Virginia Commission on Energy and Environment

Tuesday, September 9, 2008, 10:00 a.m.
Senate Room B
General Assembly Building
Richmond, Virginia

Agenda

Senator Whipple called to order the second meeting the Commission on Energy and Environment at 10:00 a.m. and noted that the October 14 meeting would be held in Norfolk at Old Dominion University. All meeting materials are available at online at http://dls.state.va.us/energy.htm.

The initial presentation was provided by staff and surveyed the existing energy policies established in the Code of Virginia and Executive Orders including regulatory incentives, grant programs, and tax credits. A surprising number of these initiatives are inactive because they have either been allowed to expire, the funding has disappeared, or the target population is not aware of the available benefits. Senator Petersen asked why Virginians might not know of some of the incentives, such as the various tax credits that might be claimed for alternative fuel vehicles and energy efficient appliances. Staff noted that further investigation may be needed to determine the steps necessary to publicize and market those programs that are funded. Senator Whipple asked that staff continue to identify and provide further information on inactive programs.

Staff also provided a presentation on innovative energy efficiency and conservation policies in other states. Notable policies include a four-day work week for state employees; a revolving loan program for energy efficient projects; the mandated installation of solar water heaters in new homes; the accelerated phase-out of incandescent light bulbs; and the creation of an independent entity to manage energy efficiency programs for customers of various utilities. Mr. Wallmeyer asked staff to elaborate on which programs have provided the best results. Staff noted that it is difficult to measure success since many of the programs are very new. Dr. Schultz asked staff's opinion of programs best suited for Virginia. Staff replied that, while some of the programs such as mandatory solar water heaters would be wholly inappropriate for Virginia, others such as mandatory labeling and independent administration of energy efficiency programs may prove to be a good fit.

Thomas Thompson, manager of the Virginia Energy Management Program, provided the Commission with an overview of progress made towards implementing the recommendations of the Virginia Energy Plan. Senator Whipple asked for clarification on the demand response program payments with regional transmission organization PJM. Mr. Thompson explained that the program allowed a reduction in load during peak times to change rates and permit users to opt out from consuming the most expensive energy. Senator Peterson asked about the role of switchgrass in the pilot project at Piedmont

Geriatric Hospital in light of its potential as a feedstock for cellulosic ethanol. While the switchgrass is burned to co-fire a generator at the facility, such a use is not incompatible or exclusive to its cellulosic ethanol potential. Overall, the project creates a market for switchgrass grown by Virginia farmers. Delegate Hogan asked about the degree to which the Commonwealth is vulnerable to sudden increases in the price of natural gas. Mr. Thompson noted that the state actually consumes more natural gas than petroleum and that supply interruptions would have a significant impact on our economy. Senator Whipple and Delegate Nixon asked for additional clarification and data on some of the points covered in the report. The Commission would like to know the degree of actual progress made towards goals instead of general statements about activity in certain areas.

Dr. Patrick G. Hatcher, Executive Director of the Virginia Coastal Energy Research Consortium (VCERC), provided the Commission with a brief overview of VCERC, its mission, and its members. Currently there are two primary thrusts of the research funded through VCERC: algae-to-biodiesel conversion technology and the capacity for wind energy in the Atlantic Ocean off the coast of Virginia. Since the Commission will tour Mr. Hatcher's laboratories at the next meeting, the presentation was turned over to Neil Rondorf, a VCERC industry partner with Science Applications International Corporation, to discuss wind energy. Mr. Rondorf stressed the importance of taking a responsible environmental and economic approach to developing the wind potential off Virginia's coast while adapting technology to meet our resources. Senator Peterson asked for clarifications on the permits necessary to proceed on a large scale wind farm in the Atlantic. Mr. Rondorf responded that the federal government hoped to develop permits that would be analogous to and complementary of any state permits to ease the regulatory burden on the developer. Delegate Hogan questioned the reliability of the wind power. Mr. Rondorf responded that although wind generation produces a low power factor, the electricity could be used cooperatively with natural gas fired turbines to relieve congestion.

Dr. Michael Karmis is a Professor in the Department of Mining and Minerals Engineering at Virginia Tech and he is the Director of the Virginia Center for Coal and Energy Research. Dr. Karmis gave the Commission an overview of work being done at the Center to advance carbon capture and sequestration and noted the wide discrepancy between funds appropriated to VCCER by the Commonwealth and those appropriated to comparable organizations in other states. While initial tests of carbon capture technology will begin shortly, a large volume test is needed. Dr. Karmis notes that Virginia is fortunate and to have geologic formations that are suitable to store carbon and that policy makers should view such formations as a valuable natural resource. The Department of Energy will provide $65 million towards the large volume tests, leaving an additional $40 million in cost share commitment to be raised from other sources in the next few months. Dr. Karmis stressed the urgency and importance of identifying these funds for the project so that the Commonwealth will not lose its competitive advantage. Delegate Sickles inquired about the relationship between his research and the Virginia City Power Plant in Wise County. Dr. Karmis explained that the large volume test targeted storage integrity and not sequestration. Any initial projects should place the geologic storage close to the source of the carbon dioxide.

Kelly Hobbs, Senior Manager with Wal-Mart's Public Affairs and Government Relations Team, provided the Commission with an overview of policies implemented by Wal-Mart, the country's largest corporation and second largest employer, to improve energy efficiency and environmental sustainability. Delegate Nixon questioned whether the unique "green" packaging Wal-Mart had developed with certain manufacturers was considered proprietary. Ms. Hobbs responded that it was not and that Wal-Mart hoped such innovations could be shared with other manufacturers across the industry. Dr. Hatcher expressed his hope that Wal-Mart would provide some oversight with respect to the validity of claims presented on packaging, such as the useful life of a compact fluorescent bulb.

Hugh E. Montgomery, Jr., Director of the Institute for Defense and Homeland Security, provided the Commission with a perspective of energy issues from the Department of Defense. Mr. Wallmeyer agreed that one of the primary shortcomings of the Virginia Energy Plan is the absence of prioritization for the recommendations and asked what actions the General Assembly should take. Mr. Montgomery noted that the Commonwealth will find the highest return on investment in conservation measures. Delegate Hogan further commented that increased investment in conservation need not occur at the behest of government. Mr. Montgomery spoke about his personal hope that waste to energy would take hold as a viable option.

Ellen Matthews Davis, State Director at USDA Rural Development, discussed the availability of funding for loans from the Rural Energy for America Program (REAP), formerly known as the Renewable Energy Systems and Energy Efficiency Improvements Program. Like its predecessor, REAP provides grant and loan guarantees to farmers, ranchers and rural small businesses to promote energy efficiency and renewable energy. The authorized funding for REAP between 2009 and 2012 is $255 million, which is more than double the funding authorized in the previous Farm Bill. The monies can be used to purchase renewable energy systems and to provide energy efficiency improvements to a facility or process that reduces energy consumption. Sample funds have been provided to: (i) install factory made wood burning furnace to heat water that will be pumped through insulated underground pipes; (ii) install geothermal renewable energy system at a winery and farm; (iii) install wind turbines and solar PV array pumping system; and (iv) build a 12,000,000 gallon bio-diesel plant. Mr. Wallmeyer questioned whether personal guarantees would be required of loan recipients. Ms. Davis replied that personal guarantees should not be required and stressed the importance of getting the word out to potential borrowers.

Senator Whipple thanked the presenters and adjourned the meeting.