

Department of Legislative Services
 Maryland General Assembly
 2003 Session

FISCAL AND POLICY NOTE
 Revised

House Bill 370 (Delegate Hubbard, *et al.*)
 Economic Matters

Electricity Regulation - Clean Energy Portfolio Standard and Credit Trading

This bill requires the Public Service Commission (PSC) to establish a Clean Energy Portfolio Standard that applies to retail electricity products sold in the State beginning in 2006. It also directs PSC to establish a market-based clean energy credit system and a Clean Energy Fund to support grants to local jurisdictions and public units.

Fiscal Summary

State Effect: General fund expenditures would increase by \$102,900 in FY 2005 to hire additional staff to implement the portfolio standard program. Potentially significant general fund expenditures to implement the energy credit system. Special and general fund expenditures would increase to the extent that the State’s energy costs increase. These costs would likely decrease over time. Special fund revenues would increase beginning in FY 2007 from the collection of compliance fees.

(in dollars)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
SF Revenue	\$0	\$0	\$0	-	-
GF Expenditure	0	102,900	99,400	105,800	112,700
GF/SF Exp.	-	-	-	-	-
Net Effect	\$0	(\$102,900)	(\$99,400)	(\$105,800)	(\$112,700)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

Local Effect: Potential increase in expenditures for any local jurisdiction that becomes a retail electricity supplier. Potential increase in local revenues to the extent that a local jurisdiction becomes a generator of eligible energy or is eligible for a grant provided by the Clean Energy Fund.

Small Business Effect: Potentially meaningful.

Analysis

Bill Summary: The bill requires the development of a renewable energy standard, a Clean Energy Fund, and a clean energy credit trading system.

Renewable Energy Standard

The bill requires any company selling electricity in a competitive market to include some amount of renewable energy as part of its portfolio of generating fuels. The requirement does not apply to electricity delivered to a residential customer under a specified rate freeze. The portfolio standard is 0.5% in 2006, 1% in 2007, 2% in 2008, 3% in 2009, 4% in 2010, and 5% in 2011, 6% in 2012, and 7.5% in 2013 and each year thereafter. Energy is eligible for inclusion in meeting the standard if it is generated from an eligible energy resource at a facility that did not produce energy from an eligible energy resource before January 1, 2003. Each electricity supplier must submit an annual report to PSC relating to compliance with the portfolio standard for the preceding year.

By December 31, 2013, an electricity supplier must receive 125% credit toward meeting the standard for energy derived from solar energy or fuel that is derived from an eligible energy resource and is used in a fuel cell.

Energy Fund and Compliance Fees

The bill establishes a Maryland Clean Energy Fund as a special, nonlapsing fund to encourage the development of generating resources for clean energy. If a retail electricity product contains fewer kilowatt-hours from eligible energy resources than are required to comply with the standard for that year, the supplier must pay a compliance fee of two cents per kilowatt-hour into the fund. PSC must use the fund to provide grants to local governments and local public units to develop additional clean energy projects. PSC must, by regulation or order, impose sufficient penalties to ensure compliance with the bill and adopt orders or regulations to implement the bill.

The bill requires PSC to adopt regulations to determine eligibility criteria for grants.

“Eligible energy resource” includes solar, wind, qualifying biomass, methane from the anaerobic decomposition of organic materials in a landfill or wastewater treatment plant, geothermal, or ocean, including energy from waves, tides, currents, and thermal differences. “Qualifying biomass” means a solid, nonhazardous, cellulosic waste material that is segregated from other waste materials, derived from specified sources, and includes gasified animal waste. “Retail electricity product” means electricity sold under identical terms of service and not for resale and includes electricity generated by a net energy metering customer, whether it is used on site or sold on the grid.

