

# Power Finance & Risk

The weekly issue from **Power Intelligence**

[www.powerintelligence.com](http://www.powerintelligence.com)

## Q3 Recap

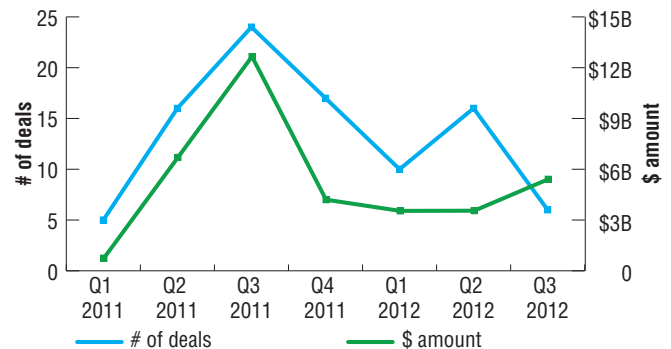
### PF Deal Flow Plummets, Sabine Sets Benchmark

The number of deals finalized during the third quarter slumped to six from 16 in the second quarter, but the dollar amount jumped 52% from \$3.54 billion to \$5.41 billion, according to *PI*'s Project Finance Deal Book.

The dearth of renewable deals resulting from expiring subsidies was counteracted by a big ticket deal, bankers say, pointing to **Cheniere Energy's** \$3.6 billion term loan A backing its Sabine Pass natural gas liquefaction project in Sabine Pass, La. ([PI, 7/19](#)). That was the largest deal this year and the first backing a major export gas project in the U.S. It accounted for roughly 66% of the dollars borrowed in third quarter.

(continued on page 6)

Project Finance Totals By Quarter



Source: Power Intelligence

## EEI FINANCIAL

### Gas Generation Rise Prompts Concerns

Coal-fired plant shutdowns and resistance to nuclear-fired generation, against a backdrop of cheap natural gas, is pushing the industry toward a gas-heavy generation mix.

The broad shift to a natural gas-dominated fuel mix is triggering concerns. "If we allow natural gas to make us uni-dimensional on the fuel side, I think we will have lost," said **David Crane**, president and ceo of **NRG Energy**.

Speakers at *EEI Financial Conference* welcomed affordable gas as a fuel for clean, reliable power, but underscored the need for a conscientious effort to maintain a balance that includes coal, nuclear, renewables and gas.

**John Pinkerton**, executive chairman at oil and gas

(continued on page 8)

### ECP Scouts IPO For EquiPower

**Energy Capital Partners** is exploring an initial public offering for **EquiPower Resource Holdings**, its portfolio independent power producer that owns 2.2 GW of gas-fired generation, observers say.

ECP has held conversations with equity analysts, bankers and lawyers to help evaluate whether the company could operate in a model similar to **Calpine**, says one observer. Calpine is much larger than the current EquiPower with a 29 GW portfolio across the country that is comprised mostly of gas-fired generation, save for some geothermal assets in California. Calpine has a market cap of \$8.11 billion.

EquiPower was established in 2010 with ECP's purchase of three gas-fired plants from **BG Group** ([PI, 11/23/10](#)). The company may be a bit small to go public immediately but observers say now is the time to grow the platform to lay the

(continued on page 12)

## EEI Financial Conference

See what industry players had to say at the confab in Phoenix this week.



See conference coverage, page 8

## New Project Finance Loans

We've added updates to our weekly round-up of the latest project finance deals in the Americas, with details on projects, sponsors and debt.

See Deal Book, page 4

## Generation Sale DATABASE

Get the rundown on the latest asset trades in *PI*'s weekly calendar, compiled from our exclusive Generation Sale Database.

See calendar, page 3

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## THE BUZZ

The 47<sup>th</sup> annual **Edison Electric Institute** Financial Conference was abuzz with chatter about how the economy and policies at the federal level could impact the power sector. The coming years are going to be times of re-positioning for utilities as they deal with changing fuel mixes, low natural gas prices and slow power growth. A **Fitch Ratings** analyst said that weak power sales, stemming from a slower economy and less residential sales, was the biggest issue facing utilities.

