Environment Northeast

101 Whitney Avenue
New Haven, CT 06510
203-495-8224
www.env-ne.org

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

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Chris James and Chris Nelson
Connecticut Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Environment Northeast's Comments on the Pre-Proposal to Connecticut's Rule To Implement the Regional Greenhouse Gas Initiative

Environment Northeast is a nonprofit research & advocacy organization focusing on the Northeastern U.S. 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 region's environmental and economic sustainability.

Environment Northeast is part of the 24 member Stakeholder Group which was selected by the Regional Greenhouse Gas Initiative (RGGI) states to represent electric generator, environmental, consumer, and other affected interests in the Northeast and Mid-Atlantic regions. We are very supportive of the RGGI process and look forward to working with the State of Connecticut as it moves forward in its rulemaking process in implementing the Regional Greenhouse Gas Initiative.

Our comments will focus on several aspects of the "Pre-Proposal Draft Section" Section 22a-174-31 and Section 22a-174-31A issued by the Connecticut Department of Environmental Protection (DEP) on April 25, 2007 and provide additional comments about the RGGI process based on our involvement in other states.

1. Section 22a-174-31 (f) (3) (C): CO2 allowance allocations
2. Section 22a-174-31 (f) (3) (B): CO2 allowance allocations
3. Section 22a-174-31 (f) (4): Mandatory Retirement of Allowances for Voluntary Renewable Energy Market
4. Section 22a-174-31 (f) (6): Early Reduction CO2 Allowances.

1. Section 22a-174-31 (f)(3)(C) and Section 22a-174-31 (f)(5): CO2 allowance allocations

Environment Northeast is concerned with subsection (f)(3)(C) "CO2 allowance allocations" which states "After deducting the amount of allowances in accordance with the provisions of subdivisions (4) and (5) of this subsection, the commissioner shall, by no later than the end of the second compliance period, allocate up to one hundred percent of the remaining Connecticut CO2 trading program base budget to the consumer benefit account established under subparagraph (B) of this subdivision." Environment Northeast is concerned that this statement gives DEP full discretion to allocate an undetermined number of allowances (up to 75% of the allowances) for the first six years of the RGGI program.

Environment Northeast is also very concerned with Section 22a-174-31 (f) subdivision (5) which states that the "commissioner may set aside a portion of the Connecticut CO2 trading program base budget to directly support highly energy efficient power generation, any other strategic energy purpose set forth in the Regional Greenhouse Gas Initiation [sic] Memorandum of Understanding or the voluntary renewable energy provisions set forth in the Regional Greenhouse Gas Initiative model rule."

Although Environment Northeast supports incentives for combined heat and power (CHP), the state should not create additional loopholes to RGGI and should look to other policy mechanisms to support CHP. Revenues from the auction could be used to support highly efficient power generation such as CHP if it would provide consumer benefit but Environment Northeast does not feel that a portion of the allowances should be specifically set aside for this purpose.

In addition, the term "other strategic energy purpose" could allow the state to give away an unlimited number of allocations to generators with long-term contracts or others who feel they would benefit from being given allocations for free instead of having to purchase them at auction. There is also no indication about how much the state would set aside for this purpose. The New York Department of Environmental Conservation wrote a paper in response to the IPPNY Concerns of NY going to 100% auction, where the NY DEC concluded,

> Long-term contracts do not warrant special regulatory treatment. Certain generators have suggested that long-term contracts prevent them from passing on the cost of the allowances to the purchaser of the power under the contract.[1] After discussions with experts in the industry involved in the negotiation of such long-term contracts, the Department has learned that it is not uncommon for a supplier to negotiate for a "re-opener" or "change-in-law" provision in such contracts that would enable the supplier to renegotiate the price or pass on unforeseen costs incurred because of a change in law like RGGI. In cases where no such re-opener is included in the contract, it is likely that the supplier of the electricity under the contract has assumed the risk of any change in law that occurs during the term of the contract. Indeed, placement of risk between two parties is a central theme in any long-term power contract negotiation and change-in-law is a central risk in an industry like electric generation where the regulatory environment has always been a changing factor.[2]

