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DoE Loan Chief Chats

Jonathan Silver, the executive director of the U.S. **Department of Energy's** loan program office, gave a wide-ranging interview to *PFR*, outlining, among other things, the improved pace of securing loan guarantees.

See Q&A, page 7

PPL Wraps Kentucky Financing

PPL Corp. has issued \$2.91 billion in notes to wrap financing of its purchase of **E.ON's** Kentucky utility assets. Senior finance v.p. **Jim Abel** explains the nuts and bolts of the tranches and the timing strategy.

See Corporate Strategies, page 6

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Up On The Sun

TENASKA SCOUTS FINANCING FOR MAIDEN SOLAR FORAY

Tenaska is aiming to raise \$700-800 million in debt for its first two solar photovoltaic projects, both in Southern California. The Omaha, Neb.-based developer is targeting late 2011 to wrap financings backing two plants totaling roughly \$1 billion, says **Greg Van Dyke**, cfo and treasurer.

"From a strategic standpoint, we think there's a very large market... in terms of total investment potential," says **Dave Fiorelli**, president of Tenaska's development group in Omaha. The IPP has several hundred MW of solar generation planned over the next five years.



(continued on page 11)

Q3 Generation Sales Data

RENEWABLE ASSET FLOW SPIKES

Renewable generation took center stage in generation asset auctions and sales in the third quarter. Of the 10 deals that wrapped, eight were renewable. That's against zero renewable sales in the same quarter last year, according to exclusive numbers from *PFR's* Generation Sale Database.

The momentum behind regulatory and governmental initiatives is seen as a key driver. These include buyers looking to meet state standards or in preparation for emission regulations from the U.S. **Environmental Protection Agency**. "Various companies are making strategic moves to get into what is an attractive market at what may be a good time to buy because there may be financial stress or strategic changes at the seller," says **Jeff Bodington**, president of **Bodington & Co.** in San Francisco.

(continued on page 10)

FIRST SOLAR HUNTS ONTARIO PV FINANCING

First Solar is hunting financing to support roughly \$380 million in solar photovoltaic plants in Ontario. **Credit Suisse** is among the lenders looking at the portfolio of six projects, a deal watcher says.

Two 20 MW plants are planned for St. Clair, Ontario. Other plants include the 20 MW Walpole, 20 MW Belmont, 10 MW Amherstburg and 5 MW Tilbury projects. Solar PV generally costs \$4 million per MW to build. A spokesman for the Tempe, Ariz.-based company declined to discuss the financing of the projects.

If First Solar opts for a conventional project finance deal, bankers expect it to tap lenders that arrange its revolvers, including those that closed Oct. 15. That day, First Solar increased its \$300 million revolver to \$600 million and extended its maturity to 2015 from 2013. The

(continued on page 11)

Check www.iipower.com during the week for breaking news and updates.



At Press Time

Entergy Taps MS For Vermont Yankee Review

Entergy is working with **Morgan Stanley** on the possible sale of its Vermont Yankee nuclear facility. Potential buyers for the 650 MW facility in Vernon, Vt., are expected to be limited to companies already operating nuclear facilities, bankers say. The U.S. has about two dozen nuclear power operators, including **Exelon**, **NextEra Energy** and **PSEG**.

Entergy had been in talks with Exelon about a merger earlier this year (PFR, 9/27), but those talks have largely ended, industry officials say. The two companies discussed a deal involving **Entergy Nuclear**, an Entergy subsidiary that owns the fleet of 10 nuclear facilities, a banker says. What happened to the talks or whether they could be revived could not be learned.

Vermont regulators have been at odds with Entergy over whether Vermont Yankee's license would be extended beyond March 2012. Whether state regulators would consider extending the license under a new operator could not be learned.

A timeline for the sale of the nuclear facility or other options Entergy is considering could not be learned. A Morgan Stanley official and spokeswoman declined to comment as did an Entergy spokesman in New Orleans, La.

KEPCO Makes U.S. Debut, Eyes Acquisitions

Korea Electric Power Corp. will be looking for renewable acquisitions in North America to follow up on its foray in to the U.S. via an affiliate's purchase of **Marubeni Sustainable Energy**. **Korea East-West Power Corp.**, the new parent of **Marubeni** unit, is targeting biomass, solar and wind acquisitions, says **John Wood**, executive v.p. at the newly renamed **EWP Renewable Corp.** in San Diego.

Greenfield development will not be ruled out in the future. EWP will be looking to add people to its team, he says. He declined to identify on acquisition targets or growth plans.

Korea East-West pocketed three biomass facilities and one natural gas-fired plant in the transaction that closed Sept. 30:

- 17.5 MW Fairhaven Power biomass facility in Eureka, Calif.
- 15 MW Whitefield biomass facility in Whitefield, N.H.
- 16 MW Springfield Power biomass facility in Springfield, N.H.
- 14 MW natural gas-fired facility in Brooklyn, N.Y.

Headwaters, a boutique investment bank in Denver, Colo., advised **Marubeni**. **KEPCO** worked with **Rothschild**. **Korea East-West** is a generation company is a spin-off of **KEPCO**, which still owns the majority of shares.

