

Virginia Commission on Energy and Environment

November 30, 2009, 1:00 pm
Senate Room A, General Assembly Building
Richmond, Virginia

Summary

Members Present: Senator Whipple, Senator Petersen, Senator Stuart, Delegate Nixon, Delegate Poindexter, Delegate Sickles, Patrick Hatcher, Karen Schultz, August Wallmeyer, Arlen Bolstad, Angie Jenkins.

Senator Whipple, Chair of the Commission, called the meeting to order and members of the Commission provided brief introductions. Presentations made to the Commission can be found on the Commission's website at <http://dls.virginia.gov/energy.htm>.

Offshore Wind Energy Development

Senator Frank Wagner presented the Commission with an overview relating to offshore wind energy development along the Virginia coastline. Senator Wagner's presentation included highlights of the report by the Virginia Coast Energy Research Consortium (VCERC) indicating commercially viable class 5 and class 6 winds within 30 miles of Virginia's coastline. VCERC determined wind class, wind location, wind rate, and water depth for potential turbine sites. VCERC also calculated that 25 of the offshore lease blocks could potentially produce 300 MW of power, six percent of the total wind power off of the coast of Virginia. Senator Wagner also noted that Virginia is the only mid-Atlantic state with a 500 kV substation off of its coast, which would allow for efficient distribution to the entire PJM grid. Senator Wagner underscored the long and short-term employment opportunities created by the development of Virginia's offshore wind resources as wind-related manufacturing infrastructure is developed in Virginia.

Senator Wagner reported on efforts to redefine offshore wind energy in federal legislation in order to change its classification from a "mature renewable resource" to a "not mature renewable resource" to avoid the requirement that project construction begin by September 2011 to qualify for federal loan guarantees. Reclassification of offshore wind energy would extend the deadline for federal loan guarantees and allow more time for project research and development. *Senator Whipple* remarked that it could take 12 to 18 months just to build the meteorological towers and test the winds at specific sites.

As of July 1, 2009, offshore wind projects in competing areas are automatically delayed by two years while the projects are evaluated. Two offshore wind development applications before the DMME are in non-competing areas, allowing both to progress without triggering the automatic two-year delay. Senator Wagner explained that through MMS, Virginia could apply for the leases, but that any competing applications would trigger the two-year delay.

The proposed legislation presented by Senator Wagner would establish the Virginia Offshore Wind Authority, a state chartered entity similar in its makeup to the Chesapeake Bay Bridge Tunnel Authority, which would facilitate multiple development projects by holding the lease to large lease blocks off the coast of Virginia and granting subleases to different developers. The Authority would establish a program allowing projects from Virginia Beach to coastal New Jersey to develop their offshore resources.

In response to a question from *Delegate Poindexter*, Senator Wagner explained that the Authority would lay a buried, marine grade cable parallel to an existing water treatment station to the 500 kV substation to connect the energy from the offshore wind farm to the PJM grid.

Senator Whipple pointed out that Delaware development has avoided the need for federal loan guarantees by contracting with a Delaware utility to purchase the electricity generated by offshore winds. Senator Wagner agreed that finding a buyer would be ideal and considered the prospect of contracting with the US Navy.

Mandatory v. Voluntary Renewable Portfolio Standard (RPS) Programs

Joe Gorberg of LS Power presented on the potential benefits of a mandatory RPS program over a voluntary one. Mr. Gorberg focused on the role of an RPS program in securing financing to support renewable energy projects and develop a state's renewable energy market. RPS programs define long-term market objectives, promote job growth in the energy industry, reduce emissions, and encourage investment in renewable energy processes and technologies. He described defining RPS goals and targeted technologies, addressing energy efficiency and demand response, analyzing available resources, using effective incentives and compliance payments, and permitting as the keys to a successful RPS standard.

Mr. Gorberg stated that stable markets are crucial to the success of an RPS program. Long-term contracts can also ensure a purchaser of renewable energy. A mandatory RPS program increases the financing and investment available to renewable energy projects by guaranteeing a level of demand for renewable energy. Investors and lenders can participate in long-term projects without the fear that the market will evaporate. He reported that states with voluntary RPS programs fail to attract significant capital investment in renewable energy technologies and are not seeing the same benefits as states with mandatory RPS programs. Developers prioritize where to invest their resources and are choosing states with mandatory RPS programs. Mr. Gorberg encouraged the Commission to develop a mandatory RPS program for the Commonwealth.

