

Clean Water Action Conservation Law Foundation
Environmental League of Mass. Environment Massachusetts
Mass. Climate Action Network Union of Concerned Scientists

Date: March 19, 2007

To: Massachusetts Division of Energy Resources and Department of Environmental Protection

From: Undersigned Organizations

Re: Comments on allowance auctions and other issues related to Massachusetts' Implementation of the Regional Greenhouse Gas Initiative

We appreciate the work that DOER and DEP have put into RGGI implementation, and this opportunity to comment on several important points of that process. These comments address the questions posed by those agencies in the "RGGI -- Allowance Auctions, Issues and Work Plan" document of March 12, as well as other related issues that we believe are of particular importance and should be considered during the drafting process that the agencies are now undertaking as they adapt the Model Rule for promulgation in Massachusetts.

We start with these additional issues and then move on to the questions posed at the March 12 meeting.

"Voluntary" renewables purchases

The RGGI Model Rule contains an "optional" provision regarding the treatment of voluntary purchases of electricity from renewable sources, that each participating state can choose to adopt. Up to this point, DOER and DEP have not stated whether this provision will be part of the Massachusetts implementation package for RGGI. For the reasons stated below, we urge the agencies to include this provision of the Model Rule in the Massachusetts regulations.

We begin by summarizing the problem that this provision seeks to solve. It must be recognized that given a fixed RGGI cap on CO₂ emissions from power plants, the actual emissions from generating plants in the region can be expected to be at the cap. As a result, optional purchases of renewable electricity (most notably purchases not mandated by energy portfolio standards like the Massachusetts RPS law), which currently reduce CO₂ emissions, will no longer do so. In this situation, renewable energy credits could lose a significant portion of their value, as they would no longer have as clear an environmental benefit. The result could be to entirely destroy the market for voluntary purchases of renewable power (also known as "clean" or "green" power), as promoted by programs like the Clean Energy Choice program of the Massachusetts Technology Collaborative.

To prevent this detrimental result and to further the RGGI emission reduction goals, we strongly urge the DEP and DOER to adopt the RGGI model rule's optional provision that would reduce the number of allowances the state issues to account for the CO2 eliminated due to voluntary actions. That language defines such purchases [Section XX-1.2(b)] and describes the mechanisms for retiring allowances accordingly [Section XX-5.3(d)], including:

“The REGULATORY AGENCY shall retire CO2 allowances in the voluntary renewable energy set-aside account in an amount up to the number of tons of CO2 represented by actual voluntary renewable energy purchases, based on actual MWh purchases and the emissions factor determined pursuant to paragraph (2) of this subdivision.”

Should 100% of allowances be auctioned?

DEP and DOER did not raise this question, but it was raised by several stakeholders during the March 12 meeting. That the agencies did not raise the question is appropriate, since Governor Patrick has issued his decision on the matter and it should be considered settled. In addition, it now appears that most or all of the RGGI states will auction 100% or close to 100% of their allowances. Vermont passed a law in April 2006 that requires all of its allowances to be sold and used for the benefit of consumers. The governors of both Maine and Connecticut have announced their intentions to sell all or close to 100% of the allowances in their states. New York's Dept. of Environmental Conservation (DEC) on Dec. 9, 2006, proposed regulations that would require 100% sale of allowances, and Governor Eliot Spitzer has strongly stated his support for selling all the allowances. The DEC's press release says, in part:

“New York's preliminary draft rule announced today also includes the auction of 100 percent of emissions allowances... The emissions allowances would be sold on the open market, and the proceeds of the sale would support energy efficiency and clean energy technology investments in the State.”

Although the issue should be considered settled, we restate in Appendix A below some of the strong arguments for selling the allowances.

Should the auction be designed to maximize revenues or minimize allowance prices?

All the arguments discussed in Appendix A as to why emissions allowances should be paid for rather than given away for free also apply to why the goal should be to maximize revenue rather than to minimize allowance prices -- including of course that electricity generators will be the only parties to gain by keeping allowance prices down.

