

## SECTION 8 – FINDINGS, GOALS, AND RECOMMENDATIONS

### Findings

In completing the 2010 Virginia Energy Plan, we find:

- Growing Virginia's economy and supporting the quality of life of our citizens requires a diverse portfolio of energy supplies. We must continue to rely on traditional energy sources such as coal, natural gas, nuclear, and petroleum, while at the same time making alternate sources such as biomass, wind, hydro, and solar a larger part of our energy mix.
- Virginia has ample in-state energy resources. Virginia's energy businesses can generate new jobs and investment developing these resources.
- Virginia's consumers have the opportunity to use energy resources more efficiently. Expanding conservation and efficiency will support new jobs for Virginians, reduce waste of our natural resources, and keep our financial resources inside the state's economy.
- Developing new and emerging energy technologies will require public universities and private businesses to partner in energy research and development, manage shared intellectual property, and expand the energy business sector in the Commonwealth.
- Virginia's energy environment is complex and dynamic. Therefore, the Department of Mines, Minerals and Energy will review and revise this plan periodically over the next four years in order to stay on target making Virginia the Energy Capital of the East Coast.

### Goals and Recommendations

#### 1. Make Virginia the Energy Capital of the East Coast.

- **Grow both traditional and alternative energy production, jobs, and investment in Virginia.**
- **Increase the use of conservation and efficiency in Virginia's homes and businesses, and support the establishment and expansion of energy efficiency businesses.**

Goal 1 Recommendations:

- Grow in-state production of energy, with resulting jobs and investment, by 20 percent over the next 10 years.
  - Begin offshore natural gas and oil development, and expand onshore oil and gas development in Virginia, through an open regulatory process that facilitates safe and environmentally sound energy production and eases market entry for new and expanding oil and gas businesses.
  - Develop the environmental response infrastructure to support offshore oil and gas production so the systems are in place when development is allowed in the future.
  - Expand development of renewable resources, particularly using biomass, waste, and wind resources, to generate electricity and produce liquid fuels. Particular emphasis should be placed on activities that provide secondary benefits such as water quality improvements.

- Provide green job tax credits and other financial support to companies providing new jobs and investments in clean energy production. Support should be based on a positive return on investment to the Commonwealth and its localities for their support.
- Revise the solar photovoltaic manufacturing incentive grant fund to broadly cover renewable energy manufacturing businesses.
- Provide an efficient permitting process for biomass, wind, and other alternate energy resources to facilitate timely project development consistent with good environmental protection.
- Support the private sector's efforts to grow Virginia's offshore wind development and supply chain industries. This should include:
  - Supporting work of the Virginia Coastal Energy Research Consortium (VCERC) and the Virginia Offshore Wind Development Authority; and
  - Working with the Bureau of Ocean Energy Management, Regulation and Enforcement (former Minerals Management Service) to streamline the federal offshore wind leasing process.
- Support production of biomass and algae-based drop-in fuels to support military and private uses for transportation and heating.
- Support development of new electric generating resources to meet growing electric demand, including the third nuclear reactor at the North Anna Power Station and new base-load, intermediate load, and peaking generation from conventional resources.
- Support the development of the new generation of nuclear power plants, such as the AREVA Generation III+ boiling water reactor (BWR) and the B&W mPower reactor, and the manufacturing of plant components.
- Facilitate partnerships between Virginia's electric utilities and private generation developers where private developers can deliver power more cost competitively for ratepayers.
- Facilitate development of private power projects to serve out-of-state markets.
- Balance the need for low-cost power to support Virginia manufacturing, commerce, and citizens' quality of life with the need to provide long-term, stable, clean energy supplies.
- Support expansion of distributed generation options at industrial, commercial, and residential sites.
- Assist Virginia's coal and natural gas industries comply with state and federal requirements for safety, environmental management, and reclamation. This will lead to strong mining companies working to support the economic and environmental health of the communities in which they work.
- Complete the study of the efficacy of uranium mining in Virginia in order to decide whether the existing moratorium should be continued or removed in the Commonwealth.
- Expand jobs and investment in energy efficiency services.

- Facilitate development of local and utility energy efficiency programs that overcome market inefficiencies and market failures that reduce investment below optimal levels.
- Support energy efficiency as a way to help low-income, elderly, and fixed-income families address their energy needs.
- Provide necessary systems to support delivery of energy resources under emergency conditions, addressing civilian and military needs.

## **2. Expand public education about Virginia's energy production and consumption, its effect on our economy, and how Virginians can use energy more efficiently.**

Goal 2 Recommendations:

- Implement State Corporation Commission's *Virginia Energy Sense* consumer energy education program.
- Coordinate energy efficiency public information efforts among utility, federal, state, and local sources to provide clear and easily understandable messages to consumers.
- Expand energy-related education in all phases of Virginians lives through:
  - Expanding community college jobs training in areas such as energy auditing and efficiency, utility and related trade activities, and renewable system operation and maintenance; and
  - Expand university programs in areas such as nuclear power, energy engineering, and environmental management.

## **3. Maximize the investment in clean energy research and development through the work of the Universities Clean Energy Development and Economic Stimulus Foundation.**

Goal 3 Recommendations:

- Coordinate energy R&D actions among universities and private companies to maximize value of state resources.
  - Working with the Lieutenant Governor, serving as the Chief Job Creation Officer, and Cabinet offices, coordinate resources available through the Tobacco Commission, Virginia Economic Development Partnership, Departments of Mines, Minerals and Energy, Agriculture and Consumer Services, and Business Assistance to optimize growth of energy jobs across Virginia.
  - Implement Virginia Universities Clean Energy Development and Economic Stimulus Foundation.
  - Establish the Virginia Energy Initiative to bring together research capabilities of our major research universities under one canopy to help focus efforts on developing energy technologies for the 21<sup>st</sup> century.
  - Promote development of offshore oil and gas development as a source of VCERC research and development funding.
  - Support R&D for clean coal technologies and carbon sequestration.
  - Work with the Virginia Tobacco Commission, private sector energy leaders, community colleges, and our major research universities to establish Southside and Southwest Virginia as the nation's hub for traditional and alternative energy research and development.