

Department of Legislative Services
Maryland General Assembly
2008 Session

FISCAL AND POLICY NOTE

Senate Bill 278
Finance

(Senators Pipkin and Rosapepe)

Maryland Energy Independence Act of 2008

This bill requires that 100% of the electricity used in the State to supply an electric company's standard offer service (SOS) be generated within the State from the electric company's own generating facilities by 2018. The Public Service Commission must develop regulations for enactment of the legislation and provide for appropriate cost recovery for the construction of electric generation and transmission infrastructure.

The bill takes effect July 1, 2008.

Fiscal Summary

State Effect: The bill's requirements could be handled with existing budgeted resources.

Local Effect: None.

Small Business Effect: None.

Analysis

Bill Summary: An investor-owned electric company is required to construct, acquire or lease, and operate its own peak load or other generating facilities located within the State to supply a certain percentage of their SOS load; in prespecified distinct 10% increment ranging from 10% in 2009 to 100% in 2018 and beyond. Any electricity generated in the State in excess of the required percentages may be offered for trade through markets operated by PJM Interconnection.

By January 31, 2009, PSC must determine the statewide electricity usage level for calendar 2008, this amount will be the baseline usage level. Starting January 1, 2010, all electricity that is supplied for distribution in the State in excess of the baseline level must be generated in the State.

By March 1, 2009, PSC must adopt regulations applicable to all electric companies and electricity suppliers to implement the bill's requirements. By January 31 of each year, PSC must review and report on the amount of electricity generated and used within the State during the previous year to the Governor and the General Assembly. Once electricity generation reaches the 100% level, PSC has up to three months to make recommendations to remove obsolete provisions regarding electricity supply imported from other states.

The bill creates the requirement that PSC must consider the need to meet existing and future demand for electric service when considering an application for a certificate of public convenience and necessity (CPCN) by a generating facility.

Current Law: In order to meet long-term anticipated demand in the State for SOS and other electricity supply, PSC may require or allow an investor-owned electric company to construct, acquire or lease, and operate its own generating facilities, and transmission facilities necessary to interconnect the generating facilities with the electric grid, subject to appropriate cost recovery.

The licensing of new electric power plants or overhead transmission lines in the State is a comprehensive two-part process involving PSC and several other State agencies, including the Department of Natural Resources and the Maryland Department of the Environment. PSC is the lead agency for licensing the siting, construction, and operation of power plants in the State. Companies wishing to construct a new power plant or an overhead transmission line must apply to PSC for a CPCN.

In an application for a CPCN, PSC must consider the recommendation of the governing body in which the generating facility or overhead transmission line may be located. PSC must also consider the effect of the generating station or overhead transmission line on:

- the stability and reliability of the electric system, economics, aesthetics, historic sites, aviation safety, air and water pollution; and
- the availability of means for the required timely disposal of wastes produced by any generating facility.

Also, for the construction of any overhead transmission line, the commission must consider the need to meet existing and current demand for electric service.

To obtain the best price for SOS for residential and small commercial customers, PSC may require each investor-owned electric company to obtain its electricity supply through a competitive process. PSC may also require or allow an investor-owned electric

company to procure electricity for these customers directly from an electricity supplier through one or more bilateral contracts outside the competitive process.

Background: The Electric Customer Choice and Competition Act of 1999 (Chapters 3 and 4) facilitated the restructuring of the electric utility industry in Maryland. The Act required electric companies to divest themselves of generating facilities or to create a structural separation between the unregulated generation of electricity and the regulated distribution and transmission of electricity. Some electric companies created separate entities to operate unregulated and regulated businesses under a single holding company structure and other companies divested generation facilities.

Requiring that any investor-owned electric company either own or lease and operate enough generation capacity in the State to meet SOS demand would require significant changes in the electric utilities' market structure. Allegheny Power, Delmarva Power & Light, and Potomac Electric Power Company have affiliated companies with significant generation capacity. However, the majority of the generation owned by these affiliated companies are not located in the State, and these affiliates operate as independent business entities.

To meet the requirements of the bill, electric companies would have to build, purchase or lease, and operate a substantial amount of generation capacity. An affiliate to Baltimore Gas & Electric (BGE), Constellation Generation Group, has significant generation capacity in the State that may be available to BGE or any of the other electric companies. **Exhibit 1** shows the investor-owned electric companies, the total peak electric demand in the service territory, the SOS peak demand, and the amount of generation capacity owned by affiliated companies in the State.

Exhibit 1
In-State Electricity Supply and Demand (Megawatts)

<u>Electric Company</u>	February 2008 Total Peak Demand	February 2008 SOS Peak Demand	In-state Affiliated Generation Capacity
Allegheny Power	1,491	1,054	115
Baltimore Gas and Electric	7,388	4,686	5,352
Delmarva Power & Light	954	661	10
Potomac Electric Power	<u>3,503</u>	<u>1,951</u>	<u>-</u>
Total	13,336	8,352	5,477

Source: Public Service Commission

PSC estimates that the peak summer electricity demand is over 15,200 megawatts (MW) and the current operational generation capacity in the State is approximately 12,500 MW. These include 37 power plant sites (2 megawatts or greater), all interconnected to the transmission grid. Large generation facility owners in Maryland include • independent power producers (affiliates of in- and out-of-state electric distribution companies, or independent companies, such as Mirant); • publicly owned electric companies (*i.e.*, municipal and cooperatives), and • self-generators (industry- or government-owned power plants).

