

Memorandum

December 18, 2008

- TO: Janet Joseph Director Clean Energy Research and Market Development New York State Energy Research and Development Authority
- FROM: Revis James, Francisco de la Chesnaye
- SUBJECT: Comments on RGGI Concept Paper
- Programmatic comments
 - Clarify whether funds are to be a source of subsidies to different consumers and technologies to foster behavior changes and investment.
 - The scope of possible programs is guite large in the document. Recommend developing a prioritization of the potential programs based on costeffectiveness of potential abatement. This will likely require a supporting analysis.
 - Relative to the program funding criteria, specifically toward the goal of reducing the cost of the CO₂ trading program, a differential weighting criteria for electricity-related project and non- electricity projects should be considered.
 - Given that the RGGI CO₂ trading program currently only applies to power plants, supporting programs that improve more efficient production and use of electricity will create a positive economic feedback on the sector.
 - Medium¹ and long-term² analyses of climate mitigation clearly show the continued electrification of the U.S. economy due to the multiple ways of producing electricity and the potential for low-CO₂ emitting technologies.
 - Comparing NY's total GHG emissions to that of the U.S., NY has a larger share of on-site fuel use for residential and commercial uses. Therefore, one possible program area would be to incent residential and commercial applications away from on-site fuel use and toward a greater use of electricity.

¹ See EIA's Energy Market and Economic Impacts of S.2191, the Lieberman-Warner Climate Security Act of 2007. http://www.eia.doe.gov/oiaf/servicerpt/s2191/index.html

² See U.S. CCSP Scenarios of Greenhouse Gas Emissions and Atmospheric Concentrations at http://www.climatescience.gov/Library/sap/sap2-1/finalreport/default.htm.

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- With regard to the ratio of funding for short-term versus long-term projects, it is important to provide enough funding for long-term investments, e.g., 25% of total resources. Short-term projects could include energy efficiency programs and renewables, while longer-term investments could include an improved transmission infrastructure and research into energy storage technologies to help advance the use of wind, solar renewables generation.
- Technical comments
 - Regarding "negative CO₂ abatement costs" as represented by McKinsey's work, recommend modifying goal to build an NY cost curve that doesn't necessarily use McKinsey approach, but accurately reflects costs of technology options.
 - Relative to Section 6 on potential initiatives, under the analysis area, a valuable activity would be development of a long-term electricity technology portfolio strategy which is optimum for NY economic output. This will ultimately require an integrated assessment modeling type of analysis. Results of such an analysis could be used to guide choices regarding investments in programs designed to help specific technologies.
 - Relative to the section on Electric Power Supply and Delivery Initiatives, another option regarding smart grid technologies is embedded computing and data aggregation that permits aggregated load management for commercial lighting, space heating, and space cooling systems. Such capabilities would enable demand response and load leveling that could reduce use of marginal generation resources that are more GHG intensive.