

MAINE STATE LEGISLATURE

The following document is provided by the
LAW AND LEGISLATIVE DIGITAL LIBRARY
at the Maine State Law and Legislative Reference Library
<http://legislature.maine.gov/lawlib>



Reproduced from electronic originals
(may include minor formatting differences from printed original)

MAINE PUBLIC UTILITIES COMMISSION

**REPORT ON LD 1851, "AN ACT TO ESTABLISH THE
REGIONAL GREENHOUSE GAS INITIATIVE (RGGI)"**

**Presented to the
Joint Standing Committee on
Energy, Utilities and Technology
April 4, 2011**

I. BACKGROUND

During its First Regular Session, the 123rd Legislature enacted an Act to Establish the Regional Greenhouse Gas Initiative (RGGI) (P.L. 2007, Chapter 317) a cooperative program by 10 eastern and mid Atlantic states to limit carbon dioxide (CO₂) (including greenhouse gas) emissions. RGGI has established a goal of reducing carbon emissions from large fossil fuel-fired power plants in the RGGI region (the “RGGI power plants”) by 10% by the year 2018. RGGI is the first regulation of global warming emissions in the United States.

The RGGI law requires generators of electricity to account for their carbon emissions and pay for every ton of CO₂ that they emit. Generators comply with the law by purchasing or trading allowances – one allowance is permission to emit one ton of CO₂ - or reducing their emissions by implementing efficiency measures or switching to lower carbon containing fuels. The RGGI law requires proceeds from emission allowance auctions to be administered by the Energy and Savings Carbon Trust (Trust) and used for specific purposes. No less than 85% of the funds must be used on measures that reduce electricity use and no more than 15% on measures that reduce consumption of fossil fuels. The proceeds from the auctions enhance energy efficiency and renewable energy projects that should reduce demand for electricity leading to lower electricity costs for Maine’s electricity consumers.

By a letter dated June 20, 2007, the Chairs of the Utilities and Energy Committee (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.

II. RGGI AUCTIONS

Since the first quarterly auction in September 2008, allowance prices have ranged from \$3.51 in March 2009 to the reserve price of \$1.86 in both the September 2010 and December 2010 auctions. During 2010, four quarterly auctions were held with allowance prices ranging from \$1.86 to \$2.07. Quarterly proceeds attributable to Maine have ranged from \$1.7 million to \$3.3 million over the eleven quarterly auctions conducted to date and total \$26.0 million overall. Maine’s share of the auction proceeds totaled \$8.3 million in 2010.

III. EFFORTS TO TRACK RGGI PRICE IMPACTS

Efforts to assess the effect on electricity prices in both the ten-state RGGI region and in the New England market are on-going. In a report issued in February 2011, RGGI, Inc. reported:

On average, in 2009, the cost of CO₂ allowances accounted for 0.4 percent to 1 percent of average residential electricity bills, depending on the state (based on actual or estimated CO₂ component of ISO wholesale electricity prices, state residential retail electricity prices, EIA residential electricity usage data, and a 2009 average CO₂ allowance spot price of \$3.06). Based on

typical household electricity usage, this translates into a weighted average of 73 cents per month for residential consumers across the 10-state RGGI region.¹

Additionally, a study originally conducted in 2008 and updated in February 2011 by the University of New Hampshire estimated the actual direct annual cost in 2009 to residential customers of Public Service of New Hampshire at \$7.47 or \$0.63 per month². In 2009, auction prices averaged \$2.75 for the current compliance period and \$2.21 for the future compliance period. In 2010, auction prices declined to an average of \$1.92 for the current compliance period and \$1.86 for the future compliance period, representing a decline of 30% for current period allowance prices and 15% for future period allowance prices.

IV. ESTIMATE OF AVOIDED ELECTRICITY BENEFITS

Because energy efficiency program investments have been a cornerstone of the RGGI program since its inception, efforts have also been made to analyze and quantify the electricity savings benefits that result from the investment of RGGI auction proceeds in energy efficiency programs. In an initial analysis released in October 2010³, Synapse Energy Economics, Inc. estimated the lifetime electricity savings compared to RGGI funding amounts for each of the ten RGGI states using data and auction results through the end of 2010. Using projections of marginal energy supply costs that will be avoided due to reductions in the use of electricity, natural gas, and other fuels resulting from energy efficiency programs, Synapse estimated the ratio of avoided electricity benefit to RGGI funding at 3.76 to 1 for Maine and at 1.50 to 1 for the entire RGGI region. Stated differently, the investment of \$1.00 of RGGI proceeds in energy efficiency programs in Maine leads to a benefit of \$3.76 in lifetime electricity savings.

V. CONCLUSION

Individual states and RGGI, Inc. continue their efforts to assess the costs and benefits of RGGI participation. With the many factors that influence the price of electricity and natural gas in the ISO-New England electricity market, it is difficult to isolate the impacts of RGGI and to separate those impacts from the decline in natural gas prices and electricity prices the region has seen in the past several years. As required by the RGGI Memorandum of Understanding, RGGI is in the initial stages of the 2012 comprehensive review of all components of the RGGI program, including a review of the impact the program has had on price and system reliability. The Commission will continue to stay abreast of regional efforts to track the impacts of RGGI and the results of the RGGI comprehensive review and will report future developments to the Committee.

¹ *Investment of Proceeds from RGGI CO₂ Allowances, Benefits of Regional Greenhouse Gas Initiative (RGGI)-funded programs in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont*, RGGI, Inc. February 2011. Available at www.rggi.org

² *Economic Impact in New Hampshire of the Regional Greenhouse Gas Initiative (RGGI): an Independent Assessment (Update Feb 2011) Memo*, Ross Gittel and Matt Magnusson, University of New Hampshire, Whittemore School of Business and Economics, February 2011.

³ *Electricity Energy Efficiency Benefits of RGGI Proceeds: An Initial Analysis*, Max Chang, David White, Lucy Johnston, and Bruce Biewald, Synapse Energy Economics, Inc, October 5, 2010