

## CORE METRICS

235 Van Winkle St., East Rutherford, NJ 07073

(201) 340-4541

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[neubauer@coremetricsenergy.com](mailto:neubauer@coremetricsenergy.com)

DELIVERED BY EMAIL

Regional Greenhouse Gas Initiative, Inc.  
90 Church Street, 4th Floor  
New York, NY 10007

SUBJECT: Comments on the RGGI Program Review and recommendations for incorporating energy efficiency into IPM sensitivity analysis

Dear RGGI Inc., Member States and Staff:

Core Metrics is an independent consulting practice with experience modeling energy efficiency policies for regional power planning, and performing research in commodity trading and investments. Past projects focused on energy planning in the Pacific Northwest and Mid-Atlantic states, and related experience in California. I followed RGGI's progress during the 2012 Program Review; however, this is the first time I submitted comments to RGGI.

I commend RGGI for its open process to engage stakeholders and update RGGI's design going forward. The February 2 stakeholder meeting elicited wide-ranging, constructive ideas to maintain RGGI's leadership in helping member states achieve their environmental and economic goals. Other states can learn a lot from RGGI's example, which is fortunate since they have much less time to learn.

In ICF's analysis for RGGI, the IPM model relies on energy and peak demand forecasts from the ISOs inside the RGGI footprint, without states adjusting those forecasts for planned energy efficiency (EE) and demand response programs. As Acadia Center and other commenters have noted, the resulting forecasts will exceed actual system loads, and history shows the ISO forecasts have a track record of being too high.

In some policy scenarios that will be modeled once you produce a new reference case, the RGGI cap is likely to be an important binding constraint – driving up allowance prices. If IPM analysis projects high allowance prices or high compliance costs, it makes sense to run sensitivity tests on those scenarios by representing EE across the RGGI region, since EE is not being explicitly modeled by IPM. Then it would be necessary to run the same sensitivity test on the new reference case so that differences between the scenario and the reference case are measured correctly.

I recognize there are practical reasons why EE projections were not incorporated into modeling done thus far, but subsequent results would seriously exaggerate the costs of complying with a lower RGGI cap if EE is ignored. RGGI states have already demonstrated their commitment to pursuing EE programs, and a straightforward way to portray that in IPM is to ramp up EE savings in the RGGI states as ICF did for the draft Regulatory Impact Analysis issued by EPA in June 2014. My advice is to leverage EPA's method as much as possible<sup>1</sup>, but not EPA's initial measure cost estimates, which were too high. If RGGI states decide not to use other EPA measure cost data, I suggest using ACEEE or LBNL average costs. For purposes of this analysis, it is not necessary to make assumptions about EE outside the RGGI region, and EE policies outside the RGGI states will vary a great deal.

The IPM and similar production cost models have important limitations in analyzing demand-side resources. In light of those limitations, I believe EPA's assumptions about ramp rates should suffice for a sensitivity test. I expect EE savings would be funded through a combination of utility and private sector sources, though I do not know how that is modeled within IPM.

I look forward to upcoming RGGI stakeholder meetings, and can elaborate on these recommendations if there is strong interest. Please contact me regarding any questions.

Yours truly,

Franklin Neubauer  
Principal

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<sup>1</sup> Rhode Island, Massachusetts and several other states have energy savings goals that exceed 1.5% of electric sales, so you could assume a cap for the RGGI states that is higher than EPA's assumed cap of 1.5%.