

**Department of Legislative Services**  
 Maryland General Assembly  
 2004 Session

**FISCAL AND POLICY NOTE**  
**Revised**

Senate Bill 654  
 Finance

(Senator Frosh)

Economic Matters

**Energy-Saving Investment Program**

This bill establishes an Energy-Saving Investment Fund in the Maryland Energy Administration (MEA) to increase the opportunities for energy consumers to save energy, reduce energy costs, reduce pollution and threats to public health associated with energy production and consumption, and improve service reliability. The bill requires residential retail electric and gas customers to contribute to the fund through an energy-saving investment charge that each electric and gas company will collect.

The bill takes effect July 1, 2004 and sunsets March 31, 2015. The customer charge will terminate September 30, 2013.

**Fiscal Summary**

**State Effect:** Special fund revenues would increase by \$5.8 million in FY 2005 from investment charges and at least \$7.7 million annually thereafter. Revenues could increase by as much as \$13.6 million in FY 2006, \$27.1 million in FY 2007, and \$31.0 million from FY 2008 to 2013, according to the rate set by the Public Service Commission (PSC). Special fund expenditures by MEA would increase correspondingly to implement energy efficiency programs. Future year expenditures are annualized, adjusted for inflation, and reflect ongoing operating costs and increased program activities.

(in dollars)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
SF Revenue	\$5,811,100	\$7,748,200	\$7,748,200	\$7,748,200	\$7,748,200
SF Expenditure	5,811,100	7,748,200	7,748,200	7,748,200	7,748,200
Net Effect	\$0	\$0	\$0	\$0	\$0

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

**Local Effect:** Minimal or none. It is assumed that municipal corporations that provide retail electric or gas service would decline to collect the charge as provided by the bill.

**Small Business Effect:** Meaningful.

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## **Analysis**

**Bill Summary:** The fund consists of: (1) the charge collected pursuant to the bill; (2) funds to match the collected charges, as appropriated in the State budget and subject to the availability of funds; and (3) any additional appropriated funds.

The fund will support energy efficiency programs and renewable energy projects that are generated by one of several defined types of energy, including geothermal, hydropower, wind, solar electric, and biomass. MEA cannot spend more than 10% of the funds on management and supervision of activities or more than 20% on renewable energy projects. PSC can retain 1% of the funds to offset its administrative expenses associated with the program. PSC must set the level of the investment charge as provided by the bill. Customers who receive gas or electric bill assistance from the Maryland Energy Assistance or Electric Universal Service program are exempt from the charge.

A municipal corporation or cooperative that provides retail electric or gas service to customers may decline to collect the charge if it gives prior written notice to the Comptroller. PSC may suspend the collection of the charge for up to six months if it finds that the balance in the fund has exceeded \$35 million for two consecutive fiscal quarters. Any uncommitted funds remaining in the fund at the end of September 30, 2014, must be returned to residential electric and gas customers. If a utility is authorized to directly implement its own residential energy efficiency program, the bill allows the PSC-approved customer charge to be subtracted from the amount of the charge to be collected from that utility's customers. The charge may be combined with the universal service fee allowed under current law.

### *Energy Investment Plan*

MEA must prepare and maintain an energy-saving investment plan that directs all disbursements from the fund and describes, evaluates, and recommends programs designed to accomplish several specified objectives. MEA must submit the initial plan to PSC by March 1, 2005, and periodically update it. The first updated plan must be submitted to PSC by March 1, 2008. At least 5% of each of the funds derived from residential retail electric customers and residential gas customers must be directed toward programs to serve low-income customers. The plan must give priority to energy efficiency programs that reduce peak demands for electricity or natural gas, other factors being equal.

The bill outlines the required elements of the plan. MEA must annually determine the amount of any additional funds needed to implement programs recommended in the plan and submit the request for additional funding to PSC. PSC must review the plan and provide an opportunity for interested parties to comment. It also must issue a final order within 90 days after receiving the plan or update. The bill outlines the requirements for approving the plan and provides that, as part of its final order, PSC may modify or reject any recommended program that it finds to be not cost effective. Among the required components of the plan are: (1) a list of residential programs conducted independently by utilities with PSC approval; (2) an assessment of the current state of renewable energy resource development in Maryland; and (3) recommended renewable energy projects, including budgets and performance indicators for those projects. Within 60 days after any final order rejecting or modifying the plan or update or any program in the plan or update, MEA may file a supplement. PSC must review the supplement and issue a final order within 60 days.