The choice to hold an auction implies that a goal is to raise as much money as possible, and then to make good use of those funds. In turn, this conclusion in large part implies the answers to the other questions posed by DOER and DEP, concerning the design of the auction: among other goals, it should be designed to maximize the resulting revenues.

In deciding to auction the allowances, Governor Patrick repeatedly cited the gains to consumers from using the auction proceeds to fund efficiency programs. Allowance prices should be

maximized in order to yield the most funding for these programs, which could fully protect electricity consumers against the costs of RGGI, and for other valuable purposes. Research by the state governments shows that using RGGI permit fees to double spending on energy efficiency would cause the average household electric bill in the northeast to fall by more than \$100 a year, or around 12%¹ -- and business customers would obtain similar savings.

Analysis performed using the ICF model, and then converted into retail electric bill impacts by Mass. DOER, also broke down the savings from efficiency by individual state. The projected savings to electricity consumers in Massachusetts are shown in the table below. They are quite dramatic, well exceeding the forecasted impacts of RGGI on electric rates for most scenarios modeled by the states (and note that due to methodological issues in the modeling, it is likely that the savings to industrial consumers are underestimated).²

Benefits to Massachusetts Consumers from Doubling Energy Efficiency Spending, Using Sales Value of RGGI Allowances

	Ave. bill (2003)	\$ saved	% saved
Year 2015			
Residential	\$900	\$105	11.7%
Commercial	\$6,866	\$519	7.6%
Industrial	\$59,632	\$1,416	2.4%
Year 2021			
Residential	\$900	\$170	18.9%
Commercial	\$6,866	\$816	11.9%
Industrial	\$59,632	\$1,273	2.1%

Sources: Summarized by Marc Breslow, Mass. Climate Action Network, from spreadsheets of Mass. Department of Energy Resources, December 2005. Based on modeling by ICF, Inc. using their IPM model (Integrated Planning Model) on behalf of the RGGI State Working Group; and on efficiency scenarios designed by NYSERDA and ACEEE.

In addition to these direct savings to consumers who make use of efficiency programs, there are also substantial savings to all consumers due to efficiency programs, as these reduce overall demand for electricity and thereby reduce the average market clearing price. The RGGI modeling by ICF clearly showed the substantial gains this would produce, eliminating a significant portion of any wholesale electricity price increase (which varies depending on the modeling scenario).³

Should MA participate in the RGGI Regional Auction?

Yes. Participation in the regional auction should reduce administration costs to Massachusetts, and should provide a larger market, which will both smooth the operation of the market and provide it with greater liquidity.

To what extent should the allowance auction be Open or Closed?

An open auction will bring more buyers into the market, helping to ensure that no market manipulation by a small number of purchasers occurs, and to bring the highest possible revenues, which can then be used to benefit consumers. We note with approval the comments made by Andrew Kruger of Evolution Markets at the March 12th meeting on this subject. While we clearly disagree with Evolution Markets on a number of issues, there is common ground on this point, that as the most elementary of economics textbooks tell us, the broader and deeper the market is the more stable and accurate it will tend to be with fewer opportunities for exercise of “market power” by overly dominant market actors.⁴

Concerns about abusive exercise of market power by market participants with partial or complete monopoly or monopsony power in energy markets have been deep, pervasive and real. We urge the Massachusetts state agencies, both in their own rulemakings, and in their work as part of the group of state regulators shaping the regional auction, to ensure that appropriate market monitors are put in place. Such monitors must be accompanied by controls on how many allowances any particular participant can purchase at any given time. In shaping such a market monitor and market controls it will be instructive to look not only at the long-established mechanisms in the securities markets but also the specific experience of the market monitors for the wholesale energy markets operated by independent system operators like ISO New England.⁵

We note without further comment that the generators who have advocated narrowing the market are among the market participants who might exercise this improper and distorting market power. Reducing that market power through structural mechanisms, like broadening and deepening the market, and explicit regulation, like market monitoring and controls intended to promote price discovery, transparency and fair and open competition among all participants may not be in the narrow interest of the generators, but it is clearly in the public interest.

What is the best frequency of the auction?

