Institutional Investor

VOL. XIV, NO. 51 / December 26, 2011

Exclusive Insight on Power M&A and Project Financing

Power Finance & Risk

The weekly issue from Power Intelligence www.powerintelligence.com

In This Issue

Happy Holidays!

Power Finance & Risk will not publish next Monday. Your next issue will appear on Jan. 9. We wish all of our readers a happy holiday season!

Biggest Borrowers

First Solar took out the most project finance debt this year. Check out which other companies made the top 10 list of biggest borrowers.

See chart, page 2

 ISSN# 1529-6652

Annual Review & Preview

Renewable M&A Set For Steady Flow

Madeleine Tan

Solar and wind projects will continue to trade hands next year as developers look for ways to raise capital to drive development in the face of expiring subsidies. Federal grants and loan guarantees have already expired and production tax credits are set to expire at the end of 2012. Larger, well-capitalized developers along with strategic investors will be the likeliest buyers. Both areas saw a wave of projects changing hands late in the third quarter, and throughout the fourth for solar, as developers

(continued on page 11)

Debt Crisis Redraws PF Map

Tom Murray

The European debt crisis shook up the North American project finance market, forcing dominant European lenders to the sidelines and, as a result, creating openings for others. "Banks are more focused on shoring up their balance sheets than using their balance sheets," says **Tom Murray**, **WestLB** global head of energy in New York.

The meme that project finance in the U.S. and Canadian is dominated

(continued on page 11)

Buyers To Have M&A Upper Hand

Mergers and acquisitions next year across gas- and coal-fired assets will see prospective buyers in a strong position as owners are hit by sagging natural gas prices, power prices that remain low and expiring hedges on merchant facilities.

"Our view, long-term, is the period we're in is a very attractive opportunity to be picking up plants," says **Jim Schaefer**, Americas head of global power, utilities & alternative energy at **UBS**. That **NextEra Energy Resources**, **ArcLight Capital Partners** and **GDF Suez Energy**

(continued on page 12)

Tax Equity Shows Good Health

Keith Martin

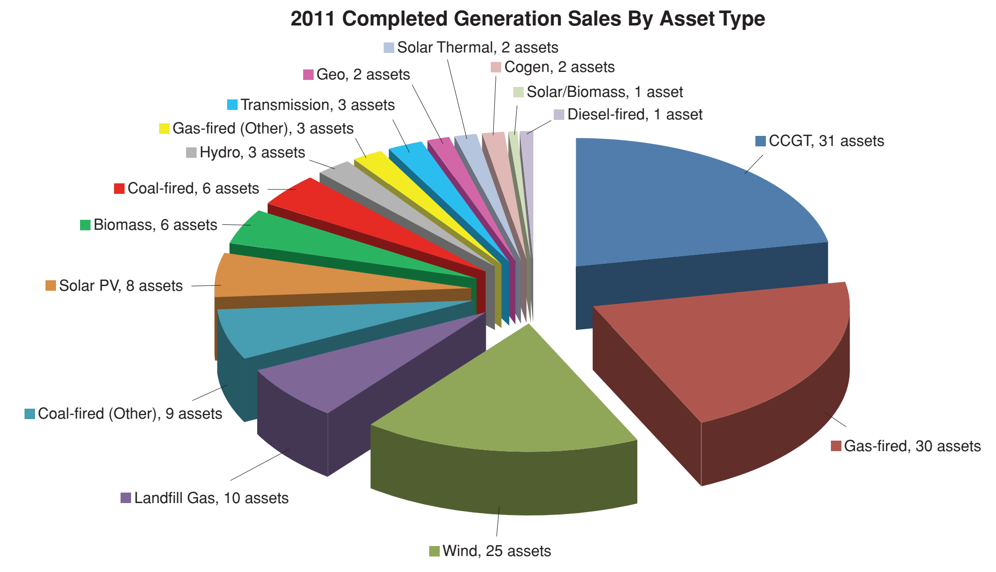
The tax equity market for wind is at its strongest since the 2008 financial collapse. New entrants, and the prospect of more coming, has observers predicting the market will withstand the expected expiration of the U.S. **Department of Treasury** cash grant program at year-end.

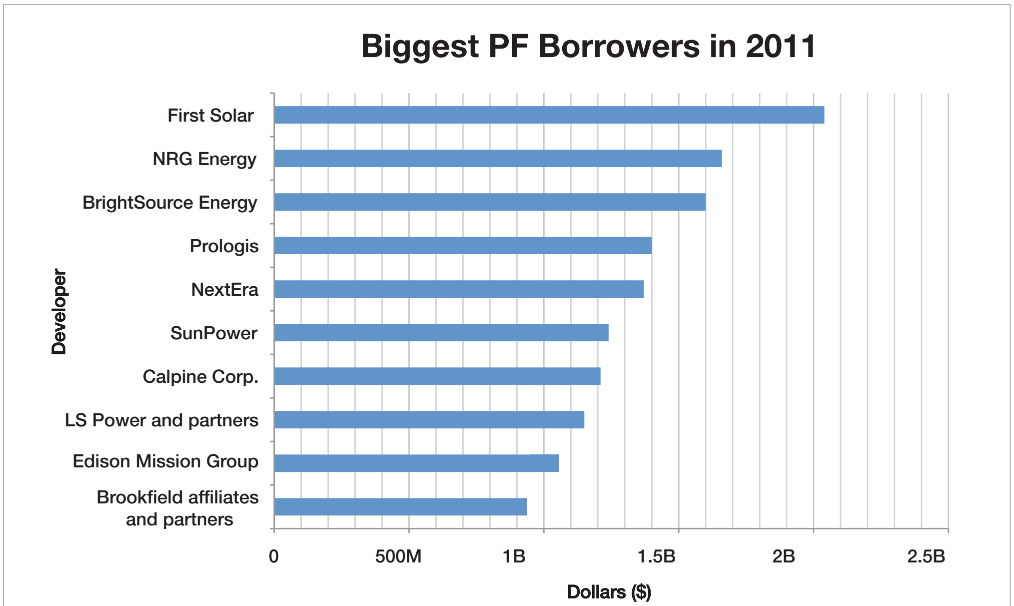
Roughly 20 entities are investing in renewables tax equity today, up from 16 in 2010 (PI, 12/23/10), led by stalwarts **GE Energy Financial**

(continued on page 12)

2011 At A Glance

The following graphs depict a breakdown of completed generation asset sales by resource and borrowers who took out the most project finance debt this year, respectively. The data is derived from the Generation Auction Sale Database and the Project Finance Deal Book available at www.powerintelligence.com.