The purchase price could not be learned. A **Headwaters** official declined to comment. A **Marubeni America** official in New York did not return a call. A **KEPCO** official could not be immediately reached and a **Rothschild** spokesman in New York couldn't immediately comment.

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Project Finance

GE Lands Cogentrix Refi Mandate

Cogentrix has mandated **GE Energy Financial Services** to lead a \$150-200 million refinancing of two coal-fired plants in Virginia. The **Goldman Sachs** affiliate is targeting a year-end close.

Deal details, including pricing and tenor, and other banks eying the refinancing couldn't be learned by press time. **Kevin McNamara**, Cogentrix v.p. of project finance in Charlotte, N.C., did not return a call. A Goldman spokesman in New York declined comment.

Cogentrix is leveraging the 117 MW Hopewell plant and the 110 MW Portsmouth plant after the **Northern Virginia Electric Cooperative** approved offtake agreements for them through 2029 (PFR, 9/14).

Deutsche Bank Snags SkyPower Mandate

SkyPower has mandated Deutsche Bank to lead a financing backing a roughly \$120 million, 30 MW portfolio of solar plants in Ontario. The three projects will be financed in individual phases, under a single structure, a deal watcher says. The first phase is expected to close this month.

Deal details, including pricing and tenor, as well as the financing timelines for the second and third phases couldn't be learned. Lenders considering joining the financing also couldn't be learned. A call to **Kerry Adler**, SkyPower president and ceo in Toronto, was forwarded to **Hando Kang**, senior director, who didn't respond. A Deutsche Bank official declined to comment.

The **Ontario Power Authority** is the offtaker for the farms. The identity and locations of those farms couldn't be learned. OPA offered PPAs to SkyPower in April for the Glenarm and Val Caron solar plants in Kawartha Lakes and Greater Sudbury, respectively.

Lenders Eye Shepherds Flat Financing

More than a dozen lenders are looking at \$360 million in credit facilities backing **Caithness Energy** and **GE Energy Financial Services'** \$2 billion Shepherds Flat wind farm. Leads **Bank of Tokyo-Mitsubishi**, **Citigroup**, **Royal Bank of Scotland** and **WestLB** are pitching ticket sizes at roughly \$40 million. Commitments are due in early December.

The leads launched a roadshow Wednesday for the \$650 billion private placement attached to the financing, a deal watcher says. The debt has a tenor of 10 years plus a three-year construction period (PFR, 10/14). Pricing and potential investors in the private placement couldn't be immediately

learned. **Jeff Delgado**, Caithness director in New York, didn't respond to an inquiry and a GE EFS spokeswoman in Stamford, Conn., declined to comment. Bank officials either declined to comment or didn't return calls.

Southern California Edison has a 20-year offtake agreement for the 845 MW farm in eastern Oregon.

Natixis, RBC Snare Invenergy Mandate

Invenergy has mandated **Natixis** and **Royal Bank of Canada** to lead a financing backing its \$326.4 million, 138 MW Le Plateau wind farm in southeastern Quebec. A half-dozen lenders are expected to participate in the financing. Invenergy is seeking a tenor matching **Hydro-Québec's** 20-year offtake agreement (PFR, 10/13). Deal

details, including the loan size and pricing, and the financing timeline couldn't be learned by press time. **Joe Condo**, Invenergy general counsel in Chicago, didn't return a call seeking comment. A Natixis official and an RBC spokesman couldn't be reached. Le Plateau is slated to be operational in December 2011.



Minn. Developer Hunts Wind Funds



Paul White

Project Resources Corporation is talking with lenders about leading a financing via a sale-leaseback for its \$100 million, 50 MW Lakeswind farm it is developing near Fargo-Moorhead, Minn. PRC expects to mandate a bank as early as next month and is targeting financial close in the first quarter.

Mitsubishi UFJ Financial Group affiliate **Union Bank** has reached out to PRC, says **Paul White**, president in Minneapolis. He declined to discuss those talks or reveal other potential lenders. Union Bank is providing a \$60 million financing via a sale-leaseback for PRC's 25.3 MW Ridgewind farm in Woodstock, Minn. (PFR, 7/20).

Construction on Lakeswind will begin by year-end to qualify for the U.S. **Department of Treasury** cash grant. PRC, a project developer, will front initial construction costs via its balance sheet, White says. The prospective debt-to-equity split on the financing, as well as pricing and tenor couldn't be learned. A Union Bank official in Los Angeles declined to comment.

Whether PRC has an offtake agreement for Lakeswind couldn't be learned. White declined to comment. **Xcel Energy** is

the offtaker for Ridgewind, but isn't in negotiations with PRC for Lakeswind, a spokeswoman says.

Details Emerge In ArcLight Term Loan B

ArcLight Capital Partners affiliate Race Point Power is targeting a seven-year tenor for a \$370 million term loan B. The loan will recapitalize eight generation facilities it financed with equity in the U.S. and Spain. Leads Barclays Capital and Credit Suisse expect to close the deal in early December. Pricing has yet to be set (PFR, 11/1).

The leads hosted a meeting for potential institutional investors Wednesday. The names of interested investors couldn't be learned. Dan Revers, ArcLight managing director in Boston, didn't return a call. A Barclays official declined to comment, while a Credit Suisse banker couldn't be reached.