Environment Northeast believes that 100% of allowances should be auctioned and used to reduce consumer costs (once the allocation for voluntary renewable credits has been set aside as is in 22-a-174-31(f)(4)). Environment Northeast has publicly commented on this issue at Connecticut stakeholder meetings and has also submitted written comments. However, we feel that it is best to repeat some of our prior comments and expand on other issues in light of the continued inclusion of these provisions in Connecticut's draft pre-proposal.

The rational and fair decision is to auction 100% of the allowances and use the allowance value to reduce the cost of the program on the region's ratepayers. Other states such as New York and Vermont have

[1] Despite repeated requests, however, no generator has come forward with a long-term contract to give the Department an opportunity to determine whether the contracts in fact contains no provision that would allow the generator to pass on the cost of emissions allowances under new programs.

2 New York Department on Environmental Conservation response to concerns from IPPNY 11-26-06.

committed to 100% auction in their rulemaking and this has paved the way for states such as Maine, Rhode Island and Massachusetts who have also decided that they will auction 100% of the allowances.

In a letter describing their rationale, the New York Department of Environmental Conservation stated that there was widespread support for 100% allocations and "Large commercial and industrial consumers have likewise come out strongly in favor of a 100% auction, arguing that an allowance giveaway to generators would be grossly unfair and represent a poor public policy choice.[3]"

Some large industrial consumers and regional electric utilities are calling for 100% auction of RGGI allowances.

- A letter and white paper from National Grid supports 100% auction or allocation to consumers with the money used for rebates or expanded energy efficiency investments.[4]

- The Connecticut Industrial Energy Consumers state, *"Energy prices in Connecticut currently are significantly higher than the national average. And, consumers have experienced dramatic increases in the past several years. Consistent with Connecticut's goal of reducing the price of electricity, the State should mitigate the impact of RGGI on the price of electricity by auctioning all of the RGGI air emissions allowances, to the maximum extent possible, and utilizing all of the auction proceeds as a credit on retail electricity consumers' bills on a kilowatthour basis."* [5]

- Large industrial groups like New York's Multiple Intervenors are saying, *"All RGGI Emissions Allowances Should Be Auctioned And The Proceeds Should Be Applied As A Per-kWh Credit To Retail Electric Distribution Rates."* [6]

No persuasive reason has been presented for why allowances should be allocated to electric generators for free. On the other hand, economic and fairness issues clearly support a complete or large and growing auction of allowances, with generators having to purchase them and the proceeds used to reduce the cost of the emissions programs on electric ratepayers.

The arguments for an auction and against free allocation of allowances are strong:

- Air quality and the world's climate are a public good that polluters do not have a right to spoil – the purchase of allowances is consistent with the 'polluter pays' principle with payment for pollution rights being a cost of production.
- Previous cap and trade programs, created prior to electricity restructuring, did not face the same issues, as cost of service regulations allowed excess profits to be returned to ratepayers; the electric markets are very different today than when the SO2 and NOx programs were first created.
- Most generators, and all economists we are aware of, agree that an allowance, whether allocated for free or purchased, has an opportunity cost as it can be used for compliance, banked, or sold to others.
- Allowances are assigned the market value (opportunity cost) by generators and that cost is built into their marginal costs or O&M costs that determine their bid prices in the marketplace.

