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## Enel N.A. To Revive Wind Sale

Enel North America is looking to restart a sale of its TradeWind Energy stake.

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## Power And Utilities M&A Symposium

Check out the hot topics hashed out in New York this week

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## BES LOOKS TO OFFLOAD EUR2.6B IN LOANS

Banco Espirito Santo is looking to sell roughly EUR2.6 billion (\$3.57 billion) of project finance and infrastructure debt. The bank is seeking bids by Feb. 8 and hopes to sell the loans in full, rather than a piecemeal approach, says a syndicator in New York. Whether the amount represents all or part of BES' project and infrastructure loan portfolio could not be learned.



The assets comprise EUR420 million (\$576.51 million) of deals in the Americas, EUR940 million (\$1.29 billion) of European loans and EUR1.3 billion (\$1.78 billion) in Middle East financings. It could not be determined whether the seller has hired an advisor.

Buyers will likely be other lenders, says a financier, as the returns on infrastructure and

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## INVENERGY BIRD-DOGS INVESTOR

Invenergy is considering selling a \$200 million stake in the company as it looks for ways to fund its wind development pipeline.

A handful of investment banks out of New York have presented potential investors, mostly Asian players, to the Chicago-based company. Invenergy management has decided to proceed now, bankers say, to take advantage of a number of Asian shops looking to enter the U.S. renewables market. Invenergy is not using an advisor.

Investors that have spoken with the company have included Chinese firms and at least one Korean shop, observers say. One banker categorizes the talks as early stage. Marubeni is tipped to be a possible candidate given its recent acquisition of a stake in an Invenergy Ontario wind project, notes one banker. The Japanese shop took a 49% stake in the 78 MW Raleigh wind project (PFR, 1/11).

(continued on page 12)

## STARWOOD HUNTS ONTARIO SOLAR DEBT

Starwood Energy is talking to lenders about financings backing roughly \$800 million in solar photovoltaic plants in Ontario. The Greenwich, Conn.-based firm aims to close all the deals supporting 200 MW of PV by year-end, with up to 100 MW expected to be financed by the third quarter, deal watchers say.

The quest to land Starwood mandates is expected to be competitive, even with the glut of large deals hitting the market early this year. Bankers perceive Starwood as a savvy and experienced sponsor without the heavy-handedness common among sponsors with such clout. "There are some sponsors we have to work with because they're big names that our credit committees like," says one senior financier. "Others, we choose to work with. We choose to work with Starwood."

Starwood's relationship lenders are among those interested in participating in the

(continued on page 11)

Check [www.iipower.com](http://www.iipower.com) during the week for breaking news and updates.



## At Press Time

### Enel N.A. To Rekindle TradeWind Sale

Enel North America is gearing up to revive the search for a buyer for its stake in TradeWind Energy. The first attempt was iced because buyers were reluctant to purchase a mostly uncontracted development pipeline. Morgan Stanley is expected to release a second teaser in the coming weeks, a deal watcher says.

The second stab is expected to elicit more interest since TradeWind secured a couple of power purchase agreements totaling 336 MW in the fourth quarter, banker say. The Tennessee Valley Authority has a 20-year offtake agreement for the 201 MW Caney River project in Elk County, Kan., and Western Farmers Electric Co-Op has a 25-year PPA for the 125 MW Rocky Ridge project in Kowa and Washita Counties in Oklahoma. Both projects are expected to be online in early 2012.

TradeWind has about 1.2 GW of near-term projects in the Midwest, including Caney River and Rocky Ridge. The total development pipeline, or projects in all stages of development, is nearing 8 GW, according to the company's Web site. Enel has a 40% stake in the Lenexa, Kan.-based developer. A sell will likely have a buyer come in and scoop up both the development pipeline and development team, a banker says. The initial process launched in the spring (PFR, 4/30). The potential purchase price or the identity of potential buyers for the stake could not be learned.

Neither spokeswomen at Morgan Stanley and TradeWind nor an Enel N.A. spokesman in Andover, Mass., immediately responded to inquiries.

## EIF, Black Hills Sell Idaho Pair To Chi-Town Group

Chicago-based investors have bought a pair of 10 MW combined-cycle plants in Idaho from Energy Investors Funds and Black Hills Corp. Two joint ventures between buyers Crestwood Energy Investments and Energy Operations Group will own and operate both Glenns Ferry and Rupert, each a namesake for its town.

The transaction wrapped earlier this month. Both facilities sell power to Idaho Power Co.

This is the second acquisition the investor group has made from EIF; it purchased the 50 MW Carson natural gas-fired facility in Carson, Calif., from EIF and JPMorgan in July (PFR, 7/28). The group is prowling for natural gas, wind and solar acquisitions in North America although it's not actively in negotiations, says Chuck Walker, president of Energy Operations Group in Chicago.

Walker declined to disclose the purchase price. The size of the EIF's and Black Hills' stakes could not be learned. An EIF spokesman declined to comment and a Black Hills spokesman could not be immediately reached.

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## Project Finance

### BoTM Stalks Calif. Thermal Mandate

**Bank of Tokyo-Mitsubishi UFJ** is in discussions to lead a financing backing **Radback Energy's** 624 MW combined-cycle Oakley plant in Contra Costa County, Calif. **Crédit Agricole**, **ING** and **Scotia Capital** are also looking at the deal. The estimated price of developing the plant ranges from \$800 million to \$1.5 billion.

**Pacific Gas & Electric** has a purchase and sale agreement for Oakley, which is expected to be online in 2014 (PFR, 1/12). Ownership of the plant will transfer to the utility in 2016. The size of the financing, as well as targeted pricing and tenor, couldn't be learned. **Bryan Bertacchi**, Radback president and ceo in Danville, Calif., didn't return a call, while bank officials either declined to comment or didn't respond to inquiries. A spokeswoman for PG&E in San Francisco did not return a call.

The California **Division of Ratepayer Advocates** has filed an application at the state's **Public Utilities Commission** for a rehearing on the Oakley plant. The DRA contends that the public was denied due process when the PUC approved the project. Whether that agency's challenge will affect financing couldn't be learned. A PUC spokesman in San Francisco says he is unaware of reconsiderations of the approved project.

