Welcome to the *Green Power News Update* for **October, 2014**. New stories are added throughout the month to make sure you always know what is happening in our fast-changing industry. Check back often to see what's new!

*Individuals or agencies sending press releases quoted here are entirely responsible for the accuracy of their information.*

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Green Power

Intel Corp., Kohl's top quarterly green power rankings

Today, the U.S. Environmental Protection Agency’s Green Power Partnership (GPP) released updated lists of the top Green Power Partners that are choosing to use electricity from clean, renewable sources.

Combined, the top 100 partners use more than 22 billion kilowatt-hours (kWh) of green power annually. Through their use of green power, these top organizations are avoiding carbon emissions equivalent to that created by the electricity use of more than 2.1 million average American homes each year.

Source: EPA Green Power Partnership, 10/27/14

Recording of Green Power Partnership webinar now online

You can now download "Streamlining Off-site Corporate Renewables Transactions," a webinar hosted by the U.S. Environmental Protection Agency's Green Power Partnership on Tuesday, Sept. 30, 2014.

A few large corporations have started to source renewable energy directly from large, off-site wind or solar farms. The economic benefits are often significant, especially in today’s market, but transaction complexity hinders large scale deployment. To make these transactions more accessible to a larger number of corporate organizations, the Rocky Mountain Institute is launching a shared service/resource center that will provide standardized products and services such as deal databases, case studies, contract dissections, due diligence methodologies, and training events- the Business Renewables Center. The expected impact of the BRC will be to reduce transaction costs, time to completion and failure rates.

Source: EPA Green Power Partnership, 10/1/14

Desert energy plan gets key approvals

Federal and state agencies OK proposal to limit harm to to delicate wildlife, habitat

A regulatory plan that would speed up renewable energy development across a vast section of Southern California's deserts got a public vetting at a meeting in San Diego on Tuesday.
Federal and state public agencies have endorsed a draft Desert Renewable Energy Conservation Plan designed to minimize the impact of solar, wind and geothermal power plants on delicate wildlife and habitat in an area spanning 22 million acres. The framework would streamline renewable energy permitting in areas within Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino and a portion of eastern San Diego County (268,000 acres).

Source: San Diego U-T, 10/16/14

**Renewable Energy Optimization Tool**

NREL's Renewable Energy Optimization (REopt) tool is an early screening tool that identifies and prioritizes renewable energy projects at a single site, or across a portfolio of sites in multiple cities, states, or countries, each with its own energy requirements, resources, goals, and constraints.

Source: National Renewable Energy Laboratory, 9/22/14

**Models and Tools for renewables assessment**

Use models and tools developed or supported by NREL to assess, analyze, and optimize renewable energy and energy efficiency technologies for your project. Many of these tools can be applied on a global, regional, local, or project basis. NREL models and tools include several designed for the consumer or energy professional.

Source: National Renewable Energy Laboratory, 9/22/14

**Check out wind power-related events**

This interactive calendar provides a list of wind power-related events across the country. WINDExchange also makes its calendar available through an RSS Feed.

Source: DOE Office of Energy Efficiency and Renewable Energy, 9/22/14

**DOE Produces Renewables Coloring and Activity Books for Students**

The Department of Energy has posted resources about renewable energy for students and teachers. The Get Current coloring book (PDF) introduces sources such as geothermal energy for young students. The Get Current activity book (PDF) uses puzzles and games to teach energy efficiency and renewable energy concepts.

Source: DOE Office of Energy Efficiency and Renewable Energy, 9/24/14

**FEMP offers searchable training calendar**

The Federal Energy Management Program (FEMP) Training Search lists opportunities to study best practices for facilities management.

Source: Federal Energy Management Program, 9/25/14

**Solar energy growing in U.S.**

Solar power is more affordable, accessible, and prevalent in the United States than ever before. Since 2008, U.S. installations have grown thirteen-fold from 1.2 gigawatts (GW) to an estimated 15.9 GW today. Find resources and get involved.

Source: DOE Solar Powering America, 9/26/14
Federal hydropower act aims to maximize hydro resources

On August 9, 2013, President Obama signed into law the "Hydropower Regulatory Efficiency Act of 2013". The act promotes small hydroelectric and conduit hydropower projects, authorizes FERC to extend preliminary permit periods, and promotes hydropower development at nonpowered dams and closed-loop pumped storage projects. Read More.