Energy Credit Trading System

The bill requires PSC to establish a market-based, clean electricity trading system in which electricity suppliers can trade clean energy credits (CECs) with each other to fulfill the energy portfolio standard. A CEC is defined as a credit equal to 100-kilowatt hours of retail electricity in the State that is derived from eligible energy resources. PSC must develop a clearinghouse that registers CEC transactions among suppliers and maintain records of those transactions. The clearinghouse must provide current information of the status of CECs to owners and the public through the Internet and other means. PSC may charge an administrative fee on CEC transactions only to recover actual direct costs of processing the transaction. A credit can only be diminished or extinguished by the owner of the facility from which it is derived. The bill allows a credit to be initially sold or transferred by the owner of the facility from which it is derived.

Current Law: State law does not require electricity suppliers to use renewable energy. The Maryland Clean Energy Incentive Act, which went into effect on July 1, 2000, provides State sales tax exemptions or income tax credits for buying certain high efficiency Energy Star appliances, electric and hybrid-electric vehicles, and certain renewable resource energy systems.

Chapters 3 and 4 of 1999 restructured Maryland's electricity industry with the stated intent of establishing customer choice of electricity supply and supply services and creating competitive retail electricity supply markets. Under this law, the legislature declared its intent that a program to provide net energy metering is a way to encourage investment in renewable energy sources. Net energy metering measures the differences between the electricity supplied by an electric company and the electricity generated by an eligible customer-generator and fed back to the electric company over the customer's billing period.

The law directed PSC to report to the Governor and the General Assembly on the feasibility of requiring a renewable portfolio standard and the estimated costs and benefits. It also required PSC to cap rates charged to retail customers for four years following the implementation of customer choice. As part of a settlement, PSC may approve a cap for a different time period. Furthermore, each electric company and supplier must provide information to their customers every six months about the fuel mix of the electricity being purchased and must specify categories such as coal, natural gas, biomass, wind, and other sources.

Background: At least 11 states, including Maine, New Jersey, Pennsylvania, Arizona, and Connecticut, now use a renewable portfolio standard (RPS), according to the Database of State Incentives for Renewable Energy. Three other states, Hawaii,

Minnesota, and Illinois, have a renewable portfolio goal. The main differences among various RPS proposals are the required renewable share, the timing of the program, the definition of qualifying facilities, and whether or not there is a limit on the allowable price for renewable credits. States have enacted various penalties for failure to comply with renewable standards, including monetary fines, suspension or revocation of a supplier's license, and prohibitions on new customers.

Approximately 95% of electricity generated in Maryland comes from conventional energy sources such as coal or oil. The remaining 5% comes from renewable sources such as solar, biomass, or municipal waste. According to the U.S. Department of Energy, 46 renewable energy facilities operate in the State, including bioenergy (7), photovoltaic (31), wind (1), and hydroelectric (7).

PSC evaluated the use of an RPS following the passage of electricity restructuring legislation in 1999 and concluded that energy costs would increase in the short run as lower cost opportunities are exhausted, then eventually decline due to economies of scale. The report noted that an RPS would reduce emissions of compounds such as carbon dioxide and carbon monoxide and potentially increase employment and economic activity. PSC concluded that an RPS is feasible in Maryland but also indicated that other programs could be used to promote renewable energy production.

State Expenditures: The bill would affect the State as a consumer of electricity and the administrator of the proposed programs. Any grants provided to local governments would be supported by the compliance and energy credit fees and would not affect State finances. According to the Maryland Energy Administration (MEA), the State accounts for about .2% of total electricity consumption. Special and general fund expenditures could increase by approximately \$20,000 in 2007, rising to as much as \$273,000 by 2011. These costs are expected to decline as generation of renewable energy increases. The Department of Legislative Services (DLS) notes that under a 2001 executive order, the State's goal is to procure 6% of electricity for State-owned buildings from green energy, which includes wind, solar photovoltaic and thermal, biomass, landfill gas, and combustion of municipal waste.

Because the portfolio standard and the clean energy credit would not be effective until 2006, PSC could handle any increase in workload prior to fiscal 2005 with existing resources. General fund expenditures would increase by approximately \$102,912 in fiscal 2005 to hire a regulatory economist to develop regulations, collect data from suppliers, examine the data, and monitor the clean energy portfolio of each supplier, as well as an administrative specialist to assist with those duties and develop the clearinghouse database for the energy credit transactions.