Mr. Wallmeyer asked if increasing the voluntary RPS goals would increase the availability of financing and investment in renewable energy technologies. Until a stable market is created, investors can not be certain of revenue and increasing the voluntary RPS goals will not attract a significant investment.

Delegate Sickles asked if the shortcomings of a voluntary RPS program would impede the development of offshore wind energy proposed by Senator Wagner. Senator Wagner's program will depend on securing financing and will rely on a long-term contract purchaser such as the Navy or PJM.

In response to a question from *Delegate Poindexter*, Mr. Gorberg explained that renewable energy generation could result in a decline of jobs in the current energy industries, but would create jobs in construction and generation facilities. Also, as the total demand for energy increases, the number of jobs will increase proportionally.

Delegate Poindexter asked if renewable energy markets would develop and if renewable energy technologies would be viable on a market without government assistance or subsidy. In response, *Senator Whipple* underscored the importance of indigenous energy production to national security.

Senator Whipple commented that the Commission should consider whether Virginia is missing out on opportunities for investment and job growth because of the voluntary RPS program. She referred to a wind project that went to Pennsylvania as a direct result of the voluntary RPS program in Virginia.

Mr. Hatcher noted the aggressive RPS standards adopted by the Navy and asked if a state with a mandatory RPS program would have an advantage in securing the Navy as a purchaser. Mr. Gorberg considered a state with a mandatory RPS program to be at an advantage in securing long-term contracts and repeated that Virginia has less development than states with mandatory RPS programs.

Impacts of Biodiesel Fuel Use

Chelsea Jenkins of Virginia Clean Cities reported on the use of biodiesel fuels in Virginia. Ms. Jenkins presented a brief history of biodiesel use in Virginia and named several vehicle fleets that use biodiesel blends. James Madison University (JMU) began testing biodiesel and its effects on their bus fleet in 1996 and has experimented with very low-levels up to B20. JMU and the City of Harrisonburg currently use B20 to project and demonstrate a green image in the community. VDOT has used biodiesel for the past nine years. Dominion used over 500,000 gallons of B20 in 2008.

Ms. Jenkins reported that some of the benefits of biodiesel are that it is less toxic than table salt, is produced domestically, reduces dependency on foreign oil, reduces emissions, is NOX neutral, is the least expensive fuel alternative, requires no modifications to existing vehicles, and improves health. Biodiesel is flexible and reversible, allowing fleets to switch between biodiesel and diesel fuels as the price of biodiesel fluctuates. Disadvantages of biodiesel are that it has a limited shelf life, is less energy dense than diesel fuel, and is in limited supply. Using biodiesel requires cleaning of filters and fuel tanks because biodiesel is a solvent and will dissolve diesel residue.

Ms. Jenkins reported that fleets have experienced some difficulties in using biodiesel, but that many of these were related to improper blending of biodiesel when distributors were “splash blending” the biodiesel. Once biodiesel distributors were educated in proper blending techniques, these issues were resolved.

Ms. Jenkins also reported on a joint effort between Virginia Clean Cities Commission and DEQ that would create demand for biodiesel. Their program has allocated \$25,000 to buy down the cost of biodiesel to that of ultra low sulfur diesel.

Senator Whipple commented that in 2009 the Commission endorsed a 2% biodiesel requirement for Virginia that passed in the Senate but failed in the House after testimony from lobbyists that biodiesel may harm engines. B2 is a much lower concentration than the B20 that JMU and Clean Cities have used successfully over a period of years.

In response to questions from *Delegate Poindexter*, Ms. Jenkins reported that once blended, biodiesel does not separate. Also, several long-haul trucking companies use biodiesel blends and case studies show that fleets have travelled five million total miles on biodiesel. The frequency with which fleets must change their filters will depend on the fleet and the fleet’s fuel practice and the frequency with which they clean their tanks.

Senator Stuart inquired about the impact on distributors required to carry biodiesel. Distributors would expect to spend between \$800 and \$1000 to clean their storage tanks, but would not require any filters or other devices.

Staff Discussion and Presentation of Legislative Initiatives.

Staff presented answers to questions raised by the Commission throughout the year and possible legislative initiatives.