Source: Federal Energy Regulatory Commission, 8/10/14

Avnet flips switch on 1,000Kw of solar energy for its Price Road, Tempe facility

Avnet employees are not only enjoying their new covered parking at the company's Tempe facility, but they are also benefitting from the sun's green energy.

The technology company recently flipped the switch on a new 1,000-kilowatt, solar project that is expected to supply about 60 to 65 percent of the energy load for the facility.

Source: Salt River Project, 9/30/14

The Green Power Network Update

September 2014

This update summarizes recent green power marketing activity, including news and information on competitive green power marketing, utility green pricing programs, renewable energy certificates, green power purchasing, and related market activity. Additional information on green power markets and products, as well as links to the companies mentioned below, can be found on the U.S. Department of Energy's Green Power Network website.

News
- Discovery Green Commits to 100% Wind through 2016
- Landfill Solar Facility Powering Cape Cod Healthcare
- CH2M HILL Purchases 11 Million kWh of Green Power
- Google Invests $145 Million in 82-MW SunEdison Project
- Antioch College Breaks Ground for On-site Solar Farm
- The Town of Ithaca Purchases 4.5 Million kWh of RECs
- Yolo County (CA) Produces 152% More Solar Energy than it Uses

Renewable Energy RFPs
- Southwestern Public Service Company
- El Paso Electric
- Potomac Edison, Baltimore Gas and Electric, PEPCO and Delmarva Power
- Tri-State Generation and Transmission Association

Download presentations from EPA webinar

Presentations from the EPA Green Power Partnership webinar on "Streamlining Off-site Corporate Renewables Transactions" are now available online.

This webinar will answer the following questions:
- What actions are corporate leaders taking today?
- What are the most commonly-encountered issues or barriers slowing adoption of renewable energy by organizations on a larger scale?
- How does the BRC address these issues and what is the Center’s delivery model?
• How can I become involved with the BRC?

Source: EPA Green Power Partnership, 10/1/14

Reports and Studies

Shaping our future with clean energy

Deployment of customer-sited photovoltaics (PV) in the United States has expanded rapidly in recent years, driven in part by public policies premised on a range of societal benefits that PV may provide. With the success of these efforts, heated debates have surfaced in a number of U.S. states about the impacts of customer-sited PV on utility ratepayers and shareholders. Such debates will likely become only more pronounced and widespread as solar costs continue to decline and deployment accelerates.

To inform these discussions, the Lawrence Berkley National Laboratory (LBNL) performed a scoping analysis to quantify the financial impacts of customer-sited PV on utility shareholders and ratepayers and to assess the potential efficacy of various options for mitigating those impacts.

Source: Interstate Renewable Energy Counsel, 10/1/14

Study examines cost of utility-scale solar

With a critical mass of new utility-scale projects now online and in some cases having operated for several years, the rapidly growing utility-scale sector is ripe for analysis.

In the second edition of what is intended to be an ongoing series, Lawrence Berkeley National Laboratory conducts an in-depth, data-driven analysis of installed project costs or prices, as well as operating costs, capacity factors, and power purchase agreement (“PPA”)prices from a large sample of utility-scale solar projects in the United States.

Photovoltaic systems dominate much of Utility-Scale Solar 2013, though more balanced coverage is planned for future editions as the new CSP projects that have recently or soon will come online start to generate usable data.

In addition to the report, a presentation and recorded webinar link are also available.

Source: Lawrence Berkeley National Laboratory, 10/2/14

Steal these ideas from PG&E's smart grid report

Pacific Gas and Electric Company (PG&E) today released its third annual Smart Grid report, detailing progress the company is making in creating a 21st century electric system. The report outlines the company's use and testing of advanced technology to improve the safety, reliability and resiliency of the power grid while giving customers new options for managing their energy and saving money.

Source: Smart Grid News, 10/9/14


This 2014 Industry Review explores key issues and provides recommendations related to the evolving power sector and increased use of renewable energy, particularly related to distributed generation and the effective integration of advanced grid technologies such as smart grids and microgrids. It provides a series of industry perspectives with useful analysis, data, and insight for renewable energy and utility stakeholders.

