



Energy Advisory Committee
Tuesday, September 21, 2010 10:00 a.m.
General Assembly Building, 6th Floor, Speaker's Conference Room

- Call to Order; Roll Call

Delegate Kenneth R. Plum called the meeting to order.

- Introduction of Members

Members of the Committee introduced themselves, briefly explaining their backgrounds and highlighting the areas of energy policy that interest them.

- Review of JCOTS & Role of Advisory Committee

JCOTS Staff reviewed the advisory committee process and the role of JCOTS in the General Assembly. A copy of the presentation is available on the JCOTS website at <http://jcots.state.va.us>.

- Overview of Virginia Energy Plan & Energy Initiatives
 - Stephen A. Walz, Director, Department of Mines, Minerals, & Energy

Mr. Walz provided the committee with an update on the 201 Virginia Energy Plan. A copy of the presentation is available on the JCOTS website at <http://jcots.state.va.us>.

He started by explaining the statutory mandate for the Plan, and highlighted some general information about Virginia's energy landscape. He touched on the mix of fuels used to produce the state's electricity. Virginia's balanced economy is reflected in the fact that the transportation, industrial, commercial, and residential sectors contribute roughly equally to Virginia's overall energy consumption. Virginia, however, is a net energy importer, second to only California in kilowatt hours imported and among the worst six states for total energy imports per capita.

The presentation then turned to electricity production in the state. The investor owned utilities produce approximately 84% of Virginia's electricity. Electricity rates from 2009 are approximately 90% of the national average, contributing to Virginia's economic competitiveness and growth. Virginia's growth over the next decade will require approximately 7200 MegaWatts ("MW") of new capacity.

Members of the Committee asked for clarification on this figure. Mr. Walz explained that to generate 7200 MW the state would need an additional 14 average sized power plants, or six nuclear power plants. He further indicated that the figure is a projection based on current policies. New energy policies, such as cap & trade, smart metering, distributed generation, and increased adoption of electric vehicles will adjust the amount of electricity needed in the next decade.

Mr. Walz then focused on the sources of Virginia's energy. He touched on coal, nuclear, natural gas, renewables, and petroleum. He showed a table from the 2010 Plan explaining the state's capacity for electricity generation from different renewable sources. He drew special attention to the state's sizeable offshore wind and solar power potential. Committee members questioned these figures. Mr. Walz explained that the predictions came from study conducted by Virginia Tech.

The Virginia Energy Plan also includes several findings, goals, and recommendations. He highlighted the Governor's energy goals. Namely, the Governor would like to make Virginia the Energy Capital of the East Coast. He explained that the Governor and other members of the administration would expound on this goal and others at the Governor's Energy Conference, October 12-14.

Mr. Walz described numerous initiatives in the state that are already working towards some of the Energy Plan's goals and recommendations. Committee members expressed particular interest in the weatherization systems programs run in conjunction with ElderHomes. Members also asked several questions about the local Energy Efficiency Alliances. These organizations serve as "one-stop-shops" for home and small business owners looking to improve the energy efficiency of their homes and buildings.

Mr. Walz concluded his presentation by answering questions about the metrics that will be used to measure Virginia's progress in energy consumption and production. He alerted the Committee to the fact that DMME tries to avoid mandating reporting from businesses, because it presents a financial and administrative burden. Rather, DMME relies on similar data obtained by other institutions, such as the U.S. Department of Energy.

- Overview of Uranium

- John “Buzz” I. Kyle, P.E., Vice President, Lyntek Inc.
- Douglas L. Beahm, P.E., P.G., President, BRS, Inc.

Mr. Beahm and Mr. Kyle are experienced engineers with expertise in uranium mining and milling methods and technologies. A copy of the presentation is available on the JCOTS website at <http://jcots.state.va.us>.

Mr. Beahm began the presentation by explaining the regulatory history of uranium mining. He highlighted the legal developments of the 1970's which brought stronger safety standards and more stringent environmental regulations. As a result of the standards, the uranium mining fatalities dropped significantly. This helped foster a culture of extreme attention to safety.

Further Mr. Beahm explained that if uranium is mined in Virginia, the methods likely to be used would be open pit and stripping. The mine would look like a quarry. Many new technologies have made this method of mining incredibly safe, reduced externalities, and held down costs. These improvements have resulted, in part, from the deployment of remote controlled mining equipment.

Mr. Kyle then explained the technological improvements in uranium milling. He noted that acid leaching and carbonate (i.e. baking soda) leaching are the most common methods. He highlighted the fact that the greatest technological improvements have emerged in the areas of crushing and grinding the ore, as well as collecting the dust from these activities. In line with the culture of attention to safety, milling facilities place significant emphasis on the housekeeping of their facilities. This allows potential problems to be detected more easily. He then explained technologies used to protect the environment around uranium mines, and provided examples from Canada.

The final section of the presentation highlighted the technologies and methods used to reclaim the mine tailings and restore mined lands back to their pre-mined state. Mr. Beahm explained the long term tailings treatment. Mr. Kyle explained the use of sophisticated computer models to address the concerns of stakeholders and improve communications during the planning stages. Mr. Beahm noted that regulations helped drive the technological advances of the modern mining industry.

- Discussion & Formulation of Work Plan for Future Meetings

Delegate Plum urged the members of the committee to communicate with JCOTS staff any ideas they have for the future work of the committee. He suggested the committee attempt to coordinate its efforts with other energy and technology activities taking place within state government.

Staff will organize comments emailed from Members and organize the next meeting based on the emailed comments.

- Adjournment