Competitive suppliers have focused on serving the large commercial and industrial market in each of the four electric company distribution territories in Maryland. As of February 2008, these electric suppliers have obtained 94% of the large commercial and industrial (C&I) markets, 67% of the medium C&I markets, and 30% of the small C&I market. Electric suppliers provide little more than 3% of residential load. To the extent that electricity customers switch from SOS to competitive suppliers, the peak demand for SOS will decrease.

PSC indicates that nearly 30% of electricity used in Maryland is generated from sources outside the State. Maryland's dependence on out-of-state generation resources could increase over the next 5 to 10 years due to potential growth in electricity demand, and the possible de-rating or retirement of existing generating units. Delaware, the District of Columbia, New Jersey, New York, and Virginia are all highly dependent on imported electricity and are located within PJM, and compete with Maryland for access to electricity sources in the PJM western region.

Because states bordering the south, east, and north of Maryland are also significant importers of electricity, Maryland imports the bulk of its required electricity through backbone transmission lines traveling in West Virginia and Pennsylvania. The current capacity of the transmission network through which electricity is imported into Maryland can also limit the amount of electricity that can be delivered into the State during times of peak demand. Upgrades are planned, however, to help ensure reliability. PSC expects Maryland's dependence on out-of-state electricity supplies will likely increase due to the projected increases in demand by PJM and electric utilities, few new electric generation projects scheduled to be built in the immediate region during the next five years, and the possibility of fossil-fired generating capacity being de-rated or retired to comply with federal and State air emission requirements.

As previously mentioned, companies wishing to construct a new power plant must apply to PSC for a CPCN. Currently, there are a number of Maryland-based projects undergoing CPCN review, as presented in **Exhibit 2**. This includes the Calvert Cliffs 3 nuclear facility with approximately 1,600 MW, undertaking simultaneous federal review. Maryland power plant projects currently under review have a combined capacity of

approximately 3,800 MW. Additional power plants that are currently being discussed for construction in the State total 1,000 to 1,300 MW.

Exhibit 2
Potential Generating Capacity Additions in Maryland

<u>Project</u>	<u>Developer</u>	<u>Local Jurisdiction</u>	<u>Primary Fuel</u>	<u>Capacity (MW)</u>
Allegheny Heights	Clipper Windpower	Garrett	Wind	100
Roth Rock	Synergics	Garrett	Wind	30
Calvert Cliffs 3	Constellation	Calvert	Nuclear	1,600
St. Charles	CPV	Charles	Natural Gas	640
Riverside 5	Constellation	Baltimore City	Natural Gas	85
Perryman 6	Constellation	Harford	Natural Gas/Petroleum	640
Jennings Randolph Dam	PPL Holtwood	Garrett	Water	10
Gould Street	Constellation	Baltimore City	Natural Gas	100
Catoctin	Sempra	Frederick	Natural Gas	<u>600</u>
				3805

Standard Offer Service

The Maryland Electric Customer Choice and Competition Act of 1999 accommodated retail customers that did not shop or could not shop for electric power supplies, while the competitive retail market developed and electric suppliers entered the retail markets to supply electricity products. During a multiyear transition period, the traditional electric utilities made available SOS at rates frozen and below the rates in effect prior to electric restructuring. For Maryland’s various customer classes, these fixed rates have largely expired; however, SOS has been extended and now reflects market prices for power. Coinciding with the removal of fixed SOS rates, was a realization of high and volatile wholesale market prices throughout the region, including the Baltimore/Washington metropolitan area. Higher wholesale market prices reflect higher fuel prices to generate power, barriers to import lower cost power supplies, and increased costs of environmental compliance.

Local electric companies (*i.e.*, investor-owned utilities) who own the “wires” portion of the electric system obtain electricity supply through a competitive process for residential and small commercial customers that participate in SOS. Electric companies are required to procure electricity for residential and small commercial customers through one or more bilateral contracts. The investor-owned electric companies submit bids to supply anticipated SOS load for residential and small commercial customers, as part of a portfolio of blended wholesale supply contracts. Current SOS contracts for residential

and small commercial customers are all two years in length. SOS contracts for medium size commercial customers are three months in length. The blended portfolio mitigates the potential for sudden retail price changes due to volatile wholesale market conditions. Additionally, in order to prevent an excessive amount of load from being exposed to upward market price risks and volatility, PSC may stagger the dates of the wholesale auctions.

State Effect: Legislative Services advises the bill's requirements could be handled with existing resources of the PSC. PSC states that it will need to retain consultants at an annual cost of \$500,000 to evaluate electricity generated by electric companies. The bill would likely require CPCN hearings and the participation of various State agencies in the licensing process. The Maryland Energy Administration, the Department of Natural Resources, and the Office of the People's Council advise that the requirements of the bill could be met with existing resources.

Additional Information

Prior Introductions: A similar bill, SB 853 of 2007, was heard by the Senate Finance Committee but no further action was taken.

Cross File: None.

Information Source(s): Maryland Energy Administration, Department of Natural Resources, Public Service Commission, Office of People's Counsel, Department of Legislative Services

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