Source: American Council on Renewable Energy, 10/9/14
NREL Report Identifies Research Needed to Address Power Market Design Challenges

NREL and Argonne National Laboratory have published a new report, Evolution of Wholesale Electricity Market Design with Increasing Levels of Renewable Generation. This report provides an overview of the state-of-the-art of wholesale electricity market designs in the United States. It then focuses on two high-impact questions: (1) will reduced prices and sales in the energy market that result from low-cost renewables result in insufficient revenue for traditional plants needed for long-term reliability, and (2) are the short-term markets incentivizing resources to offer and provide flexibility to meet the increased variability and uncertainty of variable renewable resources. The report summarizes how the traditional market designs met these two challenges, and discusses the recent market design changes that have been implemented or proposed in part because of the increased penetrations of renewable resources in these markets. This report is the first of its kind on the topic of technical wholesale market design.

Source: National Renewable Energy Laboratory, 10/21/14

DOE releases offshore wind interconnection study

This executive summary is a companion to the full National Offshore Wind Energy Grid Interconnection Study (NOWEGIS) report and primarily discusses the conclusions and recommendations of the study, with limited descriptions of the work conducted to arrive at those conclusions. For a more complete treatment of the assumptions, methods, and results of the study tasks, please refer to the main report.

Source: DOE Office of Energy Efficiency and Renewable Energy, 9/22/14

7 important outcomes from the U.N. Climate Summit

Yesterday’s U.N. Climate Summit brought together more than 125 heads of state and government officials—the largest-ever climate meeting of world leaders. Leaders clearly demonstrated their understanding that the impacts of climate change are real and costly, and that they no longer have to choose between economic growth and climate action—they go hand-in-hand.

Source: GreenBiz, 9/24/14

New Studies Find Significant Declines in Price of Rooftop and Utility-Scale Solar; Onerous Local Regulatory Processes Can Impact System Prices

The price of solar energy in the United States continues to fall substantially, according to the latest editions of two annual reports produced by the Department of Energy’s Lawrence Berkeley National Laboratory (Berkeley Lab).

A third Berkeley Lab report, written in collaboration with researchers at Yale University, the University of Texas at Austin and the U.S. Department of Energy (DOE), shows that local permitting and other regulatory procedures can significantly impact residential photovoltaic (PV) prices.

Source: Lawrence Berkeley Laboratory, 9/17/14

What utilities can learn from football’s winning plans and plays

This time of year, every NCAA and NFL team dreams about winning it all. Turning that dream into reality requires a plan. Like winning the Super Bowl or a National Championship, success for electric utilities in today’s changing business environment requires planning, execution, vision, commitment and teamwork.
This process is known as strategic planning. In football, the drive to win extends throughout players, coaches and support personnel and also includes the how and why behind goal achievement.

*Source: Intelligent Utility, 9/23/14*

**Updated wind development tool now available**

The 3.1 version 3.1 of the Distributed Wind Policy Comparison Tool is now online, with several improvements to reflect changes in market conditions.

The DW Policy Tool is a one-stop shop for information related to the cost, policies, incentives and other details associated with on-site wind. It was created to help policy makers, industry representatives and advocates better understand what makes a successful distributed wind market environment, and keep tabs on the complex, ever-changing policy landscape.

The Tool allows sensitivity analyses to be conducted on various policy options and assumptions to determine impacts, optimize scenarios, and guide smart investments in small wind technology. It highlights attractive markets and policy targets that offer the quickest return on investment, encouraging best practices to sustain and improve support for distributed wind.

*Source: eFormative Options LLC, 9/30/14*

**Demand response webinar available for download**

Presentations from the webinar entitled "Demand Response - Now that we can measure it, why not price it?" are now online.

This webinar presented findings on four different pricing options – TOU, CPP, TOU-CPP and VPP – under various marketing and enrollment options, including both opt-in and default enrollment. The webinar covered what customers think about time-variant rates compared with standard rate options, how load impacts vary across different rate options and enrollment strategies, what drives rate choice and opt-out decisions, whether impacts persist across multiple years, and more.

*Source: Association for Demand Response and Smart Grid, 9/30/14*

**NREL seeks feedback on latest version of SAM**

The National Renewable Energy Laboratory has announced the Beta release of the System Advisor Model (SAM). If you would like to see what the new version will look like, and give us feedback to help us identify problems, please download and install this Beta version.

When you run the installation program, you will be prompted for your email address (see below for details), and will receive a registration key to activate the software. When you close the Beta preview version, follow the instructions to send us your feedback...