### Brookfield Hands Out Granite Mandate

**Brookfield Renewable Power** has mandated **WestLB** and **Citigroup** to lead a \$185 million financing package supporting its acquisition and construction of **Noble Environmental Power's** 99 MW Granite Reliable wind

project. The package is expected to comprise a \$110 million private placement, \$15 million in letters of credit and a \$60 million cash grant from the U.S.

**Department of Treasury.**

Life insurance companies are expected to be interested in buying into the private placement, which will have a tenor of construction plus 19 years. Construction on the project in Coos County, N.H., is expected to start this quarter with commercial operation slated for December. The letters of

credit have a five-year tenor. Pricing on the bonds and letters of credit has yet to be finalized. The potential rating for the bonds could not be learned.

Toronto-based **Brookfield** has also applied for a U.S. **Department of Energy** loan guarantee.

**Donald Tremblay**, Brookfield cfo in Gastineau, Quebec, and a DOE spokeswoman in Washington, D.C., didn't return calls, while a Noble official in Essex, Conn., declined to comment. A WestLB official declined to comment while a Citi official declined to comment through a spokesman.

Citi and WestLB plan to model the structure on a portion of the \$1.431 billion financing backing **Caithness Energy** and **GE Energy Financial Services'** 845 MW Shepherds Flat wind farm, deal watchers say. In the Shepherds private placement, investors had the option of buying pieces of the loan covered by the loan guarantee (PFR, 12/23).

The project has an 18% merchant component, but lenders aren't concerned in this instance, citing the potency of Brookfield, the strength of the New England-ISO market and the expected DOE loan guarantee. **Central Vermont Public Service** is buying half of the power, while **Green Mountain Power** is taking 32%, under 20-year offtake agreements (PFR, 11/3).

Brookfield agreed to purchase the project last month (PFR, 12/7).

## People & Firms

### Sumitomo Plans Expanded PF Team

**Sumitomo Mitsui Banking Corp.** is looking to add up to three staffers to its energy project finance team, including one v.p., by April 1 to help handle heavier deal flow in 2011. The staffers will report to **Charles Sommerville**, group head of energy project finance in North America, and be based in New York.

Sumitomo prefers v.p. candidates to have at least 10 years of industry experience, preferably in project finance. The bank also is considering hiring analysts and associates to its energy project finance team.

The energy project finance team anticipates participating in a slew of deals in 2011, especially in the first two quarters. It is close to inking at least six mandates, a banker familiar with SMBC says. Potential deals and the size of its 2011 budget could not be learned. A Sumitomo official declined to comment.

SMBC hired **Michael Awad**, assistant v.p., from **NordLB** (PFR, 8/13) and **Brian Marszycki**, formerly of **Moody's Investors Service**, as an assistant v.p. last year.

Sumitomo participated in a financing backing **Brookfield Renewables Power's** \$322 million Comber Wind Project





(PFR, 10/5) and helped lead a \$200 million financing supporting a portfolio of solar photovoltaic plants in Southern California being developed by **Eurus Energy** and **NRG Solar** (PFR, 9/27).

## Norwegian Bank Taps Ex-BNP Staffer For NY

**DnB NOR** has hired **Mark Dennes** to build a U.S. power and renewables financing group in New York.

Dennes, a former director at **BNP Paribas** and the group head of energy in the Americas at **Fortis Capital**, will report to DnB's oil and gas team in Houston, says a financier familiar with the bank's plans. He accepted the position earlier this month; whether he has started at the post could not be learned.

Dennes plans to hire a staff to assist him, a syndicator says. The number of staffers DnB is seeking as well as the hiring timeline and criteria couldn't be learned. Dennes and a DnB representative in Houston didn't return calls by press time.

Dennes left BNP in November to launch **Energy Capital Advisors**, a New York-based advisory shop (PFR, 11/17). He intended to advise wind, solar, biomass, geothermal, waste-to-energy and landfill gas developers—until the opportunity at DnB

surfaced, explains the senior originator.

DnB has eyed a move into renewables for at least two years (PFR, 9/03/09). DnB participated in a \$1.4 billion revolver for **Kinder Morgan Energy Partners** (PFR, 9/18/09) and deals backing power projects in Chile, Mexico and the Bahamas (PFR, 5/15/09).

## Intesa Names NY PF Chief

**Intesa Sanpaolo** has named **Alessandro Vitale**, a London-based director, as the head of project and industry specialized lending in New York.

His start date in New York and whether he is filling a newly created role or replacing someone could not be determined. Vitale was unavailable for comment and an official declined to discuss the matter.

Intesa participated in a \$366 million syndication backing **Caithness Energy** and **GE Energy Financial Services'** 845 MW **Shepherds Flat** wind farm in eastern Oregon (PFR, 12/23), as well as a \$370 million loan supporting **ArcLight Capital Partners** and **Hess Corp.'**s 512 MW **Bayonne Energy Center** in New Jersey (PFR, 9/30).

The Italian bank was formed by the merger of **Banca Intesa** and **Sanpaolo IMI** in 2006.

## Mergers & Acquisitions

### Calif. Biomass Owner Looks To Sell, Add Investor

**National Power** is looking to either sell or bring in an additional investor for its biomass facility in Bieber, Calif., that has a lumber mill and a possibility for solar photovoltaic development. National Power, the manager and operator of the 7.5 MW **Big Valley Power** wood-fired facility, prefers an outright sell, says a deal watcher. Teasers from advisor **Bodington & Co.** went out this week. **Tim Flato**, owner of National Power in Oakland, did not return a call.

Big Valley renegotiated a 10-year power purchase agreement with **Pacific Gas & Electric Co.** in 2009. The facility stopped operating in June due to financial constraints.

The attached lumber mill could provide up to half of the plant's fuel needs with some upgrades, according to the teaser. There is also vacant land on Big Valley Power's 120-acre plot that could support an 8-10 MW PV installation. Capacity is available on an associated 18-mile interconnect line.

National Power owns 30% of the facility along with Australian entities **Ashburton Finance** (25%) and **Dylide** (25%). Two individuals associated with **Power Holdings I** and **Bio Energy** each own 10%.