Tell Us What You Think!

Do you have questions, comments or criticisms about a story that appeared in *PFR*? Should we be covering more or less of a given area? The staff of *PFR* is committed as ever to evolving with the markets and we welcome your feedback. Feel free to contact **Sara Rosner**, managing editor, at (212) 224-3165 or srosner@iiintelligence.com.

Power Intelligence

EDITORIAL

Steve Murray
Editor

Tom Lamont
General Editor

Peter Thompson
Executive Editor (Chicago)
(773) 439-1090

Sara Rosner
Managing Editor
(212) 224-3165

Brian Eckhouse
Senior Reporter
(212) 224-3624

Holly Fletcher
Senior Reporter
(212) 224-3293

Stanley Wilson
Washington Bureau Chief
(202) 393-0728

Max Adams
Contributor

Kieron Black
Sketch Artist

PRODUCTION

Dany Peña
Director

Deborah Zaken
Manager

Melissa Figueroa, James Bambara, Douglas Lee
Associates

Jenny Lo
Web Production & Design Director

ADVERTISING

Patricia Bertucci
Associate Publisher
(212) 224-3890

Adrienne Bills
Associate Publisher
(212) 224-3214

PUBLISHING

Allison Adams
Group Publisher

Gauri Goyal
Business Director
(212) 224-3504

Anna Lee
Marketing Director
(212) 224-3175

Laura Pagliaro
Senior Marketing Manager
(212) 224-3896

Vincent Yesenosky
Head Of US Fulfillment
(212) 224-3057

David Silva
Senior Fulfillment Manager
(212) 224-3573

SUBSCRIPTIONS/ ELECTRONIC LICENSES

One Year $2,995
(In Canada Add $30 Postage, Others Outside U.S. Add $75)

Ken Lerner
Account Executive
(212) 224-3043

REPRINTS

Dewey Palmieri
Reprint & Permission Manager [New York]
(212) 224-3675
dpalmieri@Institutional investor.com

CORPORATE

Jane Wilkinson
Chief Executive Officer

Steve Kurtz
Chief Operating Officer

Customer Service
Po Box 5016, Brentwood, TN 37024-5016.

Tel: **1-800-715-9195**.
Fax: **1-615-377-0525**

UK: **44 20 7779 8704**

Hong Kong: **852 2842 8011**

E-Mail: customerservice@iiintelligence.com

Institutional Investor Hotline
(212) 224-3570 and (1-800) 437-9997 or Hotline@iiintelligence.com

Editorial Offices
225 Park Avenue South, New York, NY 10003

Institutional Investor, Inc.
Issn# 1529-6652

Major Asset Sales 2011

Generation Sale DATABASE

Buyer	Asset	Type	MW	Location	Seller	Purchase Price
Constellation Energy	Portfolio	Oil, Gas, CCGT	2,961	Mass.	U.S. Power Generating Co.	$1.1 billion
Energy Investors Funds	Portfolio	Various	2,740.40	U.S.	Cogentrix Energy	
LS Power	Portfolio	Gas-fired	1,981	U.S.	NextEra Energy Resources	
Atlantic Power Corp.	Portfolio	Various	1,360	U.S., Canada	Capital Power Income Fund	
First Reserve	Portfolio	Various	1,068	U.S.	ArcLight Capital Partners	
Energy Capital Partners	Odessa	CCGT	1,000	Texas	PSEG	$335M
Wayzata Investment Partners	Guadalupe	Gas-fired	1,000	Texas	PSEG	$352 million
Tennessee Valley Authority	Magnolia	Gas-fired	968	Miss.	Kelson Energy	$436M
Chubu Electric Power Co. and Toyota Tsusho Corp.	Goreway 50% stake	CCGT	880	Ontario	Sithe Global Power	
Riverstone Holdings	Portfolio	Gas-fired, CCGT	831	northeastern U.S.	Morris Energy Group	
Quantum Utility Generation	Choctaw	CCGT	746	Miss.	GDF Suez Energy North America	
Exelon	Wolf Hollow	CCGT	720	Texas	Stark Investments	$305M
Duke Energy Indiana, Wabash Valley Power Association	Vermillion	Gas-fired	640	Ind.	Duke Energy Ohio	$81.6M
Oglethorpe Power	Murray I	CCGT	630	Ga.	KGen Power	$531 million for two plants
Oglethorpe Power	Murray II (620 MW CCGT)	CCGT	620	Ga.		$531 million for two plants
Entergy	Hot Spring	CCGT	620	Ark.		$253M
Highstar Capital	Griffith	CCGT	579	Ark.		
Energy Capital Partners	Liberty Electric	Gas-fired	575	Pa.	Strategic Value Partners	
Highstar Capital	Arlington Valley	CCGT	572	Ariz.	LS Power	$950M
Entergy Power Gas Operations	Nelson No. 6 (10.9%)	Coal-fired Steam	550	La	City Water & Light	
MidAmerican Energy Holdings	Topaz	Solar PV	550	Calif.	First Solar	
NextEra and GE Energy Financial Services	Desert Sunlight	Solar Thermal	550	Calif.	First Solar	
Wayzata Investment Partners	Gila River, Unit 2	CCGT	540	Ariz.	Entegra Power Group	
Entergy	Hinds	CCGT	520	Miss.	K-Gen Power	$206M
Kentucky Utilities	Bluegrass	Gas-fired	495	Ky.	LS Power	
Quintana Capital Group	Richland	Gas and Diesel-fired	432	Ohio	FirstEnergy	
Rockland Capital	Gregory (10% Stake)	CCGT	400	Texas	Arroyo Energy Partners	
Brookfield Renewable Power	Thunder Mountain (380 MW Wind)	Wind	380	B.C.	Aeolis Wind Power	
Wisconsin Power and Light Co.	Edgewater 5	Coal	380	Wis.	Wisconsin Electric Power Co.	$38 million
Emera, Algonquin Power & Utilities	Portfolio	Wind	370	northeastern U.S.	First Wind	$333M
Enbridge	Lac Alfred (50%)	Wind	300	Ontario	EDF EN Canada	$330M
LS Power	University Park	Peaker	300	Ill.	Tenaska Capital Management	
Samsung Renewable Energy and Pattern Energy Group	Kingsbridge II	Wind	270	Ontario	Capital Power	
Banco Santander	Solana Solar (45%)	Solar Thermal	250	Ariz.	Abengoa Solar	
MidAmerican Energy Holdings	Agua Caliente	Solar PV	230	Nev.	NRG Solar	
Detroit Edison Co.	Gratiot	Wind	212.8	Mich.	Invenergy	
BTU Solutions	AES Thames	Coal-fired	207	Conn.	AES	$2.35M
Brookfield Americas Infrastructure Fund	Alta VIII	Wind	150	Calif.	Terra-Gen Power	
Tortoise Capital Resources	Eastern Interconnect Project	Transmission	216-mile	N.M.	Public Service Co. of New Mexico	$16.1M
CalPERS	Neptune Transmission (59%)		65-mile	N.Y.		
Brookfield Infrastructure Management affiliate	Cross Sound Cable	Transmission	24-mile	N.Y.	Commonwealth Bank of Australia	

