



New York State Foundation for
Science, Technology & Innovation
(NYSTAR)

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December 9, 2008

Mr. Robert G. Callender
Acting President
NYSERDA
17 Columbia Circle
Albany, New York 12203-6399

Re: Recommendations – *Operating Plan for Investments in NY under the CO2 Budget Trading Program and the CO2 Allowance Auction Program*

Dear Bob:

On behalf of NYSTAR and its Board, thank you for the opportunity to submit comments as it relates to New York's Regional Greenhouse Gas Initiative (RGGI).

I. Emphasize Grid Investments to Deploy Clean Energy Technologies

The proposed plan would benefit from a greater emphasis on the need for substantial and strategic investments in the existing grid infrastructure. A modern grid is critical to facilitate the deployment of clean energy technologies required to meet the state's clean energy and greenhouse gas (CHG) objectives.

Investments in the grid continue to be the least understood, least discussed, and least factored part of the state and nation's strategic plans.

There are numerous references to the grid, perhaps the strongest of which is included in the *Electric Power Supply and Delivery Initiative* section with the statement: "Implementation of an integrated strategy enabling smart grid functionality will facilitate greater penetration of renewable resources and demand management technologies in the electricity system" (Page 11). This deserves expansion and further emphasis in the document.



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In addition, there are many meanings to the term “smart grid.” Depending on the intended definition, there may be a concern that “reliability” considerations under the “smart” category were not factored into the equation. If this is the case, then many in the engineering community may question whether deployment of a vast array of clean technologies “will ensure that a secure, reliable grid can be maintained as the electric power sector adapts to a carbon-constrained environment.”

I strongly urge you to consider a specific policy statement regarding the grid. It should underscore that substantial investments are absolutely essential to facilitate the deployment and acceptance of clean energy technologies to assure the quality and reliability of delivery service.

II. Residential, Commercial, and Industrial Sectors

It is accurate to note that “new and existing residential, commercial, and industrial sectors represent the most significant opportunities to reduce GHG emissions.” A slight modification, however, would be helpful to describe this as representing the “most *significant, immediate* opportunities.” It would give the statement a greater sense of urgency.

The strategy to build off of a New York tailored McKinsey curve should prove particularly valuable. Consider the inclusion of one of the McKinsey recommendations in this regard: Developing the workforce to install the clean energy technologies commercially available today is imperative. You may wish to reference community colleges as being particularly proficient in developing and offering programs designed for contractors. The credibility and name recognition associated with the *Energy Smart* program would be a valuable reference to the consumer for identifying a certified contractor training program.

III. Transportation

In this section, another mention about the importance of grid investments is merited. After all, New York cannot make a dent in the petroleum consumption by this sector if it doesn’t upgrade the natural gas and electric grid infrastructures needed to expand the state’s alternative fuel transportation options.



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IV. Agriculture, Forestry, and Sustainable Bioenergy Initiative

Adding the term “scalable” to the opening sentence pertaining to the initiative’s primary goal would be useful. There are significant opportunities in the mid-term time frame for developing commercially viable sectors of the biomass industry if success can be demonstrated with mid-size prototyping generation facilities.

V. Multidisciplinary Initiatives

NYSTAR’s university and industry partners have the expertise, enthusiasm, and willingness to assist the state in achieving its clean energy and climate objectives in several ways.

Although the proposed plan is not to prescribe individual initiatives, the state’s supercomputing assets may be uniquely positioned to further RGGI goals. It can be used, for example, to generate an advanced climate and grid simulation model. The model could incorporate real time data and information while providing a platform for measuring progress, identifying ways to maximize efficiencies of investments, and determining obstacles to the overall deployment of clean energy technologies. Hence this state asset may merit being singled out.

VI. Conclusion

You and your staff are to be commended for an excellent document. Our recommendations do not relate to omissions, but to areas where greater emphasis may be beneficial. Thank you for the opportunity to offer the above comments.

Sincerely,

Edward Reinfurt
Executive Director