The estimate includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses. The information and assumptions used in calculating the estimate are stated below:

- a regulatory economist and an administrative specialist would be hired effective July 1, 2005; and
- there are approximately 30 to 35 licensed electricity suppliers.

Salaries and Fringe Benefits	\$91,482
Operating Expenses	<u>11,430</u>
Total FY 2005 State Expenditures	\$102,912

Future year expenditures reflect: (1) full salaries with 4.5% annual increases and 3% employee turnover; and (2) 1% annual increases in ongoing operating expenses.

PSC advises that, based on other renewable energy credit systems used by the New England Power Pool Company (NEPOOL) and New Jersey, it will require \$1 million in contractual services in fiscal 2004 and \$560,000 each year thereafter. DLS agrees that PSC may need significant contractual assistance depending upon the number of suppliers that participate in the energy credit system. However, it notes that: (1) Maryland's system will likely be smaller than that used by comparable regions or states (New Jersey's population, for example, is 3.2 million larger than Maryland's); and (2) PJM Interconnection, a regional transmission organization, is developing a generator attribute tracking (GAT) system that will allow retail suppliers to demonstrate compliance with portfolio standards and will be designed for access by regulators. If PSC can participate in this system, its costs will be lower. However, participation will depend on approval by PJM's stakeholders. The bill allows PSC to contract with a for- or nonprofit organization to assist in the administration of the trading system.

MEA advises that NEPOOL contracts with a company to manage the transfer of credits and pays them with funds provided by the utilities required to purchase "green" energy. This cost is built into the "electricity premium" of 1.5 cents per kilowatt and eventually passed along to the user. There is no direct cost to any state for administration or management of the certificate trading system in NEPOOL.

State Revenues: Suppliers who do not meet the requirements of the portfolio standard must pay a compliance fee of 2 cents per kilowatt-hour into the special fund established by the bill. Revenues to the fund would depend on the number of suppliers that are unable to meet the portfolio standards and the associated shortfalls, which cannot be predicted at this time. Since suppliers would be required to submit an annual report to

PSC relating to compliance with the standard for the preceding year, no compliance fees would be paid into the fund until at least fiscal 2007. Similarly, the revenues from the administrative fee that PSC can charge for energy credit transactions cannot be determined at this time.

The bill also provides for the development of regulations or orders to impose sufficient penalties to ensure compliance with the bill. Since the extent to which retail electricity suppliers will violate the provisions of the bill is unknown, any such revenue cannot be estimated at this time.

Local Fiscal Effect: If any local jurisdiction becomes a generator of eligible energy resources, the bill could result in an increase in local revenues to the extent that the local jurisdiction sells eligible energy to suppliers that need it to meet the standards established by the bill. The extent to which the bill will result in an increase in the demand for eligible energy resources cannot be estimated at this time.

Local jurisdictions will benefit to the extent that they qualify for grants supported by compliance fees paid by suppliers, which cannot be determined at this time.

Small Business Effect: To the extent that the bill increases the demand for eligible energy resources, any small business that generates eligible energy could benefit. A producer of clean energy could also benefit to the extent that it becomes eligible for payments from the fund as provided by the bill. According to PSC, retail electricity suppliers are generally larger businesses, so small businesses would not be subject to the bill's requirements relating to suppliers.

Additional Comments: To the extent that the bill's requirements cause suppliers to increase their prices, consumers would face higher costs. MEA forecasts the additional annual cost to a residential consumer to be \$1.32 beginning in 2006, rising to approximately \$18 in 2011.

Additional Information

Prior Introductions: Similar bills were introduced as HB 1215 in the 2002 session and SB 767 in the 2001 session. SB 767 received an unfavorable report from the Finance Committee and HB 1215 was heard by the Environmental Matters Committee, which took no action.

Cross File: None.

Information Source(s): Maryland Energy Administration, Database of State Incentives for Renewable Energy Incentives, Department of Legislative Services

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