*This is a list of the largest asset sales by MW that have closed or been announced in the North American power industry between Jan. 1 and Dec. 23 according to Power Intelligence's Generation Auction database. The accuracy of the information, which is derived from many sources, is deemed reliable but cannot be guaranteed. To report new auctions or changes, contact Senior Reporter **Holly Fletcher** at (212) 224 3293 or e-mail hfletcher@iiintelligence.com.*

Largest Project Deals 2011

Sponsor	Project	Location	Lead(s)	Loan	Loan Amount
BrightSource Energy	Various (1.3 GW Solar)	Southern California	Federal Financing Bank	Federal Loan	$1.6B
	Desert Sunlight (550 MW Solar PV)	Desert Center, Calif.	Citi, Goldman	Term	$1.4B
Prologis	Project Amp (752 MW DG PV)	U.S.	Federal Financing Bank, Bank of America	Term	$1.4B
SunPower Corp.	California Valley Solar Ranch (250 MW Solar PV)	San Luis Obispo County, Calif.	Federal Financing Bank	Federal	$1.24B
NextEra Energy Resources	Genesis (250 MW Solar Thermal)	Blythe, Calif.	Credit Suisse	TBA	$1B+
NRG	Agua Caliente (290 MW Solar PV)	Yuma County, Ariz.	Federal Financing Bank	Federal	$967M
Calpine Corp.	Russell City (600 MW Combined-Cycle)	Hayward, Calif.	ING, Union Bank	TBA	$844.5M
Competitive Power Ventures	Sentinel (850 MW Gas)	Riverside County, Calif.	BoTM	TBA	$800M
SolarReserve	Crescent Dunes (100 MW Solar Thermal)	Tonopah, Nev.	Federal Financing Bank	Federal	$737M
Boralex, Gaz Métro	Unidentified (272 MW Wind)	Seigneurie de Beaupé, Quebec	BoTM, DB. KfW, LBBW, Mizuho, Siemens, SMBC	Term	$710.34M
Hudson Transmission Partners	Hudson Transmission	Ridgefield, N.J.-New York	RBS, SocGen	TBA	$700M
NRG	El Segundo (550 MW Gas)	El Segundo, Calif.	Crédit Agricole, Mizuho,ING, MUFG, RBS	TBA	$688M
Midland Cogen	Midland Cogen (1.56 GW Wind)	Midland, Mich.	Credit Suisse, MUFG	Bond/LCs	$660M
First Solar	Antelope Valley (230 MW PV)	Antelope Valley, Calif.	Federal Financing Bank	Federal	$646M
Terra-Gen Power	Alta Phases 6 and 8 (300 MW Wind)	Tehachapi, Calif.	Crédit Agricole, MUFG	Mini-Perm	$631M
Edison Mission Group	Walnut Creek (500 MW Gas)	City of Industry, Calif.	MUFG, Santander	Term	$500-600M
Brookfield Asset Management, Isolux Corsan	CREZ (378 Miles Transmission)	West Texas	BOTM, DB, Scotia, SocGen	TBA	$560M
American Renewables	Gainesville (100 MW Biomass)	Gainesville, Fla.	BoTM, Crédit Agricole, ING, Natixis, Rabo, SocGen	Mini-Perm	$500M
Sharyland Utilities	CREZ (300 Miles Transmission)	West Texas	RBC, RBS, SocGen	TBA	$400-500M
LS Power	CREZ (234 Miles Transmission)	West Texas	BNP, Citi, Crédit Agricole, MUFG	Term/LCs/Revolver	$433M
enXco	Lakefield (201 MW Wind)	Jackson County, Minn.	Dexia, SocGen	TBA	$422M
Invenergy	Bishop Hill (201 MW Wind)	Henry County, Ill.	BayernLB, Rabo	TBA	$422M
Calpine Corp.	Los Esteros (300 MW Retrofit)	San Jose, Calif.	BBVA, BayernLB, Crédit Agricole, WestLB	Term	$373M
Sempra Generation	Mesquite I (150 MW Solar PV)	Maricopa County, Ariz.	FFB	Federal	$359.1M
Ormat Technologies	Various (113 MW Geothermal)	Nevada	John Hancock	TBA	$350M
LS Power, NV Energy	One Nevada Transmission Line	Nevada	Federal Financing Bank	TBA	$343M
NextEra Energy Resources	Lone Star (300 Miles Transmission)	West Texas	BoTM, Crédit Agricole, Mizuho, RBC	Mini-Perm	$300M+
Entegra Power Group	Gila River (2.2 GW Gas)	Gila River, Ariz.	WestLB, GE EFS, MUFG	Term/LCs	$300M
LS Power	West Deptford (738 MW Gas)	West Deptford, N.J.	Citi, Credit Suisse, ING, Morgan Stanley	TBA	$300M
Invenergy	Gratiot (110.4 MW Wind)	Gratiot County, Mich.	BoTM, Rabo, Siemens, UniCredit	Term/Bridge/LCs	$280M
Edison Mission Group	Various (362 MW Wind)	Neb., N.M., Texas	WestLB	Refi	$260M
Invenergy	Le Plateau (138 MW Wind)	Quebec	Natixis, RBC	TBA	$259M
Recurrent	Various (20 Solar PV)	Ontario	Mizuho	Construction Revolver	$250M
Edison Mission Group	Tapestry (Wind Portfolio)	Oklahoma, West Virginia	WestLB	TBA	$240M+
Wind Capital Group	Lost Creek (150 MW Wind)	Dekalb County, Mo.	BayernLB, MUFG, NordLB, Rabo, Santander	Refi	$240M+
Kruger Energy	KRÉMONT (100 MW Wind)	Montérégie, Quebec	Deutsche Bank, MUFG	Term	$240M
Brookfield Renewable Power, Coram Energy	Unknown (102 MW Wind)	Tehachapi, Calif.	BoTM, Mizuho, SMBC	TBA	$209M
Cate Street Capital, Starwood Energy	Unidentified (75 MW Biomass)	Berlin, N.H.	TBA	Private Placement	$200M
First Wind	Palouse (100 MW Wind)	Whitman County, Wash.	CoBank, Key Bank, NordLB, Santander	Term	$180M
Brookfield Renewable Power	Granite Reliable (99 MW Wind)	Coos County, N.H.	Citi, WestLB	Private Placement	$168.9M

