#### **Department of Legislative Services**

Maryland General Assembly 2011 Session

## FISCAL AND POLICY NOTE

House Bill 1227 Economic Matters (The Speaker, et al.) (By Request - Administration)

## Economic Development Opportunities Program Account - Wind Turbine Manufacturing Facility

This Administration bill includes the attraction of a new wind turbine manufacturing facility to the State, or expansion of an existing private-sector enterprise to include wind turbine manufacturing, in the definition of "extraordinary economic development opportunity" eligible to receive State loans, grants, and investments under the Economic Development Opportunities (Sunny Day) Account. The offshore wind turbine manufacturing facility must be an enterprise that manufactures for offshore wind turbine projects, creates or retains substantial employment, and invests capital at a level equal to at least two times the value of State incentives, instead of five times for a private-sector enterprise under current law. The value of State incentives may not exceed \$50.0 million.

## **Fiscal Summary**

**State Effect:** General fund expenditures may increase by up to \$50.0 million. The timing of these expenditures is not specified in the bill and could occur over a number of years. Revenues are not directly affected.

## Local Effect: Minimal.

**Small Business Effect:** The Administration has determined that this bill has minimal or no impact on small business (attached). Legislative Services generally concurs with this assessment, with additional comments.

## Analysis

**Bill Summary:** A "wind turbine manufacturing facility" is a facility that manufactures wind turbines or the components necessary for the operation, maintenance, transport, or installation of wind turbines or their components. A "wind turbine" is defined as an

energy conversion system that converts wind energy into electricity through use of a wind turbine generator and includes such elements as a wind turbine generator hub, blade or rotor, tower, and transformer.

**Current Law:** The Sunny Day Account was established in 1988 to provide conditional loans and investments in order to take advantage of extraordinary economic development opportunities. It is administered by the Department of Business and Economic Development (DBED). An extraordinary economic development opportunity includes the attraction, establishment, expansion, or retention of a private-sector enterprise, public institution, private institution, or federal research and development institute. That opportunity must be consistent with the State's strategic plan for economic development, and create or retain substantial numbers of jobs. The Governor may provide an appropriation in the budget bill to the Sunny Day Account for a specific or general purpose.

Regarding the attraction of a new private-sector enterprise to the State or retention or expansion of an existing private-sector enterprise, an "extraordinary economic development opportunity" must be an enterprise that (1) maintains strong financial condition and minimal credit risk profile; (2) is capable of accessing alternative sources of financing through financial institutions or capital markets; (3) is consistent with the strategic plan of the State for economic development; (4) creates or retains substantial employment, particularly in areas of high unemployment; and (5) invests capital at a level equal to at least five times the value of the incentive offered.

The Legislative Policy Committee (LPC) may approve an economic development opportunity that does not meet the definition of extraordinary if the executive agency requesting the transfer of funds offers a detailed justification. The committee must give particular consideration to an exemption that would provide a significant opportunity for an area with a relatively high unemployment rate or low per capita income.

## **Background:**

## Sunny Day Account

DBED has financed a total of 120 Sunny Day transactions with an aggregate original balance of \$170.6 million. As of June 30, 2010, the total outstanding portfolio consisted of 20 loans, conditional loans, conditional grants, and investments with a total original approved balance of \$49.3 million and an outstanding balance of \$35.0 million. Based on full or partial achievement of performance requirements, conditional loans with an aggregate original amount of \$63.5 million have received either full or partial forgiveness of loans, totaling \$57.9 million.

In fiscal 2010, DBED closed one project totaling \$4.0 million. The project, an investment incentive for Morgan Stanley, was approved in fiscal 2008. In fiscal 2010, the Sunny Day Account forgave a \$1.0 million loan to Morgan Stanley.

### Offshore Wind Development

Numerous efforts are currently underway to promote offshore wind generation in Maryland. In addition to this bill, the Administration has introduced a legislative proposal (SB 861/HB 1054) requiring the Public Service Commission (PSC) to order the State's four investor-owned electric companies to enter into a long-term power purchase agreement with one or more qualifying offshore wind generators. PSC must issue a request for proposals (RFP) and approve contracts awarded to an offshore wind generator for between 400 and 600 megawatts (MW) of nameplate capacity for a period of at least 20 years. Under the bill, PSC is required to establish a nonbypassable surcharge or other mechanism to ensure costs or savings associated with a power purchase agreement are shared equitably among all customers across all distribution territories, with some exceptions.

Offshore wind developers may also potentially receive a power purchase agreement or other form of support through efforts undertaken by PSC to increase the amount of electric generation in the State. In December 2010, PSC issued a draft RFP to solicit offers from persons seeking to construct new generating facilities in or around the State and is currently receiving comments on the draft. Under the RFP, respondents may offer energy from any generation capacity resources, not to exceed 1,800 MW on an installed capacity basis. PSC may award one or more contracts to one or more suppliers from new generation and may direct one or more electric companies to construct new generation up to 1,800 MW; however, PSC reserves the right to reject all submissions if proposals are not cost-effective. The draft RFP is the result of Case Number 9214, which was initiated in September 2009 for PSC to investigate whether it should exercise its authority to order electric companies to enter into long-term contracts to attract new generation or to construct, acquire, or lease and operate new generation facilities in the State. Persons seeking to install offshore wind generating facilities, as well as conventional generation, may submit a proposal under this RFP.