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[3] These commercial and industrial customers include the approximately 50 members of the Multiple Intervenors, as well as the New York Energy Consumers Council, National Grid (on behalf of its customers), the City of New York and Consumer Power Advocates, consisting of major institutional consumers of energy in and around New York City.
[4] National Grid comments submitted to the RGGI process: http://www.rggi.org/docs/national_gird_whitepaper.pdf
[5] Connecticut Industrial Energy Consumers comments submitted to the RGGI process: http://www.rggi.org/docs/ciec_comments.pdf
[6] Multiple Intervenors (New York) comments submitted to the RGGI process: http://www.rggi.org/docs/mi.pdf

- Because costs are built into bid prices, whether generators get an allowance free or have to pay for it, these costs are passed on to consumers – while making that expense to consumers larger than necessary.
- Because electric consumers will bear the very modest cost of the RGGI program, we see no reason for generators to profit at their expense.
- As a part of utility restructuring, part of the deal with moving to competitive markets was that generators took on regulatory risk in exchange for a significantly freer and less regulated market.
- This is consistent with the idea of competitive and free markets – let the markets work.
- In any case, New England consumers are already paying generators very significant and amounts of money in the form of congestion payments and the forthcoming Forward Capacity Market payments – states should not add free allowances to this already very significant stream of payments.

Economists, consultants, and government agencies that have looked the issue of allocation are increasingly in agreement that allowances should be auctioned to avoid windfall profits and avoid market distortions. This has been increasingly clear in the European Union where recent experience with its carbon dioxide cap and trade program has indicated that some companies are reaping very large windfalls because allowances were allocated to them for free (see references below).

In an April 25, 2007 Congressional Budget Office (CBO) Economic and Budget Issues Brief called "Trade-Offs in Allocating Allowances for CO2" the CBO stated that "…the cost of holding the allowances would generally be reflected in the prices that producers charged, regardless of whether those producers had to buy the allowances or were given them for free." This means that producers would pass on the value of the allowances as a cost on to their consumers either way since they allowances have an opportunity cost. "That result was borne out in the cap-and-trade programs for sulfur dioxide in the United States and for CO_2 in Europe where consumer prices rose even though producers were given allowances for free."[7]

While it may seem at first glance that generators will be forced to pay the full costs of compliance with RGGI; in reality the costs associated with purchasing allowances are passed on to electricity consumers. The good news is that since these costs will be distributed among millions of customers, the impact on individuals' electric bills will be small while the benefits to public health and the environment will be large.

- The projected direct electricity cost impacts due to RGGI would be modest under the best estimate and range from 0.3% to 0.6% in 2015 resulting in a bill increase in the range of $3-$16 per average household annually in 2015.
- In addition, designing expanded energy efficiency programs into the RGGI framework or providing direct rebates to electricity consumers from the sale of emissions allowances would reduce consumer costs and lead to improved job and economic growth.
- Studies have shown that investments in end-use energy efficiency programs, as a result of, or in conjunction with RGGI are projected to be so effective in reducing total electricity usage by households, that they will mitigate any cost increase associated with RGGI.

In addition, while RGGI may have a very small impact on the regional economy (as measured by Gross Regional Product, Real Personal Income, and Private Sector Jobs), RGGI modeling has shown that the impact is projected to be a ***positive*** one (primarily due to the benefits of investment in energy efficiency

[7] Trade-Offs in Allocating Allowances for CO2 Emissions, April 25, 2007
http://www.cbo.gov/ftpdoc.cfm?index=8027&type=1

technologies) – ranging from a one hundredth to two-hundredth of one percent change (0.01% - 0.02% positive change in economic growth).

For additional background on the issue of allocation of emissions allowances, please refer to the following documents:

- Åhman, et al, 2006-forthcoming, *A Ten-Year Rule to Guide the Allocation of EU Emission Allowances*. Accepted for publication in the Journal of Energy Policy, April 2006.
- Boemare, C., and P. Quiron, 2001. *Implementing Greenhouse Gas Trading in Europe: Lessons from Economic Theory and International Experience.* Report for the Interact project, DG Research of the EU Commission, Centre International de Recherche sur l'Environnment et le Development. www.centre-cired.fr.
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- Burtraw, D., 2001. *The Effect of Allowance Allocation on the Cost of Carbon Emission Trading,* Resources for the Future Discussion Paper 01-30 (August).
- Burtraw, D., and K. Palmer, 2003. *Economic Efficiency and Distributional Consequences of Different Approaches to NOx and SO2 Allowance Allocation*, Prepared for the U.S. Environmental Protection Agency. http://www.epa.gov/air/clearskies/econ.html (accessed June 8, 2005).
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- Burtraw, et al, 2001. *The Effect of Allowance Allocation on the Cost of Carbon Emission Trading,* Resources for the Future Discussion Paper 01-30 (August).
- The Carbon Trust, 2004, *The European Emissions Trading Scheme: Implications for Industrial Competitiveness*, CT/2004/04
- Carlson, et al, 2000. *SO2 Control by Electric Utilities: What are the Gains from Trade?* Journal of Political Economy, 108:6, 1292-1326.
- CEEP, 2005, *Evaluation of CO2 Emission Allocations as Part of the Regional Greenhouse Gas Initiative*, Center of Energy, Economic, and Environmental Policy, Rutgers University
- Congressional Budget Office, *2003, Issues in the Design of a Cap-and-Trade Program for Carbon Emissions*, Economic and Budget Issue Brief, November 25, 2003
- Cramton, P., and S. Kerr, 2002. *Tradable carbon permit auctions: How and why to auction not grandfather*, Energy Policy, 30, 2002, pp. 333–345.
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- Hamal and Madian, 2005, *Allocation of Emission Allowances for the Regional Greenhouse Gas Initiative*, White Paper for National Grid
- IPA Energy Consulting, 2005, *Implications of the EU Emissions Trading Scheme for the UK Power Generation Sector*, to: Department of Trade and Industry (DTI)
- Standard & Poor's, 2006, *Gas And CO2 Prices Fuel Profits For Electric Utilities In Europe's Deregulated Markets*, Standard & Poor's Credit Ratings - Commentary & News, 6 April 2006
- Stavins, R., 1998. "What Can We Learn from the Grand Policy Experiment? Lessons from SO2 Allowance Trading," Journal of Economic Perspectives, 12:3 (summer), 69-88.
- Sijm, et al, 2006, *CO2 cost pass-through and windfall profits in the power sector*, Climate Policy, 6 (1): 49-72
- Sijm, et al, 2005, *CO2 price dynamics: the implications of EU emissions trading for the price of electricity*, Energy Research Center of the Netherlands, ECN-C--05-081

- Tietenberg, T., 2001. *The Tradable Permits Approach to Protecting the Commons: What have we Learned?* Nota di Lavoro 36.2002, Fondazione ENI Enrico Mattei (FEEM).
- UBS, 2005, *CO2 – The Windfall Has Arrived*, UBS Investment Research, ETS Update, 7 June 2005

2. Section 22a-174-31 (f) (3) (B): CO2 allowance allocations

Environment Northeast is supportive of Section 22a-174-31 (f) (3)(b) (Page 31-23) the Consumer benefit or strategic energy purpose account which states that the commissioner shall establish in order to "promote or reward investments in energy efficiency, renewable or non-carbon emitting technologies or innovative greenhouse has emissions abatement technologies.

Connecticut should ensure that the allowance value from an auction is not squandered and is targeted to activities that reduce costs for the region's ratepayers, support RGGI program goals, and generally receive public support by limiting potential negative environmental and health impacts. Increasing investments in energy efficiency programs and clean energy alternatives have the effect of lowering the cost of meeting emissions limits.

As a result, all activities and programs supported through the auction should:

1) Reduce the costs of the RGGI program to the state's electricity ratepayers
2) Provide additional benefits for activities or projects that would not have occurred anyway and not replace existing programs or investments; and
3) Support programs and activities that do not pose a significant risk to human health and the environment.

We believe the state should make an explicit policy statement, such as the one above, in the model rule that will guide all future investments of RGGI allowance value.