This a list of the largest power project finance deals that closed between Jan. 1 and Dec. 23 according to the Power Intelligence's Project Finance Deal Book. The accuracy of this information, which is derived from several sources, is deemed reliable but cannot be guaranteed. To report updates or provide additional information, please contact Senior Reporter **Brian Eckhouse** *at (212) 224-2624 or beckhouse@iiintelligence.com.*

Project Finance

Mizuho, UniCredit Pass On Wind Capital Deal

Mizuho Corporate Bank and **UniCredit** have passed taking part in a $225 million financing supporting **Wind Capital Group**'s 201 MW Post Rock wind project. The remaining participants, **BayernLB**, **NordLB** and **Rabobank**, aim to wrap the deal by year-end, says a deal watcher.

> **FAST FACT**
> The financing is a one-year construction facility and is priced at LIBOR plus 225 basis points.

Mizuho and UniCredit had been expected in the deal and whether the sponsor and remaining lenders are looking for replacements couldn't be learned. A Wind Capital spokeswoman in St. Louis couldn't be reached by press time, while bank officials declined to comment or didn't return calls.

The financing is a one-year construction facility and is priced at LIBOR plus 225 basis points. **GE Energy Financial Services** and **MetLife** are among three investors considering taking tax equity stakes (PI, 12/16).

Westar Energy is the offtaker for the $370 million Post Rock project in Kansas' Ellsworth and Lincoln counties.

Edison Mission Lands $242M Wind Financing

WestLB has wrapped a $242 million financing supporting a 204 MW portfolio of **Edison Mission Group** wind projects in the U.S. The deal closed Wednesday.

The financing package comprises a 10-year, $214 million amortizing term loan and 10-year letter of credit and working capital facilities that total $28 million. The package is priced at LIBOR plus 250 basis points, with step-ups over the life of the loan.

Siemens Financial Services was among the lenders that participated. **CIT Group** had been looking at the deal. Eight lenders were expected to take $25-50 million tickets (PI, 12/8).

The identity of the participating lenders and the size and interval of the loan step-ups couldn't be learned. Lender officials or spokespeople declined to comment or didn't return calls. An EME spokesman in Chicago didn't return a call by press time.

The Tapestry financing supports the 130 MW Taloga farm, the 19 MW Buffalo Bear farm and the 55 MW Pinnacle project. Tapestry and Buffalo Bear are operating farms in Oklahoma; **Oklahoma Gas & Electric** is the offtaker for Taloga, while **Western Farmers Electric Cooperative** is buying the generation from Buffalo Bear. The **University of Maryland System** and the Maryland **Department of General Services** have offtake agreements for Pinnacle project, which is being built in West Virginia.

WestLB Snags Hawaii Biomass Mandate

Biomass developers **Green Energy Team** and **Standardkessel Baumgarte Contracting** have tapped WestLB to lead a financing backing their roughly $70 million, 6.7 MW biomass project near Koloa, Hawaii. The deal is expected to wrap next year.

Green Energy Team launched in 2005 and is based in Kilauea, Hawaii. Duisburg, Germany-based Standardkessel is a global supplier of boiler technologies. **Kauai Island Utility Cooperative** has a 20-year offtake agreement for the project with a potential one-year extension. Construction will start next year and operation is expected in 2013.

The size of the financing, the sponsors' desired terms and whether either of the companies have experience developing power projects couldn't be learned. Efforts to reach the sponsors were unsuccessful, while a bank spokeswoman declined to comment.

Four Lenders Eye NextEra Wind

NextEra Energy Resources is talking with **Bank of Tokyo-Mitsubishi UFJ**, **Lloyds TSB**, **Mizuho Corporate Bank** and **Siemens Financial Services** about a roughly $300 million financing supporting three U.S. wind projects. The deal is priced at 250 basis points over LIBOR.

The Juno Beach, Fla.-based NextEra had been scouting a $300 million refinancing backing 236.8 MW of wind projects in California and Oklahoma (PI, 11/7). Details regarding the three wind projects and whether BoTM, Lloyds, Mizuho and Siemens are in talks regarding the refinancing or another deal couldn't be learned.

A NextEra spokesman in Juno Beach didn't immediately address an inquiry, while officials for the lenders didn't return calls seeking comment.

Mergers & Acquisitions

Brookfield Hooks Latest Alta Phase

Brookfield Americas Infrastructure Fund has agreed to purchase the 150 MW eighth phase of **Terra-Gen Power**'s 3 GW Alta wind project in Kern County, Calif. BAIF, an affiliate of **Brookfield Asset Management**, expects to close the acquisition alongside a tax equity deal early in 2013, according to a filing with the U.S. **Federal Energy Regulatory Commission**.

