



## EDISON ELECTRIC INSTITUTE

November 30, 2007

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Re: Phase 2, Final Report of October 2007 "Auction Design for Selling CO<sub>2</sub> Emission Allowances Under the Regional Greenhouse Gas Initiative." (RGGI)

Dear Mr. Lowery:

The Edison Electric Institute (EEI) welcomes the decision to make available for written comment the above-referenced final report by "Investigators" from the University of Virginia, Resources for the Future, and the California Institute of Technology.

EEI is the association of U.S. shareholder-owned electric companies. Our members serve 95% of the ultimate customers in the shareholder-owned segment of the industry, and represent approximately 70% of the U.S. electric power industry. We also have more than 65 International electric companies as Affiliate members, and more than 170 industry suppliers and related organizations as Associate members.

We take this opportunity to provide the attached comments. If the Investigators, others in RGGI, or you have questions, please contact me at (202-508-5617; [bfang@eei.org](mailto:bfang@eei.org)) or Eric Holdsworth, Director, Climate Programs (202-508-5103; [eholdsworth@eei.org](mailto:eholdsworth@eei.org)).

Sincerely,

William L. Fang  
Deputy General Counsel and  
Climate Issue Director

Enclosure

**EDISON ELECTRIC INSTITUTE COMMENTS –  
PHASE 2 FINAL REPORT, “AUCTION DESIGN FOR SELLING CO<sub>2</sub> EMISSION  
ALLOWANCES UNDER THE REGIONAL GREENHOUSE GAS INITIATIVE.”<sup>1</sup>**

**November 30, 2007**

**I. Background**

The Edison Electric Institute (EEI) welcomes the opportunity to provide comments on the above-referenced Report. In addition, we refer RGGI and the Investigators to EEI’s prior comments of May 22, 2006—on the allowances and auction provisions of the RGGI Memorandum of Understanding (MOU) of 2005—and of March 13, 2007, on the New York Department of Environmental Conservation’s pre-proposal draft for implementing the RGGI CO<sub>2</sub> Budget Trading Program for New York State. In particular, we reiterate the following general remarks on the New York proposal that are particularly relevant to the RGGI-wide auction exercise:

As noted below, the use of the 100-percent auction is in stark contrast to the traditional method of allowance allocation employed in applicable regulatory programs, and has not yet been employed in any regulatory scheme to date. Thus, New York is **exposing its citizens and businesses to significant risks under its program**, which is unlikely to serve as a model for a national program despite the fact that serving as such a national model has been a prime objective for the RGGI states since the inception of the effort. Further, **such a policy virtually guarantees that there will be few, if any, surplus allowances available, which in turn will unduly constrain the effectiveness of emissions trading**. Even if a company were to receive allowances, unless it can reduce its emissions overall, any allowances sold on the market will have to be purchased back eventually for compliance. **In any event, generators will suffer overall economic losses in meeting the cap as a result of the set-asides.**

Significantly, the RGGI states and their electricity generators, including those serving New York, have to operate in a deregulated environment, with no option of government-mandated cost recovery. This reality further exacerbates the impact of leakage by leaving covered generators at a significant competitive

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disadvantage compared with generators in neighboring, non-RGGI states and Canada.

By artificially restricting the pool of allowances available for trading, the set-asides would exacerbate distributional inequities by forcing companies that produce most of their power from coal- or oil-fired generation to either buy a relatively large share of whatever allowances are available in the market – possibly at exorbitant prices that could cause economic distress and even bankruptcy – or to switch fuels or curtail or shut down plant operations, which may or may not be practicable. But these same units are critical to maintaining system reliability, load leveling, ancillary services and fuel diversity in the region. Accordingly, **such a situation will potentially create an immediate, negative step-change in available generation resources in the market in a region that has already indicated generation resource availability concerns in the 2008 and beyond timeframe, and will likely create an immediate cash and credit management crisis.** The end result, among other negative results, is that longer-term energy deals from fossil-fueled generation will be much more difficult to execute going forward and **customers will be exposed to the greater short-term volatility of the market.**