National Power is a developer of wind, solar, biomass and

fossil generation with offices in Oakland, Calif., and Sydney, Australia. It had a joint venture with **Babcock & Brown** to develop biomass, wind and natural gas-fired projects in Australia, New Zealand and South Africa that ended in 2009.

The identity of the parent companies of **Ashburton** and **Dylide** could not be learned. An official with **Power Holdings** in Redding, Calif., declined to comment as did an official with **Bodington & Co.** in San Francisco. An official with **Bio Energy** could not be reached.

## AES, Riverstone JV Ropes In Solar Projects

**AES Solar**, a joint venture between **Riverstone Holdings** and **AES Corp.**, has reportedly agreed to buy a solar project from Seattle-based developer **Tuusso Energy**. The agreement, which involves at least 20 MW of capacity that is contracted to **Southern California Edison**, was reached earlier this month. **Marathon Capital** advised the seller.

**Owen Hurd**, president of **Tuusso**, and an official and a spokeswoman at **AES** in Arlington, Va., did not return calls. A spokesman for **Riverstone** in New York did not immediately respond to an inquiry. A **Marathon** official declined to comment.

**SCE** has a 20-year power purchase agreement for **Tuusso's** 20

MW Antelope photovoltaic project near Lancaster, Calif. AES Solar was established in 2008 with a capital platform of \$1 billion and an eye towards developing utility scale PV globally.

Whether the Antelope project is the asset trading hands and the purchase price could not be learned.

Hurd founded Tuusso in 2008, along with **Vivek Nayak**, v.p. of operations and **Jason Evans**, v.p. of business development. Prior to Tuusso, Hurd focused on operations strategy and corporate finance for semiconductor manufacturers and technology companies at **McKinsey & Co.**

## News In Brief

*News In Brief is a summary of publicly reported power news stories. The information has been obtained from sources believed to be reliable, but PFR does not guarantee its completeness or accuracy.*

### Americas

- As many as 10 clean tech companies could go public this year in multi-billion dollar transactions, according to **Alan Salzman**, ceo of venture capital firm **VantagePoint Venture Partners**, which backs **Tesla Motors** and **BrightSource Energy**. Companies like **Cisco**, **GE** and **Siemens** are expected to make strategic clean tech acquisitions (*Reuters*, 1/27).

- Carl Icahn** has extended his offer for **Dynegy** by two weeks after his bid didn't receive enough shareholder support or approval from the U.S. **Federal Energy Regulatory Commission** by the deadline Tuesday night. **Goldman Sachs** and **Greenhill & Co.** didn't turn up any competition for Icahn after talking with more than 50 investors (*The Financial Times*, 1/27).

- Southern Co.** and **Ted Turner** have brought the 30 MW Cimarron solar photovoltaic project in New Mexico online, marking the first project to come online under their joint venture. Denver co-ops **Tri-State Generation and Transmission Association** are the offtakers (*Reuters*, 1/27).

- The Iraqi government has selected **Hyundai** to build a \$218.9 million, 500 MW al-Quds natural gas fired-plant near Baghdad. Construction is expected to take 18 months (*Dow Jones Newswires*, 1/27).

- Exxon Mobil** anticipates that natural gas will trump coal by 2030 to be the second-largest energy source behind oil (*Reuters*, 1/27).

- Nuclear and clean coal-fired generation will be included in the nation's generation mix to meet President **Obama's** goal of 80% clean energy by 2035. The inclusion of nuclear and clean coal in his plans could help round up the necessary votes in Congress to pass an energy bill (*Reuters*, 1/26).

- Portland General Electric** is looking for an independent firm to help it manage its generation acquisitions as it looks to meet demand over the next decade. PGE expects to need about 550 MW around 2013 for seasonal peak use; 120 MW of renewables and up to 500 MW of baseload combined-cycle power by 2015 (*Portland Business Journal*, 1/26).

- George Jepsen**, the Connecticut attorney general, has said the Connecticut **Department of Public Utility Control** should reverse its decision to forego a review of **Northeast Utilities'** \$17.5 billion merger with **NStar**. The merger is slated to be finalized by year-end (*Hartford Business Journal*, 1/26).

- Hawaiian Electric Power Co.** received state approval for its 20-year PPA with **Honua Power's** 12 MW biomass project. The agreement has a price range of \$0.18 per kWh for off-peak power to \$0.22 for on-peak (*Star-Advertiser*, 1/26).

- An Ontario property owner has asked a Superior Court judge to cease wind development in the province until a medical study is conducted to determine the health impact of nearby turbines. Doctors associated with the anti-wind campaign allege that people who live within two kilometers of turbines are in danger of sleep deprivation and hypertension (*The Ottawa Citizen*, 1/24).

- The U.S. wind industry built 5.1 GW of new wind generation in 2010, the lowest since 2006. The **American Wind Energy Association** blames a lack of long-term, predictable federal energy policy (*USA Today*, 1/25).

- The Missouri Senate has nixed a portion of a rule crafted by state regulators requiring investor-owned utilities to buy increasing amounts of renewable energy. A majority of senators found fault with language stipulating that electricity from renewables sources be produced or sold in Missouri (*The Kansas City Star*, 1/25).

### Europe / Middle East

- The French government will seek bidders in the second quarter interested in building the nation's first offshore wind farm. The 3 GW farm is expected to cost \$13.6 billion (*Bloomberg*, 1/25).

- The Saudi government has earmarked \$133 million for renewable energy in 2011 as it plans a lengthy effort to slash its dependence on fossil fuels. The nation is eyeing solar projects in the near term and nuclear plants in eight to 10 years (*The Financial Times*, 1/24).

## Power & Utilities M&A Symposium

*A new generation of power investors such as Google, Cisco and auto manufacturers created the most buzz at SNL Exnet's Power and Utilities M&A Symposium held at the Ritz-Carlton Battery Park in New York Jan. 24-25. Senior Reporter Holly Fletcher filed the following stories:*

### Direct Energy Eyes NatGas Buys In Northeast



Chris Weston

**Direct Energy** is on the prowl for natural gas-fired generation acquisitions in the Northeast to support its demand requirements in the region. The company doesn't have a target amount of capital to deploy, but is actively looking at the opportunities, **Chris Weston**, president and CEO of Direct, said.

