PUBLIC SERVICE COMMISSION OF MARYLAND

Annual Report on the Status of Wind-Powered Generating Stations In the State of Maryland

Prepared for
the Honorable Martin O'Malley, Governor of Maryland,
the Senate Finance Committee, and
the House Economic Matters Committee

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MARYLAND WIND ENERGY

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Under Section 2, Chapter 163, Acts 2007, the Public Service Commission ("Commission") must report to the Governor and, in accordance with § 2-1246 of the State Government Article, the Senate Finance Committee and the House Economic Matters Committee on: 1) the number of applications for and the locations of wind-powered generating stations for which approval is sought under Public Utility Companies Article, *Annotated Code of Maryland* ("PUC Article"), § 7-207.1(a)(1)(ii); 2) the status of the applications and the extent to which the wind-powered generating stations have been constructed after obtaining approval from the Commission; and 3) the status of any regulatory actions undertaken by other State or local agencies with respect to the wind-powered generating stations.

BACKGROUND

PUC Article § 7-207 requires a person to obtain approval from the Commission — in the form of a Certificate of Public Convenience and Necessity ("CPCN") — before the person may construct a generating station in Maryland. PUC Article § 7-207.1, however, allows a person to obtain approval of the Commission for the construction of generating stations that meet certain conditions and be exempted from the CPCN requirement. Section 20.79.01.03 of the Code of Maryland Regulations ("COMAR") permits a person to file an application for an exemption of the CPCN requirement for the construction of a generating station that meets the required conditions. In addition to the application, the applicant must file necessary supplementary information from the local electric company.[1]

Effective July 1, 2007, PUC Article § 7-207.1 was amended to include certain generators that produce electricity from wind. *See* PUC Article § 7-207.1(a)(1)(ii). This section provides that a generating station that produces electricity from wind may be exempted from the CPCN requirement if:

1. the generating station is land-based;
2. the capacity of the generating station does not exceed 70 megawatts;
3. the electricity that may be exported for sale from the generating station to the electric system is sold only on the wholesale market pursuant to an interconnection, operating, and maintenance agreement with the local electric company; and,
4. the Commission provides an opportunity for public comment at a public hearing.

NUMBER OF APPLICATIONS AND LOCATIONS

On January 23, 2008, pursuant to PUC Article § 7-207.1, Criterion Power Partners, LLC ("Criterion") filed an application for Commission approval of an exemption for a 70 megawatt wind-powered generating station to be located in Garrett County ("Criterion Application"). No other applications for wind-powered generating stations were filed since PUC Article § 7-207.1 was amended, either under the exemption procedure or otherwise.

[1] PUC Article § 1-101 (h) defines "electric company" as a person who physically transmits or distributes electricity in the State to a retail electric customer.

The Commission notes that prior to the July 1, 2007, statutory revisions, two CPCN applications were filed with the Commission for wind projects of less than 70 megawatts. US Wind Force LLC filed a CPCN request for a 40 megawatt Savage Mountain wind farm in Garrett and Allegany counties, which received a CPCN on March 20, 2003.[2]

Synergics Wind Energy ("Synergics") filed a CPCN request for a 40 megawatt wind project in Garrett County.[3] The Commission's Hearing Examiner issued a proposed order granting Synergics the CPCN on October 30, 2006. The order was appealed and, while under appeal, the statutory requirement was amended. Consequently, Synergics has the option of withdrawing its CPCN application, and then would be eligible to file for a CPCN exemption for this wind-powered generating station under the revised statute. It, however, has not filed such requests with the Commission.

In addition to these smaller wind farms, the Commission approved Clipper Windpower, Inc. for a 101 megawatt wind-powered plant in Garrett County on March 26, 2003.[4]

APPLICATION STATUS AND EXTENT OF CONSTRUCTION

The Criterion Application currently is being reviewed and analyzed by Commission Staff to determine whether the proposed generating station meets the conditions for an exemption and to provide the Commission a recommendation as to whether the application should be approved. The Commission also has delegated to its Hearing Examiner Division the conduct of a public hearing as required under PUC Article § 7-207.1. The assigned Hearing Examiner will coordinate with Criterion, Commission Staff, and the Garrett County governing body to schedule the date and location of the hearing in Garrett County.

Of the wind-powered stations discussed in the prior section and for which a CPCN has been granted, none of them has been constructed.

REGULATORY ACTIONS BY STATE OR LOCAL AGENCIES

The Maryland Energy Administration ("MEA") has taken the lead in promoting the development of wind-powered generation in Maryland. The Department of Natural Resources' Power Plant Research Program ("PPRP") has estimated the State's wind energy potential at approximately 850 megawatts. As the State continues to have no installed large-scale wind energy generation, MEA continues to work with its Maryland Wind Working Group ("MWWG" or "Group") to

[2] *See* Order No. 78338, *In the Matter of the Application of Savage Mountain Wind Force, LLC for a Certificate of Public Convenience and Necessity to Construct a 40 MW Generating Station in Allegheny and Garret Counties, Maryland,* Case No. 8939, as revised by Order No. 81587 dated September 7, 2007 (Commissioner Brenner dissenting in part), which extended the construction date of the CPCN.

[3] *See In the Matter of the Application of Synergics Wind Energy, LLC for a Certificate of Public Convenience and Necessity to Construct a 40 MW Generating Station in Garrett County, Maryland,* Case No. 9008.

[4] *See* Order No. 78354, *In the Matter of Clipper Windpower, Inc. for a Certificate of Public Convenience and Necessity to construct a 100 MW Wind Power Plan in Garrett County, Maryland,* Case No. 8938.

accelerate the development of wind energy in Maryland and increase its wind energy capacity in environmentally, economically and socially-responsible manners. The MWWG is a collaboration of government, industry, academia, and other wind energy stakeholders whose goal is to advance wind energy at the state and local levels. Facilitated by the MEA, the Group is funded partly through Wind Powering America, the outreach initiative of the U.S. Department of Energy's Wind Energy Program.

