



**EDISON ELECTRIC
INSTITUTE**

September 22, 2006

Mr. Dan Nees
Director, Environmental Finance Center
4511 Knox Road, Suite 205
College Park, Maryland 20740
E-mail: efc1@umd.edu

Re: Maryland RGGI Study Model Assumptions and Stakeholder Input

Dear Mr. Nees:

The Edison Electric Institute (EEL) understands that the Maryland Department of the Environment contracted in June 2006 with the University of Maryland, through its Center for Integrative Environmental Research, "to conduct an independent study of the economic and environmental impacts related to Maryland's potential participation" in the Regional Greenhouse Gas Initiative's (RGGI) mandatory cap and trade program for carbon dioxide (CO₂) emissions adopted by seven northeastern and mid-Atlantic states, based on legislation adopted earlier this year calling for the State to join RGGI in 2007. We further understand that an "important part" of this study process "is stakeholder input" and, accordingly, the contractor has invited "individuals and business, non-profit and government organizations to provide input as described in the stakeholder process section" of the applicable web site.

EEL is the association of U.S. shareholder-owned electric companies, international affiliates and industry associates worldwide. EEL's U.S. members serve nearly 97 percent of all customers served by the shareholder-owned segment of the industry, generate almost 70 percent electricity in the country, and serve more than 70 percent of all ultimate customers in the nation.

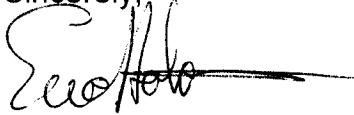
While we are concerned that stakeholders like EEL are given what amounts to very few days to provide such "input," even with an extension of the response time from September 20 to September 26, 2006, we nevertheless take this opportunity to submit the attached comments for your consideration. Unfortunately, because of the short notice and period to respond, our comments

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are not as extensive as we would like. We also take this opportunity to enclose with this letter our comments of March 20, 2006 on the "RGGI Memorandum of Understanding" of December 21, 2005, signed by seven states, and our comments of May 22, 2006 on the Draft "RGGI Model Rule and Related Issues Memorandum" that we provided to the RGGI. As you can see, we have participated throughout the RGGI process. We similarly would like to do so in Maryland's RGGI involvement and request that in the future we be notified when there are issues and matters affecting stakeholders, hopefully with more time to respond.

If you have any questions about our comments, please contact me (202-508-5103, eholdsworth@eei.org) or William L. Fang, Esq., Deputy General Counsel and Climate Issue Director (202-508-5617, bfang@eei.org).

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Holdsworth", with a long horizontal flourish extending to the right.

Eric Holdsworth
Director of Climate Programs

Enclosures (3)

**EDISON ELECTRIC INSTITUTE¹ COMMENTS ON THE
MARYLAND REGIONAL GREENHOUSE GAS INITIATIVE (RGGI)
STUDY DRAFT BASE CASE ASSUMPTION FOR ECONOMIC MODELS**

September 22, 2006

The Edison Electric Institute (EEI) understands that the recently enacted Maryland Healthy Air Act requires the State's Department of the Environment (MDE) "to contract with an academic institution in the State for a study of whether entry into and continued participation in the RGGI program would result in adverse impacts upon Maryland's economy, energy supply, electric reliability, residential energy costs and affected generations" and that the MDE entered into a contract on June 20, 2006 with the University of Maryland's (MUD) Center for Integrative Environmental Research and School of Public Policy for this study project. (Emphasis added) Apparently, the duration of the project is from "June 23, 2006 through April 30, 2007 for research analysis," but with a final report due January 15, 2007.

We understand that one of the project tasks of the study is for UMD to "provide an opportunity for interested stakeholders to provide data pertinent to the subjects of the report through a process combining electronic communications, group and/or direct interviews" and to "review stakeholder input for applicability to individual and overall RGGI report and provide a briefing on findings and recommendations to MDE" in September 2006 (emphasis added). We think a study about "adverse impacts" is warranted and useful, although we are uncertain what the state

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can or will do in light of the above legislation if the study finds it will result in such impacts, which we think are likely.

I. Stakeholder Process Is Too Abbreviated for Meaningful “Input” by Any Stakeholder.

According to the Maryland RGGI Study document, titled “Modeling Assumptions, Draft Base Case Assumptions for Economic Models,” and designated as “Updated September 8, 2006,” there is provided to stakeholders a “list of assumptions” to be used by researchers from Johns Hopkins University and Resources for the Future in applying two existing models—the HAIKU Model and the Oligopolistic Power Market Model. In addition, Towson University’s (TU) will use their input-output model “to measure the economic welfare impact of RGGI participation on the State.” In inviting stakeholder “input,” the web states that “[b]ecause of the complexity of the various modeling tools, as well as the truncated project timeline, it is critical that stakeholder comments . . . be provided soon enough to allow for effective analysis.” Accordingly, the document concluded that the “project team must receive stakeholder input *in writing* by September 20, 2006 (emphasis added).

