program as substantially reflected in a Model Rule[3]. Massachusetts signed the MOU in January 2007 when Governor Patrick took office, followed closely thereafter by Rhode Island. Maryland signed the MOU later in 2007, making it the tenth participating state. The first RGGI auction was conducted in September 2008 and the first three-year Compliance Period began on January 1, 2009.

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[1] An allowance is a limited authorization to emit one ton of carbon dioxide.

[2] http://www.rggi.org/design/history/mou

[3] http://www.rggi.org/design/history/model_rule

The actions of the Massachusetts Department of Environmental Protection ("DEP") and the Department of Energy Resources ("DOER") in designing and implementing the RGGI program have been affirmed and strengthened by the Massachusetts legislature. The Green Communities Act [4] directed the Executive Office of Energy and Environmental Affairs, through DOER, to dedicate 80% of the auction proceeds to energy efficiency programs. Shortly thereafter, pursuant to The Global Warming Solutions Act[5], Massachusetts developed a climate plan to reduce statewide carbon dioxide equivalent emissions by 25% by the year 2020.

II. Program Review

Pursuant to Section 6(D) of the RGGI MOU, Massachusetts and the other RGGI states are to undertake a comprehensive program review in 2012. This evaluation will include program successes, program impacts, program operations, additional reductions, imports and emissions leakage, and offsets. In response to requests from stakeholders and in order to facilitate gathering comments from interested parties, the RGGI states will gather analytic material and comments from interested parties and consider potential changes to their programs in 2012.

A. During the fall of 2011, the participating states have:

- Gathered additional analytic material on topics that states may address in the program review, such as the CO_2 allowance budget, disposition of unsold allowances, allowance reserve flexibility mechanisms, electricity imports and offsets.
- Gathered and analyzed information and developed analysis related to program success, program impacts and program operations.
- Conducted learning sessions with experts and stakeholders to gain additional insights on topics that states may address in the program review, such as the CO_2 allowance budget, disposition of unsold allowances, allowance reserve flexibility mechanisms, and electricity imports.
- Held stakeholder meetings to solicit comments on the updated IPM Model Reference Case and Sensitivity Analyses, and other topics related to program review, including suggestions for policy scenarios to be evaluated in 2012.
- Reviewed and refined analytic material in response to comments from stakeholders.

B. During the winter and spring of 2012, the participating states will:

- Model potential policy scenarios to inform program review.
- Initiate preparations for macroeconomic modeling.
- Consider the analyses and stakeholder comments gathered as they undertake program review. Materials will include: a comprehensive evaluation of program success, program impacts, program operations, additional reductions, imports and emissions leakage, and offsets.

[4] http://www.malegislature.gov/Laws/SessionLaws/Acts/2008/Chapter169
[5] http://www.malegislature.gov/Laws/SessionLaws/Acts/2008/Chapter298

- Hold stakeholder meetings to receive comments on the policy scenario runs, the assumptions for macroeconomic modeling as well as other elements of the program success, program impacts, program operations, additional reductions, imports and emissions leakage, and offsets.
- Review and consider stakeholder comments.
- Conduct macro-economic modeling of selected policy cases.
- Assemble a comprehensive set of recommendations for each state to consider.
- Present the comprehensive set of recommendations to stakeholders.
- Consider stakeholder input and make any necessary and appropriate adjustments to the set of recommendations.
- Initiate any state specific rule-making processes for program changes to be effective during the second control period (2012-2014).

III. MA Auction Advisory Committee

The Massachusetts DOER (formerly known as the Division of Energy Resources) provides for the 2012 Program Review in its CO_2 Budget Trading Program Auction Regulation at 225 CMR 13.06(9):

> In 2012, the Division may evaluate the auction program performance and may retire any previous allocation year allowances that were offered for sale by auction but were not sold and still remain in the Massachusetts Auction Account. The Division will consult with the Auction Advisory Committee and will solicit public comment prior to retiring any such allowances.

The DOER regulation also provide for the formation of the Auction Advisory Committee ("AAC"):

> Auction Advisory Committee: A committee chaired by the Commissioner of the Division of Energy Resources and comprised of the Secretary of the Executive Office of Energy and Environmental Affairs, the Secretary of the Executive Office of Administration and Finance, and the Commissioner of the Department of Environmental Protection, or their respective designees, established to advise the Division on procedures relevant to conducting the auctions prescribed in this regulation.

Commissioner Mark Sylvia of DOER, as chairman, has convened the AAC to advise him on implementing a review of the Massachusetts RGGI program in 2012. The members of the AAC are Barbara Kates-Garnick, Undersecretary for Energy, as designated by Secretary Sullivan on behalf of the Executive Office of Energy and the Environment; Commissioner Kenneth Kimmell of the DEP; and Kevin Miller, Fiscal Policy Analyst, as designated by Secretary Gonzales on behalf of the Executive Office for Administration and Finance.