The Toronto-based company has looked at several plants that have been on the market on the coast over the last year, he told *PFR* on the sidelines, declining to comment on how far Direct went in the bidding processes or whether it has active bids. Direct, a unit of **Centrica**, submitted a bid for **Brick Power** (*PFR*, 11/15). Direct is also interested in facilities in Texas and Canada.

Direct would consider a coal-fired plant but is wary of how potential greenhouse gas regulations would impact the plant. No greenfield development plans are in the works, Weston said. The company currently owns 1.2 GW of combined-cycle facilities in Texas.

### Google Maps Pre-Construction Renewables Prowl



Rick Needham

Google will consider making investments in pre-construction stage wind, solar or geothermal projects. The tech giant prefers to make equity or tax equity investments given the size of its balance sheet and tax capacity, **Rick Needham**, director of green business operations, told attendees.

Early stage projects, such as **Trans-Elect Development Co.**'s Atlantic Wind Connection transmission project that Google invested in last year, will be considered on an individual basis, he said. Projects in the U.S. are most attractive for its initial investments, but the company has plans to invest abroad.

Companies looking for investments have come to Google, said Needham, and it hasn't used a financial advisor. Geothermal, wind and solar—photovoltaic and solar thermal—hit the sweet spot but it won't rule out biomass in

specific situations, Needham said on the sidelines. It is however wary of the fuel risk.

The Mountain View, Calif.-based company took a \$38.8 million tax equity stake in a portfolio of two **NextEra Energy Resources'** farms in North Dakota alongside **Bank of America** and **JPMorgan**. Google is open to investing alongside experienced co-investors and hopes its investments will lead other non-financial tax equity investors into the arena, Needham said. Whether additional investments are in the works could not be learned.

Google invested in the 250-mile, 6 GW Atlantic Wind Connection alongside **Marubeni** and **Good Energies**. The AWC will run from New Jersey to Virginia and be built over 10 years. Google also has a 20-year PPA for 114 MW of power from NextEra's 150 MW Story County II wind farm in the northeast corner of Story County, Iowa (*PFR*, 9/27).

### TransCo. Sees Utility Status As Development Driver



Michael Skelly

**Clean Line Energy Partners** is applying for utility status to make it easier to recover costs on its transmission projects and access rights to the land. It is in the process of applying to be a utility in several of the states in which it is developing four, multibillion dollar transmission projects. The Houston-based transmission developer has submitted

applications to regulators in Arkansas, Illinois and Oklahoma to be a utility akin to **ITC Holdings**, the transmission utility in Michigan, said **Michael Skelly**, president.

The projects, all in early stage development, are anticipated to be online in five to seven years, he said, noting that it's too early to tell which one will be first. The HVDC, or high voltage direct currents, projects are:

- Rock Island project: a \$2 billion, 500-mile line from Iowa to Illinois. Clean Line acquired the rights to build the line in the Rock Island railroad corridor.

- Grain Belt Express: a \$1.7 billion, 500-mile line from Kansas to southeastern Missouri.

- Plains & Eastern line: a \$3.5 billion, 800-mile line from Oklahoma to Tennessee.

- Centennial West: a \$2 billion, 750-mile project from New

## Power & Utilities M&A Symposium (cont'd)

Mexico to southern California that Clean Line acquired from **Integrated Transmission Services** in May.

HVDC lines, which transmit power more efficiently and require less land than AC lines, connect the U.K. and French grids under the English Channel and also link Scandinavia and Northern Germany. Whether such lines have been deployed in the U.S. could not be learned.

Clean Line is not currently looking for additional funding, Skelly said, instead relying on capital from two investment firms: **Zilkha & Sons** and **Ziff Brothers Investments**. Skelly, formerly chief development officer of **Horizon Wind Energy**, told panelists that Clean Line gets a couple of calls a week from infrastructure funds interested in investing but that it has turned them away because it isn't to that point yet with the projects.

Lining up private equity investments for a transmission line can be tough, he said, as the long development schedule of transmission projects often doesn't align with the three to five years holding period associated with most private funds. It's best if a project coordinates with the launch of a fund.

## New Power Investors On The Horizon

Auto manufacturers and tech companies, like **Cisco Systems** and **Google**, are being tipped as likely power investors that move their products into the realm of energy efficiency or balancing. "Our sense is the industry will be impacted by the arrival of new entrants," **Jay Horine**, managing director and head of U.S. power & utility investment banking at **JPMorgan**, said Monday.

Horine said he spoken to executives at the North American International Detroit Auto Show. The changes on the horizon "will be exciting but difficult to predict." Electric vehicles, depending on the scale of the roll-out and when they are charged, could impact power demand or use power at historically lowest peak times—during the night. **NRG Energy** has partnered with **Nissan** on electric charging stations for the Leaf

vehicle in Houston.

Technology companies have enormous reserves of cash that could be deployed, he said, noting that the \$37.5 billion market capitalization of the **Duke Energy-Progress Energy** merger would not be near the size of Cisco or Google. Beyond its investment in the transmission cable planned off the East Coast and signing the occasional PPA, Google could chase after a bigger role in getting its software into the smart meters that utilities are installing.

### Reporter's Notebook

- Attendees couldn't resist the urge to exchange and one-up weather-related stories as the mercury hovered in the teens in New York on Monday. "It was so cold that..." could be heard from the coffee table to the coat-check.

- "I told them it would be like going to work with a wedge. It wouldn't hurt but it would have your attention," said **Eric Markell**, executive v.p. and cfo of **Puget Energy**, rehashing for the conference what he told colleagues at Puget when they asked what it would be like working for private equity owners when **Macquarie Infrastructure Partners** was taking the utility **Puget Sound Energy** private.



- When **John Eber**, managing director of energy investments at **JPMorgan Capital Corp.**, encountered a Powerpoint malfunction on the Opportunities in Alternative Energy panel, fellow speaker and **Thorndike Landing** partner **John Dingle** joked that the panel had "**Rick [Needham]** from **Google**—maybe he can take a look." The presentation got up and running without support from Google.