The criteria noted above would mean that programs and investments would be limited to the electric sector and those activities that most reduce consumer costs or maximize cost-effective investments would be targeted. In the near term, we believe the primary investment should be in additional electric sector energy efficiency programs. However, over time, other non-emitting electric sector technology investments could be considered such as renewables or carbon capture and sequestration.

Energy efficiency investments provide four major benefits to the state's electricity ratepayers:

- Consumer's electric bills are reduced through reductions in their energy consumption;

- Investments in efficiency substitute for payments for fossil fuels and keep energy dollars in-state leading to economic and job growth;

- Through reduced energy demand, the RGGI cap is easier to achieve and the program as a whole is cheaper leading to lower wholesale electric prices for everyone; and

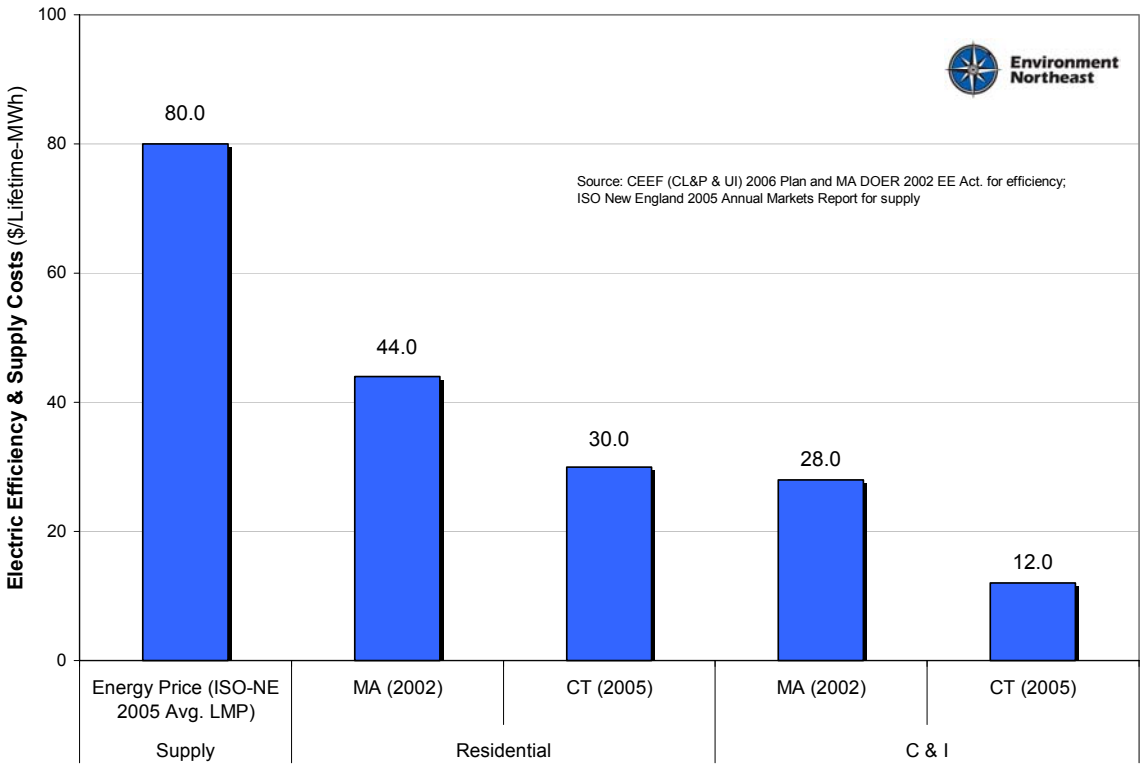
- Reduced demand avoids the need to build expensive new transmission and distribution infrastructure as well as new power plants.

The following table illustrates the potential size and value of the Consumer Benefit and Strategic Energy Purposes allocation at allowance prices of $2 and $5 per ton CO2 and for CT could be $21,390,072 at $2 a ton and $53,475,180 at $5 a ton.