Response to Commission Inquiries

In response to a previous question raised by *Delegate Poindexter* relating to hydroelectric generation capacity, up to 15% of Virginia’s annual electricity is produced by hydropower. SB1347 streamlined the DEQ permitting process, creating a general permit for any renewable generation facility producing up to 100 MW. Most facilities would be included in this and a separate program for hydropower does not seem necessary.

In response to a previous question raised by *Mr. Hatcher*, there are no standard ordinances on wind generation. There is no mandate under consideration and the Virginia Code does not usually include model ordinances. Larry Land of Virginia Counties (VACo) accepted the Commission’s suggestion that VACo create a model ordinance.

In response to a previous question raised by the Commission, 38 states, including Virginia, have a renewable fuel standard (RFS) providing incentives promoting ethanol production and biofuel use. Twelve states have a requirement mandating specific ethanol or biofuel use.

In response to a previous question raised by the Commission, information was provided on the difference between hybrid electric vehicles and plug-in hybrid electric vehicles (PHEVs). PHEVs plug in to standard 120 Vac sockets and do not require residential modification.

Proposed Legislation

LD 10100336; Climate Change Action Plan.

This legislation would empower the Commission to update and review changes to the Climate Change Action Plan. *Senator Whipple* noted that the Plan contained detailed information specific to Virginia, showing the impact of climate change on Virginia's citizens and its economy. The proposed legislation would not duplicate the previous work completed by the Governor's commission, but would track the follow-up and oversight of the initial study, review reports of relevant agencies, and consider important consequences.

Final Disposition: After discussion, the Commission determined that the Virginia Energy Plan will be presented to the Commission. Further, the duties of the Commission shall expand to include an evaluation of the interaction and the interrelationships between the energy industry and the environment and the impact of related decisions on both.

LD 10100653; Minimum Biodiesel Content.

This legislation requires state public bodies to procure B2 biodiesel. The requirement does not apply if the cost of biodiesel exceeds 5% of the cost of diesel.

Final Disposition: After discussion, the Commission endorsed this bill, subject to the amendment that the biodiesel be sufficiently available.

LD 10100850; Clean Energy Manufacturing Incentive Grant Program.

This legislation expands and repeals the solar/photovoltaic manufacturing incentive grant program, and creates a fund to provide incentives to any clean energy company that will invest at least \$50 million and create at least 200 jobs in a location with an unemployment rate that is at least 1.25 times the state average.

Final Disposition: After discussion, the Commission chose not to endorse this bill.

LD 10100337; Green Buildings Act.

This legislation requires certain state public buildings to meet LEED or Green Globes standards. The standard does not apply to local government buildings.

Final Disposition: After discussion, the Commission endorsed this bill.

LD 10100730; Inclined Block Rate and Dynamic Pricing.

This legislation grants the SCC the explicit statutory authority to regulate price structures including inclining block rates and dynamic pricing.

Final Disposition: After discussion, the Commission endorsed this bill.

LD 10100956; Rate Recovery Options Removed for Pricing KWh.

Senator Stuart and Senator Peterson requested this legislation to ensure that the SCC only approves efficiency programs that will reduce the bill for and show net savings for consumers. The bill also removes profit and lost profit recovery by investor-owned utilities for DSM programs.

Final Disposition: After discussion, the Commission determined that the appropriate course of action would be to meet prior to the legislative session to further discuss the merits of this bill.

LD 10100334; Fuel Efficient Driver Education Curriculum

This legislation adds fuel efficient driving techniques to the existing driver education curriculum.

Final Disposition: After discussion, the Commission endorsed this bill.

LD 10100352; Mandatory RPS

This bill changes Virginia's existing RPS program from voluntary to mandatory, while preserving the existing RPS goals.

Final Disposition: After discussion, the Commission determined that the appropriate course of action would be to meet prior to the legislative session to further discuss the merits of this bill.

Public Comment

Cathie France of Virginia Natural Gas presented the Commission with a model bill that would allow natural gas companies to recover the costs of infrastructure and investment improvements. Infrastructure repair could reduce up to 7,000 tons of carbon emissions annually. Mrs. France had presented the Energy Efficiency and Conservation Subcommittee with the same legislation at their November 24 meeting in Fredericksburg.

Ann Flandermeyer of the Virginia Offshore Wind Coalition presented the Commission with further information relating to the development of the offshore wind energy industry.

The Commission agreed to meet prior to the legislative session to continue the discussion on the remaining legislation and *Senator Whipple* adjourned the meeting.