Climate Change Work Group Report to the CAAAC

February 2nd & 3rd, 2010

Mark MacLeod – EDF
Eric Svenson – PSEG
Peter Tsirigotis – EPA

Agenda

- The Charge
- Caveats
- Organizing the Work
- Work Group Recommendations
- Recommend the Report to EPA
- Thoughts on Phase II

The Charge

- Identify the major issues and potential barriers to implementing the PSD Program under the CAA for greenhouse gases. [Phase II]

- Identify information and guidance that would be useful for EPA to provide concerning the technical, economic, and environmental performance characteristics of potential BACT options. [Phase I]

- Identify approaches to enable state and local permitting authorities to apply the BACT criteria in a consistent, practical and efficient manner. [Phase I]

Caveats

Organizing the Work

- **Defining the Source:** What is the source that is being analyzed for BACT controls?

- **Criteria for Determining Feasible Control Technologies:** Which technologies are demonstrated in practice and what criteria should be used to determine the technological feasibility of a control measure?

- **Criteria for Eliminating Technologies:** How do technologies get eliminated from consideration in the BACT analysis based on cost, energy, environmental or other impacts?

- **Needs of States and Stakeholders:**
  - What are the States' technical information and data needs regarding GHGs control and mitigation measures in the context of determining BACT?
  - What steps can be taken to expedite, streamline or provide additional certainty in the BACT process, especially for existing sources given that most PSD permitting involves existing sources rather than new greenfield sources?

Highlights

- Guidance requested from EPA
- Discussion on Defining the Source
- Affirming that the use of the existing EPA approved permitting authority BACT process for GHGs does not create a new process
- Needs of States and Stakeholders

Recommendations

Scope of Analysis: Defining the "Source"

Don Neal, Calpine

Criteria for Determining Feasible Control Technologies

John McManus, AEP

Criteria for Eliminating Technologies

Michael Regan, EDF

Needs of States and Stakeholders

John Paul, RAPCA

Recommend the Report to EPA

Phase II

We seek the advice of the CAAAC on the following proposed list of topics:

- the scope of applicability of PSD and BACT to GHG sources,
- the appropriateness of using presumptive BACT standards for some/all GHG source categories,
- whether it is permissible and appropriate to use averaging or trading (e.g., trading of qualified offsets) either as a BACT mechanism itself or as a compliance flexibility option,
- the potential to credit towards BACT compliance (or for netting) appropriate reductions in carbon intensity, increased energy efficiency or demand reductions at other units within a facility (or among commonly-owned or operated facilities), across a larger range of sources (e.g., a regional electricity grid or transportation system) or at the customer level (e.g., through a smart grid strategy and similar measures),
- how should BACT reviews be conducted and permit conditions established to encourage the development and promote the use of innovative control technologies for GHGs, and
- evaluating energy efficiency processes and practices as part of the top-down BACT determination process, including: benchmarking to help guide the consideration of energy efficiency; potential use of output based standards and policy designed to provide incentives for more efficient solutions, such as combined heat and power, combined cycle turbines and equipment; and, identifying practices and projects that are leaders in deploying efficient and low-emitting solutions.