STATE OF MAINE
PUBLIC UTILITIES COMMISSION

THOMAS L. WELCH
CHAIRMAN

DAVID P. LITTELL
MARK A. VANNOY
COMMISSIONERS

July 11, 2014

Honorable John J. Cleveland, Senate Chair
Honorable Barry J. Hobbins, House Chair
Energy, Utilities and Technology Committee
115 State House Station
Augusta, Maine 04333

Re: Report on RGGI Price Impacts

Dear Senator Cleveland and Representative Hobbins:

By a letter dated June 20, 2007, the Chairs of the Utilities and Energy Committee (now the Energy, Utilities and Technology Committee) requested that the Public Utilities Commission (Commission) provide RGGI-related information to the Committee on a regular basis, at least annually. Specifically, the letter requested a report from the Commission on any ongoing efforts to work with regional partners to develop a model for tracking electricity and natural gas prices and usage in the region in a way that provides indicators of the price impacts from RGGI. Attached is the Commission's Report for the Committee's consideration.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Thomas L. Welch, Chairman

On behalf of the Chairman and

David P. Littell, Commissioner
Mark A. Vannoy, Commissioner
Maine Public Utilities Commission

Attachment
cc: Energy, Utilities and Technology Committee Members
Deirdre Schneider, Legislative Analyst

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Report by the Public Utilities Commission to the
Energy, Utilities and Technology Committee
Regarding Impacts of Public Law 2007, Chapter 317
"An Act to Establish the Regional Greenhouse Gas Initiative"

July 11, 2014

I. BACKGROUND

Since 2007, Maine has participated in the Regional Greenhouse Gas Initiative, a cooperative program by several northeastern and mid-Atlantic states to limit carbon dioxide (CO_2) emissions.[1] *See* P.L. 2007, ch. 317 ("An Act to Establish the Regional Greenhouse Gas Initiative (RGGI)"). RGGI is the first regulation of CO_2 emissions in the United States.

The RGGI law requires certain generators of electricity[2] to account for their carbon emissions and acquire an "allowance" for every ton of CO_2 that they emit. Generators comply with the law by purchasing or trading for a number of allowances equivalent to the number of tons of CO_2 emitted. Generators may reduce their emissions – and therefore the number of allowances required – by implementing efficiency measures or switching to fuels with lower carbon content. Following a comprehensive program review in 2012, the RGGI states implemented a new 2014 RGGI cap of 91 million short tons of carbon. The RGGI CO_2 cap then declines 2.5% per year from 2015 to 2020.

The RGGI statute requires Maine to distribute most of the State's allocation of emission allowances through quarterly regional auctions. Once the allowances are sold at auction, the proceeds are deposited into the RGGI Trust Fund (formally the Energy and Savings Carbon Trust) and used for purposes specified in statute, including measures, investments and arrangements that reduce electricity consumption or reduce greenhouse gas emissions and lower energy costs at commercial or industrial facilities, and for investment in measures that lower residential heating energy demand and reduce greenhouse gas emissions. The measures that lower residential heating demand must be fuel-neutral and may include, but are not limited to, energy efficiency improvements to residential buildings and upgrades to efficient heating systems that will reduce residential energy costs and greenhouse gas emissions.

[1] The ten original RGGI states were: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. New Jersey withdrew from RGGI as of December 31, 2011.

[2] The provisions of the RGGI statute apply to six Maine power plants – NextEra Energy Wyman, Verso Androscoggin, Verso Bucksport, Casco Bay Energy, Westbrook Energy Center, and Rumford Power.

By a letter dated June 20, 2007, the Chairs of the Joint Standing Committee on Energy, Utilities and Technology requested the Public Utilities Commission (Commission) to provide RGGI-related information to the Committee at least annually. Specifically, the letter requested a report from the Commission on any ongoing efforts to work with regional partners to develop a model for tracking electricity and natural gas prices and usage in the region in a way that provides indicators of the price impacts from RGGI.

II. RGGI AUCTIONS

RGGI has conducted twenty-four quarterly allowance auctions since September 2008. The closing auction price for allowances has ranged from $5.02 (June 2014) to $1.86 (September and December 2010). In the past year, the auction price ranged from $2.67 to $5.02 and 100% of the allowances offered for sale were sold. For 2013, the proceeds from auctioning Maine's share of allowances ranged between $3.2 million and $3.9 million per quarter, generating a total of $14.1 million for RGGI-funded programs within the State. Cumulatively, Maine has received slightly over $53.5 million from 2008 through June 2014.