However, if an auction were to be employed, the **state should consider gradually transitioning to a full auction** – as is envisaged under the RGGI model rule recommendation of an initial 25 percent set-aside – rather than starting with a full auction, which as noted above, has not been employed in any regulatory scheme to date. **Moreover, another option that could be provided to covered sources if an auction were to be used is to offer them a “right of first refusal” for auctioned allowances.**

## **II. General Comments On Final Report<sup>2</sup>**

According to section 3 of the report, the “specification of an auction design is guided by a number of performance criteria and principles.” The “criteria” are listed “with a brief description” of each in the report (pp. 21-24) and include efficiency, price discovery, minimizing price volatility, fairness and transaction costs, and align well with wholesale energy and capacity

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<sup>2</sup> This final report is longer than the Phase I draft report (*i.e.*, 130 pages) which also included a Disclaimer, Executive Summary, narrative divided into two Parts (*i.e.*, Part I: “Motivation and Organization of the Project” and Part II: “Research Questions”) and a third Part consisting of sixteen “Recommendations.” However, like Phase I, a significant portion of the Final Report is composed of a section on “References” (pp. 82-85) and an annotated bibliography (pp. 87-130).

markets. However, the so-called “principles” are not listed or described, and there is no explanation as to why they are missing. Importantly, there is no reference in the report to such significant “factors” as: the RGGI CO<sub>2</sub> Budget Program’s stated purpose of reducing emissions; the need of electric generators in the RGGI to obtain sufficient allowances to operate cost effectively and profitably; and the customers’ need to obtain electricity reliably and at reasonable rates from such generators.

Ultimately, due to the 100-percent auction scheme proposed in a number of RGGI states, consumers and certain types of generation resources—such as dual-fuel and coal-fired generation—will bear the brunt of the costs associated with such a risky design. As stated in the EEI comments of June 29, 2007, on the Phase I draft, we are very concerned that the policy direction appears to be to maximize, not limit, the cost impact of RGGI on consumers.

While we do not contest the draft’s statement (p. 12) about there being a “long experience” with auctions, to our knowledge such experience has not yet extended to auctions involving the sale of the percentage of allowances or permits contemplated by the RGGI MOU or the RGGI states for the operation of entities providing electricity or other basic services to consumers. Even in the European Union (E.U.), where auction volume in the E.U. emissions trading scheme is limited to a small percentage, there is no such experience.

**EEI continues to be greatly concerned about a Report that relies extensively on experimental laboratory results using college students not experienced in emission**

**auctions—simply because of their “availability”—to base recommendations on allowance**

**auctioning that will likely affect tens of millions of dollars, if not more, of each electric**

**entity’s financial capital and adversely affect that entity’s customers,** whether residential,

commercial, industrial, agricultural or governmental. It should be noted that the Report itself

states that “[s]everal important features of an auction program are less amenable to experimental testing in the laboratory . . .” (p. 35). Furthermore, it continues to be our understanding that the

study parameters provided to the students did not reflect the potential for generators operating in multiple states and auction participants who had no operating costs (non-generators).

There is an urgent and critical need for experienced traders to be brought into the process now in order to provide “real world” experience to this exercise. This could involve holding a series of pilot auctions involving the owners of CO<sub>2</sub> budget sources in advance of the first “live” auction to provide market participants and states some “learning knowledge” of how the auctions may perform under varying rules and market conditions. While laboratory experiments – even with the use of students – have their place, the wisdom of relying solely on such experiments in this case is questionable. It is difficult to imagine that such students would be sufficiently capable and motivated to accurately role play and seek out ways to game the system to the extent experienced traders could, even on a limited basis. Accordingly, **RGGI should not adopt recommendations, based on this final report, until there is actual opportunity for input by experienced traders.**