BAIF has lined up entities to take 100% of the tax equity capacity in Alta VIII. The identities and number of investors were not disclosed because negotiations are ongoing.

The 150 MW Alta VIII has a power purchase agreement with **Southern California Edison** and will go online early next

(continued on page 8)

Year At A Glance

JAN. — FEB. — MARCH — APRIL — MAY — JUNE

Jan. 17 NRG Energy, **Competitive Power Ventures** and **Radback Energy** were each hunting for debt to back gas-fired projects in California.

Jan. 17 Duke Energy and **Progress Energy** announced plans to merge to create the largest utility in the U.S., with 57.2 GW of capacity and a $65.3B enterprise value.

Feb. 7 A consortium of owners led by **Strategic Value Partners** put the 568 MW gas-fired Liberty plant in Pennsylvania back on the auction block after cancelling the sale in 2007.

Feb. 14 LS Power had re-fired its sale of the 572 MW Arlington combined cycle plant and added the 579 MW Griffith, both in Arizona.

March 21 Brookfield Infrastructure Partners considered selling its 24-mile Cross Sound Cable after being unable to refinance debt associated with the line.

March 28 Edward Sondey, managing director at **Bank of America**, took a position at **LS Power**.

April 11 Constellation Energy was working with **Goldman Sachs** and **Morgan Stanley** to consider offers from several companies for a possible merger.

April 18 David Nadelman, co-head of syndicate at **Royal Bank of Scotland**, left the bank for a syndications post at the **Royal Bank of Canada**.

May 2 JPMorgan was expanding its global commodities umbrella to encompass power and renewable financing as it prepared for a return to project finance.

May 30 Central Vermont Public Service put itself on the market via **Lazard**.

Ju
Gr
the
de
inf

J
i
r

ANNUAL REVIEW & PREVIEW

ne 6 Macquarie roup was raising e group's debut fund dicated to renewable frastructure investment.

June 13 Nina Eshoo, former managing director at **Crédit Agricole**, launched project finance consulting firm **Saltbox Partners**.

July 4 Energy Investors Funds eye selling its stake in **Solar Power Partners**.

July 25 The **Carlyle Group** readied ts first transaction from its new $750M mezzanine fund focused on energy.

Aug. 8 U.S. Power Generating weighed filing for bankruptcy for its merchant 2.3 GW Astoria Generating portfolio.

Aug. 15 First Solar prepared to launch a stake sale and a financing package for its 550 MW Desert Sunlight photovoltaic project in California.

Sept. 5 Wind turbine prices neared the $1 million-per-MW mark as efficient technologies and supply push down prices.

Sept. 19 Carl Weatherly White, managing director of the energy infrastructure finance group at **Barclays Capital**, left the bank for a newly created slot at **K Road Power**.

Oct. 10 The U.S. **Department of Energy** wrapped $3.25B in loan guarantees as the Sect. 1705 program expired.

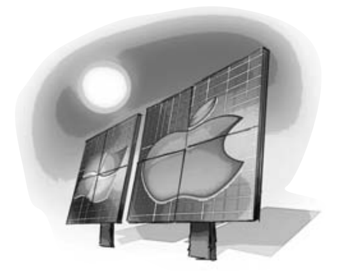
Oct. 17 BNP and **SocGen** seek to unload part of their North American project finance portfolios to cope with the effects of the European debt crisis.

Nov. 14 Korea Electric Power Co. and **Fortis** looked for wind, solar and utility acquisitions, respectively, in the U.S.

Nov. 28 European banks weighed securitizing project finance loans as an alternative to selling the loans.

Dec. 12 Energy Investors Funds and **Cogentrix** filed for Chapter 11 bankruptcy for their Northampton coal-fired plant in Pennsylvania.

Dec. 19 Apple and **Microsoft** scope becoming tax equity investors in renewable projects in the U.S.



JULY AUG. SEPT. OCT. NOV. DEC.

(Continued from page 5)

year, according to the filing. The eighth phase was financed over the summer along with the sixth phase with a $600 million syndicated loan led by **Crédit Agricole** and **Mitsubishi UFJ Financial Group** affiliate **Union Bank** (PI, 6/1).

BAIF is a limited partnership of Brookfield Asset Management and private equity investors.

The purchase price and whether financial advisors are involved couldn't be learned. A Brookfield spokesman in Toronto declined to comment. A Terra-Gen official in New York didn't respond to an inquiry.

Power Marketing JV Snags N.Y. Peaker

Louis Dreyfus Highbridge Energy, a joint venture between affiliates of **JPMorgan Chase & Co**. and **Louis Dreyfus Group**, has agreed to buy a 77 MW peaker near Albany, N.Y. LDHE is buying the facility from investors **Signal Hill Power** and **CarVal Investors**, according to a filing with the U.S. **Federal Energy Regulatory Commission**. The transaction is expected to wrap in the first quarter.

FAST FACT
LDHE is a power and commodity marketer that owns coal terminals in West Virginia and Kentucky.

LDHE is a power and commodity marketer that owns coal terminals in West Virginia and Kentucky. **Louis Dreyfus Group** and **Highbridge Capital Management**, an affiliate of JPMorgan, own LDHE with 53% and 32.67% stakes respectively The remaining stakes are owned by other undisclosed investors.

Signal Hill has been working with **Scotia Capital** to sell the Rensselaer facility along with a 77 MW Wichita combined cycle facility that operates as a seasonal peaker in Texas (PI, 8/4).

Neither the purchase price nor the plans for the Wichita plant could be learned. An LDHE spokesman in Stamford, Conn., declined to comment.

Recurrent Sells Stakes In Calif. Portfolio

Recurrent Energy has sold stakes in 88 MW of solar photovoltaic projects to **Google** and **SunTap Energy**, a solar investment shop backed by **Kohlberg Kravis Roberts & Co**.