Table 1: Estimates of the Value of the Consumer Benefit and Strategic Energy Purposes Allocation

		Value of Allowances w/ a 25% Consumer Allocation			Value of Allowances w/ a 100% Consumer Allocation		
State	RGGI Cap Level	Allowances (tons)	@ $2/ton	@ $5/ton	Allowances (tons)	@ $2/ton	@ $5/ton
CT	10,695,036	2,673,759	$5,347,518	$13,368,795	10,695,036	$21,390,072	$53,475,180
DE	7,559,787	1,889,947	$3,779,894	$9,449,734	7,559,787	$15,119,574	$37,798,935
ME	5,948,902	1,487,226	$2,974,451	$7,436,128	5,948,902	$11,897,804	$29,744,510
NH	8,620,460	2,155,115	$4,310,230	$10,775,575	8,620,460	$17,240,920	$43,102,300
NJ	22,892,730	5,723,183	$11,446,365	$28,615,913	22,892,730	$45,785,460	$114,463,650
NY	64,310,805	16,077,701	$32,155,403	$80,388,506	64,310,805	$128,621,610	$321,554,025
VT	1,225,830	306,458	$612,915	$1,532,288	1,225,830	$2,451,660	$6,129,150
Total	121,253,550	30,313,388	$60,626,775	$151,566,938	121,253,550	$242,507,100	$606,267,750
MA	26,660,204	6,665,051	$13,330,102	$33,325,255	26,660,204	$53,320,408	$133,301,020
RI	2,659,239	664,810	$1,329,620	$3,324,049	2,659,239	$5,318,478	$13,296,195

Figure 1: Electric Generation vs. Energy Efficiency Costs



As Figure 1 shows, efficiency programs put real dollars back in ratepayer's pockets that they can then spend on other parts of the state's economy. States spends billions of dollars every year on fossil fuels from other parts of the country and the world. Avoided electric consumption translates into avoided payments for natural gas and oil (plants using these fuels are primarily on the margin), reducing the state's trade imbalance. In contrast efficiency programs fund energy service companies with local employees to install new more efficient equipment that is more likely to have been manufactured in the state or region. Investments in energy efficiency boost the state's economy and lead to job growth both in the energy service sector and in the economy as a whole due to transfers of payments from the electric sector to other parts of the economy.

Energy efficiency programs have significant system-wide benefits. In particular, reduced demand depresses the wholesale electric energy price, and because peak is lower, the capacity price is also reduced. These benefits are significant today, but under RGGI, the system benefits are even larger.

If electric consumption is growing and the RGGI program requires a decline in emissions, the goals are harder to achieve and more expensive than if electric consumption is held steady or even declines through investments in efficiency. The RGGI modeling results bear this out. The following figure illustrates the change in wholesale electric prices between the equivalent RGGI reference case and the policy case.

Figure 2: Forecasts of Changes in Wholesale Electric Power Price Increases Due to RGGI