*Source: National Renewable Energy Laboratory, 9/11/14*

**National lab publishes utility-scale solar report**


For the purposes of the report, “Utility-scale” describes any ground-mounted project that is larger than 5 MWAC (up from 2 MWAC in the first edition). This definition differs from how others define it, and is
driven by the four types of data analyzed in the report. Certain data (e.g., O&M costs) are still rather limited, but are expected to become more widely available in future years.

Source: Lawrence Berkeley National Laboratory, 10/2/14

Funding

**DOE Buildings Energy Efficiency Frontier and Innovation Technologies** – Nearly $8 Million

The DOE Building Technologies’ Emerging Technologies Program is accepting applications to support research and development of the next generation of heating, ventilating, and air conditioning (HVAC) technologies. The research and development will focus on developing regionally appropriate HVAC solutions that would offer significant potential energy savings for new and existing buildings, and on developing innovative approaches that could replace current vapor compression HVAC technologies and their use of refrigerants that harm the global environment. State, local, and tribal governments; for-profit and nonprofit entities; and educational institutions may apply. Concept paper are due Nov. 10, 2014, and full applications due Jan. 12, 2015.

Source: DOE Tribal Energy Program, 10/24/14

**USDA Rural Community Development Initiative** – Nearly $6 Million

The U.S. Department of Agriculture (USDA) Rural Housing Service is seeking applications for Rural Community Development Initiative grants that will be awarded to organizations to provide critical financial and technical assistance to recipients to develop and strengthen their capacity to carry out housing, community facilities, and community and economic development projects. Qualified private, nonprofit (including faith-based and community organizations and philanthropic foundations), and public (including tribal) intermediary organizations are eligible to apply. Applicants must provide matching funds in an amount at least equal to the federal grant. Applications are due Nov. 12, 2014.

Source: DOE Tribal Energy Program, 10/24/14

**EPA Building Blocks for Sustainable Communities Program**

The U.S. Environmental Protection Agency (EPA) is seeking applications for the Building Blocks for Sustainable Communities Program that will provide quick, targeted assistance to up to 25 communities using a variety of tools with demonstrated results and widespread application to help them achieve their goals for growth. Selected communities will work with an EPA-supported team of experts during a one-to-two day workshop where participants will learn about relevant strategies, policies, and practices for a specific smart growth development topic. Applicant must have support of the local government, regional entity, or community-based organization. Applications are due Nov. 20, 2014.

Source: DOE Tribal Energy Program, 10/24/14

**DOE Landscape Design for Sustainable Bioenergy Systems** – $14 Million

The DOE Office of Energy Efficiency and Renewable Energy (EERE), on behalf of the Bioenergy Technologies Office, seeks interdisciplinary projects that apply landscape design approaches to integrate cellulosic feedstock productions into existing agricultural and forestry systems while maintaining or enhancing environmental and socioeconomic sustainability including ecosystem services and food, feed, and fiber production. State, local, and tribal governments; for-profit and nonprofit entities; and education institutions are eligible to apply. Concept papers are due Nov. 21, 2014; full applications are due Jan. 12, 2015.
An informational webinar to learn more about this funding opportunity will be held on Nov. 3, 2014, from 1:30 p.m. – 3:00 p.m. Eastern Daylight Time. Register for the webinar.

Source: DOE Tribal Energy Program, 10/24/14

**HUD National Disaster Resilience Competition** – $1 Billion

The U.S. Department of Housing and Urban Development’s (HUD’s) National Disaster Resilience Competition makes $1 billion available to communities that have been struck by natural disasters in recent years. The competition promotes risk assessment and planning and will fund the implementation of innovative resilience projects to better prepare communities for future storms and other extreme events. Funding for the competition is from the Community Development Block Grant disaster recovery appropriation provided by PL 113-2. This competition responds to requests from state, local, and tribal leaders who have asked the federal government to help them prepare their communities for the impacts of climate change and support investments in more resilient infrastructure. See the complete list of eligible applicants. Applications are due March 16, 2015.

Source: DOE Tribal Energy Program, 10/24/14

**DOE Advancing Solutions to Improve the Energy Efficiency of U.S. Commercial Buildings** – $9 Million

THE DOE EERE, on behalf of the Buildings Technology Office, is seeking applications for investments in energy-saving technologies that can be tested and deployed in offices, shops, restaurants, hotels, and other types of commercial buildings. The funding will facilitate the implementation of market-ready solutions across the United States to improve commercial building energy efficiency, with a goal of demonstrating 20 percent savings or more across a variety of approaches. State, local and tribal governments; for-profit and nonprofit entities; and education institutions are eligible to apply. Concept papers are due Nov. 22, 2014; full applications are due Jan. 20, 2015.