The acquisition marks Mountain View, Calif.-based Google's first investment in U.S. utility-scale solar. KKR's investment in SunTap is the firm's third renewables investment of 2011—and its first in the U.S. The projects in Sacramento, Calif., will benefit from the **Sacramento Municipal Utility District**'s feed-in tariff program over 20 years. Three of the projects will be operational early next year, with the fourth expected to be online by late 2012.

Google and SunTap are making their separate investments in the four Sacramento-area projects via debt and equity. Google also contributed tax equity, says a Google spokesman in Mountain View, Calif., who didn't elaborate on the financing. The dollar size of the stakes couldn't be learned. A KKR spokeswoman in New York didn't immediately address an inquiry.

FAST FACT
Recurrent landed a $250M revolver from **Mizuho** backing more than 200 MW of projects in Ontario.

In other news, the San Francisco-based Recurrent has also landed a $250 million construction revolver from **Mizuho Corporate Bank** backing more than 200 MW across 20 solar photovoltaic projects in Ontario. The projects fall under the **Ontario Power Authority**'s feed-in tariff program. Whether other banks participated in the financing couldn't be learned.

SunTap has invested in **Sorgenia**, a French wind park operator, and **T-Solar** of Spain. Details on the company and pricing and tenor of the Mizuho deal couldn't be learned. **Arno Harris**, Recurrent ceo in San Francisco, and a bank official in New York didn't return calls by press time.

Gestamp To Buy Neb. Wind, EME Deal Unravels

Spanish renewable company **Gestamp Eolica** has agreed to buy a 40.5 MW wind farm in Boone County, Neb., from **Third Planet Windpower** after a previous sale to **Edison Mission Energy** was not completed. Gestamp and Third Planet anticipate the acquisition could close by year-end, according to a filing with the U.S. **Federal Energy Regulatory Commission**.

EME had agreed to buy the Petersburg project in early October (PI, 10/3). FERC approved EME's purchase on Oct. 31, according to a filing on that day, but the deal didn't go through. Details regarding what happened to the EME-Third Planet deal could not be learned. An EME spokeswoman in Chicago declined to comment.

Parallel to the acquisition, Gestamp has lined up a tax equity investment from **Firstar Development**, a wholly owned subsidiary of **U.S. Bancorp**. Firstar will take the full tax equity capacity, according to the filing. Petersburg has a 20-year power purchase agreement with **Omaha Public Power District**.

Gestamp acquired the 40 MW Roth Rock wind project in Maryland from **Synergics** this year and also lined up tax equity from **U.S. Bank** (PI, 4/25). Calls to **Walter Kamp**, ceo of Third Planet, and **Javier Mateache**, ceo of affiliate **Gestamp Wind** in Houston, were not returned.

ANNUAL REVIEW & PREVIEW

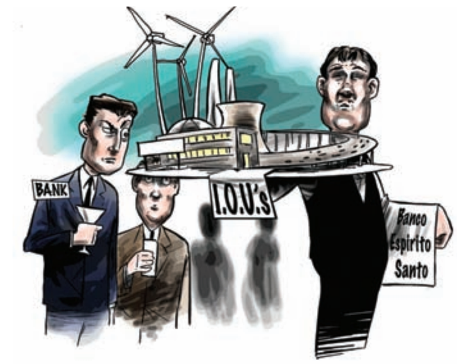
A Year In Sketches

We strive to bring you serious news and analysis every day, but we also work hard with our illustrator Kieron Black to add some color to our content. Here is a selection of our favorite illustrations

Sponsors Hunt Calif. Gas-Fired Debt
Jan. 17

Brookfield Hands Out Granite Mandate
Jan. 31

BES Looks To Offload EUR2.6B In Loans
Jan. 31



JPM Readies Return To Project Finance
May 2

China Ex-Im Bank Circles Americas Power Market *July 4*

Carlyle Readies First Mezz Energy Fund Deal *July 25*

enXco Opts for EDF Financing
July 25

LS Looks to Lever NextEra Purchases
Oct. 3

DOE Inks $3.25B In Guarantees Before Sunset *Oct. 10*

Macquarie, Coca Cola Bottler Plot Mexican Wind Sale *Oct. 10*

Carlyle Steps In After SocGen Exits Biomass Deal *Oct. 31*

GCL Taps Union Bank For PR Solar
Dec. 19

Quotes Of The Year

"I think the standard line in this business, and I'm not exception, is that we'd like to have it as soon as possible."—**Douglas Perry**, president of **Davenport Power** in Stamford, Conn., on looking to secure equity investment for developing its Newberry geothermal project (3/7).

"The biggest thing is certainty. If you're further along in the [development] process… and you say, 'We're 80% baked.' That's more attractive."—**Uday Mathur**, principal of emerging clean technologies and energy procurement at **Pacific Gas & Electric**, on what the utility looks for when considering projects in a request for proposals (3/28).

"Nuclear for the moment is a four letter word."—**Christian Schade**, then the cfo of **NRG Energy**, on increasing concerns arising over U.S. nuclear development in the aftermath of the Fukushima disaster in Japan (4/15).

"You can't buy a utility in the U.S. without spending a lot of money."—**Barry Perry**, cfo of **Fortis**, on the pricing of the common shares to fund the company's failed bid to acquire **Central Vermont Public Service** (6/3).

"We gravitate toward things that are not cookie-cutter."—**Nina Eshoo**, founder of **Saltbox Partners** in New York, on her new consultancy's mission to advise biomass, coal, gas and renewables sponsors that seek mid-sized or alternative financings (6/10).

Alex Urquhart

"It takes an investor who has the long-term perspective, someone who can see the end game… We want to be the money plus the discipline."—**Alex Urquhart**, president and ceo of **GE Energy Financial Services** in Stamford, Conn., on the firm's plan to increase investments in early-stage power and energy projects (6/24).

"Every bank wants to be the first bank to finance your second project. We're the bank financing the first project."—**Jonathan Silver**, then-executive director of the U.S. **Department of Energy**'s loan guarantee program in Washington, D.C., on the program's efforts to finance innovative renewables technologies (7/25).

Jonathan Silver

"There are plenty of U.S. banks on the sidelines that should be involved in the space, given the risk profile."—**Andrew Redinger**, managing director of **Key Bank**'s utility, power and renewables group in Cleveland on increasing U.S. lender participation in project finance (12/26).