### **III. Comments on Report Recommendations**

In general, there is a marked difference between the number and substance of the recommendations in the Phase I draft report and those in this final draft, which is of concern because both sets of recommendations are largely based on the experimental laboratory and the annotated bibliography. We take this opportunity to comment on some of the 16 recommendations. However, a lack of comment on a particular recommendation should not be construed as support or acceptance.<sup>3</sup>

#### ***Recommendation 4: Quarterly Auctions***

Auctions should be held quarterly. This schedule of auctions provides the benefits of periodic price discovery and enhanced liquidity without interfering with the performance of a secondary market. Experimental evidence and evidence from other allowance auctions is persuasive that auction and spot-market prices will track each other closely. A regular sequence of auctions for allowances will be built into spot-market participant expectations and is unlikely to cause disruption.

This recommendation, which is similar to the Phase I draft, appears reasonable, although the report (section 5.2) does not appear to have explored fully the market implications, including the implications for other markets (*i.e.*, electricity markets) and reliability, particularly in light of the estimated financial value of the allowances per compliance period.

#### ***Recommendation 6: Reserve Price***

A reserve price should be used in each auction. In general the reserve price should be publicly announced, although in the first auction a reserve price may or may not be announced in advance. A compelling justification for a reserve price can be found in the academic literature and from previous experience with

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<sup>3</sup> One significant problem with the Report is that there is no cross-reference of each recommendation to the text on which the recommendation is supposedly based.

auctions, and the reserve price would help the auction achieve criteria set out in this report.

How the reserve price is set in the auction interacts with other aspects of the program design. Regardless of how the reserve price is set, no bids for allowances should be accepted if the bid price falls below the reserve price.

The report explains that a “reserve price is an auction price below which the seller chooses to retain ownership of the item rather than sell it.” The report subsequently notes (p. 56):

We conclude that the possibility of collusion and the possibility of weak competition among asymmetric bidders make a strong case for establishing a reserve price and committing to a policy that any allowances for which offers do not meet the level of the reserve price not be sold in the current auction. If the reserve price is triggered, the reserve price becomes the auction clearing price, and bids at or above that level are accepted.

Such a policy will only exacerbate the economic difficulties caused by auctioning of allowances.

The proposed auction is not addressing some vague item but rather the “allowances” needed for power generators to generate the electricity needed to meet consumer needs, ensure reliability, and other similar factors. EEI has strongly argued against reliance on extensive auctioning, noting that it will increase the financial burdens on both power generators in the RGGI region, because they would be short of allowances to meet current and projected growth in demand, and their customers.

The reserve price sets a floor that bidders must exceed or be faced with the likelihood that if bids do not do so, the allowances will not be sold and thus will not be available to generators. It suggests that the prime purpose of RGGI is the raising of large revenues, not ensuring reliability and meeting consumer needs.

Allowances not sold during the auction should be rolled forward in some fashion for future actions. In addition, the reserve price should be made known to auction participants prior to the auction in order to reduce uncertainty.

***Recommendation 9: Open Auctions to All Qualified Bidders***

Auctions should be open to anyone willing and able to meet financial pre-qualification, but no single entity should be able to purchase (or take a beneficial interest in) more than 33% of the allowances for sale in any auction. Open auctions will enhance competition and limit opportunities for collusion. Limiting the share of allowances that a single entity can purchase in any given auction raises the cost of using the auction to corner the market without placing too stringent a restriction on what generators can purchase.

