Renewable Energy Update

an Allen Matkins market intelligence publication



August 11, 2009

Wind fluctuations complicate energy distribution through grids

Scientific American - August 3

When temperatures recently rose into the triple digits in the Pacific Northwest, breaking local heat records, electricity use also skyrocketed. Just as A-C demand went up, winds slowed to nearly a halt -- and the calm air was not turning turbines. To balance out the rise in demand, operators had to divert water around hydroelectric dams to keep the system from overloading. Meanwhile, water levels in the rivers also dropped. Scientists are currently looking into options to help mitigate these issues. One strategy is better wind forecasting. The U.S. Department of Energy is currently collaborating with INESC Porto, a research institution in Portugal, on a project to reduce the margins of error in forecasts from 20 to 15%. The BPA will add 16 wind-monitoring stations and will soon schedule power realignments on the half hour rather than the hour.

Renewable Energy Focus

Offshore windmills hold clean-energy promise

San Francisco Chronicle - August 3

California's sprawling coastal cities could draw their power from floating windmills that bob on the sea far from shore. This kind of floating windmill has not yet been deployed en masse in the U.S., but a model of one sits in the Berkeley office of Principle Power, one of several companies trying to tap the powerful winds at sea. Principle has signed agreements with utilities to test its device, called the WindFloat, off the coasts of Oregon and Portugal. Offshore wind farms have been used for years in Europe, but those windmills sit in shallow water, their bases bolted into the ocean floor. The National Renewable Energy Laboratory estimates that the wind blowing across California's deep water could generate as much as 130 gigawatts of electricity -- roughly twice as much electricity as the state needs on a hot summer afternoon.

Incremental advances in solar make transformational technologies unnecessary

Technology Review - August 3

The federal government is behind the times when it comes to making decisions about advancing the solar industry, according to solar-industry experts. This has led to a misplaced emphasis on research into futuristic new technologies, rather than support for scaling up existing ones. That was the prevailing opinion at a recent symposium by the National Academies in Washington, DC. In the past year, the federal government has announced new investments in research into "transformational" solar technologies that represent radical departures from existing technologies already on the market. Representatives of the solar industry say the federal government should do more to remove obstacles that are slowing the industry's development. One issue is financing for new solar installations, which can be much more expensive if lending institutions deem them high risk.

U.S. used less energy in 2008 but more renewable energy

RenewableEnergyWorld - August 7

Americans used more solar, nuclear, biomass and wind energy in 2008 than they did in 2007, according to the most recent <u>energy flow charts</u> released by the Lawrence Livermore National Laboratory. The nation used less coal and petroleum during the same time frame and only slightly increased its natural gas consumption. Geothermal energy use remained the same. The estimated U.S. energy use in 2008 equaled 99.2 quadrillion BTUs ("quads"), down from 101.5 quadrillion BTUs in 2007. (A BTU or British Thermal Unit is a unit of measurement for energy, and is equivalent to about 1.055 kilojoules.)

Money standing in the way of renewable energy's potential

Forbes - August 3

Wind, solar, geothermal and biomass satisfied just 4% of overall energy consumption in the U.S. in 2007, according to the U.S. Department of Energy's Energy Information Administration. By far, the biggest chunk of that is due to ethanol from corn. Forbes asked experts in the four major renewable energy technologies to explain what is holding the country back.

Technology 'smorgasbord' needed to meet climate goals: EPRI

Greenwire - August 4

The electric power industry can achieve deep reductions in greenhouse gas emissions by 2050 by building new nuclear plants, sequestering coal-plant emissions, boosting wind energy and improving efficiency, the industry's top research group says. The Electric Power Research Institute's (EPRI) report on decarbonizing electricity generation said an "aggressive" push on new technologies could lower 2005-level carbon dioxide emissions from power plants by 41% in 2030. With what EPRI calls a "full" portfolio of technology options, including new nuclear, expanded wind power and carbon capture, the price of electricity in current dollars would climb by 80% in 2050. With a "limited" range of generation options, excluding carbon capture and new nuclear, the price soars 210% higher than now, EPRI reported.

Climate bill yields short-term pain, long-term gain

Wall Street Journal - August 5

The latest tally of the costs of the Waxman-Markey bill in Congress promises to give ammunition to both supporters and opponents of the bill. That's because the dealing that made the bill politically viable will cushion the blow from higher energy costs in the near term. After about 2025, the impacts get more serious. The latest <u>base-case analysis</u> of the Waxman-Markey bill by the Energy Information Administration (EIA) concludes that the free emission allowances from Washington will limit consumers' pain. Electricity prices, for example, are projected to rise only 3-4% above the EIA's own reference scenario by 2020. In terms of overall economic impact, the EIA says the cap-and-trade program will knock 0.3% off U.S. GDP in 2030.