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## INDUSTRY CURRENT

## Lessons From Extending Subsidies—Part I

Congress gave developers of U.S. renewable energy projects in late December another year through Dec. 2011 to get new projects under construction to qualify for cash grants from the U.S. Department of Treasury for 30% of the project cost.

The fact that Congress waited until almost the end of 2010 to let developers know they have more time—the extension became official on Dec. 17—made for a rush by developers to order equipment and get work under way at factories and project sites. The experience provided some useful practical lessons for what to do or not to do when a similar rush is expected in late 2011.

The same bill that extended the deadline for cash grants also authorized a 100% “depreciation bonus” on new equipment put into service after Sept. 8, 2010 through Dec. 2011 or 2012, depending on the project. The bonus is a timing benefit. Instead of depreciating a project over the normal depreciation period, the entire cost can be deducted in the year the project goes into service.

However, projects on which work started before 2008 may not qualify.

Many developers are expected to have trouble using the bonus. There was already a 50% bonus during 2010, but many tax equity investors made developers opt out of the bonus because the investors were trying to conserve tax capacity to spread over a larger number of deals. A 100% depreciation bonus is worth roughly 4.45 cents per dollar of capital cost in additional subsidy on a wind, solar, geothermal or fuel cell project. It is worth more on other renewable energy projects and as much as 18 cents per dollar of capital cost on some transmission lines, power plants that use fossil fuels and some parts of certain biomass plants.

Congress made other changes that will affect other parts of the project finance market in the same bill in late December.

### Cash Grants

In early 2009, Congress directed the Treasury to pay owners of new renewable energy projects that are completed in 2009 or 2010, or that start construction in 2009 or 2010, 30% of the project cost in cash as an economic stimulus measure. The grants are sometimes referred to as the “section 1603 program.” Developers receiving grants must agree to forego tax credits that they would otherwise have received on the projects.

The program paid \$5.8 billion through the end of 2010. The three largest Treasury cash grants to date are \$276 million paid on the Meadow Lake wind farm in Indiana, \$222.9 million for

the Penascal wind farm in Texas and \$218.5 million for the Windy Flats wind farm in Washington.

It looked during most of 2010 that if the program were extended, it would be turned into a tax refund program in which the government would pretend that a project owner overpaid its income taxes by 30% of the project cost in the year the project is completed. The owner could then apply for the taxes back. This would have delayed grant payments compared to the current program and might have shifted administration of the program to the Internal Revenue Service.

In the end, Congress simply changed a date. Grants will now be paid on projects that are completed or that start construction in 2009, 2010 or 2011. Projects that merely start construction must be completed by a deadline.

The completion deadlines have not changed. They remain 2012 for wind farms, 2016 for solar and fuel cell projects, and 2013 for most other projects.

Grants are paid on equipment that uses wind, sunlight, geothermal steam or fluid, biomass, municipal solid waste, landfill gas and, in some instances, water to generate electricity. They are also paid on fuel cells, combined heat and power projects (or what used to be called cogeneration facilities) of up to 50 MW in size, gas micro-turbines and geothermal wells and pipes. The grants on small cogeneration facilities and gas micro-turbines are only 10% of the project cost. The deadline to put them in service is 2016. The Treasury is not sure it will pay grants on geothermal wells and pipes that are put in service to serve an existing power plant.

Developers should not assume that the cash grant program will be extended again by Congress. Republicans are now in control in the House and have more seats in the Senate. The Republican counsels to the House and Senate tax committees said at a wind industry forum in late November that their party is opposed to extending the program. They see it as part of the Obama stimulus measures against which the party voted *en masse*.

### Practical Lessons

The fact that Congress waited until the last minute to extend the construction-start deadline acted as a stimulus as developers rushed to order equipment and start work at factories and on project sites before year-end.

There are two key takeaways from that experience. Some important practical information also came out during discussions with the Treasury late in the year as the deadline was approaching.

1) Start planning early in 2011 how to start construction by



year-end. Developers who waited until the fall 2010 to start planning found equipment manufacturers had already committed their production slots to others who had gotten in line earlier.

2) It is better to try to incur more than 5% of the total project cost by year end than to rely solely on starting physical work at the site or a factory. Tax equity investors and lenders proved unwilling in some cases to assume that a project got underway in time if all the developer could point to was physical work at the site. Anyone relying solely on physical work must be able to prove that there was continuous construction work through completion. Some tax equity investors and lenders were unwilling to take the risk that the continuous work requirement would be met. There is no need for projects that incur more than 5% of the total project cost by Dec. 2011 to show that the work after that point is continuous.

There are two ways to start construction:

1) One is to commence physical work of a significant nature on the project by Dec. 2011. The work can take one of two forms. It can be work at the site on foundations, concrete pads for wind turbines, concrete pedestals for solar arrays or permanent roads that will be used to ferry spare parts once the project is in operation. It is also physical work of a significant nature for a turbine or module manufacturer with whom a developer has a binding contract to supply equipment to start physical assembly of the equipment at the factory.

2) The other way to start construction is to “incur” more than 5% of the total project cost by Dec. 2011. It is not enough merely to make a payment in 2011. Costs are not “incurred” until equipment or services ordered under a binding contract are delivered, with one exception. A payment in 2011 counts as a 2011 cost if the equipment ordered is delivered within 3 1/2 months of the payment date.

A developer relying on the 5% test can add up the costs the developer incurs. It can also add costs that a contractor or equipment manufacturer with whom the developer has a binding contract incurs (without double counting).

There is a debate within Treasury about whether pulling components out of inventory counts toward costs incurred at the equipment manufacturer or contractor level. Until the issue is settled, developers would be wise to require equipment manufacturers only to use components that are manufactured after a binding purchase order is in place.

Developers who plan to rely on the three-and-a-half month rule to count the cost of equipment delivered in early 2012 must link payments in late 2011 to the specific equipment that will be delivered in early 2012. It is not enough to make a general down

payment or general milestone payment under a contract.

The Treasury is unsure how the three-and-a-half month rule works for services. It has not decided whether services can be separately delivered from the equipment to which they relate in cases where the services are part of a larger equipment supply agreement. For example, design or engineering work may be embedded in the equipment and may not be delivered until the equipment is delivered.

