



**Governor's Commission on Climate Change
*Electricity Generation/Other Stationary Sources
Workgroup***

**August 27, 2008
9:00 a.m. – 12:00 p.m.
Richmond, Virginia
*Draft Meeting Summary***

The Electricity Generation/Other Stationary Sources Workgroup of the Governor's Commission on Climate Change met on August 27, 2008. The Chairman called the meeting to order at approximately 9:10 a.m.

Attendance

The following Workgroup members were present: The Honorable L. Preston Bryant, Jr. (Chair), Mr. Dan Carson, Jr., Christine Chmura, Ph.D., The Honorable Paul Ferguson, The Honorable Patrick O. Gottschalk, Mr. Dave Green (on behalf of Mr. David Heacock), Mr. Robert F. Hemphill, Jr., The Honorable Kenneth R. Plum, The Honorable Bruce Smart, Lydia W. Thomas, Ph.D.

Those Workgroup members not in attendance were: Mr. Bob Fledderman, Mr. Mike Quillen, and Jagadish Shukla, Ph.D.

Although not a member of this particular Workgroup, Dale Gardner attended this Workgroup meeting to discuss agricultural interests in Distributed Generation.

Angie Jenkins (DEQ) attended the meeting and will help to staff this Workgroup.

Review of July 31st Meeting Summary

Chairman Bryant started the meeting with a review of the draft summary of the July 31, 2008 Workgroup meeting. The Workgroup clarified that, although the Workgroup's discussion of a Federal cap-and-trade program focused on an EGU-only program, the group recognized that discussion among the full Commission as well as likely Federal legislation is likely to be economy-wide.

The Workgroup informally adopted the draft "Meeting Summary" for the July 31, 2008 meeting.

Distributed Generation/Combined Heat and Power

The Workgroup considered whether Virginia policies provide a level playing field for distributed generation and CHP. Workgroup members noted that Virginia has policies in place to facilitate net metering and to facilitate interconnection and solar installations for residences. There are, however, no subsidies to facilitate or support DG (except for certain subsidies for wind power). Workgroup members noted North Carolina has the NC Green program to try to overcome the economic barriers to DG. The NC Green program requires utilities to pay a fee into a fund which then finances DG projects.

Mr. Gardner appeared before the Workgroup to discuss the interests and barriers agricultural facilities have with respect to DG. Mr. Gardner noted that there is a significant amount of interest in renewable energy production on farm, but there are barriers due to local lack of understanding of the facilities and practices. Mr. Gardner noted that farmers are interested in waste-to-energy (methane recovery) and wind energy, but that technology is generally scaled for big farms, where as, most of the farms in Virginia are small, so the technology needs to be scaled down to a useable size for most Virginia farmers.

The Workgroup generally supports programs to facilitate the development of DG and CHP. Some Workgroup members raised concerns, however, about the high costs associated with DG and suggested that efforts to subsidize DG may raise the costs of electricity when it may be more cost-effective to work towards lowering GHG emissions from the larger, centralized power plants. Additionally, Workgroup members noted that many of the barriers associated with DG may be at the local level through building or local zoning codes and homeowner association regulations.

With respect to CHP, Workgroup members suggested that many manufacturers are already using CHP where appropriate to save fuel costs and that CHP may be a good idea in specific industrial applications but not be broadly applicable. Some Workgroup members believed that specific CHP goals in other state plans may be more aspirational than actually achievable.

The Workgroup generally expressed concern about the cost-effectiveness of DG and CHP and believes more expertise and/or site-specific information/research may be necessary to identify the hurdles to investment in DG and CHP and to determine how the Commonwealth may best use available resources to facilitate these activities.

Waste-to-Energy

The Workgroup considered recommendations to encourage the development of waste-to-energy facilities. The group generally believed that incentives to increase the costs of landfilling compared to disposing of waste in WTE facilities were less desirable and would likely meet with much opposition. With respect to encouraging localities to send waste to WTE facilities, members of the Workgroup believed that localities would need direct financial aid to help offset the costs of sending wastes to WTE facilities rather than landfills.