An informational webinar to learn more about this funding opportunity will be held on Oct. 27, 2014, from 12:00 – 1:00 p.m. Mountain Time. Register for the webinar.

Source: DOE Tribal Energy Program, 10/24/14

**CDFI Bond Guarantee Program** – $525 Million

The U.S. Department of the Treasury is accepting applications for the Community Development Financial Institutions (CDFI) Fund. A total of $525 million in bonds is guaranteed for Fiscal Year 2014 to provide long-term, fixed-rate capital for projects in low-income and underserved communities. All of the bond proceeds, provided through the Community Development Financial Institutions Bond Guarantee Program (CDFI Bond Guarantee Program), will provide long-term, fixed rate capital for projects in low-income and underserved communities. This program is open to all entities. Applications are due Nov. 24, 2014.

Source: DOE Tribal Energy Program, 10/24/14

**EPA Environmental Justice Small Grants Program** – $1.2 Million

Eligible Entities: Tribal governments and nonprofits

EPA is seeking applications to support activities designed to empower and educate communities to understand environmental and public health issues and to identify ways to address these issues at the local level. The funding will focus on proposals supporting community-based preparedness and community climate resiliency efforts. Applications are due Dec. 15, 2014.
Concentrating Solar Power: Advanced Projects Offering Low LCOE Opportunities

The Concentrating Solar Power: Advanced Projects Offering Low LCOE Opportunities (CSP: APOLLO) funding opportunity announcement (FOA) seeks transformative projects targeting all components of a concentrating solar power (CSP) plant. Projects should seek to meet the targets set out in the SunShot Vision Study, enabling CSP to become fully cost-competitive with traditional forms of electric power generation. Projects can address challenges in any technical system of the plant, including solar collectors, receivers and heat transfer fluids, thermal energy storage, power cycles, as well as operations and maintenance.

The total federal funding for this opportunity will be about $25 million with a minimum 20 percent required awardee cost share. Individual awards are expected to range from $250,000 to $5 million. Prior to submitting a full application for this opportunity, a brief, mandatory concept paper is due on Nov. 26, 2014. Reference funding number DE-FOA-0001186.

Massachusetts Pushes Solar Ownership With Loan Program

Homeowners who wish to install solar on their rooftops need money, so they should be able to borrow those funds from their local banks. That's the general idea behind a proposed solar loan program that the Massachusetts Department of Energy Resources (DOER) announced earlier this year.

The program's goal, the department said, is to reduce barriers for Massachusetts residents to directly own solar projects.

White House Announces $68 Million For 540 US Renewable & Energy Efficiency Projects

US Agriculture Secretary Tom Vilsack announced $68 million in funding Thursday for 540 US renewable energy and energy efficiency projects in the nation’s rural communities. This legislation is part of the “Swiss Army knife” of tools for jobs, innovation, infrastructure, research, and conservation President Obama has been talking about. Of these projects, almost half are solar investments.

Weekly Federal Funding Opportunities Update

Van Ness Feldman regularly publishes a list of federal funding opportunities that cover such areas as alternative and renewable energy, biofuels, combined heat and power, energy efficiency and more.

DOE offers funding for concentrating solar projects

The SunShot Initiative announced $25 million in funding to advance concentrating solar power (CSP) system technologies. This investment will fund research and development (R&D) projects to improve the performance and increase the efficiency of all components of CSP plants, ultimately lowering the cost of solar electricity and producing affordable, clean and renewable energy, even at night, by storing the heat generated by the sun.
Eligible projects may include developing transformative solutions to break through current performance barriers, such as efficiency and temperature limitations, and projects to demonstrate or prove new concepts for CSP plant components. Key components targeted for advancements include solar collectors, receivers, thermal energy storage systems, heat transfer fluids, and other technologies that will lower operations and maintenance costs or achieve system-wide cost-efficiencies.

Concept papers are due Nov. 26, 2014. The deadline for full applications is Feb. 20, 2015.

*Source: DOE Sunshot Initiative, 9/30/14*