Even with the extension of the comment deadline, stakeholders were given less than 20 days to comment on this list of assumptions. While we are today providing some comments, we question why the team did not begin the stakeholder process in July or August rather than wait to September 8, the date the public website apparently became available. The period of time provided, even with the recent extension to September 25, which we appreciated, is clearly insufficient for any stakeholder participation that is meaningful.

We also understand, according to the document titled “Stakeholder Input Process,” that the staff of the Environmental Finance Center (EFC), located at the University of Maryland, and “critical project team leaders” will be contacting critical stakeholder groups and experts directly and through teleconference.” However, that effort is also affected by the necessity to “shorten the project timeline” and thus those “discussions will” also “conclude on September 25, 2006.”

We agree that there is a real need for outreach by EFC and the project team with “Key Stakeholder Interest,” such as EEI members, but it should be through one-on-one contact, not through the use of group teleconference calls. Most importantly, more time should be made available by the EFC and the project team for such contacts. We reiterate that the period of September 8-25, 2006 is not an adequate period for meaningful stakeholder “input.” It should be extended further.

In addition, it is unclear whether and when stakeholders will have an opportunity to learn what assumptions are finally adopted by the project team and whether they will have an opportunity to review the results of the modeling and comment thereon before a final report is made.

II. Proposed Models Differ From Those Used In The RGGI Process

The RGGI process, which was initiated in 2003, engaged in modeling that adopted various assumptions, and accordingly, stakeholders in that process, including EEI and its members, are familiar with the Integrated Planning Model (IPM) used in that effort. However, EFC and the

project team apparently are going to utilize an entire new set of models with their assumptions. The effect is likely to make comparisons difficult or even impossible for interested stakeholders. We find it difficult to understand why Maryland, particularly given the short contract period, would engage different models.

Further, the study proposes to use an IO model to evaluate direct, indirect and induced economic impacts of Maryland's participation in RGGI. While IO models are widely used for regional economic analysis, they are fraught with analytic and methodological problems that can lead to incomplete or spurious results. It would be better if this study used a Computable General Equilibrium (CGE) model like SIAM-MRN from Charles River Associates or one of the other CGE models out there to do the "Economic Welfare Study." If the modeling must be done using IO modeling, then the modeling should be done using the most up-to-date version of the IMPLAN model and its datasets or a similar model. IMPLAN is widely used by the U.S. Government and others to do this kind of modeling and is relatively transparent. Outside reviewers can obtain a copy of IMPLAN and use it to review the final results of the study.

III. RGGI Model Rule and Amended Memorandum of Understanding Should Be Considered

On August 15, 2006, the seven participating states issued a model rule that is over 150 pages long to guide implementation of the RGGI program in those States and, presumably, Maryland. Prior to that, on August 8, 2006, those States issued a "Post-Model Rule Action Plan" and an "Amendment" to the RGGI Memorandum of Understanding (MOU) of 2005. However, our review of the "Draft Base Case Assumptions" for the Maryland modeling indicates no mention

of those new RGGI materials. More importantly, the study and modeling does not appear to contemplate a review of their application to Maryland. We think they should be factored into the assumptions as they are obviously critical to Maryland's participation in RGGI and could adversely affect Maryland economically and otherwise.

IV. Allowance Set Aside For Public Benefits Is Not Consistent With RGGI Model Rule

One of the proposed draft "Base Case Assumptions" for the Maryland study – under the heading "Initial RGGI Allowances and Emissions Accounting" – is that 25% of allowances would be applied to "public benefits, unless stated otherwise by State policy" (*e.g.*, Vermont, which requires that 100% of the allowances be so applied) and that it is "assumed that all of the funds will go to energy efficiency efforts unless stated otherwise by State policy." However, the model rule on which the seven RGGI States reached agreement on August 15, 2006, states that the set aside of "at least 25 percent" would be dedicated not just for a generic "public benefits" purpose but for "strategic energy or consumer benefit purposes, such as energy efficiency, new clean energy technologies and ratepayer benefits." The study's assumption should be the same as the RGGI model rule.

In addition, the "rules" adopted by Maryland for both grandfathering and auctioning could impact generator competitiveness and profitability, as well as potential construction of new power generation facilities. The proposed analysis should address the issues of grandfathering and auctioning CO₂ allowances and how different approaches might affect generators and state revenues differently.

V. Assumptions Need To Incorporate How RGGI Baseline Emissions Determined

The proposed modeling should take into account that the initial nine RGGI states negotiated the distribution of allowances among them so that three states – New Jersey, Vermont and Massachusetts (of which the first two are still in the RGGI region, while the other is not) – were allotted extra allowances. The 2005 RGGI MOU states (p. 8) that, in recognition of the “contributions of Massachusetts and Rhode Island to the design and development of the Program and the negotiation of the MOU,” the seven Signatory States “agree” that these two states may still become signatories “at any time prior to January 1, 2008, without any amendment to the terms of the MOU.” In short, the initial agreement was not based on actual emissions, but on a negotiation. The draft assumptions do not take into account that initial agreement or indicate how the allowances for Maryland will be determined with the current seven RGGI states. Presumably, it will also be by negotiation. The modeling assumptions should take all of that into consideration.