In addition, MEA is working closely with the PPRP and Department of General Services ("DGS") to identify state or local government facilities in which renewable energy projects, such as wind and solar, would be suitable. Over the summer of 2007, MEA assisted in the review of eligible participants through a Request for Qualifications released by DGS. In partnership with PPRP, MEA has identified one such candidate site – the Town of Crisfield, MD (Somerset County) ("City") – to build a "community" wind generation facility at the City's wastewater treatment plant. Preliminary discussions have begun on a feasibility study to be conducted for the City. In addition, MEA has met with at least four counties – Calvert, Somerset, Talbot and Worcester – that are interested in learning more about wind energy and has provided them with Wind Energy 101 presentations.

A 3.8 kilowatt ("kW") hybrid solar-wind demonstration scale project has been installed at Frostburg State University ("FSU" or "University") over the late summer of 2007. This project was designed to overcome barriers to, and increase awareness of, wind and solar energy, bolster support for other related development activities, and stimulate interest in the implementation of other small wind projects. In partnership with MEA, FSU along with the Maryland Technology Development Corporation organized a Renewable Energy Symposium in September 2007 to showcase renewable energy technologies, offer the opportunity for related businesses to exhibit their products and services, and provide a forum for the discussion of barriers in introducing wind energy as a mainstream energy resource to Maryland. The University welcomed more than 160 stakeholders to its Compton Science Center, including faculty and students from a broad range of institutions, experts, members of the tri-state community, entrepreneurs, small business owners, local and state administrators, legislators, media, and industry representatives.

The State Anemometer Loan Program, launched in September 2006, loans wind measuring devices to landowners, allowing them to quantify and characterize the wind resource available at their property. The program is designed to empower landowners by supporting their interest in wind energy through the loan of anemometers and wind vanes and providing education about wind energy development. The data collected by the anemometers will allow landowners to assess the economic feasibility of using wind energy. Six anemometers (four will be mounted atop 99 ft towers, and two will be mounted atop 164 ft towers) are available for loan. Of the six, installation of one anemometer has been completed. It was installed in April 2007 in Manchester, MD. The demand for loan of the anemometers has exceeded the available supply, and the program currently has a waitlist of more than 22 applicants.

Additionally, an online wind energy calculator is currently under development which will help Marylanders determine the feasibility of installing a wind turbine on their property. The calculator is designed to provide a quick assessment of wind resources and an approximation of

the payback of the installed wind energy system. This tool should be available in the spring of 2008.

MEA launched its pilot Windswept Grant Program in November 2007 to provide grants to individuals, businesses and local governments to install small scale wind energy systems. The program helps offset a portion of the cost of small scale wind energy projects. A limited number of grants are available to Marylanders to install eligible wind energy systems of at least 1 kW for residential properties and 1.5 kW for non-residential properties. The source of the program is the Energy Overcharge Restitution Fund.

Grant amounts are $1500 per kW for a maximum per-project amount of:

- ✦ Residential Wind Systems: $3000
- ✦ Nonresidential Wind Systems: $5000

Since November 2007, more than three dozen inquiries have been logged regarding the program and six applications have been received. Five (5) grants are currently in the process of being awarded to the following installed projects, representing 10 kW of wind energy. These projects have all been on the Eastern Shore – Dorchester, Somerset and Talbot counties. Of the $15,000 earmarked for this pilot program, $13,500 has been awarded thus far.

WINDSWEPT GRANT PROGRAM PROJECTS

- ✦ 2 Residential: East New Market, MD, 1.8 kW Skystream 3.7 (Dorchester)
- ✦ Residential: Tilghman, MD, 1.8 kW Skystream 3.7 (Talbot)
- ✦ Residential: Rhodesdale, MD, 1.8 kW Skystream 3.7 (Dorchester)
- ✦Commercial: Crisfield High School, Crisfield, MD, 1.8 kW Skystream 3.7 (Somerset)

In July 2007, the Governor pledged to install one demonstration scale renewable energy project at one school in each county by the end of FY 2008. One school, Crisfield High School in Somerset County, MD, is in the process of installing a 1.8 kW Skystream small wind energy system on its property. The turbine will be installed within the viewscape of its baseball field to maximize its visibility. Crisfield High will incorporate the turbine into the science curricula at the school in the following school year as well as offer an example to its local residents of how a wind turbine works.

The Clean Energy Production Tax Credit (“Credit”), enacted in 2006, offers Marylanders a state income tax credit for electricity generated by qualified resources, including wind, of 0.85 cents per kilowatt hour (“kWh”), and 0.50 cents per kWh for electricity generated from co-firing a qualified resource with coal. In 2007, MEA drafted regulations, which includes residential projects that may want to take advantage of this tax credit, and an application process for the Credit. This credit is available to individuals and corporations that build and generate electricity from qualified resources operational on or after January 1, 2006, but before January 1, 2011. To date, no wind energy projects have taken advantage of this credit.

CONCLUSION

Since the effective date of the statutory revision to PUC Article § 7-207.1, the Commission has received one application for an exemption for a CPCN for a wind-powered generating station, which is currently pending review. Although the Commission has granted a CPCN for several wind-powered generating stations since 2003, none of these stations have been constructed to-date. MEA is working to encourage and accelerate the construction and use of wind-powered generating stations and the State has programs to encourage the development of these renewable energy facilities. The Commission will continue to monitor the status of wind-energy generating station applications and construction.