Mergers & Acquisitions

Good Energies Invests For Wind Long Haul



Ian Blakely

Good Energies has taken a \$50 million stake in Champlin Energy Co., a Santa Barbara, Calif.-based wind development shop with plans to bring projects online starting in mid- to late-2012.

That approach runs counter to the current demand for shovel-ready, contracted projects.

"Wind is in a tough period, particularly in the U.S., where the ability to secure PPAs has been relatively low, and our view is, there currently is an under investment in development. Two or three years down the road when we are in a better economic environment there will be more of a need to bring wind online," says Ian Blakely, director in the New York-based investment firm.

Champlin, now called Champlin-GEI Wind Holdings, is primarily in the market for mid- to late-stage 100-500 MW projects that are just before offtake negotiations although earlier stage or construction-ready projects will be considered, says Blakely. Good Energies and Champlin will co-own the projects. Western states are the most attractive although Champlin will also look at parts of the Midwest, Blakely says.

Shovels will be in the ground on the first project late next year. Its current pipeline has about 4 GW in various stages of development in California, Hawaii, Nevada and Utah. Blakely declined to elaborate on the project's size, location or how projects will be financed.

A portion of the capital will be used to fill out the management

team, which is headed by Mike Cutbirth, a former president of Clipper WindPower. Cutbirth did not respond to an inquiry.

Second Lien Prep BostonGen Bid

A group of second lien lenders to Boston Generating Co. are getting ready to make a bid to take over the company.

MatlinPatterson Global Advisers and CarVal Investors are part of the group that wants to own the distressed unit of U.S. Power Generating Co., bankers say. The financial players would restructure the debt and hold on to the asset, waiting for power prices to rise, says one banker.

A credit bid—a bid from a first or second lien creditor—would need to cover secured debt the bidders do not hold. It would also have to pay the \$35 million break-up fee related to the stalking horse bid, according to the bidding procedures filed with the bankruptcy court.

The bid will go up against Constellation Energy's \$1.1 billion stalking horse bid and Energy Capital Partners on Nov. 15 (PFR, 11/5). The stalking horse bid would cover the first lien debt, but not the second lien and mezzanine. All bids were due Nov. 12.

CarVal and Fortress Investor Group objected to the court-run process (PFR, 10/1). Houlihan Lokey advised the second lien lenders in restructuring negotiations earlier this year. Whether Houlihan remains the advisor or if Fortress is in the consortium of buyers could not be learned.

Officials at JPMorgan, which is advising U.S. PowerGen, and officials at CarVal in Minnetonka, Minn., declined to comment. Officials at Fortress Investment, Houlihan, MatlinPatterson and U.S. PowerGen didn't respond to inquiries.

DTE Sub. Expands Converted Biomass Fleet

DTE Energy Services is looking to build its fleet of coal-fired-cum-biomass plants through acquisitions after agreeing to buy a 49.5 MW plant in California—its second conversion in the state. DTEES is eyeing a handful of plants across the country, says Steve Sorrentino, v.p. of power and renewables in Ann Arbor, Mich. DTEES is not using an advisor; he declined to identify potential targets or give a timeline for acquisitions.

DTE Energy Services is buying out Northern Star Generation and Red Hawk Energy's stakes in the Mt. Poso coal-fired plant in Bakersfield, Calif., which is already undergoing a conversion. Pacific Gas & Electric Co. will buy power upon completion. The Mt. Poso facility will be owned 50:50 by DTE and existing owner MacPherson Oil.

The retrofit, which will result in a 44 MW plant fueled with wood waste and agricultural residues, could cost in the

neighborhood of \$25 million, says an industry official. Sorrentino declined to confirm or comment on the number.

The unregulated unit of **DTE Energy** is in the process of converting the 44 MW POSDEF coal-fired plant in Stockton, Calif., that it bought from **NextEra Energy** earlier this year (PFR, 7/2). It recently completed a conversion project in Wisconsin and owns biomass plants in Woodland, Calif., and Mobile, Ala.

The purchase price of Mt. Poso could not be learned. Boutique investment bank **Headwaters** in Denver, Colo., advised Northern Star and Red Hawk. An official at Northern Star Generation did not return a call and a Headwaters banker declined to comment. A Red Hawk official could not be reached.

Corporate Strategies

PPL Locks In Financing For E.ON Purchase



Jim Abel

PPL Corp. has finalized its permanent financing for its \$7.6 billion purchase of E.ON's Kentucky utility assets with seven tranches of notes in a \$2.91 billion issuance that came a week after the acquisition finalized Nov. 1. **Kentucky Utilities Co.** and **Louisville Gas & Electric Co.**—the newest additions to PPL—have issued tranches of debt with five, 10- and 30-year maturities.

The bonds came to market Monday after a delay due to the **EEI Financial** conference in Palm Desert, Calif., last week, says **Jim Abel**, senior v.p. of finance and treasurer of PPL in Allentown, Penn. "We had our paperwork ready to go. It is not a good week to launch because everybody's focus was out there. We went as soon as we could," he says, adding the transaction could have been delayed if the bond market wasn't favorable. The need

for speed led to a 144A placement although PPL intends to register the notes with the **Securities and Exchange Commission** in the coming weeks, he says.