Recent changes in federal regulations established the U.S. Department of the Interior's Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) as the federal agency responsible for overseeing the safe and environmentally responsible development of energy and mineral resources on the Atlantic Outer Continental Shelf (OCS). In January 2011, nine indications of interest were received from eight parties wishing to obtain a commercial lease for wind energy projects in the Maryland portion of the OCS. The area offshore Maryland is made up of 29 whole OCS blocks and 4 partial OCS blocks. The western edge is approximately 10 nautical miles from the Ocean City, Maryland coast, and the eastern edge is approximately 207 square nautical miles.

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There are currently at least 2,000 MW of U.S. offshore wind generation in the permitting process, but none has been installed. To date U.S. offshore wind generators have signed power purchase agreements with utilities in Delaware, Massachusetts, and Rhode Island. Offshore wind generation is also being considered in several states on the Atlantic Coast, including Georgia, Maine, New Jersey, New York, North Carolina, and Virginia.

## Existing Maryland Programs for Business Investments

DBED considers investments the primary tool for business assistance. The agency generally purchases equity from companies to provide capital for these companies. Investments are made with the hope of an eventual financial return, but the timing and the amount of the return are unknown. The Maryland Venture Fund began in 1994 with the establishment of the Enterprise Fund, which was developed to make equity investments in "new" State enterprises. This initiative was later enhanced to target investments in early stage, high technology companies experiencing difficulties attracting private-sector financing. Maryland Venture Fund activities are provided through five programs: the Enterprise Investment Fund, the Challenge Investment Program, the Enterprise Venture Capital Limited Partnerships (VCLP) Fund, the Maryland/Israel Development Fund, and the Federal Information Processing Standards (FIPS) Certification Grant Program. About 60% of the fund is invested in technology companies and 40% is invested in life science companies. In the fiscal 2010 report on the Maryland Venture Fund, DBED stated that without additional money the fund will have a limited ability to make new investments beyond fiscal 2011 and will primarily monitor existing portfolio companies.

The Enterprise Investment Fund program provides capital through equity purchases for start-up companies that are developing innovative technologies. Investments are limited to 25% of the company's total equity and require a three-to-one outside investor match. Investments, except those made in venture capital limited liability companies, are generally limited to \$500,000 and may not exceed 15 years in duration. A 10-member advisory board provides input for investment recommendations. The program has made investments in 94 ventures through June 30, 2010. A total of \$39.2 million in investments has been made since fiscal 1994; DBED has received \$62.3 million in returns from these investments through the end of fiscal 2010. The fair market value of the portfolio totaled approximately \$14.0 million as of June 30, 2010. DBED projects that in fiscal 2011 and 2012 it will not receive any funds from companies exiting the Enterprise Investment and Challenge Investment programs and expects the programs to generate \$400,000 in income annually through equity investment earnings, royalties, and interest income.

The Challenge Investment Program is a "seed" program to invest in high technology "start-up" firms. The program requires a minimum 1:1 co-investor match. Generally, investment amounts range from \$50,000 to \$150,000. A total of \$11.6 million in investments has been made in 174 high tech companies through June 30, 2010. In the

fiscal 2010 Maryland Venture Fund annual report, DBED did not provide information on the program's investment performance since its inception.

The Enterprise VCLP fund has invested \$11.3 million in 10 venture capital limited partnerships since fiscal 1994. According to DBED, it recognizes the lack of venture capital participation in deals under \$10.0 million and works closely with the venture capital community to connect Maryland-based early-stage and technology companies with funding sources. In the fiscal 2010 Maryland Venture Fund annual report, DBED did not provide information on the program's investment performance since its inception. The report did state that the fund has received an annual average of \$172,200 in distributions within the last three fiscal years and investments made before 2000 are close to the end of their expected lives and, accordingly, a declining number of distributions of stock/cash to DBED is expected.

# Offshore Wind Turbine Manufacturing

Historically, original equipment manufacturers (OEMs) of *on*shore wind turbine equipment have been based overseas. However, due to the expansion of onshore wind generation in the United States, since 2006, an increasing number of manufacturers of onshore wind turbines and related components have located manufacturing and assembly plants in the United States. In contrast, *offs*hore wind turbines and related components are currently manufactured overseas.