IV. Unsold RGGI Allowances from the First Compliance Period

Each state's emissions budget ("state caps") contained in the MOU was based largely upon its historic emissions levels and future emission projections. Collectively the total of the state caps equals the regional cap. However, between 2005, when the state caps were established, and 2009, when the program launched, annual emissions for the region dropped significantly. Those emission reductions were due to a number of factors identified in a white paper[6] study conducted for RGGI by the New York State Energy Research Authority, which found that:

- Approximately 48% of the reduced emissions 2009 vs. 2005 were due to factors that affect load:
  - Weather 24%
  - Energy efficiency investment 12%
  - The economy 4.4%
  - Other load impact factors 7.6%
- Approximately 31% of the reduced emissions 2009 vs. 2005 were due to changes in relative fuel prices:
  - Shale gas is the significant driver here, making gas cheaper compared to coal and oil.
- Approximately 21% of the reduced emissions 2009 vs. 2005 were due to changes in available capacity mix:
  - Less coal, more renewable (wind, solar, etc.).

These factors have resulted in total annual emissions in the region being significantly less the regional emissions cap that was established in 2005. The ten-state regional cap is currently 188 million tons per year for a total three year compliance period allocation of 564 million tons. The ten state regional emissions total for the first three-year compliance period (2009, 2010, & 2011) is projected to be 388 million tons. This has resulted in a significant over-allocation of allowances in the RGGI cap and trade system (a projected surplus of approximately 176 million tons). This oversupply of allowances has resulted in very low prices and low demand at auction. The six most recent auctions have cleared at the reserve price, and in five of the last six auctions, not all of the allowances offered for sale have sold.

The RGGI program was designed for allowance prices to achieve the program goal of carbon dioxide in two distinct ways. First, the states have committed to invest a large portion of proceeds to investment in energy efficiency. These energy efficiency investments have and will continue to yield carbon dioxide emission reductions while at the same time providing economic benefits and jobs to the region. The Analysis Group, an economic consulting firm, very recently released an independent report on the economic impacts of RGGI. The Analysis Group Report concludes that the ten states auctioned $912 million worth of allowances in the first 13 auctions. The states have reinvested the large majority of those auction proceeds within the region. Those investments by the states have generated $1.6 billion in economic value to the region and have resulted in 16,000 jobs. Second, the price on carbon emissions is meant to create an economic incentive for regulated facilities to change their collective behaviors in a way that will reduce emissions.

The oversupply of carbon allowances has the potential to impact the long term environmental integrity of the RGGI program. With the oversupply of allowances, the cap becomes non binding (i.e. the cap will not limit emissions of carbon dioxide to achieve the original program intent to stabilize and then reduce emissions). It is critical to address the oversupply of allowances if the states are to achieve the program goals moving forward. The reserve price at which allowances are currently trading may not be sending an adequate price signal to the market to influence behavior.

[6] http://rggi.org/docs/Retrospective_Analysis_Draft_White_Paper.pdf

Based on the projected total emissions for the first Compliance Period, there are approximately 30 million more allowances currently in circulation (sold at auction or otherwise distributed by the states) than are needed to demonstrate compliance for the first Compliance Period. These allowances in circulation are not under the control of the states; they are held primarily by compliance entities. The Market Monitor's Report from Auction 14 states: "Compliance entities and their affiliates will hold 97 percent of the allowances in circulation following the settlement of allowances sold in Auction 14."

The states currently have control over the majority of the excess allowances resulting from the oversupply described above. The RGGI states hold approximately 109 million allowances that were offered for sale at auction and were not sold in the first Compliance Period, of which 16,831,266 allowances are held by Massachusetts.

V. Staff Recommendation

Based on the foregoing determination that there is a significant current oversupply of carbon dioxide allowances, DEP and DOER staff recommends that Massachusetts retire the 16,831,266 unsold RGGI allowances from the First Compliance Period held by Massachusetts, contingent upon agreement from the other participating states committing to similarly retire or hold unsold First Compliance Period allowances held by their respective states. This will allow a clean slate for the participating states to undertake program review in 2012 and consider a potential redesign of the RGGI program, to better achieve the long-term goals set forth in the RGGI MOU. For Massachusetts, this action would also be consistent with the goals and mandates of the Green Communities Act and the Massachusetts Global Warming Solutions Act.

VI. Request for Comment

The public is invited to submit written comments, regarding the retirement of unsold allowances, to the Auction Advisory Committee by **January 5, 2012**, at the following address:

Auction Advisory Committee
Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Or by email to: RGGI.AAC@state.ma.us

The Auction Advisory Committee will actively participate in the evaluation and potential redesign of the RGGI program in 2012, and will solicit additional public comment through each stage of the process.