This recommendation raises at least two problems. First, it would open the pool of bidders to entities, including utilities, outside the RGGI region. This could lead to a situation where a non-RGGI regional utility or other entity buys up a significant amount of auctioned allowances, driving up allowance prices and possibly increasing power imports—and exacerbating leakage—more than already is likely to occur under RGGI. This would occur because since there would be even fewer allowances available for generators to buy, they would likely have to curtail their own generation and import power in order to meet both demand and the RGGI reduction targets. Such a situation would ultimately lead to a net negative impact on the overall environment by replacing cleaner generation within the RGGI region with more fossil-fired generation from outside. **In summary, this policy could lead to entities inside or outside of RGGI buying up the auctioned allowances, withholding them from the secondary market or retiring them, potentially reducing the allowances available to generators while also reducing allowance**



**market liquidity, which would force a) RGGI states to import more power and b) generators to curtail or close down generation.**

The Report also points out that other outside entities (which have no interest in RGGI or the states, the power generators or the consumers therein) could bid for and obtain allowances and, in essence, retire them, thus driving up the costs of RGGI. The Report states (p. 23):

The RGGI states are creating a new asset, the RGGI CO<sub>2</sub> allowance, which may have value outside of RGGI. For example, a corporation wishing to advertise its carbon neutrality could buy RGGI allowances and functionally retire them. The same strategy might be used by a city that has pledged to reduce its carbon footprint. Rather than buy offsets through the voluntary offset market, the city could choose to buy RGGI allowances. The external compliance motive is entirely consistent with the goals of RGGI, but because the world market for such carbon restrictions, while relatively small now, ultimately is very large compared to any excess of allowances in RGGI, it is possible that external compliance activities could have an effect on RGGI allowance prices.

**This recommendation appears to contradict a goal of the auctioning program, as stated at the May 31 RGGI public stakeholder meeting, namely, that the auctioned allowances be sold to the bidders that place the highest value on them.** It would seem logical that power generators inside the RGGI region would place the greatest value on the allowances, since they need them to comply with the RGGI program. Yet, they could be outbid by other entities with greater financial resources that would have no need for such allowances.

If the auctions are to be open to all qualified bidders, it is recommended that RGGI incorporate a transition period to fully open the auction. The transition period could limit participants to CO<sub>2</sub> budget sources for the first several years of the program, while allowing non-CO<sub>2</sub> budget sources to participate in the secondary market during the transition.

***Recommendation 15: Statement of Intent***

RGGI should articulate the auction goals in a “Statement of Intent” and ask all participants in the auction to acknowledge that statement and agree not to undermine these goals. The goals that might be articulated range from overall environmental integrity to specific behavior in the allowance market.

It is not clear what a statement would or could achieve or what it means to ask “participants” to “agree not to undermine” the “goals” that RGGI might articulate, nor is it clear what, if any, consequences would result if RGGI concluded, rightly or wrongly, that somehow a participant was not adhering to one or more such goals.

***Recommendation 16: Ongoing Evaluation***

RGGI should evaluate the performance of the auction on an ongoing basis as part of their administrative oversight of the program.

This recommendation lacks any statement of the criteria that RGGI should use in the evaluation and what RGGI should commit to do if the performance proves to be inadequate. **It is absolutely critical that there be clear and transparent market rules established in order to prevent market abuse.**

**IV. Additional Comments**

One matter referred to in Appendix A’s “Statement of Work Map”—what can or should be done to prevent the hoarding of allowances—does not appear to be covered by the recommendations, at least directly. The Report’s weak response is (p. 74):

We already have mentioned some possible strategies that could be used to address hoarding of allowances. Our key conclusion here is that the possibility of

hoarding is speculative and that an initial approach of monitoring of the auctions, the spot market, recorded ownership of allowances, and financial records of firms in the RGGI market will provide significant, and probably sufficient, safeguards to prevent hoarding behavior from causing significant problems in the RGGI market. Some of the possible solutions proposed either are likely to be ineffective or may cause more damage than they are likely to prevent.

Neither Recommendation 12 (Market Monitoring) nor Recommendation 13 (Disclosure of Beneficial Ownership)—both of which appear to be the relevant recommendations—adequately addresses the problem. Indeed, the so-called “safeguards” would not adequately address the problem, which is real and not “speculative.”