Offshore wind turbines are generally marinized versions of onshore equipment, but they tend to be larger and require specialized towers and bases. As a result, a large portion of the project costs results from transporting very large parts from component manufacturers to the OEM assembly plant and then to the installation site. Offshore wind projects require the use of ports that meet specific requirements. Port facilities must have lay-down acreage to allow for preassembly and must also have infrastructure capable of accommodating specialized ships to transport equipment to the offshore site. Even though the United States has not yet developed an offshore wind project, the logistical requirements of transporting offshore wind turbines would encourage OEMs to establish manufacturing operations in the United States.

Due to the uncertainty in demand, OEMs of offshore turbines have been reticent to build in the United States. Based on extensive federal and state efforts to site offshore wind generating facilities, this may change. If OEMs decide to establish manufacturing facilities for offshore wind turbines and related components in the United States, the facilities established may be limited to simple assembly operations or may include manufacturing of turbine blades, electrical components, or ships necessary to transport wind turbines to the installation site.

Clipper Windpower, headquartered in California and the United Kingdom, recently broke ground on a new facility manufacturing blades for its 10 MW offshore wind turbines in

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the United Kingdom. The facility is expected to employ over 500 workers. Also, in 2010 General Electric Company (GE) announced plans to invest \$450 million to construct manufacturing facilities for offshore wind turbines and related equipment in the United Kingdom and throughout Europe. GE's plans were tied to the successful deployment of the United Kingdom government's plans to upgrade ports to accommodate offshore wind development and are expected to create up to 2,000 jobs.

### Recent Developments in the United States

Interest in manufacturing offshore wind turbine equipment in the United States has recently increased. In February 2011, Spanish turbine manufacturer Gamesa announced a partnership with Northrop Grumman to develop an offshore wind turbine prototype in Hampton Roads, Virginia. Also, in March 2011, AC Wind announced plans to retrofit a former boat factory in Salisbury, Maryland to produce wind turbine blades that may potentially be manufactured for offshore use. The plant may be operational in two years and may hire up to 200 workers.

**State Fiscal Effect:** Due to ongoing budget constraints, the Sunny Day Account does not currently have funds available to provide incentives to manufacturers of offshore wind turbine equipment. According to DBED, a fund balance of approximately \$3 million is available to fund existing projects; thus, a general fund appropriation is required to provide these incentives to potential private-sector enterprises. Because the Governor's proposed fiscal 2012 budget does not include an appropriation for the Sunny Day Account and any incentive provided is likely to be delayed until fiscal 2013, Legislative Services assumes general fund expenditures are delayed a year and then concentrated over a four-year period.

Accordingly, *for illustrative purposes only*, general fund expenditures could increase by up to \$20.0 million in fiscal 2013, and by \$10.0 million each year between fiscal 2014 and 2016 (up to the \$50.0 million total allowed in the bill). However, the timing and amount of any appropriation to the Sunny Day Account depends on the timing of the construction and installation of offshore wind turbines off the Atlantic Coast and any potential related assembly or manufacturing enterprises that may locate in the State. The timing of any grants, loans, and investments provided to offshore wind turbine manufacturers through the Sunny Day Account assumes large grants are initially provided to OEMs, and additional grants are provided to related component manufacturers in the following years. Legislative Services assumes grants, rather than loans, would be provided based on existing program experience and the rate of loan forgiveness. Thus, program revenues are not affected due to any loan repayment.

DBED can implement the bill with existing budgeted resources.

**Small Business Effect:** Under the bill, a private-sector enterprise involved in the manufacturing of offshore wind turbine equipment that attracts or retains substantial employment is eligible for State loans, grants, or investments from the Sunny Day Account. Although a facility that creates or retains substantial employment may not be considered a small business (50 or fewer full-time employees), establishment of a major offshore wind turbine manufacturing facility may indirectly create opportunities for small businesses in the State to provide supplies and related components to the facility.

# **Additional Information**

Prior Introductions: None.

**Cross File:** SB 881 (The President)(By Request - Administration) and Senator Mathias - Finance.

**Information Source(s):** Department of Business and Economic Development, National Renewable Energy Laboratory, U.S. International Trade Commission, www.offshorewind.biz, www.brightenergy.org, Department of Legislative Services

**Fiscal Note History:** First Reader - March 21, 2011 ncs/rhh

Analysis by: Erik P. Timme

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

# ANALYSIS OF ECONOMIC IMPACT ON SMALL BUSINESSES

TITLE OF BILL: Economic Development Opportunities Program Account - Wind Turbine Manufacturing Facility

BILL NUMBER: SB 881/ HB 1227

PREPARED BY: Governor's Legislative Office

#### PART A. ECONOMIC IMPACT RATING

This agency estimates that the proposed bill:

\_\_X\_\_ WILL HAVE MINIMAL OR NO ECONOMIC IMPACT ON MARYLAND SMALL BUSINESS

OR

WILL HAVE MEANINGFUL ECONOMIC IMPACT ON MARYLAND SMALL BUSINESSES

#### PART B. ECONOMIC IMPACT ANALYSIS

The proposed legislation will have no impact on small business in Maryland.