The re-election of President **Obama** and whether there was support for a federal energy policy crept into many conversations. The attitude was cautiously optimistic on the understanding that financial issues, namely the fiscal cliff and tax reform, would take the congressional floor first. Investors and analysts queried utility executives about how the companies would handle other changes at the federal level, such as a possible reform on the dividend tax as well as further implementation of emission regulations on coal-fired generation.

The rising popularity of electric vehicles could carry a new set of opportunities and challenges. **Bill Ford**, vice chairman of **Ford Motor Co.**, talked about the need for customers to have greater access to charging stations and changes to the breakouts of utility bills as more EVs hit the road (see story, page 10).

Pension funds are continuing to make plays in power as they search for yield in a low-rate environment and an M&A transaction highlights a slew of international players on U.S. soil this week: **Ontario Municipal Employees Retirement System** purchased a stake in a portfolio of spinning wind projects in the U.S. developed by **EDP Renovaveis North America**. State-backed **China Three Gorges International Europe** is the largest stakeholder in EDPRNA's Spanish parent.

## 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,  
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## GENERATION AUCTION &amp; SALE CALENDAR

These are the current live generation asset sales and auctions, according to *Power Intelligence's* database. A full listing of completed sales for the last 10 years is available at [www.powerintelligence.com/AuctionSalesData.html](http://www.powerintelligence.com/AuctionSalesData.html)