PPL set the maturity and amounts it wanted to issue at each company and let investor interest guide each tranche size, says Abel. The strongest interest was in the 30-year notes at both the utilities, he says. The issuance was not upsized. Asset managers made up 60% of the investors with insurance companies rounding out the mix, Abel says, declining to name the buyers.

KU issued an aggregate \$1.5 billion of first mortgage bonds:

- \$750 million of 30-year notes with a 5.125% coupon, 108 basis points over U.S. Treasuries
- \$500 million of 10-year notes with a 3.25% coupon, 75 bps
- \$250 million of 5-year notes with a 1.625%, 58 bps

LG&E issued \$485 million in first mortgage bonds:

- \$285 million of 30-year that carried a 5.125% coupon, 108 bps
- \$250 million of 5-year that carried a 1.625% coupon, 58 bps

LG&E and KU Energy, the parent of the utilities that was formerly known as **E.ON U.S.**, issued \$875 million in senior unsecured notes:

- \$475 million of 10-year with a 3.75% coupon, 130 bps
- \$400 million of 5-year with a 2.125% coupon, 110 bps

Credit Suisse, advisor to PPL, and **Bank of America** were bookrunners. BoA joined Credit Suisse in offering a \$6.5 billion bridge loan to PPL at the outset of the acquisition that was never drawn on, says Abel, noting the loan was an "insurance policy." Officials at Bank of America and Credit Suisse declined to comment.

PPL issued \$3.5 billion in common stock and equity this summer to finance the acquisition.

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

- **TransAlta** is planning to build an 800 MW Sundance 7 natural-gas fired plant near Edmonton, Alberta, at its existing 2.1 GW Sundance coal-fired facility. The project will cost between \$78-115 per megawatt hour (*Calgary Herald*, 11/11).

- Solar panel and wind turbine manufacturers are increasingly take over targets as stocks lost about \$400 billion in value this year. **Gamesa** could be a target, according to **UBS** (*Bloomberg*, 11/11).

- **Fort Sumter National Monument** in Charleston, S.C., has launched a study to determine whether solar panels and a hydrogen fuel-cell backup system can be built without affecting the site's historic integrity. If successful, the new generating system could be in place by next summer (*Post & Courier*, 11/10).

- The U.S. **Department of Interior** has launched the first phase of a request for proposals for an offshore wind project off the coast of Maryland that could be 1 GW (*Baltimore Sun*, 11/9).



Q & A

DoE's Jonathan Silver

Jonathan Silver is the executive director of the U.S. Department of Energy's loan program office in Washington, D.C. He supervises multiple initiatives, including the Sects. 1703 and 1705 loan guarantee programs. The Sect. 1705 program was launched under the 2009 American Recovery and Reinvestment Act and is designed to spur investment in commercially viable technologies at large scales and create clean energy jobs. The Sect. 1703 was established during the Bush Administration to propel innovative technologies forward. Under Sects. 1703 and 1705, the U.S. government has offered support for 16 clean energy projects in 13 states—and to some of the most-discussed renewables projects, including Caithness Energy and GE Energy Financial Services' 845 MW Shepherds Flat wind farm in eastern Oregon, the largest such project in the U.S. Congress initially appropriated \$6 billion to the program, but has sliced it to \$2.465 billion (PFR, 8/12).

He spoke to Senior Reporter **Brian Eckhouse**.

What would the clean energy financing market look like without the DOE loan guarantee programs?

"We've become more effective at reviewing applications quickly."

One of the goals is to incentive the private capital markets into these energy sectors. We do that by attempting to de-risk them from a technological perspective and provide low-cost capital around commercial debt. Ever since the economic [crisis], there has been an increased need for loan guarantees in order to stimulate and launch these markets. The tax equity market... has shrunk

considerably. Commercial lending has been smaller in this space and equity capital has been somewhat scarcer. I think the DOE loan guarantee programs are necessary to the resurgence and renaissance in these sectors.

Bankers often characterize the process to secure a loan guarantee as glacial. Is that a fair assessment?

I think that was a correct perception but that's an outdated perception. We've automated the entire submission process.

You can now fill out the submission online; that has really helped the speed. We used to take three to four months to do an initial review of the application, which is now something we can do in 5 to 10 business days. The recent applications have been processed soups-to-nuts in under six months. That's been the recent norm. That review time has been cut by at least half. I'd like to see it [wrapped] in five to six months. It won't get much faster than that. And that's on par with the private sector. Remember, we're dealing with the most complex loans in the country... involving new and innovative technologies that have really not been tried at scale in the country.

"We have sufficient funds to deploy on the projects we're working on and robust new projects that come in."

What methodology do you use to determine a project's worthiness?

There's a very robust due diligence... including detailed screening of financial issues, market issues, the underlying technology, legal issues, regulatory issues and environmental impact issues. The mechanics of it are that every part of the project is scored. Those scores are weighted and tabulated in a model that we've developed with the **Office of Management and Budget** so there is a level playing field by which all projects are measured. In some respects, our work mirrors the work of the private sector. It's what's done at financial institutions everywhere when looking at both sides of the balance sheet. You look at the competitive landscape and data from independent third-party sources to validate those assumptions.