## Private Equity Funds

Developers who are owned partly by private equity funds cannot receive Treasury cash grants on their projects unless the funds hold their interests through “blocker corporations,” with one exception. The developer can benefit indirectly from a cash grant by selling the project to a tax equity investor and leasing it back. The tax equity investor can claim a full grant in that case, and the benefit is shared with the developer in the form of reduced rent for use of the project.

There had been talk at the staff level in the House tax committee about dropping the ban on cash grants for projects with private equity fund backing and moving instead to a “proportionate disallowance rule” where the grant would be lost to the extent of government and tax-exempt ownership of the project. Thus, for example, if state pension funds and university endowments own 10% of a private equity fund that owns 90% of a project indirectly through a developer, then only 9% of the grant would be lost.

Municipal utilities and electric cooperatives were also pressing to be able to receive Treasury cash grants on their projects.

The final bill was silent on these issues.

In addition to changing the deadline to start construction, the bill also changed a deadline to apply for Treasury cash grants. Grants are not usually applied for until after a project is completed. However, anyone expecting a grant had to apply to the Treasury by Sept. 30, 2011 as a way of letting the government know how many more claims there might be on the program. That deadline has now been pushed back to Sept. 30, 2012.

*This week's Industry Current was written by Keith Martin, partner, and John Marciano, associate, at Chadbourne & Parke. In Part II, the authors will examine depreciation bonuses and how to determine a project's eligibility in terms of its timeline.*



Keith Martin



John Marciano

Industry Current is a feature written by industry professionals that highlights and clarifies key issues in the power sector. Power Finance & Risk runs the feature periodically and is now accepting submissions from industry professionals for the Industry Current section. For details and guidelines on writing an Industry Current, please call Sara Rosner at (212) 224-3165 or email srosner@iineews.com.

# Generation Auction & Sale Calendar

**Generation Sale ■ DATABASE**

Following is a directory of ongoing generation asset sales. The accuracy of the information, which is derived from many sources, is deemed reliable but cannot be guaranteed. To report new auctions or changes in the status of a sale, please call **Holly Fletcher** at (212) 224-3293 or e-mail [hfletcher@iinews.com](mailto:hfletcher@iinews.com).

Seller	Assets	Location	Advisor	Status/Comments
Ameren	Coffeen Power Station (950 MW Coal) Electric Energy (800 MW Coal) Hutsonville Power Station (156 MW Coal) Meredosia Power Station (513 MW Coal) Newton Power Plant (1.15 GW Coal) Columbia Energy Center (140 MW Gas) Elgin Energy Center (460 MW Gas) Gibson City Power Plant (228 MW Gas) Grand Tower Power Plant (511 MW Gas) Joppa (165 MW Gas)	Coffeen, Ill. Joppa, Ill. Hutsonville, Ill. Meredosia, Ill. Newton, Ill. Columbia, Mo. Elgin, Ill. Gibson City, Ill. Grand Tower, Ill. Joppa, Ill.	JPMorgan	Ameren is quietly selling its unregulated generation facilities (PFR, 8/30).
Brick Power	Tiverton (265 MW Natural Gas) Rumford (265 MW Natural Gas)	Tiverton, R.I. Rumford, Me.	Deutsche Bank	A mix of strategic and financial players will submit final bids next month (PFR, 11/22).
Capital Power Income Fund Complete Energy	Various (1.4 GW in U.S. and Canada) Batesville (837 MW natural gas-fired)	Various Batesville, Miss.	CIBC, Greenhill & Co.	Management presentations for potential second round bidders are underway (PFR, 1/17). Creditors, including JPMorgan, Monarch Alternative Capital and Stark Investments, are in a foreclosure process (PFR, 12/6).
ConAgra	Glenns Ferry (10 MW natural gas-fired) Rupert (10 MW natural gas-fired)	Glenns Ferry, Idaho Rupert, Idaho	TBA TBA	Crestwood Energy is buying the pair (see story, page 2).
Constellation Energy	Quail (548 MW CCGT)		No advisor	A Texas municipal is buying the plant for \$215 million (PFR, 1/10).
Entergy	Vermont Yankee (650 MW Nuclear)	Vernon, Vt.	Morgan Stanley	Existing nuclear operators are expected to be interested in the facility (PFR, 11/15).
First Wind	Various (wind)	Maine, New York	Credit Suisse Macquarie Capital	Looking to sell wind farms to raise capital in addition to secure equity (PFR, 12/20).
First Solar	Sombra (20 MW solar photovoltaic)  Moore (20 MW solar photovoltaic) Agua Caliente (290 MW photovoltaic)	Ontario  Ontario Yuma County, Ariz.	TBA  TBA TBA	NextEra Energy Resources is buying the projects as it looks to fill out its development pipeline (PFR, 12/13).  NRG Solar is buying it and will make up to an \$800 million equity investment (PFR, 12/20).
Invenergy	St. Clair (570 MW, CCGT) Raleigh (78 MW wind project) Le Plateau (138 MW wind) White Oak (150 MW, wind)  Big Otter (24 MW, wind)	Ontario Ontario Ontario McLean County, Ill.  Belt, Mont.		The deadline for the final bids for the natural gas plant is being pushed back (PFR, 12/6). Marubeni has taken a 49% stake in Raleigh (see story, page (PFR, 1/17)).  NextEra Energy Resources is buying the project that is currently under construction (PFR, 1/10). NorthWestern Energy has an MOU to buy the project (PFR, 1/17).
JPMorgan	Triton (550 MW NatGas)	Jackson, Mich.	JPMorgan	JPMorgan is flipping a facility that unit Arroyo Energy Investors just bought from Kinder Morgan (PFR, 10/4).
LS Power	Bridgeport (460 MW, CCGT)	Bridgeport, Conn.	JPMorgan	Management presentations are currently underway (PFR, 1/10).
National Power	Big Valley Power (7.5 MW Biomass)	Bieber, Calif.	Bodington & Co.	Teasers went out this week (see story, page 4).
Noble Environmental Power	Granite Reliable (99 MW wind)	Coos County, N.H.	No advisor	Brookfield is working with WestLB and Citigroup on acquisition and construction financing (see story, page 3).
PSEG	Guadalupe (1 GW, CCGT) Odessa (1 GW, CCGT)	Marion, Texas Ector County, Texas	Goldman Sachs	Bids due Oct. 22 (PFR, 10/25).
Raser Technologies	Thermo 1 (14 MW Geothermal, development assets)	Thermo, Utah	Bodington & Co.	Raser has entered into an early agreement with Evergreen Clean Energy (PFR, 11/8).
Royal Dutch Shell	Shell Wind Energy (stakes in 1.1 GW) 50% Rock River (50 MW) 50% White Deer (80 MW) 50% Top of Iowa (80 MW) 50% Cabazon (41 MW) 50% Whitewater Hill (60 MW) 50% Brazos (160 MW) 50% Colorado Green (162 MW) 50% NedPower Mount Storm (264 MW) European wind (200 MW)	U.S. and Europe Wyoming Amarillo, Texas Joice, Iowa Palm Spring, Calif. Palm Spring, Calif. Lubbock, Texas Lamar, Colo. Grant County, W.Va. Various	Morgan Stanley	Second round bids came in Dec. 10 (PFR, 12/20).
Stark Investments	Wolf's Hollow (730 MW Gas)	Hood County, Texas	JPMorgan	Second round bids coming due (PFR, 11/1).
Terra-Gen Power	Alta 1 (150 MW wind)	Tehachapi, Calif.	No advisor	Initial bids for the first phase of the 3 GW Alta wind project were due earlier this month (PFR, 10/25).
Tessera Solar	Calico (850 MW, solar thermal)	California		K Road Power bought it and will convert it to photovoltaic (PFR, 1/17).
U.S. Power Generating Co.	Astoria Generating (1.28 GW Natural Gas) Gowanus (542 MW Fuel, oil and gas-fired) Narrows (276 MW Fuel oil and gas-fired)	New York City New York City New York City	Goldman Sachs	Sale is postponed to 2011 (PFR, 11/15).