Seller	Assets	Location	Advisor	Status/Comments
ArcLight, Olympus Power, John Hancock, Atlantic Power Corp.	Delta Person (140 MW Peaker)	Albuquerque, N.M.	Fieldstone Private Capital Group	Shortlist to emerge by October (PI, 9/10).
Atlantic Power Corp.	Path 15 (84-mile Transmission line)	California	Rothschild	The company is quietly shopping it; initial bids due soon (PI, 11/12).
Calpine	Broad River (847 MW Gas)	Gaffney, S.C.	None	Energy Capital Partners is buying the facility for \$427 million (PI, 11/12).
Dominion	Brayton (1,536 MW Coal, Oil, Gas) Kincaid (1,158 MW Coal) 50% Stake (1,424 MW Elwood Peaker)	Somerset, Mass. Kincaid, Ill. Chicago, Ill.	Citigroup, Morgan Stanley	Teasers are expected soon (PI, 9/17).
EQT Infrastructure Fund, Fortistar	Midland (1.56 GW Gas Cogen)	Midland, Mich.	Credit Suisse, Royal Bank of Canada	Borealis Infrastructure has agreed to buy it (PI, 10/8).
Edison Mission Energy	Homer City (1,884 MW Coal)	Indiana, Pa.	Barclays	GE Capital Corp. is taking over its sale leaseback agreement in bankruptcy court (PI, 10/22).
EDP Renovaveis	High Praire (101 MW Wind) Telocaset (101 MW Wind) Old Trail (198 MW Wind)	Mower County, Minn. Union County, Ore. McLean County, Ill.	None	OMERS unit Borealis buys stake in portfolio for \$230M (see story, page 5).
Energy Investors Funds	Stake (550 MW Astoria Energy II)	Queens, N.Y.	Barclays	EIF recently mandated Barclays to sell its stake--the largest of the co-owners (PI, 10/22).
Energy Investors Funds	Rathdrum (275 MW Gas) Plains End I & 2 (228.6 MW Gas) Stakes (245 MW Cottage Grove Gas) Stakes (249 MW Whitewater Gas)	Rathdrum, Idaho Arvada, Colo. Cottage Grove, Minn. Whitewater, Wis.	Scotiabank	Initial bids due by Sept. 12 (PI, 9/10).
Enova Power Group	Plainfield (37.5 MW Biomass project)	Plainfield, Conn.	UBS	Teasers have gone out recently for the project that will be online next September (PI, 11/12).
Exelon	Brandon Shores (1,273 MW Coal) H.A. Wagner (976 MW Coal) C.P. Crane (399 MW Coal)	Anne Arundel Co., Md. Anne Arundel Co., Md. Baltimore Co., Md.	Citigroup, Goldman Sachs	UBS has floated a \$150M package to support Riverstone's acquisition (PI, 10/29).
Harbert Power	Hanford (95 MW Gas) Henrietta (97 MW Gas) Tracy (314 MW Gas)	Kings County, Calif. Kings County, Calif. Stockton, Calif.	Morgan Stanley, Merit Capital Advisors	Highstar Capital is buying the fleet (PI, 10/22).
IPR-GDF Suez Energy North America	Various (287 MW Wind)	Various, Canada	CIBC	The sale has entered the second round (PI, 9/3).
Iberdrola Renewables	Various (Wind, Solar)	Various	JPMorgan, Blackstone	The Spain-based parent is driving the sale of 700 MW of spinning wind plus wind, solar development assets (PI, 7/16).
Inland Energy, City of Palmdale, Calif.	Hybrid (570 MW Gas, Solar Project)	Palmdale, Calif.	None	Bids are due Dec. 3 (PI, 10/29).
Luminus Management, CarVal Investors, Fortress Investment Group	Bosque (507 MW Gas)	Laguna Park, Texas	Bank of America	Calpine is buying it for \$432M (PI, 10/15).
MACH Gen	Harquahala (1 GW Gas)	Maricopa County, Ariz.	Goldman Sachs	Wayzata has agreed to buy it (PI, 10/15).
PPL Corp.	Various (604 MW Hydro) Colstrip (529 MW Coal) Corette (153 MW Coal)	Various, Montana Colstrip, Mont. Billings, Mont.	UBS	The utility holding company is selling its unregulated Montana operations (PI, 11/12).
Rockland Capital, John Hancock Life Insurance and Atlantic Power Corp.	Gregory Power Partners (400 MW CCGT Cogen)	Gregory, Texas	TBA	Teasers are out (PI, 10/29).
Sempra U.S. Gas & Power	Mesquite Power (1,250 MW Gas) Mexicali (625 MW Gas)  Copper Mountain 1 (58 MW Solar) Copper Mountain 2 (150 MW Solar project) Mesquite 1 (150 MW Solar)	Arlington, Ariz. Mexicali, Baja California, Mexico Boulder City, Nev. Boulder City, Nev. Arlington, Ariz.	TBA	Sold half of Mesquite to Salt River Project (PI, 11/12). The Sempra Energy unit is talking with prospective advisors (PI, 10/22).
SunPower	AVSP 1 (325 MW Solar PV) AVSP 2 (276 MW Solar PV)	Rosamond, Calif.	Morgan Stanley	Teasers were recently released (PI, 9/17).
Tenaska Energy, Energy Investors Funds, Diamond Generating	Ferndale (271 MW Gas)	Ferndale, Wash.	TBA	Puget Sound Energy is buying the plant to meet demand (PI, 10/15).
Western Wind Energy Corp.	Windstar (120 MW Wind) Windridge (4.5 MW Wind) Mesa (30 MW Wind) Kingman (10.5 MW Wind, Solar PV) Yabucoa (30 MW Solar PV)	California California Arizona Puerto Rico	Rothschild, PI Financial	Shareholders vote for current management in proxy; sale on track (PI, 10/1).

## New or updated listing

The accuracy of the information, which is derived from many sources, is deemed reliable but cannot be guaranteed. To report updates or provide additional information on the status of financings, please call Senior Reporter **Holly Fletcher** at (212) 224-3293 or e-mail [hffletcher@iintelligence.com](mailto:hffletcher@iintelligence.com).

