June 29, 2007

Mark Lowery
Chief, Bureau of Public Outreach
Division of Public Affairs and Education
New York State Department of
Environmental Conservation
625 Broadway
Albany, NY 12233-4500
Email: *mdlowery@gw.dec.state.ny.us*

Re: **Phase 1 Research Draft Report on "Auction Design for Selling CO_2 Emission Allowances under the Regional Greenhouse Gas Initiative"**

Dear Mr. Lowery:

The Edison Electric Institute (EEI) appreciated the "Stakeholder Meeting" held by the Regional Greenhouse Gas Initiative (RGGI) on May 31, 2007 for the "discussion and presentation" of the above-referenced Phase 1 draft report, the "Investigators" of which include a University of Virginia professor and representatives of Resources for the Future. It, together with the other matters discussed, was helpful. Indeed, EEI welcomes these opportunities for stakeholders input.

The Edison Electric Institute 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 as Affiliate members more than 65 international electric companies, and as Associate members more than 170 industry suppliers and related organizations.

At the session, you indicated that RGGI and the Investigators would welcome written comments on the draft by the informal date of June 15, 2007. Unfortunately, that date proved to be too soon for EEI to respond adequately and constructively. Nevertheless, we take this opportunity to provide comments. If you, the Investigators or others in RGGI have questions, please contact me (202-508-5617; eholdsworth@eei.org) or William L. Fang, Deputy General Counsel and Climate Issue Director (202-508-5617; bfang@eei.org).

Sincerely,

(original signed)

Eric Holdsworth
Director, Climate Programs

Enclosure

Comments of the Edison Electric Institute on the Phase 1 Draft Research Report on Auction Design Under the Regional Greenhouse Gas Initiative (RGGI)

June ___, 2007

I. <u>Background</u>

The Edison Electric Institute[1] (EEI) welcomes the opportunity to provide comments on the above-referenced draft Report. Before doing so, however, we take this opportunity to again refer RGGI and the Investigators to EEI's prior comments of May 22, 2006, on the allowance and auction provisions of the RGGI Memorandum of Understanding (MOU) of 2005 (later amended in August 2006), and of March 13, 2007 on the New York Department of Environmental Conservation's pre-proposal draft for implementing the RGGI CO_2 Budget Trading Program for New York State. In particular, we reiterate some of our general remarks on the New York proposal that we believe are particularly relevant to the RGGI-wide auction exercise referred to in the draft paper as follows:

> 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 <u>**exposing its citizens and businesses to significant risks under its program**</u>, 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, <u>**such a policy virtually guarantees that there will be few, if any, surplus allowances available, which in turn will unduly constrain the effectiveness**</u>

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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 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.**

(Emphasis added).

II. <u>General Comments on Draft Report</u>[2]

According to the draft's "**Executive Summary**," the "purpose" of the research project is to "assist with the design of auctions for the sale of carbon dioxide (CO_2) allowances" in the RGGI states and, while the usual "goal specified in the sale" at an auction "is to maximize some combination of efficiency and revenues," in the case of RGGI "other factors important to the success of an auction include transparency, ease of administration, competitiveness, the ability of the auction to elicit bids that reflect actual valuation by bidders, and restricting bidder opportunities for acting strategically." Strangely, we note no reference in the draft to such "factors" as the RGGI CO_2 Budget Program's stated purpose of reducing emissions or, just as importantly, to the need of electric generators in the RGGI to obtain sufficient allowances to operate cost effectively and profitably and to the customers' need to obtain electricity reliably and at reasonable rates from such generators. The draft's emphasis appears to be overly concerned about the maximization of "some combination of efficiency"[3] and "revenues."

Ultimately, due to the proposed 100% auction <u>***scheme,***</u> consumers and certain types of generation resources such as dual-fuel and coal-fired generation will bear the brunt of the costs

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[2] We note that the Report itself is quite brief (*i.e.*, 29 pages, including an Executive Summary, a General Introduction, a short Summary, and several Recommendations). The bulk of the draft is composed of Appendices, including Appendix E, which is an "Annotated Bibliography" (pages 34-39).