## Project Finance Deal Book

*Deal Book is a matrix of energy project finance deals that PFR is tracking in the energy sector. The entries below are of new deals or deals where there has been change in their parameters or status. To report updates or provide additional information on the status of financings, please call Senior Reporter **Brian Eckhouse** at (212) 224-3624 or e-mail [beckhouse@iinews.com](mailto:beckhouse@iinews.com).*

### Live Deals: North America

Sponsor	Project	Location	Lead(s)	Loan	Loan Amount	Tenor	Notes
Abengoa Solar	Solana (250 CST)	Gila Bend, Ariz.	DOE/FFB	TBA	\$1.45B	12-yr	FFB and DOE finalizes loan, priced at Treasury plus 37.5 bps (PFR, 1/10).
Arclight Capital Partners	Various (Gas and Transmission)	U.S., Spain	Barclays, Credit Suisse	Term Loan	\$275M	7-yr	Leads finalize deal, backing a 1,412 MW operational portfolio (PFR, 1/10).
Brookfield Asset Management, Isolux Corsan		CREZ Transmission	Texas	TBA	TBA	\$240M	TBA Citi eyes financing (PFR, 1/24).
Caithness Energy, GE EFS	Shepherds Flat (909 MW Wind)	Oregon	BoTM, WestLB, RBS, Citi	TBA	TBA	TBA	Leads close largest wind financing in U.S. (PFR, 12/27).
Cannon Power	Windy (100 MW Wind)	Klickitat County, Wash	TBA	TBA	\$180M	TBA	Financial close expected this quarter (PFR, 1/10).
	Aubanel (1 GW Wind)	Baja California, Mexico	TBA	TBA	TBA	TBA	Talking to lenders in Q2, weighing financing mix (PFR, 1/10)
Calpine	Russell City (600 MW Combined-Cycle)	Hayward, Calif.	TBA	TBA	TBA	TBA	Looking for lenders (PFR, 1/10)
	Los Esteros (300 MW Retrofit)	San Jose, Calif.	TBA	TBA	TBA	TBA	Looking for lenders (PFR, 1/10)
Competitive Power Ventures, GE EFS	Sentinel (850 MW Gas)	Riverside County, Calif.	TBA	TBA	TBA	TBA	GE EFS helping to organize financing (PFR, 1/17).
EDF EN Canada	St. Isidore A (12 MW Solar PV)	Nation, Ontario	Dexia, Union Bank	TBA	TBA	TBA	Deal closes on first phase (PFR, 1/10).
	St. Isidore B (12 MW Solar PV)	Nation, Ontario	TBA	TBA	TBA	TBA	Dexia mulls participation (PFR, 1/24).
Edison Mission Energy	Various (362 MW Wind)	Neb., N.M., Texas	WestLB	TBA	\$265M	10-yr	Six banks commit (PFR, 1/24).
First Wind	Sheffield (40 MW Wind)	Caledonia County, Vt.	Key Bank	Construction	\$76M	TBA	Deal wraps (PFR, 1/24).
Noble Environmental Power	Granite Renewable (99 MW Wind)	Coos County, N.H.	TBA	TBA	TBA	TBA	WestLB, Citi land land mandate of acquisition financing (see story, page 3).
NRG Energy	El Segundo (550 MW Gas)	Carlsbad, Calif.	TBA	TBA	TBA	TBA	Sponsors plot deal for Q1 (PFR, 1/17).
Pattern Energy	Various (Wind)	Nevada, Ontario, Puerto Rico	TBA	TBA	TBA	TBA	Pattern hunts over \$1 billion in debt for projects (PFR, 1/24).
Radback Energy	Oakley (624 MW Gas)	Contra Costa County, Calif.	TBA	TBA	TBA	TBA	BoTM targets mandate (see story, page 3).
Recurrent Energy	Various (170+ MW Solar)	Ontario	TBA	TBA	TBA	TBA	Financing expected in Q2 (PFR, 1/24).
Starwood Energy	Unidentified (100 MW Solar)	Ontario	TBA	TBA	TBA	TBA	Sponsor hunts debt (see story, page 1).
Western Wind Energy	Windstar (120 MW Wind)	Tehachapi, Calif.	Manulife	TBA	\$249M	TBA	Deal closes, with Sun Life participating (PFR, 1/10).