## PROJECT FINANCE DEAL BOOK

Deal Book is a matrix of energy project finance deals that Power Intelligence is tracking in the energy sector. A full listing of deals for the last several years is available at <http://www.powerintelligence.com/projectfinancedeal.html>

## Live Deals: Americas

Sponsor	Project	Location	Lead(s)	Loan	Loan Amount	Tenor	Notes
AES Generz	Alta Maipo (531 MW Hydro)	Chile	TBA	TBA	\$1B	TBA	IFC, IDB and OPIC are participating in multilateral tranche. Sponsor also talking to commercial lenders (PI, 7/2).
AES Solar, 8minutenergy Renewables	Mount Signal (200 MW Solar PV)	Imperial Valley, Calif.	Citigroup, Morgain Stanley (Bonds)	TBA	\$700M	TBA	Citigroup and Morgan Stanley tapped to lead a \$416 million bond tranche (PI, 11/12).
Alterra	Dokie II (156 MW Wind)	Fort St. John, B.C.	TBA	Expansion	\$300M	TBA	The sponsor is hoping to close the financing in the next few months (PI, 9/24).
	Upper Toba (124 MW Hydro)	Toba Valley, B.C.	TBA	Expansion	\$40M	TBA	Sponsor is looking for project equity (PI, 9/10).
Astoria Generating	Various (Unknown)	New York, N.Y.	BofA, Goldman Sachs, Morgan Stanley	Refi	\$450M	6-yr, 5-yr	The sponsor is looking for pricing at around LIBOR plus 550 (PI, 10/15)).
BHP Billiton	Escondida (Unknown)	Antofagasta, Chile	N/A	N/A	N/A	N/A	BHP rounds up short-list to build project to power its Escondida mine (see story, page 5).
BP, Semptra	Flat Ridge 2 (419 MW Wind)	Wichita, Kan.	Banco Santander, Bank of Tokyo-Mitsubishi, Prudential Financial	TBA	\$500-600M	TBA	The deal will hit the market next month. Structure will include bonds (PI, 8/10)
BrightSource	Rio Mesa (500 MW Solar)	Riverside County, Calif.	TBA	TBA	TBA	TBA	Sponsor is tapping banks in New York and hopes to close by end of Q2 next year (PI, 9/3).
	Hidden Hills (500 MW Solar)	Hidden Hills, Calif.	TBA	TBA	TBA	TBA	Sponsor has an offtake agreement with Southern California Edison for both projects.
Competitive Power Ventures	St. Charles (660 MW Gas)	Charles County, Md.	TBA	TBA	\$500M	TBA	Sponsor talking with banks for a club deal and may consider a bond component (PI, 9/17).
Dalkia Canada, Fengate Capital	Ft. St. James (33 MW Biomass)	Ft. St. James, B.C.	TBA	TBA	~\$175	TBA	Sponsors seek roughly \$175 million financing for project (PI, 3/26).
	Merritt (33 MW Biomass)	Merritt, B.C.	TBA	TBA	~\$175	TBA	Sponsors seek roughly \$175 million financing for project (PI, 3/26).
Duke Energy Renewables	Los Vientos (402 MW Wind)	Willacy County, Texas	Mizuho	TBA	\$800M	7-yr	Sponsor aims for \$800 million in debt (PI, 11/5).
EmberClear Corp.	Good Spring (300 MW Gas)	Schuylkill County, Pa.	TBA	TBA	\$400M	TBA	The company is looking for debt and equity in a 70:30 ratio. It is circling an equity close (PI, 11/12).
Energy Investors Funds	Pio Pico (300MW Gas)	San Diego County, Calif.	SocGen	TBA	\$300M	TBA	The sponsor has tapped Société Générale to lead the financing (PI, 10/1).
Greengate	Blackspring Ridge I (300 MW Wind)	Lethbridge, Alberta.	Citigroup	TBA	~\$600M	TBA	Sponsor may be looking for financing or to sell (PI, 9/10).
Innergex Renewable Energy	Wildmare (77 MW Wind)	Peace River, B.C.	TBA	TBA	\$160M	TBA	Sponsor targets financing, likely from life insurance companies (PI, 4/2). Innergex buys project from Finavera Wind Energy (PI, 8/6).
InterGen	Unidentified (Gas Pipeline)	Zacatecas, Mexico	TBA	TBA	\$200M	TBA	Sponsor considering club deal (PI, 6/11).
Kruger Energy	Various (202 MW Wind)	Ontario, Canada	CIBC, Scotia Capital	Refi	\$400M	TBA	Both projects have long-term PPAs (PI, 9/3).
Moxie Energy	Moxie Liberty (850 MW Gas)	Bradford County, Pa.	TBA	TBA	\$800M	TBA	The plant may be financed merchant by the team, made up largely of AES Corp alum (PI, 10/22).
NextEra Energy Resources	Various (Wind)	U.S.	TBA	Refi	TBA	TBA	The sponsor has been talking with lenders to refinance a portfolio of about 10 wind projects (PI, 10/1).
	Limon I & II (400 MW Wind)	Colorado	N/A	N/A	N/A	N/A	State Street, JPMorgan, Bank of America and Wells Fargo make tax equity investments in the projects (PI, 11/5).
OCI Solar Power, CPS Energy	Alamos I - V (400 MW Solar)	Texas	TBA	Term	~\$500M	TBA	Sponsor is likely to decide on an Asian bank to lead the financing (PI, 9/17).
Odebrecht	Chaglia (406 MW Hydro)	Peru	BNP Paribas	Term	\$650M	17.5-yr, 20-yr	Pricing set at roughly 350 over LIBOR (PI, 7/9).
Ocean Renewable Power Company	Maine Tidal Power (5 MW Tidal)	Eastport, Maine	TBA	TBA	\$25M	TBA	The company is looking for equity financing to complete its maiden project (PI, 9/3).