Conservation Pricing

Workgroup members discussed the good position of utilities to develop and implement energy efficiency and conservation programs, but that utilities need some incentive to develop and implement programs which would reduce sales of electricity. The Workgroup members discussed the policies/programs that may encourage conservation, including: utility cost recovery on investment (or even enhanced return on investment); demand response programs and the need to have program which motivate customers. Workgroup members noted that utilities have had time-of-use programs in place for a long time but few customers participate because of the behavioral change required. The Workgroup discussed the types of conservation projects utilities are currently involved in, including

investments in changing to Smart Meters. **Dominion currently has a Smart Meter project underway and Mr. Green agreed to try to find out whether Dominion has available numbers on the CO₂ equivalent avoided by Smart Metering.**

With respect to consumer behavior, Workgroup members noted the importance of educating the public about conservation and available conservation programs.

The Workgroup appears to have reached consensus along the following parameters with respect to draft recommendation(s) regarding conservation pricing:

- The Commission should recommend that Virginia statutes and regulations for utility ratemaking should be changed to ensure timely cost recovery for conservation programs.
- Additionally, the Commission should recommend the provision of rate incentives similar to supply-side rate incentives to encourage the development of conservation and energy efficiency programs.

Research and Development

The Workgroup considered whether Virginia should fund research and development projects with respect to carbon-free energy resources and carbon sequestration technologies.

Workgroup members noted that a number of energy technology research and development programs are already underway at organizations and academic facilities throughout Virginia. Specifically, in July 2008, the Virginia Tobacco Commission approved more than \$36 million to fund a variety of energy research centers in Southwest and Southside Virginia, including \$8 million for a center in Abingdon which will focus research on carbon sequestration, \$8.07 million to establish a sustainable energy research center in Danville, \$7.69 million for a nuclear energy research center in Bedford County; \$873,845 in additional funding for a Gretna, Va. facility that converts crops into bio-diesel fuel; and nearly \$8 million for a nuclear research center in Halifax.

Workgroup members noted that the Virginia Research & Technology Advisory Commission (VRTAC) in its report entitled “Collaborative Research and Development Strategies and Directors for the Commonwealth of Virginia” recommended energy, conservation, and the environment research and development as one of three priority areas for investment by the Commonwealth, contingent upon cost sharing by universities and industry. VRTAC found that research institutions in the Commonwealth are involved in a substantial base of research and development activities regarding energy and conservation, including research regarding renewable resources. VRTAC recommended funding of large scale collaborative research programs through a consortium of stakeholders to achieve a focused, state-wide effort to coordinate resources and activities.

Some Workgroup members stated that research for carbon capture and storage is underfunded and suggested that the Workgroup recommend support for Congressman Boucher’s bill, H.R. 6258, Carbon Capture and Storage Early Deployment Act, to fund research for carbon capture and sequestration.

With respect to funding research and development, Workgroup members expressed belief that there would be huge resistance in the public and the legislature to a public benefits fund which may increase the cost of electricity.

The Workgroup appears to have reached consensus along the following parameters with respect to draft recommendation(s) regarding research and development:

- The Commission should recommend that Virginia support Congressman Rick Boucher's bill (H.R. 6258, Carbon Capture and Storage Early Deployment Act) to fund research for carbon capture and sequestration.
- The Commission should recommend that state funding for research and development prioritize research relating to carbon capture and sequestration technology and emissions-free energy sources.
- The Commission should recommend that there be public funding of research at Virginia Tech on carbon capture and storage.

Review of Materials Provided by Workgroup Members

The Workgroup reviewed and discussed the materials prepared by provided by Dr. Chmura and Mr. Carson.

Process Going Forward

At the conclusion of the Workgroup discussion, Chairman Bryant suggested that staff prepare a list of draft recommendations based on the group's discussions and send the list to the Workgroup members to solicit their response as to the description and ranking of recommendations.

At approximately 11:38 a.m., Chairman Bryant excused himself from the meeting to see to some Workgroup administrative matters and asked that Secretary Gottschalk chair the meeting during his absence.

Public Comment

Before the close of the meeting, Secretary Gottschalk provided the opportunity for members of the public to provide comments. Al Weed of Public Policy Virginia provided verbal comments asking the Workgroup to avoid getting caught in a "cap-and-trade" trap and suggested that putting a value on carbon would help the group review the mechanisms and barriers to reducing carbon. According to Mr. Weed, the IPCC suggests that carbon be valued at \$30/ton in order to get emissions to decline.

Adjournment

Secretary Gottschalk adjourned the meeting at approximately 12:00 p.m.