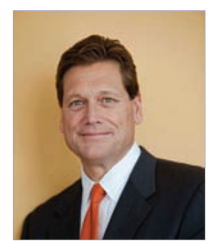
"Banks are not as aggressive because of funding risks."—**Chris Smith**, managing director of **Energy Management Inc.** in New York, on the project finance landscape after **Standard & Poor's** downgraded U.S. sovereign debt (8/29).

"There's something of a herd mentality in this sector. A lot of bankers are probably talking to their clients and saying, 'You've got to get in while the going is good.'"—**A.J. Sabatelle**, senior v.p. at **Moody's Investors Service** in New York, on the flurry of utility bond issuances (9/12).

"The third quarter has been probably artificially high because of the deadline for closing DOE transactions."—**Olivier Delay**, **Natixis** incoming Americas head of project finance in New York, on the increase in project finance volume in the third quarter (10/24).

"I love coal. I would love to invest in coal."—**Rahul Culas**, co-head of the **Carlyle Group**'s energy mezzanine opportunities group, lamenting the paucity of coal-fired M&A opportunities 10/31).

"If there's any capital requirement companies have, they can start by coming to me."—**Kirk Edelman**, president and ceo of **Siemens Financial Services** in Iselin, N.J., on growing the entity's power and energy finance business (11/11).



Kirk Edelman

"It will be a mad dash to the finish line to get that done."—**Partho Sanyal**, director in the global energy and power group at **Bank of America**, on wind developers' push to line up financing, complete construction and arrange tax equity before the production tax credit scheme expires Dec. 31, 2012 (11/21).

"The scarcest thing in the energy private equity arena is a realized deal."—**Daniel Revers**, managing partner of **ArcLight Capital Partners** in Boston, on the company's strategy of divesting $4.5 billion of assets to attract investor interest in its $3.3 billion fund (11/28).

Daniel Revers

Renewable M&A

(Continued from page 1)

searched for equity and development capital.

The solar space will see more entrants looking to lay claim to utility-scale projects or to companies that have made a name in the rooftop and commercial solar, such as **Solar Power Partners**, which was acquired by **NRG Solar** (PI, 10/13). Rooftop and commercial scale projects are attractive because interconnection logjams are eliminated, thereby removing one of the risks of developing utility scale projects.

A wide and mixed group of names are sniffing around solar, a banker says. Shops from the U.S., Canada, and overseas are interested in adding utility scale solar to their collection. "For a lot of these energy companies, the acquisitions are diversifying their portfolio," says **Madeleine Tan**, partner at law firm **Kaye Scholer** in New York, who anticipates that the sector will see more companies step in with either full acquisitions or partial ownership. Developers are looking for additional sources of capital to fund solar projects—even those with loan guarantees from the U.S. **Department of Energy**—because of high construction costs and a changing project finance market (see story, page 1).

Partnerships, whether between strategics or financial players, will probably be on the rise, especially for large solar projects, as companies look to combine balance sheets and scout companies that can benefit from tax attributes. "Partnerships are tried and true at the asset level," says **Ray Wood**, head of global alternative energy at **Credit Suisse**. Alliances akin to **Google** and private equity shop **Kohlberg Kravis Roberts & Co.**'s investment in a **Recurrent Energy** portfolio or **MidAmerican Energy Holdings Co**.'s investment in **NRG Energy**'s 290 MW MW Agua Caliente project in Yuma County, Ariz., could be common in 2012.

Private equity and infrastructure funds are increasingly interested in using dry powder on solar investments and are turning to taxable corporations as investment partners (PI, 12/16). Partnerships with taxable corporations are attractive for their balance sheets and tax appetite. They can invest equity and, in most cases, utilize the tax benefits under the production tax credit and investment tax credit schemes. The PTC program, which opens wind projects up for tax equity investments, is slated to expire at the end of 2012 while solar will still be eligible for tax credits through 2016 under the ITC program.

Much of the activity on the wind side will occur as developers try to position single projects to be online by year-end to qualify for PTCs that expire at the end of 2012, or position pipelines for development in a post-PTC world. Experienced developers with money to spend are currently being bombarded by smaller developers looking to bring in capital to fund construction on projects that can be online by the end of 2012 (PI, 11/16). This activity is expected to extend through the first half of the year on projects that have qualified for the U.S. **Department of Treasury**'s cash grant program, says Tan. Projects must incur 5% of construction costs by Dec. 31 of this year and also complete construction by the end of next year in order to qualify for the grant.

The wind market could grow quieter moving into the third quarter as more developers realize that their projects will miss the year-end completion deadline for the cash grant. "[The slowdown] is not unexpected although it probably won't fall off a cliff. Those who are developing projects are looking to plan B," Tan says, adding that her firm is already talking with some developers on how to proceed with projects that didn't qualify for the cash grant. ***—Holly Fletcher***

Debt Crisis

(Continued from page 1)

by European-lenders may be dead by the close of 2012. "If the contagion continues to spread, European banks will likely limit their lending to their home countries, for political and financial reasons, leaving a big gap for U.S. project finance," Murray says. **BNP Paribas**, **Crédit Agricole**, **Dexia** and **Société Générale** favored deals with relationship clients and non-balance sheet advisories since the third quarter.

"Our borrowers have heard from a number of their European lenders that lending will be focused only on their most important relationships and that bank debt, when available, has to be more expensive than it was in the past," says **John Anderson**, **John Hancock Financial Services** head of corporate finance origination in Boston. Several European lenders, burdened with mounting exposure to struggling Greek and Italian sovereign debt, have seen the cost of self-funding surge to more than 160 basis points over LIBOR from the single-digits (PI, 9/23). The increase contributed to the rise of project finance pricing and limited lenders' activity in deals as they face slimmer margins.

Looming Basel III regulations requiring European lenders to strengthen capital reserves against outstanding loans has also led many of the major players in U.S project finance to sell off portfolios of project finance loans (PI, 10/21). Crédit Agricole, BNP and SocGen are among a host of European banks that are looking to sell loans or portfolios of these assets (PI, 10/14). **Allied Irish Bank** is winding down its U.S. presence (PI, 9/15), while **Bank of Ireland** sold a $1 billion portfolio of project finance loans to **GE Energy Financial Services** earlier this year (PI, 10/18).