VI. The Draft Assumptions Do Not Address Offsets

Our review of the draft list indicates no assumptions about offsets projects and offset credits. Yet the final model rule allows such projects “to account for up to 3.3 percent” of allowances only and with other limitations, which are considerable. For example, while offset projects may come from anywhere in the United States, if they stem from projects outside RGGI states they are to be subject to the “regulatory watch of a cooperating agency” of states not participating in RGGI. Offset projects and their credits could be very helpful to the Maryland utilities in meeting

RGGI requirements, but the limitations – including the 3.3% limit – are likely to adversely affect such utilities, which could adversely affect Maryland economically. The Maryland RGGI modeling assumptions should include these offset provisions and limitations.

VII. Additional Modeling Runs on Natural Gas Are Needed

The listing of AEO2006 natural gas price estimates is an improvement over the natural gas price assumptions used by RGGI to estimate the impacts of the RGGI program, which are artificially low compared to current data and thus lessen the potential price and leakage impacts. However, at least one additional modeling run should be undertaken using the natural gas price assumptions from the “High Gas” scenario used by RGGI.

VIII. The Draft Assumptions Do Not Include the RGGI “Safety Valve” Provisions

The RGGI model rule and the MOU amendment provide what is called by RGGI as a streamlining and simplification of the so-called “safety valve” provisions of the RGGI program. The proposed Maryland RGGI modeling assumptions do not cover this aspect of the Program. We think they should.

IX. Draft Assumptions Do Not Address The Impacts on Maryland And Its Citizens Of Limiting Program To One Greenhouse Gas and One Economic Sector

The document, “Stakeholder Input Process,” under the heading “Project Description” states:

Based on requirements from MDE, this project will analyze multiple aspects of the RGGI program and how it both positively and negatively might affect the State of Maryland as well as neighboring regions. In particular, our impact study will evaluate whether the State’s participation in the RGGI has or may have an adverse impact on the:

- Preservation and enhancement of the economic welfare of the residents of the State;
- Maintenance of a safe and reliable electric power supply in the State,
- Adequacy of the energy supply in the State, including the potential for power plant shutdowns,
- Ability of persons who own, lease, operate, or control an affected facility to compete in neighboring states, or,
- Electric rates for residents of the State.

However, the draft assumptions, in considering such impacts, do not appear to address the fact that RGGI affects only one of the several global greenhouse gases – CO₂ – and only one economic sector, namely electric utilities. We think that both points are important in helping understand whether Maryland's joining or participating in the seven state RGGI Program has an adverse impact on the State and its businesses and residents.

X. Key Price Uncertainties

It is important that the various studies being conducted (*i.e.*, Energy Supply Study, Generator Competitiveness Study, Electric Reliability Study, etc.) incorporate key uncertainties in the expected future prices of fuels (*e.g.*, coal, natural gas, oil, etc...) and emissions allowances (NO_x, SO₂, CO₂) into their analysis. It will also be important for the analyses to incorporate any known correlations between electricity prices, fuel prices, allowance prices, etc.

One very important element that seems to be missing from the analysis is how the study is going to attempt to forecast future CO₂ prices in the RGGI region. Are CO₂ prices going to be based on an analysis of the most cost-effective GHG abatement options available throughout the RGGI region and assume complete and unfettered trading of CO₂ allowances? Or, is the analysis

simply going to assume that Maryland power generators must achieve the RGGI targets solely by changing their own generation mix through the retirement of existing facilities and the construction of new, lower GHG-emitting facilities?

XI. Plant Retirement and New Generation Scenarios

It appears that the study is simply going to assume different "scenarios" for the construction of new types of generation facilities in Maryland to achieve the RGGI targets. If this approach is going to be used, it will be very important to understand the underlying assumptions being used to come up with the "new build" scenarios. How are the types of power plants to be used in the scenarios being chosen? Also, is the study going to adequately consider the "lead time" required to plan for new power plant construction, obtain regulatory approval, etc. in these scenarios?

Lastly, the new generation scenarios should include potential compliance with other federal and state regulations that have recently been adopted, such as the Clean Air Interstate Rule and the Clean Air Mercury Rule.

XII. Leakage

It is not clear how the modeling described will handle potential "leakage" from outside of Maryland and the RGGI region. Leakage here refers to the potential for increased use in the RGGI region of electric power generated outside of the region (*e.g.*, ECAR or MAIN). This is a very real possibility under RGGI and it is not clear that leakage is going to be addressed in these studies. It should be addressed.