

THE ENERGY EFFICIENCY & RENEWABLE ENERGY TRACKER

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PEOPLE & PLACES

Geostellar Expands into Benefits Programs and Adds Distribution Channels

Geostellar, a Martinsburg, West Virginia-based developer of site-specific solar PV performance data and financing information, has expanded its marketplace offerings. The firm maintains its role of data, creative financing and information services provider but is now partnered with other firms to offer PV systems as part of their product lines and benefits packages.

Geostellar's data includes information on solar resources for specific locations, system costs, state and federal incentives, solar installers and estimates of savings on electricity bills. The firm was started in 2010 with angel investors and a \$500,000 grant from the USDOE SunShot Solar Rooftop Challenge program, with an initial goal to help lower the installation cost of solar panels for the residential sector.

A second SunShot grant for \$750,000 allowed Geostellar to develop an application programming interface for its data to be integrated in financial software such as Quickbooks, TurboTax and Mint from Intuit. The firm now has several partnerships with Fortune 500 corporations, where its solar data and investment information is offered as part of employee benefit programs. Geostellar's information is part of the benefits packages of several firms including 3M, Cisco, Kimberly Clark, National Geographic and American Express. These firms offer employees discounts on PV systems, using Geostellar's system performance and financial return data.

Geostellar has also become the first solar firm to have services included in a major network marketing system. This is a result of its partnership with ACN, a telecommunications provider, and Xoom Energy, a retail provider of electricity and natural gas service.

In July of 2015, David Levine, CEO of Geostellar, received a patent for a simulation algorithm titled "Geomatic Modeling of a Solar Resource Based on Radiance Paths and Normalized Slope." To date, the firm has raised nearly \$19 million in venture capital and has 35 full-time employees.

For more information, visit geostellar.com.
SOURCE: David Levine, CEO of Geostellar.

PEOPLE & PLACES CONTINUED

Four Hydroelectric Projects Advance in the State

Two developers of hydroelectric projects are advancing four separate projects in the state. The projects are in various stages of permitting and are all located in the northern part of West Virginia at existing dams operated by the U.S. Army Corps of Engineers (USACE).

Advanced Hydro Solutions, LLC has rights to develop the Jennings Randolph Dam (14.6 MW) and the Tygart Dam (30 MW) in West Virginia. The Jennings Randolph project received a FERC license in 2012, which was renewed in 2014, and is under final review at USACE headquarters. The Tygart project received Section 401 Water Quality Certification in October 2015 and is expecting a FERC license by early 2016.

FreeFlow Power New Hydro, which is managed by Rye Development for US Renewables Group, LLC is developing the Morgantown Lock & Dam (5 MW) and the Opekiska Lock & Dam (6 MW) on the Monongahela River. The firm expects to receive initial FERC licenses for both projects in 2016 and is in the process of applying for state-level permits. Recently, FreeFlow met with representatives of the City of Morgantown and other stakeholders regarding the details of construction and operations.

SOURCE: Advanced Hydro Solutions and Rye Development.

Canadian Firm Buys New Creek Wind Project

Enbridge Energy announced in November that it bought the New Creek Wind Project located in Grant County, WV. The project was originally owned by AES Energy of Alexandria, VA. Enbridge purchased the project from EverPower, a Pittsburgh-based company, which bought the project from AES in 2014.

Enbridge intends to develop a smaller version of the original project, reducing the nameplate capacity to 103 MW from 160 MW. The turbines would run north-south on a stretch of ridge line near Greenland, WV.

Enbridge is based in Calgary, Alberta. The firm plans to have the facility operational in December 2016.
SOURCE: Charleston Gazette-Mail.

"Total green power market sales increased ten percent from 2014 to 2015."

-National Renewable Energy Laboratory (NREL)

POLICY TRACKING

West Virginia Net Metering Task Force Finalizes Report

The Net Metering Task Force was organized by the Public Service Commission of West Virginia (PSC) in response to H.B. 2201, which amended existing net metering and interconnection standards when passed in February 2015. The goal of the Task Force is “to identify: i) net metering issues that need to be developed in West Virginia, ii) studies that should occur, if any, and iii) possible revisions to the current rules.”

The Task Force concluded there were two main issues to present to the PSC: 1) How to address disconnect switches for Level 1 net metering generators, and 2) what is the meaning of cross-subsidization and how should the PSC address the issue.

Cross-subsidization is defined in H.B. 2201 as “the practice of charging costs directly incurred by the electric utility in accommodating a new metering system to retail customers who are not customer-generators.” The rule requires the WV PSC to prohibit cross-subsidization.

The Task Force agreed that H.B. 2201 requires disconnect switches for Level 1 net metering generators and that due to safety concerns existing generators should not be exempt from installing the switches. The Task Force recommended changes to the language of existing rules to address this issue.

The Task Force was unable to reach a consensus on how the PSC should address the Legislative mandate regarding cross-subsidization. With the exception of Appalachian Power and Monongahela Power/Potomac Edison, the Task Force agreed that “costs directly incurred” refers narrowly to the incremental cost of interconnection (e.g. utility engineering studies) and the difference in the cost of a traditional meter and the bi-directional meter required for net metering. The various positions presented by Task Force members on the cross-subsidization issue are included in the report.

SOURCE: Net Metering Task Force Final Report, Sept 2015.

OTHER ENERGY NEWS

Voluntary Markets for Green Electricity 2% of Total

The National Renewable Energy Laboratory (NREL) released a report titled “Status and Trends in the U.S. Voluntary Green Power Market (2014 Data)” in October. Highlights include the following data: Voluntary retail sales of RE totaled 74 million MWh, about 26% of total U.S. non-hydropower RE generation, and 2% of total U.S. electricity sales.

- Total green power market sales increased 10%.
- About 4.9 million customers are purchasing green power, a decrease from 2013.
- Unbundled RE certificate (REC) markets increased by 15% to 36 million MWh.
- Community solar projects had about 42,000 participants, representing 150,000 MWh of sales.
- As of July 2015, more than 550 power purchase agreements (PPAs) for RE had been signed, with over 6,400 MW of capacity.

SOURCE: NREL.



EVENTS

Energy Efficiency & Renewable Energy Awards at TransTech Energy Conference

The 2015 TransTech Energy Business Development Conference was held November 5-6 in Morgantown. The event had several winning pitches in the areas of renewable energy and energy efficiency including:

- Mosaic Power of Frederick, MD – Internet enabled technology to aggregate electric hot water heaters and provide frequency regulation service to the electric grid.
- One Oak Systems of Pittsburgh, PA – Deployed and tested prototype for distributed sensors with real time HVAC controls that provide a uniformly heated living space.
- Sustainable Dental Products of Morgantown, WV – 3-D printed prototypes of bio-degradable toothbrushes made from corn-based plastics.
- Carbon Free Innovations of Athens, OH – Proof of concept prototype of a biomass-based gasification CHP system using free piston Sterling engine technology to provide hot water and electricity.

SOURCE: TransTech Energy.



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