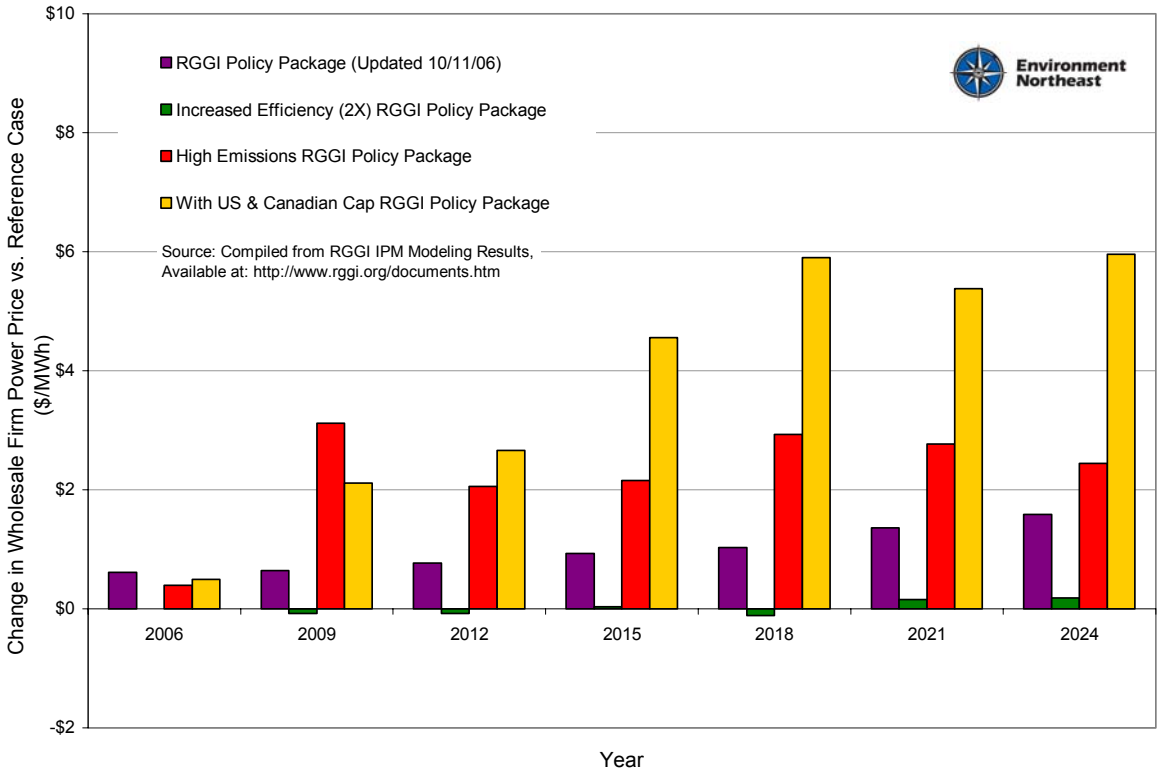
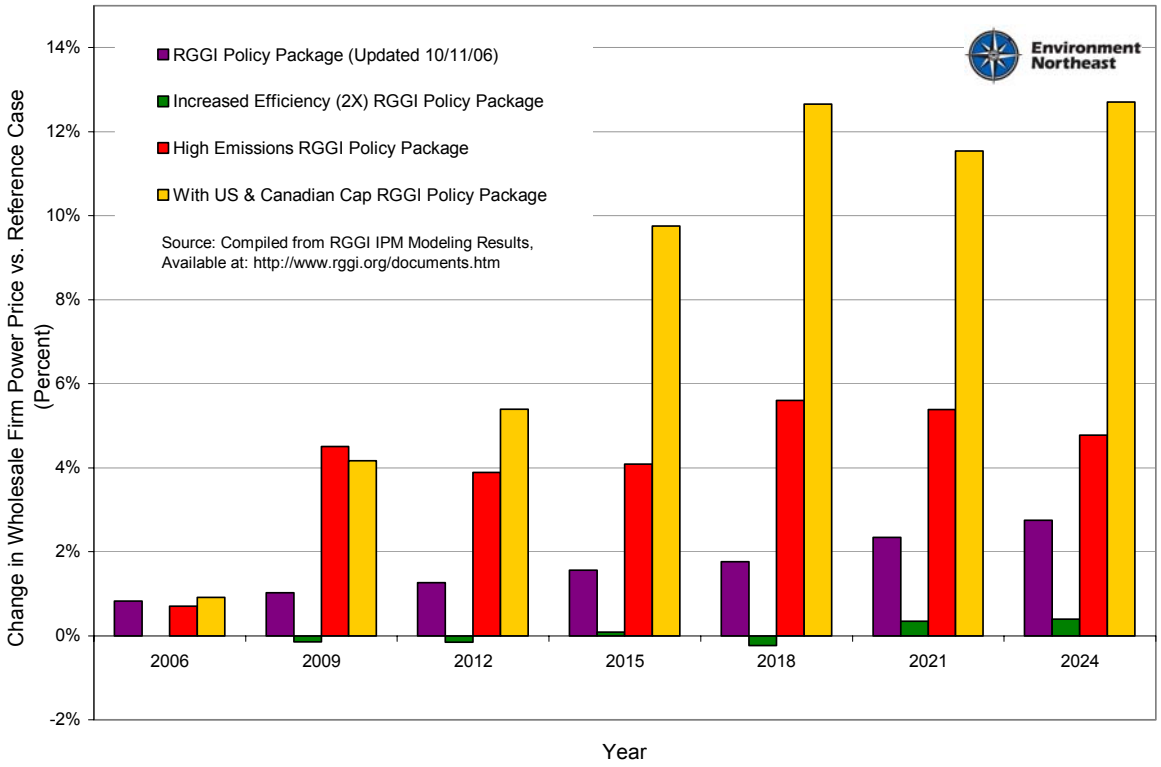


