



MEMORANDUM

September 26, 2007

To: NH DES, UNH Modeling Team, and
NH RGGI Stakeholders
From: Derek K. Murrow, Director, Policy Analysis
RE: Comments on UNH's Draft NH RGGI Modeling Report

Rockport, ME
Portland, ME
Boston, MA
Providence, RI
Hartford, CT

The following are preliminary comments from Environment Northeast (ENE) on the draft *Economic Impact in New Hampshire of the Regional Greenhouse Gas Initiative*, (RGGI) by Gittell and Magnussan at the University of New Hampshire. Our comments are based on the PowerPoint presentation of September 19, 2007¹ and the draft Executive Summary of the report dated September 13, 2007.

General Comments

- Although the report highlights the benefits of energy efficiency, we are extremely concerned that the assumptions related to ratepayer bill impacts do not appear to be consistent with current program results. It also does not appear that the authors modeled expanded energy efficiency investments using REMI (see detailed comments below). If so, a conclusion that using RGGI proceeds to reduce business taxes is the most economically beneficial result cannot be supported without comparing the impacts to using the proceeds for efficiency.
- It would be helpful to have access to the full report, as there are a number of detailed assumptions we would like to review.
- The authors have addressed the key economic question that New Hampshire policy makers should consider when reviewing the RGGI program with their summary conclusion being: "It is in the long term economic interest of the state of New Hampshire to participate in the Regional Greenhouse Gas Initiative (RGGI)."
- This study does not assess anything related to the environmental benefits associated with the program, which are significant – RGGI is a critical first step in terms of getting the state on a sustainable emissions pathway.
- Key findings that some stakeholders have debated, but all experts and economists such as the authors have found:
 - "NH part of regional energy market .. Electricity wholesale costs determined by the marginal cost of electricity in the region"
 - "Auction all carbon allowances (don't give them to generators) - The costs of RGGI will primarily be borne by ratepayers no matter how carbon allowances are allocated"

¹ Available at: http://www.des.state.nh.us/ard/ClimateChange/docs/rggi_bia_9_20_2007_finalpost-et.ppt

Detailed Comments

- REMI Results
 - The REMI results shown are quite troubling as they appear to only focus on a rebate option and a series of tax reduction options – there is no 100% energy efficiency investment run shown
 - Based on other REMI modeling that has looked at expanded energy efficiency investments (RGGI State Working Group, US EPA, the State of Connecticut, etc) this analysis should show tremendous net economic benefits to the state
 - Energy efficiency modeled using REMI should be completed and the assumptions should include:
 - Increased wholesale electric power costs due to RGGI
 - Efficiency investment costs should not be a negative as they are derived through the auction and included in the wholesale electric price assumptions
 - Reduced energy consumption and consumer bills directly attributable to the
 - Reduced electric prices for all customers due to reduced demand and lower wholesale electric prices (LMP) and reduced capacity costs
 - Increased investments in other parts of the economy as consumers can spend their energy dollars in other sectors
 - Reduced imports of fossil fuels
 - Reduced revenue to electric generators, but not reduced revenue to electric transmission (FERC rates adjust for this) or distribution companies (fixed distribution costs are regulated and companies will come in for a rate case, request lost revenues be recovered, or request decoupling to ensure most of these costs are paid in any case)
 - ENE believes this analysis is incomplete without REMI runs that examine expanded energy efficiency scenarios. Without a common assessment it is not clear how the authors can compare the tax cut scenarios to the energy efficiency investment options, although this has been done in the draft results that highlight tax benefits first.
- Energy efficiency investment scenarios:
 - Modeling energy efficiency investments can be complicated and the assumptions related to these scenarios should be spelled out in detail.
 - The ups and downs in terms of results related to rate impacts need to be explained – some increases due to higher RGGI allowance costs make sense, but investments in energy efficiency should yield significant and constantly growing savings to consumers, which does not appear to be reflected in these results
 - The scale of the energy efficiency savings looks very small – in a pre-RGGI scenario they should yield 6 times their cost in direct savings to ratepayers. NH energy efficiency program

results indicate that program costs were about 1.95 cents per lifetime kWh saved, in comparison to 14.2 cents for a kWh of additional electric power.²

- All efficiency investment assumptions should be built on the experience of existing NH programs.
- As noted above, the net-present value of ratepayer costs should be presented in this analysis for things like ratepayer impacts which are hard to compare over longer time periods – this may be the case in the tables comparing ratepayer impacts but it is not clear and the discount rate used should be identified.
- The differences in terms of results for PSNH and the other utilities should be spelled out. If this is related to a portion of the allowances being held by PSNH and not auctioned, this should be made clear and the 100% EE or 100% rebate terminology should be changed.
- It is not clear that the modeling incorporated a scenario where there is significant investment in energy efficiency regionally at the same time RGGI is implemented. This kind of scenario was modeled for the RGGI State Working Group using IPM and REMI and the system benefits were very significant with much lower wholesale electric prices. This kind of scenario should be included as most states have now committed to 100% auction of allowances and have been discussing investment of most proceeds in expanded energy efficiency programs (CT, MA, ME, VT, RI, NY)
- Costs and benefits:
 - Any costs or benefits should be compared over the full period of analysis with the value discounted to today's dollars using net-present value analysis.
 - Summary conclusions related to reducing other tax levels or reducing ratepayer costs through energy efficiency investments are very confusing as the time period being examined appears to be different.
- Long-term economic benefits of joining RGGI:
 - The report properly identifies that, “Joining RGGI can also enable NH consumers and businesses to: be better positioned for future Federal policies”
 - However these benefits can be quantified or at least more fully explained using the results of the IPM and REMI modeling that was completed for the RGGI State Working Group, which looked both at RGGI being implemented in isolation and then having a federal cap and trade program implemented at a later date
 - When a cap is applied to the RGGI region, the right investment decisions are more likely to be made by the energy companies in the region increasing the efficiency with which we generate and use energy and also decreasing the emissions rate regionally.
 - This more efficient and lower emissions energy system will bear much less of a burden than other parts of the country or even the world that are less efficient and more polluting.
 - This effect is significant and RGGI will put New Hampshire and the region at a competitive ADVANTAGE in comparison to many other parts of the country.

² NH Saves, 2007, New Hampshire's Energy Efficiency Programs, Presentation to RGGI Stakeholders Meeting, available at: http://www.des.state.nh.us/ard/ClimateChange/docs/Success_of_ExistingStatewidePrograms-GilGelineau_PSNH.ppt

- The singling out of PSNH results from the other utilities in the state is confusing and the reasons for this (plant ownership, etc) should be identified.
- The list of scenarios evaluated talks about a 100% rebate scenario, but the conclusion related to the reduction of business taxes appears to come out of the blue. Tax shifting options are plentiful, but the state could choose to invest the RGGI revenues in just about any program or policy. Why the tax scenarios and not other investments from education to healthcare, much less keeping the investments in the electric sector?



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Environment Northeast is a nonprofit research and advocacy organization focusing on the Northeastern United States and Eastern Canada. Our mission is to address large-scale environmental challenges that threaten regional ecosystems, human health, or the management of significant natural resources. We use policy analysis, collaborative problem solving, and advocacy to advance the environmental and economic sustainability of the region.