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## PROJECT FINANCE

## BHP Narrows Pool For Chile Project

**BHP Billiton** has short-listed three bidders for a request for proposals for a plant that will power its Escondida copper mine southeast of Antofagasta, Chile. The more than 400 MW project is expected to cost at least \$1.2 billion. A preferred bid will be selected in the next few months, says a deal watcher, adding that bidders have been working with banks for financial backing.

**AES Gener, GDF Suez, Marubeni, Mitsubishi Corp., Mitsui** and **Sembcorp**, had been eyeing several tenders in the region (PI, 5/11). BHP had reportedly been considering coal-fired generation for the tender, but has switched to gas-fired. The Australian company

signed a 20-year capacity agreement at GDF and **Codelco's** GNL Mejillones liquefied natural gas terminal last month.

Spokespeople and officials at the companies did not respond to calls and e-mails. An AES Gener spokeswoman in Chile did not respond to an inquiry by press time. The identities of the three bidders could not be learned.

Escondida is the highest producing copper mine in the world. In addition to BHP's 57.5% stake, **Rio Tinto** and **JECO** own 30% and 12.5% stakes, respectively. JECO is a Japanese consortium headed up by Mitsubishi.

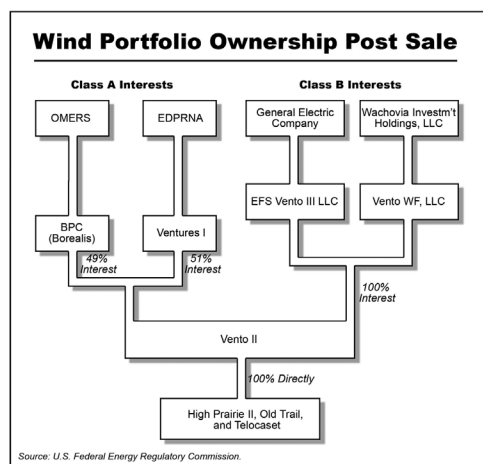
## MERGERS &amp; ACQUISITIONS

## Canadian Pension Fund Unit Takes EDP Wind Stake

A unit of **Ontario Municipal Employees Retirement System** is taking a 49% stake in the class A shares in a portfolio of three operating wind farms developed by **EDP Renewables North America** for \$230 million. **Barclays** was financial advisor to **Borealis Power Generation**, the infrastructure arm of OMERS.

