Virginia Commission on Energy and Environment

Thursday, July 17, 2008, 10:00 a.m. Senate Room A General Assembly Building Richmond, Virginia

Meeting Summary

Senator Whipple called to order the first meeting the Commission on Energy and Environment at 10:00am. After a brief round of introductions Senator Whipple accepted nominations for chair and vice chair of the Commission. After receiving all motions, the Commission elected Senator Whipple as chair and Delegate Pointdexter as vice-chair. Senator Whipple stated that she was glad to have the opportunity to move the Commission forward after passage of her bill, SB 484, which created the Commission during the 2008 legislative session.

First on the agenda was Dr. Robert Hirsch, who presented findings from his report entitled "Peaking of World Oil Production: Impacts, Mitigation, and Risk Management". Dr. Hirsch's presentation is available on the Commission's website at: http://dls.state.va.us/energy.htm.

The Commission's first question for Dr. Hirsch was whether \$4/gallon gas was here to stay. The answer was "yes." Dr. Hirsch estimates that citizens will have to continually readjust their lifestyles to accommodate increasing fuel prices up to a range (according to one prominent economist) of \$15-\$20 per gallon at some point in the future. The Commission followed with questions on what the impact of an increase in biofuel production will have on these estimates. Dr. Hirsch stated that corn based ethanol is a dead-end and the most promising biofuel right now is cellulosic based ethanol, which uses energy crops or organic waste residue to produce ethanol. Despite the positive impact biofuels will have on the liquid fuel supplies in this country, Dr. Hirsch pointed out that no single technology or fuel will be able to meet the growing demand.

Another question from the Commission focused on whether recent or near-term changes in state or federal policy could mitigate the problem of increasing fuel prices. Dr. Hirsch responded that 'peak oil' is mainly the result of a finite supply of world oil. Demand is growing too fast and the world is too deeply committed to oil to make any significant reversals in a short period of time. Dr. Hirsch further stated that as demand for oil continues to rise across the globe and production levels, eventually the entire road based transportation system in the United States will be in jeopardy. Dr. Hirsch stated that to continue with a road/car based transportation system vehicles will need to change, there must be much more mass transit, less air travel, and a reduction in volume of cars on the road.

Hugh Montgomery, a member of the Commission, expressed his opinion that coal-to-liquids technology may not be as appealing as Dr. Hirsch stated. Mr. Montgomery asked Dr. Hirsch to elaborate on the potential for waste-to-energy technologies. Dr. Hirsch responded that the country will need to tap all potential resources for liquid fuels, even though many of them have environmental drawbacks. The Commission concluded with a series of questions on what other technologies could help mitigate the impact of rising fuel prices. Dr. Hirsch responded that although there may be some fossil-based alternatives, such as natural gas, all fossil-based fuels are limited in supply and will eventually suffer the same fate as oil (the US, however, happens to have significant amounts of coal). Dr. Hirsch concluded by stating that all options need to be on

the table to address the short-term potential for energy costs spiking in a short period of time. With regard to long-term planning, the country needs to focus on utilizing renewable resources.

Second on the agenda was Dan Beckley with the Office of Energy Efficiency and Renewable Energy (DOE) presenting on the scope and integration of federal and state initiatives. Mr. Beckley began by stating that Virginia has adopted the most recent version of the IECC Building Codes, which contain greater energy efficiency requirements for new residential construction. The Commission asked Dr. Beckley what happened to state deployment grants from the DOE. Mr. Beckley stated that although they have been cut by 25%, there may be some block grant money coming to the state in the near future. Mr. Beckley's full presentation is available on the Commission's website.

Next on the agenda was Steve Walz, the Governor's Senior Advisor for Energy Policy, presenting an overview of the Virginia Energy Plan. Mr. Walz confirmed that the Commonwealth does have a large reserve of coal, but it is not the type of coal used in the coal-to-liquids process. One question from the Commission was to what extent implementation of reasonable energy efficiency and conservation measure could meet the growing electricity demand in the Commonwealth. Mr. Walz responded that energy efficiency and conservation could level the Commonwealth's per capita use of electricity, but due to the growing population, overall electricity demand will continue to grow in the Commonwealth. Delegate Nixon asked what metrics are in place to gauge the success of the Virginia Energy Plan. Mr. Walz responded that most data comes from the Energy Information Agency (EIA) within the DOE, but the Commonwealth is looking for alternative methods for collecting better data.

The Commission asked Mr. Walz where the Commonwealth should be concentrating its efforts in meeting increasing energy demands. Mr. Walz responded that the best options are efficiency and conservation, indigenous energy supplies, and consumer education. With regard to consumer education, the Commonwealth needs to focus on education consumers on replacing large scale appliances with more energy efficient products. Concomitantly, contractors of all types need to be educated to advise their customers on energy efficient options to traditional appliances. Mr. Walz's full presentation is available on the Commission's website.

Public Comment

A member of the public reminded the Commission that there is promising research in algal farming and using algae as a feedstock for the production of biofuels.

Mike Tolson, Homebuilder's Association of Virginia, informed the Commission on efforts underway to improve contractor knowledge of energy efficiency options in residential construction. However, requiring greater efficiency standards will make it more difficult for consumers to purchase a new home as most energy efficiency improvements will increase the initial cost of a home. Additionally, Mr. Tolson highlighted the EarthCraft House program as a model for residential efficiency in new construction. Mr. Tolson also stated that the 2009 building code is currently being developed and will contain more stringent efficiency requirements.

Denise Thompson, Virginia Municipal League, and Larry Land, Virginia Association of Counties, informed the Commission of the GoGreenVA Initiative.

Meeting adjourned.