Figure 3: Forecasts of Changes in Wholesale Electric Power Percent Increases Due to RGGI



As the figures above indicate, the wholesale electric price is actually reduced in some years if RGGI is implemented along with a doubling of efficiency investments. Efficiency investments along with RGGI will deliver these savings to all consumers in the RGGI region.

Note that wholesale power prices are over half of delivered retail prices with wholesale prices in the range of $60 to 100 per MWh and transmission and distribution costing about $30 to 50 per MWh.

Increases in efficiency programs can be delivered using a number of policy mechanisms or tools. Environment Northeast believes that most of the RGGI allowance value should be used to increasing funding for efficiency programs. However, other sources of funding for programs could include: the Forward Capacity Market, the sale of NOx allowances, commitments to increase efficiency through investing in all cost-effective efficiency to be paid for through rates, or other policies.

3. Section 22a-174-31 (f) CO2 Allowance Allocations (4): Mandatory Retirement of Allowances for Voluntary Renewable Energy Market

Environment Northeast is very supportive that Connecticut has included the optional set-aside for voluntary renewable purchases in the state rulemaking process (RGGI section XX-5.3(D) in Section 22a-174-31 (f)(4): Mandatory Retirement of Allowances for Voluntary Renewable Energy Market. Environment Northeast believes that retiring these credits to support the voluntary renewable market will ensure that the marketers can continue to claim that the program is reducing carbon emissions. It is our understanding that this set aside and retirement of credits would only represent a tiny fraction of the allowance budget. In Connecticut, which has a robust voluntary clean energy program, this voluntary

requirement would comprise less than 1% of CT's allocation (CT Clean Energy Fund calculation). This should be the only portion of RGGI allowances that would not be auctioned. Environment Northeast questions whether it is necessary to provide the voluntary set aside provision in Section 22a-174-31 (f)(5) as well since it has just been discussed in Section 22a-174-31 (f)(4). Section 22a-174-31 (f)(5) states that the commissioner may set aside a portion of the voluntary renewable energy provisions set forth in the Regional Greenhouse Gas Initiative model rule.

4. Section 22a-174-31 (f) (6): Early Reduction CO2 Allowances.

Section 22a-174-31 (f) (6) on p. 31-24 is an optional provision that Connecticut can choose to implement or not. It is unclear whether this provision is needed if Connecticut is planning to auction most of the state's allowances.

We appreciate the opportunity to comment on the development of RGGI in Connecticut. This program is a critical part of the state and region's plan to reduce greenhouse gas emissions. Please let us know if you have questions about this letter, which we hope provides some additional ideas to policy makers on next steps for RGGI. We look forward to working with the states to implement the RGGI rule in all the Northeastern states.

Sincerely,

Derek Murrow, Director of Policy Analysis
dmurrow@env-ne.org

Alice E. Liddell, Policy Analyst
aliddell@env-ne.org