Has the methodology evolved in the past year?

The underlying modeling remains much the same. Under the loan program's office, we've completed 20 projects financing \$25 billion in loan guarantees generating \$40 billion in project costs. With that experience, we've been able to refine not so much our methodology but our insights into various energy sectors. That has helped us speed up the processing of these applications. People don't realize that as early as January 2009, we had 15 employees. Now we have 80 to 90 federal employees in addition to a large number of consultants. We've become more effective at reviewing applications quickly.

What is the status of loan guarantees for developers of nuclear reactors?

We are actively involved in reviewing and doing due diligence.

You probably know that we did one earlier this year, the first one done in 30 years, the Vogtle project in Georgia. I expect we'll move some forward in the relatively near term.

What will happen with the Calvert Cliffs project in Maryland now that Constellation Energy has pulled out?

EDF and Constellation have concluded their negotiations and EDF is now the owner of the Calvert Cliffs project. We continue

to work on the UniStar project and see where things go.

How has Congress' slashing of the DOE loan guarantee program affected how you decide whether a developer merits a loan guarantee?

Obviously we have less capital to work with... but we have sufficient funds to deploy on the projects we're working on and robust new projects that come in.

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.*

Live Deals: North America

Sponsor	Project	Location	Lead(s)	Loan	Loan Amount	Tenor	Notes
American Electric Power, Allegheny Energy	PATH (Transmission)	Maryland, Virginia and West Virginia	TBA	TBA	TBA	TBA	Sponsors initiate informal talks with banks (PFR, 11/1).
ArcLight Capital Partners	Various (Gas and Transmission)	TBA	Barclays, Credit Suisse	Term Loan	\$370M	TBA	ArcLight affiliate targets a seven-year tenor (see story, page 5).
BP Wind Energy, Sempra Generation	Cedar Creek II (250.8 MW Wind)	Weld County, Colo.	TBA	TBA	\$400M	10-12-yr	Banco Sabadell and Mizuho to participate (PFR, 11/8).
Caithness Energy, GE EFS	Shepherds Flat (909 MW Wind)	Oregon	BoTM, WestLB, RBS, Citi	TBA	TBA	TBA	More than a dozen banks eye \$40 million tickets (see story, page 4).
enXco	Unknown (Wind)	Canada	Dexia	TBA	TBA	TBA	Dexia mandated to lead financing wind farm in Canada (PFR, 11/10).
First Solar	Various (90 MW Solar PV)	Ontario	TBA	TBA	TBA	TBA	Sponsor scouts portfolio financing (see story, page 1).
GWF Energy	Tracy (314 MW Combined Cycle)	Tracy, Calif.	MUFG	TBA	\$305M	TBA	Six banks commit to loan (PFR, 11/1).
Horizon Wind Energy	Meadow Lake II (99 MW Wind)	White County, Ind.	TBA	TBA	TBA	TBA	JPMorgan makes tax equity investment (PFR, 11/1).
Hudson Transmission Partners	Hudson Transmission	Ridgefield, N.J.-New York	RBS, SocGen	TBA	TBA	TBA	Deal expected to launch in November (PFR, 11/1).
Invenegy	Le Plateau (138 MW Wind)	Quebec, Canada	Natixis, RBC	TBA	TBA	TBA	Natixis and RBC snag mandates (see story, page 4).
	White Oak (150 MW Wind)	McLean County, Ill.	TBA	TBA	\$300M	TBA	Sponsor scouts financing (PFR, 11/1).
Lincoln Renewable Energy	Various (100 MW Solar PV)	New Jersey	TBA	TBA	\$400-500M	TBA	Sponsor targets relationship lenders of Airtricity and SunPower (PFR, 10/11/10).
NextEra Energy Resources	Unknown (500 MW Gas-Fired)	Blythe, Calif.	Crédit Agricole, Lloyds TSB	TBA	\$300M	TBA	NextEra mandates banks to lever existing plant (PFR, 11/1).
Noble Environmental Power	Granite Renewable (99 MW Wind)	Coos County, N.H.	TBA	TBA	TBA	TBA	WestLB considers participating (PFR, 11/10).
Project Resources Corporation	Lakeswind (100 MW Wind)	Fargo-Moorhead, Minn.	TBA	TBA	\$200M	TBA	PRC in talks with lenders about sales-leaseback (see story, page 4).
Rollcast Energy	Piedmont Green Power (50MW Biomass)	Barnesville, Ga.	MUFG, Investec	TBA	\$133M	TBA	MUFG, Investec wrap \$133 million financing (PFR, 11/1).
SkyPower	Various (30 MW Solar PV)	Ontario	Deutsche Bank	TBA	TBA	TBA	Sponsor mandates Deutsche Bank to leading financing (see story, page 4).
Tenaska	Various (250 MW Solar PV)	California	TBA	TBA	TBA	TBA	Tenaska scouts debt for two solar plants (see story, page 1).
Terra-Gen Power	Alta Phases 5-8 (300-500 MW Wind)	Tehachapi, Calif.	TBA	TBA	TBA	TBA	Sponsor initiates talks with lenders about financing next phases (PFR, 10/25).