III. RGGI PROGRAM REVIEW

At the outset of the regional program the RGGI states entered into a Memorandum of Understanding which, among other things, provided that RGGI undergo a comprehensive Program Review by 2013. The Program Review, in which Maine participated, analyzed a variety of possible program design changes intended to improve RGGI and help achieve its statutory objectives. On February 7, 2013, the RGGI states issued Program Review Recommendations along with an updated RGGI Model Rule reflecting those recommendations. The Commission and the Department of Environmental Protection (DEP) briefed the Committee about these recommendations during the 2013 session. On November 26, 2013, the DEP concluded its formal regulatory process, adopting rule amendments consistent with the recommendations and the revised Model Rule. The other RGGI states also completed their statutory and/or regulatory processes during 2013, allowing the Program Review changes to take effect across the region. Emissions from covered generators were brought under the revised program as of January 1, 2014. The first auction utilizing the revised program design occurred on March 7, 2014.

Key program design changes resulting from the Program Review process include the following:

- A reduction in the regional CO_2 budget of allowable emissions ("cap") from 165 million to 91 million tons (45%) in the year 2014. Thereafter, the cap is scheduled to decrease by 2.5% annually from 2015 to 2020. Actual emissions in 2012 were 92 million tons.

- Additional adjustments to the cap to ensure that it is not distorted by the presence of allowances previously purchased and currently held in the allowance market.

- The creation of a new Cost Containment Reserve (CCR) consisting of a limited number of additional allowances that may be released for auction in the event that allowance prices exceed certain levels (e.g., $4.00 in 2014, $6.00 in 2015, $8.00 in 2016 and $10.00 in 2017). The CCR will serve to moderate any increase in allowance prices that might occur under the revised cap.

- Updates to the RGGI offsets program. The previous offsets category applicable to forest management practices is expanded to also include reforestation activity as well as projects where the conversion of forest land to non-forest land is avoided.

IV. TRACKING PRICE IMPACTS AND MACROECONOMIC EFFECTS RELATING TO RGGI

RGGI Inc. is a non-profit organization established by the RGGI states to provide administrative and technical services to each state and the states collectively. RGGI Inc. assists the states by administering the quarterly auctions, providing allowance tracking services, and performing other functions, allowing the nine states to coordinate certain activities and obtain efficiencies over what would be possible if the states carried out these tasks separately. At the request of the states, RGGI Inc. is able to analyze pricing impacts in the region.

During its 2012 session, the Legislature enacted An Act To Provide Transparency in Electricity Pricing for Maine Ratepayers, P.L. 2011, ch. 590, which requires the Commission to develop useful information for ratepayers regarding the costs and effects of state policies on electricity ratepayers. Based on the 2013 RGGI auction prices and results, the Commission calculated that the cost to ratepayers of the RGGI program ranges from $0.0011 to $0.0012 per kWh.[3] For the average residential customer using 530 kWh per month, the RGGI program costs range from $0.58 to $0.64 per month.

In connection with the program changes implemented earlier in 2014, RGGI Inc. provided estimates of the effect on electricity prices the revisions would have. As compared to the reference case that included no RGGI program changes, the Analysis Group consulting firm provided projections of the impact of implementing the lower 91 million ton cap on electricity prices for 2012-2020.

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[3] ISO-NE imports from Canada are not subject to RGGI and associated with a wholesale CO_2 allowance price component. From this perspective, the ISO-NE initial $0.0012 per kWh wholesale CO2 allowance price component can be reduced to $0.0011 per kWh to account for the electricity imported from these areas (about 13.6% of the load).

Overall, these projections suggest that, as a result of the program changes, the average monthly electricity bill for Maine residential customers might be incrementally higher by 0.6%, for commercial customers might be incrementally higher by 1.2%, and for industrial customers might be incrementally higher by 1.2%.[4] This equates to $0.49 on a monthly household bill of $81.51; $1.45 on a small commercial bill of $121.10; $36.33 on a medium commercial bill of $3,027.50, and $481.80 on a large commercial/industrial bill of $40,150.00.[5] This impact on electricity bills is estimated on an overall average basis.