[3] The draft explains that the term "efficiency as used here means the maximum possible total surplus of value over (p. 11) cost. So, when the bidder wins an allowance at auction, the surplus generated from that purchase is the value that allowance has to the bidder minus the amount paid. Efficiency can be reduced if the 'wrong' (high-cost) emitters operate their capacity units while some low-cost emitters do not, or if some permits go unsold and total production of the final product is reduced."

associated with such a risky design. **It is perplexing, at best, that the policy direction is to maximize, not limit, the cost impact on consumers.**

According to the draft, this "interim report" covers the first of two phases of the "project." It explains (p. 3) that this first phase "is primarily concerned with providing policymakers in New York and other RGGI states with information sufficient for them to choose an auction type from among the wide variety of alternatives." The draft explains further (p. 4) that the second phase "will use the auction form chosen by policymakers based on Phase 1 to conduct a series of experiments designed to help in drafting the detailed specifications needed to implement an auction of the type chosen." As we discuss below, we question whether this interim draft adequately provides such "information".

The draft's "General Introduction" notes (p. 3) that "long experience with auctions and the substantial value of items sold at auctions has led to the development of a large body of academic literature on the subject", which the draft adds "has three branches: theoretical, empirical, and experimental."[4] In the case of the latter, the draft states that "increasingly auction

[4] As noted, the draft includes Appendix E, which is designated as an "**Annotated Bibliography**" of a number of papers, various journal articles, and other publications. Section 3 of the draft (p. 17), titled "**Literature on Auctions**," states that "we identify many of the most influential articles in the last thirty years"; and that the "Investigators" have provided, in some cases, their apparent summary of "the main results, especially as they may be relevant to the auction of emission allowances" and a table summarizing "most important findings in the auction literature." It is unclear what criteria the Investigators used to "identify" some articles for annotation and not others. However, there is nothing to indicate how the literature and annotations were used by the Investigators for this phase. We point out that the draft itself does not cite any of these publications as source references in support of the material provided in the draft, including the summaries and recommendations, although "Recommendation 2" states that
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theory is being tested and refined in the economics laboratory." The draft goes on to explain that (p. 3):

> An economics laboratory generally comprises a group of human subjects at a set of computers that are linked together with specialized software that allows the subjects to be represented wit ha set of carefully designed decision tasks where the incentives, choices, information, and other characteristics are carefully controlled. By allowing one factor to vary while holding all other factors constant in the laboratory, experimentalists can test theoretical predictions about how that "treatment variable" affects outcomes. Due to their availability and suitability, college students are frequently used as experimental subjects in economics laboratories. Generally the experiment is structured so that these student subjects earn a payment based on the outcome of their choices. (Emphasis added.)

EEI understands that the Investigators of this draft adopted this "economics laboratory" approach for Phase 1 and utilized students from the University of Virginia in choosing in the first phase the several "auction types," saying (p. 13) that "[a]uctions, in particular, because of the compact institutional form are well-suited to experimental investigation." However, the RGGI CO_2 market will ultimately impact the northeast energy markets (NE-RTO, NYISO, and PJM RTO), natural gas, oil and coal commodity pricing, and potentially future asset valuation for generation, transmission, and gas infrastructure. **It cannot be emphasized enough that if this policy – which is being based on theoretical, empirical, and experimental exercises, not real world conditions – is not designed correctly, the impact on our cornerstone societal requirement – electricity – will be grave.**

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the auction literature in general "suggests" how "allowance vintages should be defined." Thus, the draft is entirely the view of the Investigators and apparently is not necessarily based or supported, as far as we can tell, on the material in the appendix.

While we do not contest the draft's statement about "long experience" with auctions that have resulted in "the substantial value of items sold", we point out that 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, where auction volume in the EU ETS is limited to a small percentage, there is no such experience (emphasis added).