It seems likely that the earlier, and the more frequently, that auctions are held, the better price discovery will be, the smoother will be adjustments by participants to market conditions, and the less likely that “gaming” and the “market power” discussed above will undermine the integrity of the market and undermine confidence, and therefore participation, in this important mechanism.

How should the proceeds from the MA allowance auction be used?

All funds obtained from sale of RGGI allowances should be used to benefit electricity consumers, to reduce the cost of implementing the RGGI program, and to advance the emissions-reduction goals of the program. No funds should be returned to electricity generators.

Because energy efficiency measures are the most cost-effective method of reducing energy consumption and therefore the costs of RGGI to consumers, the RGGI funds should be used primarily to expand efficiency programs.

A smaller, and specified, portion of the funds should assist the achievement of emissions reductions beyond those mandated by RGGI, to accelerate progress toward the 75% to 85% cuts that scientists agree are necessary and that are called for by the New England Governors/Eastern Canadian Premiers Climate Action Plan and in the plans of several northeast states. In particular, revenues should support development and expansion of clean, safe renewable energy technologies beyond the levels required under state renewable energy standards.

RGGI funds should only be used to support programs and activities that do not pose a significant risk to human health or the environment.

RGGI funds should be used to assist new programs or to expand existing programs, but only if those expansions would not have occurred anyway. In no case should RGGI funds be used to replace existing programs, investments, or funding.

RGGI funds should be used to ameliorate the impacts of RGGI on low income customers to the greatest extent possible, preferably through provision of energy efficiency programs to such households. In addition, a small portion of the RGGI funds could be used to ease the transition for communities and workers that see losses due to reduced operation of local fossil fuel fired plants, should that occur.

This, along with Appendix A, concludes our comments in answer to DEP and DOER's questions. Thank you again for this opportunity to comment, and for your work to date.

Yours truly,

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Appendix A - Why 100% of the Emissions Allowances Should Be Auctioned to Electricity Generators and Used for the Benefit of Consumers

Pollution is a burden on society

All companies and individuals should be required to pay for the environmental damage they create. Doing so both provides an incentive to pollute less and yields funds that can be used to prevent pollution and rectify its impacts. The fact that historically polluters have not paid for the costs they impose on society is no reason for continuing this fundamentally misguided policy into the future. As The Energy Consortium (a trade association for large commercial, institutional, and industrial energy consumers in Mass.) has stated:

“Ideally TEC believes that there should be no free allowances given to generators. Consistent with the principles of market efficiency, generators in a competitive marketplace should purchase allowances, just as they do any other cost of production...”

Setting a critical precedent for future emissions reduction policies

Charging generators for their allowances will show that policies to halt global warming can be done in a manner that does not harm, and actually benefits, residential, low-income, and business electricity consumers. RGGI will only reduce emissions in the electricity sector by 10% in 2018 (although that is probably around a 30% reduction from “business as usual”), while scientists say that we need to eventually reduce emissions by around 80% from current levels. Mitigating costs to consumers is a critical precedent to set if we are to achieve the deeper emissions cuts that are necessary to stabilize our climate.

Windfall profits from free permits

If they are given allowances for free, generators will make large windfall profits from the program. Economic studies forecast that the costs to power producers of complying with the cap will only be a small fraction, about 10% to 20%, of their gains from higher electricity prices. One way to understand why this is true is to remember that RGGI only requires that current emissions be kept level through 2014, and then reduced gradually to be 10% below current levels in 2018. If allowances are distributed for free, then to meet the 10% requirement, the most that generators will have to spend is the cost of buying allowances for 10% of their output. If they are able to reduce emissions or to buy offsets at lower prices, then their cost will be smaller. Meanwhile, if electricity prices rise by the price of allowances, generators will have increased revenue of that amount per unit for 100% of their output. As a result, on average generators will see revenue gains at least ten times as great as their costs of compliance.