Related News:

Energy Market and Economic Impacts of H.R. 2454, the American Clean Energy and Security Act of 2009

DOE, Treasury Take Applications for Payments to Renewable Energy Projects

EERE Network News - August 5

DOE and the U.S. Department of the Treasury are now accepting applications from renewable energy project developers that wish to receive direct federal payments in lieu of tax credits. The direct-payment program is meant to address a lull in demand for federal tax credits, which has hampered the financing of renewable energy projects.

Borrego Solar Systems launches power purchase agreement program

Business Wire - August 3

Borrego Solar Systems, Inc. has introduced a new financing option for schools, companies and government organizations interested in adopting solar energy. Borrego's new power-purchase agreement (PPA) program assists its customers in financing a solar project without having to assume the up-front costs of the project or work with a third-party financier. With \$30 million backing from a PPA fund launched by Walsin Lihwa, a current investor, Borrego is positioned to develop and finance more than \$100 million in solar projects over the next 12 months. Borrego has already received interest in the program from early customers in Massachusetts, New Jersey and California.

Notable Renewable Energy Projects and Deals

Battle brewing over giant California desert solar farm

Green Inc. - August 5

U.S. Fish & Wildlife Service Environmental groups are worried that a massive solar project in the Mojave will threaten protected wildlife. Tessera Solar plans to plant 34,000 solar dishes -- each one 40 feet high and 38 feet wide -- on 8,230 acres of the Mojave Desert in Southern California. Although the licensing process for the Calico solar farm remains in the early stages, environmental groups are already raising concerns about the massive project's impact on protected wildlife. Calico is one of dozens of industrial-scale solar farms planned for the Southwest that have divided environmentalists over the need to promote renewable energy while protecting fragile desert ecosystems. The solar farm would generate 850 megawatts of electricity for Southern California Edison.

Two major California utilities sign on for eSolar projects

Union-Tribune - August 6

A north Los Angeles plant built by Pasadena-based eSolar has become the first commercial solar tower project in the U.S. The Sierra SunTower is small enough to power about 4,000 homes at its peak 5megawatt production. eSolar has deals in place to build larger plants, about 600 megawatts of peak power production in California and the Southwest, plus a gigawatt in India. The company sells the equipment while other firms own the plants and sell the power. Two of California's biggest utilities, Southern California Edison and Pacific Gas and Electric Company, have signed deals to buy their power but San Diego Gas & Electric Company has not.

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Editors William R. Devine

Patrick A. Perry

Emily Murray

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Allen Matkins Leck Gamble Mallory & Natsis LLP, founded in 1977, is a California law firm with over 230 attorneys practicing out of seven offices in California. The firm's broad based areas of focus include construction, corporate, real estate, project finance, business litigation, taxation, land use, environmental, bankruptcy and creditors' rights, intellectual property and employment and labor law. More...



Allen Matkins #1 Real Estate Law Firm in California Chambers and Partners 2002 - 2009

Recent Events

Allen Matkins has attended numerous events addressing developments in the renewable energy field in 2009. A <u>summary can be found</u> <u>here</u>. Allen Matkins hosted the successful panel discussion on <u>Renewable Energy</u> <u>Project Finance</u>. For a copy of the program materials, <u>click here</u>.

Upcoming Events

Energy In California San Francisco, CA

September 14 & 15

Developing Wind Power

Projects in California Marina del Rey, CA Sept 17 & 18

2nd Renewable Energy

Finance Forum – West San Francisco, CA September 29 & 30

2009 Algae Biomass

San Diego, CA October 7-9

Solar Power Project

Development San Diego, CA October 22

Solar Power International

Anaheim, CA October 27-29

Recent Opportunities

Southern California Edison ("SCE") Issues Its 2009 Request for Proposals for Renewable Electric Energy Products Pacific Gas and Electric ("PG&E") Issues Its 2009 Renewable Portfolio Standard Solicitation

> City of Willows Opportunity

New Submission Deadlines Released for the California Energy Commission Alternative and Renewable Fuel and Vehicle Technology Program

Los Angeles Department of Water and Power Renewable Energy Supply Rolling Request for Proposals

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