For a complete listing of the Project Finance Deal Book, please go to iipower.com.

Generation Sales Database

Generation Sale DATABASE

Following is a listing of ongoing generation asset sales from PFR's Generation Sales Database. The entries below are of new sales and auctions or of sales and auctions that have changed in their parameters or status. The accuracy of the information, which is derived from many sources, is deemed reliable but cannot be guaranteed. To report new sales and auctions or changes in the status of a sale or auction, please call Senior Reporter **Holly Fletcher** at 212.224.3293 or e-mail hfletcher@iineews.com. The full database is available at <http://www.iipower.com/GenerationSalePage.aspx>

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).
BlackRock Subsidiary and investor group	Milford Power (559 MW CCGT)	Milford, Conn.	JPMorgan	Teasers for the facility went out late last month (PFR, 8/30).
Brick Power	Tiverton (265 MW Natural Gas) Rumford (265 MW Natural Gas)	Tiverton, R.I. Rumford, Me.	Deutsche Bank	Second round bids are due soon from a mix of strategic and financial players.
Carlyle/Riverstone	Coastal Carolina Clean Power (27.5 MW biomass)	Kenansville, N.C.	TBA	Teasers for the facility are expected to go out soon (PFR, 10/25).
Cogentrix Energy	20% interest in Calypso Energy Holdings	Various in U.S.	Goldman Sachs	Wants to exit the 2.8 GW Calypso portfolio that consists of coal and gas-fired facilities (PFR, 8/2).
Entergy	Vermont Yankee (650 MW Nuclear)	Vernon, Vt.	Morgan Stanley	Existing nuclear operators are expected to be interested in the facility (see story, page 2).
GE Energy Financial Services	Oyster Creek (424 MW CCGT)	Freeport, Texas	TBA	Toyota Tsusho buys 45% stake for \$100M.
Invenergy	St. Clair (570 MW, CCGT) Raleigh (78 MW wind project)	Ontario Ontario		Second round bids due (PFR, 11/8).
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).
Northern Star Generation	Mt. Poso (50 MW coal-fired)	Bakersfield, Calif.	Headwaters	DTE Energy is buying out two of the plants owners to convert it to biomass (see story, page 5).
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).
Robert Mooney, Mendata	Malacha (30 MW hydro)	Lassen County, Calif.	Bodington & Co.	Brookfield Renewable Power is buying out the 50% stake (PFR, 11/1).
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 due (PFR, 11/15).
Stark Investments	Wolf's Hollow (730 MW Gas)	Hood County, Texas	JPMorgan	Second round bids coming due (PFR, 11/1).
Tenaska	Selling a portion of stakes 35% of 70% Alabama II (885 MW Gas) 35% of 70% Virginia (885 MW Gas) 35% of 20% Kiowa (1.222 GW Gas) 22% of 32% Gateway (845 MW Gas) 35% of 70% Georgia (944 MW Peaker)	Various Billingsley, Ala. Scottsville, Va. Kiowa, Okla. Mt. Enterprise, Texas Frankling, Ga.	Citigroup, Morgan Stanley	Tyr Energy and Chubu Electric Power Co. partnered to buy the stakes (PFR, 10/25).
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).
U.S. Power Generating Co.	Boston Generating Mystic 8 (801 MW Gas fired) Mystic 9 (801 MW Gas fired) Fore River (801 MW Gas fired) Mystic 7 (560 MW Gas fired) Astoria Generating (1.28 GW Natural Gas) Gowanus (542 MW Fuel, oil and gas-fired) Narrows (276 MW Fuel oil and gas-fired)	Greater Boston area New York City New York City New York City	JPMorgan Goldman Sachs	Second lien lenders are preparing to rival Constellation Energy and Energy Capital Partners (see story, page 5). Sale is postponed to 2011 (PFR, 11/15).

Generation Auctions & Completed Sales

Generation Sale ■ DATABASE

	Quarter 3 2010 Deals Launched	Quarter 3 2010 Launched & Completed	Success Rate for Quarter 3	Deals Completed Within Quarter 3 2010 (regardless of when launched)	Quarter 3 2009 Deals Launched	Quarter 3 2009 Launched and Completed	Success Rate for Quarter 3	Deals Completed Within Quarter 3 2009 (regardless of when launched)
Total	30	5	17%	10	34	1	3%	3
Gas	11	0	0%	1	13	1	8%	1
Wind	11	4	36%	5	2	0	0%	1
Nuclear	0	0	0%	0	0	0	0%	0
Coal	0	0	0%	1	3	0	0%	0
Geothermal	1	0	0%	1	0	0	0%	0
Biomass	1	0	0%	0	3	0	0%	0
Solar	0	0	0%	0	0	0	0%	0
Landfill Gas	2	0	0%	0	0	0	0%	0
Hydro	2	1	50%	1	5	0	0%	0
Gas/Solar	1	0	0%	1	0	0	0%	0
Naptha	0	0	0%	0	0	0	0%	0
Waste-to-Energy	0	0	0%	0	7	0	0%	0
Petcoke	0	0	0%	0	0	0	0%	0
Oil	0	0	0%	0	1	0	0%	0
Gas/Oil	0	0	0%	0	0	0	0%	1
Coal/Gas	1	0	0%	0	0	0	0%	0