MEA must: (1) manage, supervise, and administer the programs implemented under the approved plan; (2) adopt regulations necessary to ensure that the implemented efficiency programs carry out the purposes of the plan; and (3) develop procedures for monitoring and assessing all energy efficiency programs. MEA may contract with one or more nongovernmental entities for assistance in carrying out the program.

By October 1, 2004, the director of MEA must convene an Energy-Saving Advisory Board to review and comment on draft and final versions of the plan, plan updates, and plan supplements, goals, milestones, budgets and performance indicators, recommendations, and other matters. By March 30, 2006, and at one-year intervals thereafter through 2013, MEA must submit an annual report on the fund to the General Assembly in cooperation with the Comptroller.

**Current Law:** The Electric Customer Choice and Competition Act of 1999 (Chapter 4) restructured the electric industry, allowing for consumer choice of electricity suppliers. As a result, Maryland's electric industry was opened to competition in 2000; however, the law and related settlements with utilities also resulted in a temporary rate freeze for residential and commercial customers, so consumers had little incentive to switch suppliers. The freeze is longer for residential consumers and varies by utility.

There are separate rates and freezes for generation, distribution, and transmission. A total rate freeze will end for Baltimore Gas & Electric customers in June 2006; the PEPCO and Delmarva generation rate freeze end in June 2005. Allegheny's residential rate freeze lasts through 2008, but the company's bankruptcy proceedings could affect the freeze. Following the end of the freeze, the transmission rate will be set by the Federal Energy Regulatory Commission and distribution rates will be set by PSC. Generation

rates, however, will be determined by the market. Rates are expected to increase after the freeze ends.

The restructuring law also required PSC to ensure that restructuring did not affect cost effective conservation programs and directed it to evaluate whether current and potential programs were cost effective. PSC issued a report required by the statute that concluded that such programs should be evaluated by determining an overall demand reduction goal and whether the goal is worth the effort and related costs. It recommended using general funds or general obligation bonds as financing tools.

Chapter 398 of 1998 directed PSC to require gas and electric companies to establish programs deemed appropriate to conserve energy and to adopt reasonable financial incentives for companies to establish such programs.

**Background:** As a result of restructuring, electric utilities are seeking ways to reduce discretionary expenditures while maximizing electricity sales to recover fixed costs and increase profits. As a result, most have diminished or eliminated energy efficiency programs. According to the American Council for an Energy Efficient Economy, energy efficiency spending by utilities peaked at \$113 million in 1995 and declined to \$17 million in 1999.

However, MEA has developed two programs – the Energy Star Marketing Campaign and the Contractor Training Program – using \$1 million provided from the merger of PEPCO and Conectiv. The Energy Star project educates consumers about the benefits of purchasing Energy Star appliances and homes. The pilot program is expected to save consumers \$2 million annually. The training program educates heating and cooling contractors on installation techniques to improve efficiency. The training program will benefit an estimated 1,500 consumers and produce \$170,000 in energy savings per year. A settlement in 2000 with Baltimore Gas & Electric and Allegheny provided for a surcharge of up to 1 mill per kilowatt hour to fund programs serving customers of those utilities but the surcharge and related programs have not been implemented.

Eighteen states (including Maryland) and the District of Columbia have adopted electricity restructuring; all but Maryland and Virginia have developed a public benefits fund similar to that proposed in this bill. The surcharge per customer varies from .03 mills per kilowatt hour in Illinois to 3 mills in Connecticut. Other states that have not restructured their electric power industries (Vermont and Wisconsin) are implementing energy efficiency programs supported by a fund similar to that proposed in this bill.

In order to address issues related to energy conservation and efficiency, the Governor established the Task Force on Energy Conservation and Efficiency in January 2001. MEA advises that the proposed funding mechanism and energy efficiency programs

under this bill are a direct result of the recommendations made by the task force in its report to the Governor.

The U.S. Energy Information Administration (EIA) expects residential energy use to increase by 25% between 2002 and 2025. Most of the projected growth (76%) is related to increased use of electricity. Natural gas use in the residential sector is projected to grow by 1.5% per year from 2002 to 2010 and 0.9% per year to 2025. Natural gas prices for residential customers are projected to increase by 9% from 2002 to 2025, remaining competitive with heating oil.