EEI is greatly concerned about a draft Report that relies rather 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 impact tens of millions of dollars, if not more, of each electric entity's financial capital and affect, possibly adversely, that entity's customers, whether residential, commercial, industrial, agricultural or governmental. Furthermore, the study parameters provided to the students did not reflect the potential for generators operating in multi-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. While laboratory experiments – even with use of such students – have their place, we question the wisdom of relying solely on such experiments in this case. 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, **we strongly urge that no recommendations be adopted, based on this draft, until there is actual opportunity for input by experienced traders and phase 2 of the project is completed.**

III. Comments on the Draft's Recommendations

Draft Report Recommendation 1: *RGGI may wish to consider a mixed auction program. The first time that a given vintage (preferably defined according to the 3-year compliance period) is auctioned, an English clock with a shootout round using discriminatory pricing should be used. Subsequent auctions of that vintage would use a sealed-bid format.*

EEI Response to Recommendation 1: At the end of the draft's section 4, "**Analysis and Discussion**," the "**Summary**" concludes (p. 26) that "[n]one of the auction types is best in all areas of performance," that with the "advent of internet bidding" the "differences in administrative costs" have been "virtually eliminated," and that "[t]here is little reason to believe that the different auction forms" referenced in the draft will have any significant effect on "the liquidity of the spotmarket, the volatility of prices, or the performance of the secondary markets in general." But here, and in all but one of the seven recommendations, the draft emphasizes that "Phase 2" of this investigation will address or examine apparently significant "issues," which suggests that Phase 1 is not adequate in providing to "New York and other RGGI states with information sufficient for them to choose an auction type" from the so-called "wide variety of alternatives." Yet, according to the draft (p. 4), the start of the second phase is apparently highly dependent on NY and RGGI policymakers choosing one auction type as a basis for a "series of experiments designed" to help respond to these "issues" and provide the "detailed specifications needed to implement an auction of the type chosen." That does not seem consistent with this first recommendation, which is that "RGGI may wish to consider a mixed auction program."

Draft Report Recommendation 3: *Auctions should be held quarterly throughout the vintage period.*

EEI Response to Recommendation 3: Recommendation 3 seems reasonable, although market implications have not been fully explored. There should be investigation of more or less frequent auctions and implications on other markets (i.e., electricity markets and reliability) given the tremendous financial value of the allowances, particularly since it is very likely that the RGGI market allowance value per compliance period could reach or even exceed $3.9 billion.

Draft Report Recommendation 4: *Use credible reserve prices during all auctions. For the reserve prices to be credible, the state must be willing to leave some allowances unsold and be willing to continue to do so until such time as the price rises above the reserve level. To reduce price volatility, the unsold allowances could be banked. Allowances in the bank would be made available during price spikes above a specified price ceiling.*

EEI Response to Recommendation 4 – Such a policy will only exacerbate the economic difficulties brought about by the auctioning of allowances (see our March 2007 comments referenced above on this subject to New York State on their RGGI rule pre-proposal).

EEI has argued strongly against reliance on extensive auctioning, noting that such a policy will further increase the financial burden on power generators in the RGGI region, who will be short of allowances under the RGGI targets based on projected growth in demand. The policy proposed in the draft would further increase the price of allowances by additionally restricting the supply. The draft report explains that such allowances could be banked and made available during price spikes above a specified price ceiling. Yet **<u>withholding more allowances from the market, after an initial auctioning of 25 percent or perhaps more of all allowances, will virtually guarantee a price spike.</u>** Moreover, as the draft states (p. 16), such banking adds “complexity,” making “auction comparisons more difficult.” Furthermore, ‘reserve pricing’ is a new concept introduced to the RGGI policy arena through this report. The concept of “reserve pricing” contradicts the low cost basis that was used to sell the RGGI concepts to the states during the program’s inception.

Draft Report Recommendation 6: *Allowance auctions should be open to any party willing and able to meet financial qualification requirements.*

<u>EEI Response to Recommendation 6</u> – EEI believes this recommendation raises two problems. First, if followed, 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 buys up a significant amount of auctioned allowances, thereby driving up allowance prices, which could drive increased power imports than will already occur under RGGI (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. **<u>In summary, this policy could lead to entities inside or outside of RGGI buying up the auctioned allowances withholding them from the secondary market and/or retiring them, potentially reducing the allowances available to generators while reducing allowance</u>**

market liquidity; forcing RGGI states to import more power and generators to curtail or close down generation.

Second, this recommendation also 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.