	Deals Launched Jan.-Sept. 2010	Deals Launched & Completed Jan.-Sept. 2010	Success Rate for Jan.-Sept.	Deals Completed Within Jan.-Sept. 2010 (regardless of when launched)	Deals Launched Jan.-Sept. 2009	Deals Launched & Completed Jan.-Sept. 2009	Success Rate For Jan.-Sept.	Deals Completed Within Jan.-Sept. 2009 (regardless of when launched)
Total	90	22	24%	31	72	7	10%	18
Gas	32	5	16%	9	22	3	14%	9
Wind	25	14	56%	15	18	3	17%	4
Nuclear	0	0	0%	0	1	0	0%	0
Coal	2	1	50%	2	5	0	0%	2
Geothermal	2	0	0%	1	0	0	0%	0
Biomass	2	0	0%	0	5	0	0%	1
Solar	10	0	0%	0	0	0	0%	0
Landfill Gas	2	0	0%	0	3	0	0%	1
Hydro	6	1	17%	2	7	0	0%	0
Gas/Solar	2	1	50%	1	0	0	0%	0
Naptha	0	0	0%	0	1	0	0%	0
Waste-to-Energy	0	0	0%	0	7	0	0%	0
Petcoke	1	0	0%	0	0	0	0%	0
Oil	1	0	0%	0	1	0	0%	0
Coal/Gas	3	0	0%	1	0	0	0%	0
Gas/Oil	2	0	0%	0	2	1	50%	1

Notes:

Data Covers U.S. and Canada

Numbers represent individual power plants, not corporations

 Source: PFR Generation Sale Database <http://www.iipower.com/GenerationSalePage.aspx>

RENEWABLE ASSET FLOW

(continued from page 1)

Three of five wind projects were bought by utilities or municipals looking to add wind to their portfolio; **Oklahoma Gas & Electric**, **Southern California Public Power Authority** and **Golden Spread Electric Cooperative** in Texas all added a wind project to their portfolio mix. Utilities like **OG&E** are taking advantage of being able to rate-base renewables in some states, says **Ted Brandt**, ceo at **Marathon Capital** in Bannockburn, Ill.

Pressures to meet deadlines to qualify for cash grants from the

U.S. Department of Treasury are also pushing some sellers to line up buyers or co-investors for projects. "The pressure for both solar and wind is on qualifying for grants. We've seen lots and lots of effort in getting these projects toward development milestones so they can be 2011, 2012 projects," says Brandt.

Financial stress lingers for many companies, renewable and thermal, and is still driving plants to change hands. Of the 30 deals launched in the quarter, five were sewn up within the quarter. That can indicate some sellers are looking to divest quickly, says a banker.

Financial investors put 11 natural gas-fired facilities, including **Astoria Generating Co**, **Brick Power**, **Milford**

Power Co., on the market. The return of buyers, strategic and financial alike, has buoyed the possibility of making an exit, says an M&A banker, noting however, there is still a rift in the buy-sell ask price.

Year to date, 90 power plants have hit the market while 72 were up for grabs last year.

—*Holly Fletcher*

FIRST SOLAR

(continued from page 1)

company has the right to further increase the facility, to \$750 million.

Lenders include **Bank of America**, **JPMorgan**, **Royal Bank of Scotland** and **Credit Suisse**. Other banks that could be approached include **BMO Capital Markets**, **Dexia Crédit Local**, **NordLB** and **Rabobank**—lenders with appetites for financing renewables and experience with Canadian projects, financiers in New York say. Bank officials either declined to comment or didn't return calls.

First Solar sometimes finances construction on balance sheet, after inking offtake agreements, completing permitting and tending to site work, the spokesman says.

First Solar's timeline to finance the six plants, potential investors, preferred structure and the desired debt-to-equity couldn't be learned. **Jens Meyerhoff**, cfo in Tempe, didn't return a call.

The **Ontario Power Authority** has 20-year offtake agreements for the plants. Construction is expected in 2011.

—*Brian Eckhouse*

TENASKA SCOUTS

(continued from page 1)



Greg Van Dyke

A subsidiary of **CSolar Development**, a renewables company managed by **Tenaska Solar Ventures**, is developing the 130 MW **Imperial Solar Energy Center South** in Imperial County, Calif. **San Diego Gas & Electric** has a 25-year offtake agreement for the project. The other Tenaska plant will generate 120-180 MW. **Fiorelli** declined to specify the location and likely offtaker.

Van Dyke is monitoring the financing of **Caithness Energy** and **GE Energy Financial Services'** \$2 billion, 845 MW **Shepherds Flat** wind farm in eastern Oregon (see story, page 4) and could model the Tenaska financings after it. The U.S. **Department of Energy** awarded the developers of **Shepherds** a loan guarantee under the agency's **Financial Institutional Partnership Program**. Tenaska is seeking **FIPP** loan guarantees, as well, and has completed the first part of the applications. If Tenaska doesn't garner guarantees, it will probably seek a traditional project finance debt-to-equity ratio of 70-80% debt, Van Dyke says.