Customers in Maine and the other states who participate in energy efficiency programs funded by RGGI allowances could see smaller bill increases or bill decreases as a result of more efficient electricity usage achieved through programs funded by the RGGI Trust Fund. Additionally, the Omnibus Energy Act enacted during the 2013 session, P.L. 2013, ch. 369, provides that 15% of the RGGI funds received in fiscal years 2013-2014, 2014-2015 and 2015-2016 shall be transferred to the transmission and distribution utilities to be disbursed to ratepayers in a manner that provides maximum benefit to the Maine economy.

The 2014 program changes are also projected to have substantial benefits for the Maine economy by funding investments in energy savings installations, stimulating increased activity among businesses in the energy efficiency sector, and reducing consumer energy bills. Consistent with other analyses, RGGI Inc. estimates that these benefits will include a cumulative increase in Maine Gross State Product of $200 million, a cumulative increase in employment of more than 5,000 job-years, and a cumulative increase in real personal income of $100 million. Economic impacts for the New England region include a cumulative increase in Gross Regional Product of over $2 billion, a cumulative increase in employment of 38,900 job-years, and a cumulative increase in real personal income of $1.5 billion. These projections are based on a comparison between the new program design and the program as it operated in 2013. The figures reflect the net benefits after accounting for the economic effects of increased allowance prices paid by generators, and they are calculated through 2020 and expressed in 2010 dollars.

V. PROPOSED EPA CLEAN POWER PLAN

On June 2, 2014, the U.S. Environmental Protection Agency released the federal "Clean Power Plan," consisting of emissions guidelines for existing stationary electric generating units. The agency will be taking comment on the proposed rule and is scheduled to publish a final rule in June, 2015. According

[4] RGGI, Inc. Customer Electricity Bill Analysis: 91 Cap Bank Model Rule Case, May 24, 2013 (slide 11).

[5] Based on rates in May 2014 EIA report, assuming residential usage of 530 kWh, small commercial usage of 1,000 kWh, medium commercial usage of 25,000 kWh, and large commercial/industrial usage of 500,000 kWh.

to the announcement, "[n]ationwide, by 2030, this rule would achieve $C0_2$ emission reductions from the power sector of approximately 30% from CO_2 emission levels in 2005."[6] The proposal creates a "flexible" approach whereby states may choose from a variety of paths for achieving compliance. The proposal specifically allows the RGGI states to comply by continuing their cooperative regional effort.[7] The time frame established by the proposal is somewhat different from that in RGGI. The federal proposal covers the period 2017 to 2030, while the recently revised RGGI Model Rule covers the period 2013 to 2020. The federal proposal also uses a different metric for measuring carbon emissions. The proposed federal rule sets an emissions reduction target for Maine's affected sources equal to 378 lbs. per MWh. Rather than the lbs. per MWh metric, the RGGI standard is based on the total tons of CO_2 emissions.

The Commission and the DEP are analyzing the rule to determine how best to translate the "total tons" standard Maine and the RGGI states have been employing to the "lbs. per MWh" goal set forth in the federal proposal. That translation will allow us to assess whether the proposed standard is more or less stringent than the existing RGGI standard. Our preliminary assessment is that the federal proposal is similar to RGGI and will require a similar level of effort to that already underway in Maine.

VI. CONCLUSION

The information available to date shows that the impact of RGGI on electricity prices has been relatively modest, while RGGI-funded programs contribute to the Gross State Product, job growth, and personal income, and also reduce greenhouse gas emissions. At the direction of Maine and the other states, RGGI Inc. will continue to assess the costs and benefits of RGGI participation, with particular attention to the program design changes that are being implemented following from the Program Review process. Other independent analyses may also be undertaken in the months and years ahead, and we will continue to review those studies and any other information about the economic impact of the program on the Maine economy and on business, residential and commercial customers in the State and region.

[6] Clean Power Plan Proposed Rule, June 2, 2014 at page 14 http://www2.epa.gov/sites/production/files/2014-05/documents/20140602proposal-cleanpowerplan.pdf (to be codified at 40 CFR Part 60).

[7] *Id*. at 22.