For a complete listing of the Project Finance Deal Book, please go to [iipower.com](http://iipower.com).

## STARWOOD HUNTS

*(continued from page 1)*

financings. Those lenders include **Mizuho Corporate Bank**, **NordLB**, **Sumitomo Mitsui Banking Corp.** and **WestLB**.

Bankers say the project finance market in the Americas is liquid enough to handle several deals in excess of \$500 million in the first three quarters of 2011. "You're seeing more club deals where banks being asked to take \$75-125 million [pieces] are willing to do that," a financier says.

The number of projects Starwood is looking to finance this year and their respective generation capacity couldn't be learned. Starwood's desired debt-to-equity ratio and whether the firm has retained a co-sponsor or equity provider couldn't be learned. **Brad**

**Nordholm**, Starwood ceo in Greenwich, Conn., declined to comment, while bank officials either declined to comment or didn't return calls.

Starwood has inked some offtake agreements for the plants, while others are still being negotiated. The identity of the offtaker couldn't be learned. A Toronto-based spokesman for the **Ontario Power Authority**, which typically grants PPAs for projects in the province, declined to acknowledge or discuss pending Starwood PPAs.

Starwood landed a financing in excess of \$100 million in September backing 30 MW of PV projects in Ontario (PFR, 9/28). **NordLB** and **KfW IPEX-Bank** led that deal.

—**Brian Eckhouse**



## INVENERGY BIRD-DOGS

(continued from page 1)

A deal could be tough depending on the amount of control the management team, headed by **Michael Polsky**, ceo, wants to retain. A passive investor would allow the company to yield little control, but it would cap the amount of dollars on the table. A firm looking to invest a few hundred million would likely want a larger say on strategy, a banker notes.

The company has scored roughly 600 MW of power purchase agreements with the **Tennessee Valley Authority** in the past year, adding to the shop's appeal, industry observers say. Invenergy has also been looking to line up buyers or investors for its assets in Canada, including Le Plateau, which has a 20-year PPA with **Hydro-Québec** (PFR, 9/17).

The uncertainty about who Invenergy will bring on board has decelerated the financing backing its \$326 million, 138 MW Le Plateau wind project in southeastern Quebec, says a financier, explaining that credit departments are reluctant to ink deals without assurance that all owners are creditworthy. **Natixis** and **Royal Bank of Canada** were tapped to lead the financing last quarter (PFR, 11/10) and **Sumitomo Mitsui Banking Corp.** is eyeing the deal. Neither the size of the financing nor pricing could be learned.

A spokeswoman for Invenergy declined to comment.

—*Holly Fletcher & Brian Eckhouse*

## BES LOOKS

(continued from page 1)

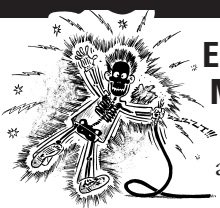
project finance loans are generally too low for private equity shops or hedge funds. A BES official in New York declined to comment.

BES will continue playing in project finance in the Americas, says another banker. The Portuguese bank is pursuing the sale to build cash reserves as fears mount over the home country's ability to fund its public debt, several project financiers explained. Portuguese 10-year bond yields closed at 6.93% on Monday, up from 4.99% on Aug. 9, when yields for the paper were at a six-month low. While the sale may make sponsors slightly weary of BES, it likely won't make prevent the bank, which has typically taken smaller deal tickets, from participating in deals.

But another banker doubts BES ultimately will remain a player in project finance, saying sponsors are unlikely to forge or rekindle relationships with an institution that relinquished a majority of its loans before they came due. "It's one thing to sell a loan here or there to reduce exposure to a company, to an offtaker, or a technology," he adds. "It's another thing to sell everything."

BES has participated in deal's backing **First Wind's** Milford I and II projects (PFR, 4/17 & 8/19). The lender has also taken tickets in deals backing **Energy Capital Partners** and **Martin**

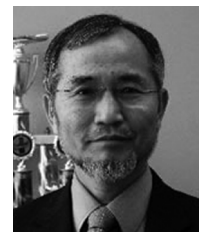
## Alternating Current



### Electricity: Where The Rubber Meets The Road

We've all heard about using pavement to fry an egg, but a research team from the **University of Rhode Island** is working on a project that would use asphalt surfaces as a medium for solar generation.

Dr. Wayne Lee is looking at several different approaches to harnessing the power of the sun via asphalt on highways, bridges and roads. Ideas include wrapping flexible photovoltaic cells around concrete barriers that divide highways, embedding PV cells on highway shoulders, and burying water pipes in the asphalt that would function similarly to geothermal pumps.



Dr. Wayne Lee

The group of researchers is also looking at replacing asphalt roadways with large, durable electronic blocks that contain PV cells which would generate power to illuminate roads, lane markings and signs. Such a prototype has been implemented in a driveway in Idaho, at the cost of \$100,000 but a practical application is at least five to 10 years ahead, Lee says from Kingston, R.I.

For now, putting on the mileage will still be leaving a carbon footprint. But in the future, driving the extra mile could make your trip a little bit greener.

**Resources Management's** Cardinal gas storage facility (PFR, 5/21), **NaturEner's** 106.5 MW Glacier I wind farm (PFR, 1/30/09) and **Abengoa Mexico's** 300 MW combined-cycle plant in Tabasco, Mexico (PFR, 6/25). Officials at the sponsors did not

## Quote Of The Week

"Our sense is the industry will be impacted by the arrival of new entrants." —**Jay Horine**, managing director and head of U.S. power & utility investment banking at **JPMorgan** in New York, on the expected arrival of new power industry investors (see story, page 7).

## One Year Ago In Power Finance & Risk

**Terra-Gen Power** selected **Crédit Agricole** and **Natixis** to lead a \$394 million financing backing the first, 150 MW phase of the 3 GW Alta Wind Energy Center in Tehachapi, Calif. [The leads wrapped the financing in March (PFR, 3/18). Terra-Gen also closed a \$1.2 billion financing backing phases two through four (PFR, 7/26) and is now talking to lenders about funding phases five through eight (PFR, 10/22).]