Proposed Study of Increased Use of Renewable Energy Resources in Virginia

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Study objective: To provide legislators and policymakers with a factual basis to determine whether further efforts to stimulate increased use of renewable energy and environmentally beneficial resources to generate electricity in Virginia would be warranted.

Extract: There is general need for greater understanding of the feasibility, costs, benefits and risks associated with the use of renewable energy and environmentally beneficial resources to generate electricity. Despite claims that these resources have a variety of benefits, such energy sources make a relatively small contribution to power generation in Virginia and the nation. An objective study should examine the existing barriers to deployment of such resources. This study should determine the cost of generating electricity from such sources and then compare it with the cost of power generated from traditional sources, for both the case of existing capacity and new capacity additions. This information can be used to estimate the scale of incentives or subsidies needed to encourage investment in renewable resources. In addition the study should review incentives that have been employed elsewhere for expanded deployment of such energy and analyze the effectiveness of each. The study could then recommend public policy initiatives to realize them, within the framework of Virginia's currently ongoing restructuring of the electricity industry.

Study components:
The use of the term "renewable energy" in the following is understood to include the broad range of environmentally beneficial electric generating technologies.

1. Identify existing renewable energy resources in Virginia.
2. Determine the cost of electricity produced by existing renewable energy resources in Virginia, by type.
3. Identify existing barriers to expansion of renewable energy resources in Virginia.
4. Identify existing federal, state and local incentives to use and/or expand use of renewable energy resources in Virginia.
5. Examine the effectiveness of existing incentives.
6. Determine the cost of new electric generating capacity additions using renewable energy resources in Virginia.
7. Compare the cost of new electric generating capacity additions using renewable energy resources in Virginia with the cost of new "traditional" electric generating capacity additions in Virginia.
8. Determine future renewable energy resource potential in Virginia.
9. Evaluate the costs of present and future air emissions compliance in Virginia and potential reductions in emissions and compliance costs due to increased use of

renewables, including the effect of increased use of renewables on Virginia's efforts to improve air quality in ozone nonattainment areas and regions, and elsewhere in Virginia.

10. Determine potential employment impacts in Virginia due to increased use of renewables, especially in economically distressed Southwest and Southside Virginia.
11. Examine the potential effects on suppliers of renewable fuel, equipment and services in Virginia.
12. Examine the potential effects on Virginia's agriculture industry of using switch grass, sorghums, or other crops as boiler fuels, replacing cultivation of tobacco.
13. Estimate potential local tax base impacts due to increased use of renewables.
14. Examine and consider other benefits and risks of increased use of renewables.

The study is to conducted by the Virginia Center for Coal & Energy Research and the following state agencies should cooperate with the study:

Department of Environmental Quality
Department of Health
Virginia Employment Commission
State Corporation Commission
Coal and Energy Commission
Secretariat of Commerce and Trade
Department of Agriculture
Department of Mines, Minerals and Energy