Va. study makes economic case for renewable energy

STEVE SZKOTAK - Associated Press - Associated Press

Pursuing a portfolio of renewable power sources such as solar, biomass and wind power to satisfy Virginia's energy appetite through 2035 would create tens of thousands more jobs than relying on either coal or natural gas, a George Mason University study concludes.

The study released Wednesday was prepared for Virginia Conservation Network, a coalition of environmental groups and proponents of renewable energy sources over fossil fuels.

George Mason's Center For Regional Analysis based the study on the 2010 Virginia Energy Plan, which projected a need for an additional 19,448 megawatts of demand over the next 25 years. Half of that demand can be met through biomass, solar and wind, offshore and onshore, the study concludes.

Nathan Lott, executive director of the Conservation Network, said the study illustrates that renewable energy can be competitive with fossil fuels. "This is important for regulators and utilities that must plan today for a safe, reliable electricity system 20 and 30 years into the future," he said.

Researchers developed two scenarios in which energy demand was satisfied by a combination of renewable sources.

They included: biomass, the burning of wood pellets made from sawdust and sawmill waste; solar; and wind power, offshore and onshore.

Under the first scenario, demand met by 50 percent of biomass, 28 percent wind and 22 percent solar would create 172,328 jobs and generate a "gross state product" valued at $20.8 million. The authors of the study define gross state product in the same terms as the gross domestic product — the sum of all goods and services created by those collective energy sources.

The second scenario would trim biomass to 40 percent, up wind power to 51 percent and trim solar to 9 percent. That combination would create 107,890 jobs and generate $13 billion in gross state product.

Coal would create 43,442 jobs and a gross product valued at $5.3 billion, while natural gas would create 20,473 jobs and a gross state product of $2.5 billion.

On the flip side, the study notes, increased electricity generation from renewables would likely mean more costs to ratepayers because of capital costs.

Under the first renewable scenario, for instance, construction costs are pegged at $9.48 billion and $5.94 billion under the second scenario. Coal construction costs are $2.39 billion, while natural gas is $1.13 billion.

The study did not include the North Anna Nuclear Power station in its equations because of questions involving nuclear power following the earthquake in Mineral, which automatically shut down the plant, and the quake and tsunami in Japan that caused the Fukushima nuclear disaster. Dominion Resources has considered adding a third reactor at North Anna.

"We couldn't reasonably expect to have a nuclear reactor up and running and filling this demand gap b 2035," Lott said in an interview. He also said the long regulatory process leading to a new reactor's licensing.

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