Pricing and tenor have been yet to be decided on the financings backing the Tenaska plants. Van Dyke expects to talk to relationship lenders, European and Japanese project finance banks and participants in a \$133 million term loan and \$7 million letter of credit backing **Acciona Solar Power's** 64 MW **Nevada Solar One** plant (PFR, 1/4/08). Tenaska has already started to talk to banks, Van Dyke says, declining to name them. Tenaska's known relationship lenders include **BNP Paribas**,

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Citigroup, Crédit Agricole, Credit Suisse and Morgan Stanley. Acciona participants include Banco Santander, BBVA, Dexia, Crédit Local and HSH Nordbank.

Tenaska's solar projects could deepen a slowly emerging financing market in the space. One of the largest solar deals in the U.S.—five banks backing a \$200 million portfolio of three Southern California plants developed by **Eurus Energy** and **NRG Energy** (PFR, 9/27)—is fairly small for project financiers. Most solar financings in the U.S. have tended to be support small, 10-20 MW plants. There has also been a recent smattering of mega projects, including **BrightSource Energy's** 400 MW Ivanpah solar plant in California, that have been propelled by the U.S. government via loan guarantees (PFR, 7/23). Some lenders project several 90-125 MW plants will be financed in 2011 and 2012, as the space matures and bank appetite mounts.

Bank officials either declined to comment or didn't return calls. A U.S. **Department of Energy** spokeswoman in Washington, D.C., and an SDG&E spokeswoman in San Diego declined to comment.

—*Brian Eckhouse*

Conference Calendar

- **EuroMoney** will host the 3rd Annual Brazilian Energy and Infrastructure Finance Forum November 17-18 at The Sofitel in Sao Paulo. To register, visit <http://www.euromoneyseminars.com/EventDetails/0/3487/The-3rd-Annual-Brazilian-Energy-Infrastructure-Finance-Forum.html?LS=EMS423128>.
- **Green Power Conferences** will host Wind Power Manufacturing & Supply Chain Summit USA November 30-December 1 at Courtyard Chicago Downtown-Magnificent Mile in Chicago. To register, visit <http://www2.greenpowerconferences.co.uk/EF/?sSubSystem=Registration&sEventCode=WE1011US&sSessionID=1286a89f350f6dbb460149bbfcd56f6f-1240602>.
- **Infocast** will host Southern Wind 2010 November 30-December 2 at the Sheraton Myrtle Beach Convention Center Hotel in Myrtle Beach, S.C. To register, visit www.infocastinc.com/southernwind or call 818-888-4444.
- **Infocast** will host the US-China Wind 2010 December 7-9 at the Holiday Inn Golden Gateway Hotel in San Francisco. To register, visit www.infocastinc.com/uschinawind or call 818.888.4444.
- **Green Power Conferences** will host Small Hydro USA December 6-7 at the Marriott at Metro Center in Washington, D.C. To register, visit <http://www2.greenpowerconferences.co.uk/EF/?sSubSystem=Registration&sEventCode=HP1012US&sSessionID=1286a89f350f6dbb460149bbfcd56f6f-1240615>.

Alternating Current



NASA Tries To Prep Grid For Solar Storms

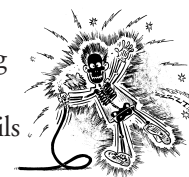
A unit of NASA has teamed up with the Electric Power Research Institute on an initiative to protect the U.S. power grid from solar storms activity that could damage the grid—not generate power. Solar Shield monitors solar eruptions on the sun's surface that emit ionized gas that can wreak havoc on the magnetic field and high voltage transmission systems.

Solar Shield could give about two days notice about the impacts of a specific solar storm that would give utility operators time to prepare, says **Antti Pulkkinen**, project leader of Solar Shield at NASA in Greenbelt, Md., and associate researcher at **Catholic University of America**.

The sun has an 11-year solar cycle with peaks and valleys and “right now are starting to climb away from the solar minimum,” he says. Similar to a hurricane season—in which storms are likely not guaranteed—the next solar maximum is slated for 2014 when one or two storms could occur.

Currently Solar Shield is working with two nodes in the “northern part of the program,” says Pulkkinen. He declined to give their exact locations—that's classified. The team wants to bring in more nodes from across the country before the cycle is at its next peak. Power transformers systems can be shorted and, in the worst cases, equipment melted. In 1989, a solar storm hit the **Hydro-Quebec** grid, knocking out power to the province for nine hours.

The initial phase of the experimental program ended in April when its \$1.5 million funding from NASA ended. They are currently working with another government agency about a similar amount to expand, he says. Again, details are classified.



Quote Of The Week

“People don't realize that as early as January 2009, we had 15 employees. Now we have 80 to 90 federal employees in addition to a large number of consultants. We've become more effective at reviewing applications quickly.”—**Jonathan Silver**, executive director of the U.S. **Department of Energy's** loan program office in Washington, D.C., on the process for sponsors and lenders to secure loan guarantees for clean energy projects (see Q&A, page 7).

One Year Ago In Power Finance & Risk

SkyPower was working with **Marathon Capital** to sell its wind development unit in Canada. [**Competitive Power Ventures** has retained Marathon to find investors to capitalize the wind unit after buying it in January (PFR, 6/18).]