SB 976

Department of Legislative Services

Maryland General Assembly
2013 Session

FISCAL AND POLICY NOTE

Senate Bill 976 (Senator Pipkin)
Finance

Renewable Energy Portfolio Standard - Tier 1 Renewable Sources - Qualifying Natural Gas

This bill adds "qualifying natural gas" as a Tier 1 renewable source eligible to meet the State's Renewable Energy Portfolio Standard (RPS) beginning with compliance year 2014.

The bill takes effect January 1, 2014.

Fiscal Summary

State Effect: The addition of natural gas as a Tier 1 resource likely reduces renewable energy credit (REC) prices and, therefore, State expenditures on electricity, beginning in FY 2014; however, the amount cannot be reliably estimated at this time. The bill is not anticipated to materially affect Strategic Energy Investment Fund (SEIF) revenue from alternative compliance payments (ACPs).

Local Effect: Local governments may benefit from reduced expenditures on electricity beginning in FY 2014; however, the amount cannot be reliably estimated at this time.

Small Business Effect: Small businesses may benefit from reduced expenditures on electricity; however, the amount cannot be reliably estimated at this time.

Analysis

Bill Summary: "Qualifying natural gas" means natural gas that powers an electric generation facility that (1) was previously powered by coal combustion or (2) replaces an electric generation facility powered by coal combustion. Energy from qualifying natural

gas is eligible for inclusion in meeting the RPS only if the source is connected with the electric distribution grid serving Maryland.

Current Law:

Maryland's RPS

Maryland's RPS requires that renewable sources generate specified percentages of Maryland's electricity supply each year, increasing to 20%, including 2% from solar power, by 2022. Electricity suppliers must submit RECs equal to the percentage mandated by statute each year, or pay an ACP equivalent to the supplier's shortfall. RECs are classified as Tier 1, Tier 1 Solar, or Tier 2. Generally, energy from a Tier 1 source is eligible for inclusion in meeting the State RPS regardless of when the generating system or facility was placed in service.

Examples of Tier 1 sources include wind; qualifying biomass; methane from anaerobic decomposition of organic materials in a landfill or wastewater treatment plant; geothermal; ocean, including energy from waves, tides, currents, and thermal differences; a fuel cell that produces electricity from a Tier 1 source; a small hydroelectric plant of less than 30 megawatts; poultry litter-to-energy; and waste-to-energy. Tier 1 Solar sources include photovoltaic cells and residential solar water heating systems commissioned in fiscal 2012 or later. Any ACPs are used by the Maryland Energy Administration (MEA) to support new renewable energy sources.

A REC is a tradable commodity equal to one megawatt-hour of electricity generated or obtained from a renewable energy generation resource. A REC has a three-year life during which it may be transferred, sold, or redeemed. REC generators and electricity suppliers are allowed to trade RECs using the Generation Attributes Tracking System, a trading platform designed and operated by PJM Environmental Information Services, Inc. and approved by the Public Service Commission (PSC), which tracks the ownership and trading of RECs.

Strategic Energy Investment Fund

Chapters 127 and 128 of 2008 (SB 268/HB 368) created the Maryland Strategic Energy Investment Program, and the implementing SEIF, to decrease energy demand and increase energy supply to promote affordable, reliable, and clean energy. The fund is administered by MEA. Currently, the fund's primary source of revenue is proceeds from the sale of carbon dioxide (CO_2) allowances under the Regional Greenhouse Gas Initiative. Money received by SEIF from the CO_2 auctions is required by statute to be allocated across various energy programs, including those that support energy efficiency and conservation, electricity assistance for low-income individuals, and renewable and

clean energy. The fund may also receive money as appropriated in the State budget and from ACPs paid under the State RPS, among others. Revenues from ACPs are accounted for separately and are used to make loans and grants to support the creation of new Tier 1 or Tier 1 Solar renewable sources (depending on the ACP source) in the State.

Background: According to PSC, current Tier 1 REC prices for Maryland are approximately $4. Assuming a capacity factor of 64%, a 200-megawatt natural gas plant produces over 1.1 million RECs per year under the bill. This represents over half of the 2010 Tier 1 nonsolar RPS obligation (which was 1.9 million RECs) and approximately 10% of the 2020 Tier 1 nonsolar RPS obligation.

RPS Compliance

For the 2010 compliance year, electricity suppliers retired 3.6 million RECs (1.9 million Tier 1 nonsolar) at a cost of $7.6 million. The *total* cost of compliance with the 2010 RPS was just under $8 million, with ACPs accounting for $217,620 of the total. **Exhibit 1** summarizes the results of the annual compliance reports filed by electricity suppliers with PSC for the years 2006 through 2010. In general, electricity suppliers have been able to meet all of their Tier 1 and Tier 2 REC requirements; therefore, the predominant source of ACPs is from the Tier 1 Solar requirement.

Exhibit 1
Results of RPS Compliance Reports
2006-2010

Compliance Year	Tier 1	Tier 1 Solar	Tier 2	Total
2006				
RPS Obligation	520,100	-	1,300,200	1,820,300
Retired RECs	552,900	-	1,322,100	1,874,900
ACP Required	**$13,300**	**-**	**$24,900**	**$38,200**
2007				
RPS Obligation	553,600	-	1,384,000	1,937,600
Retired RECs	553,400	-	1,382,900	1,936,200
ACP Required	**$12,600**	**-**	**$23,800**	**$36,400**
2008				
RPS Obligation	1,183,400	2,900	1,479,300	2,665,700
Retired RECs	1,184,200	200	1,500,400	2,684,800
ACP Required	**$9,000**	**$1,218,700**	**$8,200**	**$1,235,900**
2009				
RPS Obligation	1,228,500	6,100	1,535,700	2,770,300
Retired RECs	1,280,900	3,300	1,509,300	2,793,500
ACP Required	**$400**	**$1,147,600**	**$300**	**$1,148,300**
2010				
RPS Obligation	1,922,100	16,000	1,601,700	3,539,800
Retired RECs	1,931,400	15,500	1,622,800	3,569,600
ACP Required	**$20**	**$217,600**	**-**	**$217,600**

Notes: Some electricity suppliers retired more RECs than required. Numbers may not sum to total due to rounding.

Source: Public Service Commission

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Office of People's Counsel, Public Service Commission, Department of Legislative Services

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