PF Lenders Move Beyond Europe


Andrew Redinger

Several senior financiers expect **Bank of America**, **Citigroup**, **JPMorgan** and **CIT Group** to boost their roles in project finance next year. Regional American banks that play in tax equity are also potential entrants to project finance. "There are plenty of U.S. banks on the sidelines that should be involved in the space, given the risk profile" of the asset class, says **Andrew Redinger**, managing director of **Key Bank**'s utility, power and renewables group in Cleveland.

Bank of Tokyo Mitsubishi-UFJ, **Mizuho Corporate Bank** and

Sumitomo Mitsui Banking Corp. already were market leaders and show no signs of letting up, say financiers, noting that these lenders enjoy low costs-of-funding. Canadian project finance banks also appear to have avoided the worst of the European contagion—and may thrive in this redrawn landscape. A return of short-dated financings figures to attract **CIBC** and **Scotia Capital**, which have traditionally favored such tenors, while their European peers were more willing to offer 18 years for sterling renewables deals prior to the crisis. Canadian insurance company **Manulife Financial**, meanwhile is offering tenors of roughly 20 years plus construction for worthy solar and wind projects.

Lenders backed by industrial and consumer conglomerates, including **Siemens Financial Services**, (PI, 11/14), will be active players in the market next year as they exploit relatively easier access to capital. "When you're trying to grow a business, you can be most effective growing that business when others are less active," says **Kirk Edelman**, SFS ceo of global energy finance in Iselin, N.J.

While most of their European peers are cutting back, Spanish lenders **BBVA** and **Santander** should also remain resilient players thanks to their ownership of American retail deposit banks **Compass** and **Sovereign Bank**, respectively. Owning domestic retail depositor bases ensure cheaper access to dollar funding, notes **Manish Taneja**, WestLB global head of loan syndications in New York. "Given the widening euro to dollar swap spreads, this ownership translates to a real competitive advantage versus their European peers without such a presence," he says.

Sponsors that seek long-term money will still have some avenues to pursue 20-year debt. In the U.S., investors in the private placement markets have appetites for project finance paper at long tenors, says **Adam Umanoff**, **Akin Gump Strauss Hauer & Feld** partner in Los Angeles. John Hancock offers up to 25 years to financings backing solar projects and up to 20 years for wind via private placements, Anderson says.

—Brian Eckhouse

Buyers To *(Continued from page 1)*

North America each agreed to carve up portfolios they put on the block is emblematic that buyers have the upper hand, one executive at a prospective acquirer notes. Buyers don't think they have to buy all portfolio assets, he explains.

The sector saw a buzzing first half of 2011, but activity slowed mid-year as domestic and European debt crises rocked the global markets (PI, 9/9). As the months progressed, sellers saw the market slip to a buyer's advantage, industry officials say.

Buyers, particularly the financial players sitting on piles of cash, are best positioned to strike in auctions as they aren't beholden to quarterly earnings reports and can take a longer view on a rebound in the market, says an industry official. "Those who are well-capitalized can hunker down and perhaps take advantage of those who are not," **Roger Wood**, managing director in the power and utility group at boutique investment bank **Moelis & Co**.

Plants that go through a restructuring process could account for much of the activity, although some sellers would probably like to hang on to solid, operating facilities that have been impacted by the recession, bankers say. **Astoria Generating**, **Edison Mission Group**'s Homer City, **AES Eastern Energy** and **Energy Investors Fund**'s Northampton coal-fired facility are all in various stages of the restructuring process. On the whole, shops that don't have plants in distress will wait to see what happens with the broader economy to decide whether to put assets up for sale. A handful of private equity firms that are raising new funds could put up existing assets to get returns for existing investors like ArcLight did in 2011 (PI, 11/23).

Another potential scenario puts attractive assets on the block: sellers look to sell the jewels in their fleets as a way to raise capital to tide over under-underperforming facilities until demand sees a boost. Contracted assets remain, of course, financeable and will attract a diverse audience pool when they come to market.

—Holly Fletcher

Tax Equity *(Continued from page 1)*

Services, **JPMorgan**, **MetLife**, **Union Bank**, **U.S. Bank** and **Wells Fargo**. And the pool of investors may be expanding. Potential entrants include **Apple** and **Microsoft** (PI, 12/16), regional U.S. banks, such as **East West Bancorp**. (PI, 11/16), and investors in low-income housing credits (PI, 9/23).

Wind tax equity financings in 2011 totaled roughly $4 billion, says **John Eber**, **JPMorgan Capital Corp**. managing director of energy investments in Chicago. About 65% of the financings that raised tax equity in 2011 selected the production tax credit in lieu of the cash grant, say bankers and project finance attorneys. This is a development that few anticipated in January, when the renewables industries expressed relief over Congress' unexpected one-year extension of the cash grant. The grant covers 30% of construction costs for qualifying projects since Sept. 2009 (PI, 12/5).

Congress could reintroduce the grant in a 2012 bill, but Republicans in the House of Representatives are loath to support any hint of stimulus, says **Keith Martin**, partner at **Chadbourne & Parke** in Washington, D.C. The fears that renewables project financings would crater in the wake of the expiration of the grant have eased, however, thanks to the potency of the production tax credit. "I don't think we'll be in dire shape," Eber says. The tax credit is favorable for projects with robust wind regimes, whereas the grant is intended for a quick return on capital, explains a leading New York-based project finance attorney. "When you drive up capacity factors, you drive up the value of the production tax credit," says Eber, pointing to higher turbine towers and improved rotors. "That trend will continue into next year."

Sponsors that favor the cash grant over the PTC aren't necessarily out of luck in 2012. Several have feverishly maneuvered in recent months to satisfy requirements to qualify in-development projects for the grant after the close of 2011, says **Adam Umanoff**, partner at **Akin Gump Strauss Hauer & Feld** in Los Angeles. One qualification included spending 5% of project costs by the end of 2011.

—Brian Eckhouse