Experience from the European Union Emissions Trading System, where the reductions in CO₂ emissions mandated by the Kyoto Protocol are being implemented by giving away almost all the permits for free, is quite instructive. Regulators there are already regretting having given out most of the permits for free, as generators gain massive profits at the expense of electricity consumers. For example, a Nov. 2005 report by IPA Energy Consulting for the United Kingdom’s Dept. of Trade & Industry was reported as saying: “The big six UK electricity

generators have seen profits rise by at least £800 million per year as a result of the EU emissions trading scheme... It confirms that a combination of free allocation to power stations and full pass-through of marginal costs to consumers has led to a massive increase in the electricity industry's profitability.”⁶

A recent slide presentation by Citigroup⁷ of Europe's experience stated:

“So Winners and Losers?
All generation based utilities -- winners
Coal and nuclear generators -- biggest winners
Hedge funds and energy traders -- even bigger winners
Losers? Hmm... Consumers!”

Deutsche Bank⁸ stated recently:

“The most striking market outcome of emissions trading to date has been the power industry's windfall profits, which have sparked controversy.”

Charging for permits will not affect electricity prices

Charging generators for their allowances will not cause electricity prices to rise compared to giving the allowances away for free. In the Northeast's deregulated electricity market, prices are based not on the cost of producing power, but on the highest priced source of generation at any given time. This “marginal” generation is almost always natural gas. So, regardless of whether highly polluting coal-fired generators are required to pay for their allowances or are given them for free, the price of power will likely be the same. Charging for the allowances merely reduces the windfall profits of fossil-fuel generators and uses them for public benefit.

NY Governor Eliot Spitzer (while in his previous position as Attorney General) stated:

“Free allocation of allowances to CO₂ generators will not lead to lower electricity prices to consumers. The price of electricity will rise to the same extent under RGGI whether the allowances are given to the generators for free or auctioned for the benefit of the public...”

A generator will include in its variable costs, and thus in its offering price, the current market value of the CO₂ allowances it uses to cover its emissions, regardless of how it originally obtained those allowances. This is because, in offering power into the market, a generator has to decide whether it is more profitable to produce electric power and expend the necessary CO₂ allowances to do so, or not to produce electricity and instead sell its allowances to others. If it decides to offer power, it is foregoing the opportunity to sell the allowances in favor of consuming the allowances. This “opportunity cost,” which is the market price of the allowances, is a variable cost that will be included in generators' marginal cost (i.e., the marginal bid price for the electricity they generate). The opportunity cost represents the cost to the generator of deciding to produce the power and use up allowances. The same opportunity costs will be included in the generator's bid regardless of how the allowances were originally dispensed.”⁹

In the same document cited above, Deutsche Bank said:

“We are all familiar with the background: emissions allowances were handed out free of charge to those plant operators participating in the emission trading scheme. Nevertheless, in particular the producers of electricity succeeded in marking up the market price of electricity to include the opportunity-cost value of the allowances. This is correct from an accounting point of view, since the allowances do have a value and could otherwise be sold. Moreover, emissions trading cannot work without price signals.”

¹ “REMI Impacts for RGGI Policies based on the Std REF & Hi-Emission REF,” Lisa Petraglia (Economic Development Research Group) and Dwayne Breger (Mass. DOER), 11/17/2005, slide 4, at www.rggi.org.

² DOER’s original Excel spreadsheets can be provided if desired.

³ See the state governments’ website, www.RGGI.org, “RGGI Package Scenario (updated 10/11/06) and the 2X Efficiency Policy Scenario.

⁴ For an excellent basic definition of “market power” see <http://www.economist.com/research/Economics/alphabetic.cfm?term=marketpower#marketpower>.

⁵ See for example, <http://www.osti.gov/bridge/servlets/purl/821332-1ExPdM/native/821332.pdf>

⁶ *Platts Emissions Daily*, March 1, 2006; “Implications of the EU Emissions Trading Scheme for the UK. Power Generation Sector,” IPA Consulting for the UK Dept. of Trade & Industry, Nov. 2005.

⁷ “Citigroup Analysis of the Impact of the EU Carbon Market on European Utilities,” Peter Atherton, Citigroup Global Markets.

⁸ “EU emission trading: Allocation battles intensifying,” Deutsche Bank Research, 3/6/2007.

⁹ Statement of NY Attorney General for the May 2, 2006 RGGI Stakeholders Meeting.