**State Revenues:** The bill specifies that PSC must set the level of the charge on retail electric customers at 0.025 cents (0.25 mills) per kilowatt-hour for fiscal 2005. The bill authorizes but does not require PSC to reset the charge on October 1, 2005 by up to 0.05 cents (0.5 mills) per kilowatt-hour and up to 0.1 cents (1 mill) per kilowatt-hour thereafter, if necessary. MEA advises that approximately 81,900 low-income households will be exempt from the charge.

Based on information provided by MEA, special fund revenues from the investment charge would total an estimated \$5.8 million in fiscal 2005, accounting for the October 1 start date of the charge, \$13.6 million in fiscal 2006, \$27.1 million in fiscal 2007, and \$31 million from fiscal 2008 to fiscal 2013. If the 0.025 cent rate remains in effect, the annual revenue will be \$7.7 million. The schedule for increased charges does not follow the fiscal year; therefore, the fiscal year revenues will include nine months of one charge and three months of the succeeding charge.

These estimates are based on average electricity and gas consumption in the residential sectors as reported by the U.S. Department of Energy (USDOE) for Maryland utilities for 2001 and PSC. These estimates assume that all investor-owned utilities will participate in the program, but that municipal electric corporations and cooperatives will opt out. The estimates also assume that PSC will not suspend the charge as authorized by the bill under specified circumstances and do not include any State matching funds or any other funds. To the extent that any such funds are appropriated, special fund revenues would increase.

The bill provides that any revenues remaining in the special fund at the end of fiscal 2013 be returned to customers in a manner prescribed by PSC.

**State Expenditures:** Special fund expenditures would increase by an estimated \$5.8 million in fiscal 2005. The Office of People's Counsel advises that it could handle any increase in workload with existing budgeted resources. The estimates do not include any State matching funds or any other funds appropriated to the fund.

*Maryland Energy Administration*

Special fund expenditures would increase by an estimated \$5.8 million in fiscal 2005, which includes \$187,754 for personnel and \$5.6 million for contractual services to implement programs pursuant to the energy-saving investment plan. Contractual services include approximately \$307,000 of additional administrative costs associated with the programs.

This administrative cost estimate reflects the cost of hiring three employees (an energy efficiency program manager, a marketing specialist, and a procurement specialist) to: (1) coordinate all program activities; (2) provide marketing expertise for the Energy Star Marketing program; and (3) provide fiscal management and oversight. The estimate includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses and accounts for the October 1 effective date of the surcharge. The information and assumptions used in calculating the estimate are stated below:

- no more than 10% of the funds collected may be expended on management and supervision of activities, as provided by the bill;
- contractual services will be used for independent evaluation and monitoring of all energy efficiency programs or renewable energy projects, a comprehensive survey to define current energy use practices, and program support;
- substantial in-state travel;
- the purchase of a computer and office equipment, including data servers, personal computers, software, desks, and file space for each position; and
- extensive use of contractors (private businesses and nonprofit organizations) to design and administer the programs.

Salaries and Fringe Benefits	\$135,111
Contractual Services (Administrative only)	307,070
Communications	18,750
Equipment	15,600
Travel and Other Operating Expenses	<u>18,293</u>
<b>Total FY 2005 Administrative Expenses</b>	<b>\$494,824</b>
<b>Total FY 2005 Program Expenses</b>	<b>\$5,258,203</b>

Future year administrative expenditures reflect full salaries with 4.6% annual increases and 3% employee turnover and 1% annual increases in ongoing operating expenses.

MEA advises that it would spend the remaining fund balance each year on programs established pursuant to the energy-saving investment plan. These expenditures are estimated to total approximately \$5.3 million in fiscal 2005. Program expenditures may vary in the out-years depending on the available fund balance. A breakdown of estimated costs for the anticipated residential programs is provided below, according to the fiscal 2005 rate and the additional rates authorized by the bill for future years.

<u>Anticipated Programs</u>	<b>Estimated Expenditures for FY 2005 (.025 cents) (\$ in millions)</b>	<b>Estimated Expenditures (.05 cents) (\$ in millions)</b>	<b>Estimated Expenditures (0.1 cent) (\$ in millions)</b>
<i>Residential Programs (total)</i>	<b>\$5.3</b>	<b>\$13</b>	<b>\$30.4</b>
Existing Homes Programs	1.1	4.3	7.6
New Homes Programs	.55	2.0	4.0
Residential Appliances Programs	3.2	6.0	16
Low-income Programs	0.4	0.75	2.8

The residential programs may include: (1) an existing homes program, including programs to encourage the use of more efficient water heaters, windows, and HVACs, and programs providing home energy audits and certifications; (2) programs to provide education and training related to building codes, programs to provide information and incentives to builders and developers for the construction of energy efficient model homes, and an education program targeting builders and subcontractors related to the design and construction of energy efficient homes; (3) a residential appliances program, to promote the sale and purchase of Energy Star® appliances and products and to encourage the retirement and recycling of older, less efficient appliances; and (4) programs for low-income energy consumers, including HVAC assistance.

Based on the projected revenue, up to \$1.2 million (20%) could be set aside for renewable energy projects in 2005. MEA advises that it will review existing successful renewable energy projects in other states to help the board determine which renewable energy projects should be implemented. Examples of potential projects include:

- *Customer choice:* The Utah Power Blue Sky campaign gives customers a choice in how their energy is produced. Demand for renewable energy (enhanced by a marketing program) is large enough to allow renewable power to be bought at a lower cost;

- *Photovoltaic:* New York is providing funding for demonstration photovoltaic systems on model homes (pays for \$10 per watt up to \$20,000); and
- *Wind:* Rhode Island is encouraging the development of wind turbines through a combination of grants and financing support mechanisms.

To the extent that special fund revenue or program selection varies, program expenditures would vary accordingly.

#### *Public Service Commission*

PSC advises that it would need to hire one regulatory economist to independently evaluate and advise PSC on the plans submitted by MEA (including the development of databases, monitoring program performance, and comparing the results of Maryland programs to programs in other states). Personnel costs are approximately \$43,888 in fiscal 2005, accounting for a 90-day start-up delay. As the bill permits PSC to retain 1% of the fund's revenues (\$58, 111 in fiscal 2005), these costs and any other administrative expenses would be covered by the fund.

**Local Fiscal Effect:** It is assumed that a municipal corporation or electric cooperative that provides retail electric or gas service would decline to collect the charge as provided by the bill. Accordingly, their customers, including any local jurisdictions, would not be required to pay the charge. Several of the State's local jurisdictions may be exempt from the program since their electricity services are provided by municipal systems, such as Berlin, Easton, Hagerstown, Thurmont, and Williamsport. Likewise, local jurisdictions served by electric cooperatives also could be exempt, such as Port Tobacco, La Plata, Indian Head, and Leonardtown.

**Small Business Effect:** Small home-based businesses served by investor-owned utilities would incur increased expenditures from fiscal 2005 through fiscal 2013 as a result of the charge. To the extent that any funds remain in the fund at the end of fiscal 2013, they would be returned to customers. As consumers of electricity, small businesses paying into the fund could directly benefit from the programs established pursuant to the bill.

To the extent the bill results in the use of more energy-efficient practices and products, these businesses would realize energy savings in the long run. To the extent that the programs developed by MEA result in an increase in the demand for energy-efficient products or services, any small business manufacturing, selling, or providing such products and services would benefit. Small businesses would also benefit to the extent that they are hired as contractors or subcontractors to implement the programs established pursuant to the bill.



**Additional Comments:** The average annual cost for the energy-saving investment charge is estimated to be \$5.76 for each residential electric and gas customer paying into the program in fiscal 2005 at 0.025 cent per kilowatt hour. (The cost for customers who use natural gas and oil heating systems could be slightly less.) The annual charge rises to \$11.52 in fiscal 2006 if the rate increases to 0.05 cent per hour and to \$23.03 per year starting in fiscal 2007 if the maximum rate allowed under the bill (0.1 cent per kilowatt hour) is charged.

To the extent the bill results in greater energy efficiency, customers paying into the fund would realize energy savings in the long run. The average monthly electricity bill for Maryland residents in 2000 (the most recent year available) was \$79.92.

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### **Additional Information**

**Prior Introductions:** Similar bills were introduced as SB 373 (2003), SB 541/HB 1332 (2002), and SB 688/HB 1322 (2001). SB 373 of 2003 was heard by the Senate Finance Committee, which took no action. SB 541 of 2002 was reported unfavorably from the Finance Committee, and HB 1332 was withdrawn. SB 688/HB 1322 of 2001 both received unfavorable reports. Earlier versions of this bill applied the charge to commercial and/or industrial consumers and did not allow PSC to retain 1% of the fund proceeds to cover costs.

**Cross File:** None.

**Information Source(s):** Maryland Energy Administration, U.S. Energy Information Administration, Public Service Commission, Department of Human Resources, Office of People's Counsel, Department of Legislative Services

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Analysis by: Ann Marie Maloney

Direct Inquiries to:  
(410) 946-5510  
(301) 970-5510