The portfolio comprises the 101 MW High Prairie in Mower County, Minn., the 198 MW Old Trail in McLean County, Ill., and the 101 MW Telocaset project in Union County, Ore. All of the projects have long-term power purchase agreements.

Pension funds tend to gravitate towards operating assets and away from construction risk, a banker says,



adding the entities are showing increased interest in the space to counteract record-low yields in bonds markets. A spokesman for **EDP Renovaveis** in Madrid did not respond to inquiries by press time and a spokeswoman for OMERS in Toronto declined to comment or make an official available. The impetus behind the pension fund's decision to invest in the portfolio could not be learned.

**China Three Gorges International Europe** is the largest shareholder in EDPR. Borealis most recently bought Midland Cogeneration, a 1.56 GW gas-fired plant in Midland, Mich., from **EQT Infrastructure** and **Fortistar** for \$1.3-1.4 billion (PI, 10/5).

## 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.



• **Google** is investing \$75 million in **RPM Access'** 50 MW Rippey wind project near Perry, Iowa. The project has a long-term power purchase agreement with the **Central Iowa Power Cooperative** (Press-Citizen, 11/15).

• **Alliant Energy** subsidiary **Interstate Power & Light Co.** is looking for approval from state regulators for its proposed 600 MW gas-fired Marshalltown project in Marshalltown, Iowa. IP&L filed two applications with the **Iowa Utilities Board** for the project this week (Sacramento Bee, 11/14).

• **Washington Electric Cooperative** and **Vermont Electric Cooperative** are facing soaring costs associated with the merger between **Green Mountain Power** and **Central Vermont Public Service**. The co-ops have filed protests with the U.S. **Federal Energy Regulatory Commission** over the issue (Burlington Free Press, 11/15).

• A record 8,521 MW of wind made it on to the grid in Texas on Nov. 10. The generation accounted for 25.9% of demand, according to officials at ERCOT (Star-Telegram, 11/14).



## PF Deal Flow *(Continued from page 1)*

"Cheniere is a notably large transaction," says **Nasser Malik**, global head of project finance at **Citigroup**. "The tenor, the spread, the breadth of banks and the size show you that now deals like this over \$1 billion can get done." Sabine Pass is expected to be the first of many LNG financings, pending federal approval ([PI, 9/21](#)), and is widely viewed as a benchmark.

The third quarter was also marked by the re-emergence of merchant financings, which have been largely absent from the project finance scene since the financial collapse of 2008. Increasing activity in term loan B tranches also helped fuel the merchant rebirth in the quarter. **Panda Power Funds** secured B loans backing its gas-fired plants in Temple ([PI, 7/23](#)) and Sherman ([PI, 9/20](#)), both in Texas.

The Dallas-based developer upsized the B loan for its 758 MW Temple facility from \$75 million to \$255 million. That facility priced

at LIBOR plus 1,000 basis points and matures in six years. The company improved the pricing for its Sherman deal, which closed a couple of months later at LIBOR plus 700 bps. That B loan was increased \$19 million to \$342 million and was able to attract investors even with a reduced equity injection.

In all, just under \$600 million in B loans were made in the quarter as demand for capital shifted into riskier areas. B loans also tend to flourish in the current low-rate environments, says **Stuart Murray**, director, project & infrastructure finance at Citi. "These deals are getting done at attractive levels for issuers, with attractive spreads."

The three renewable transactions in Q3 represented roughly 20% of the deal volume, at \$1.1 billion. None of the deals backed wind, highlighting the acute impact of uncertainty surrounding the potential extension of production tax credits. The effects of subsidies are especially stark when Q3 volume and deals are compared to Q2, when 63%, or 10 of 16, deals backed wind projects.



## DEAL SNAPSHOT

*A look at the players, the numbers and the outcome of a key deal this quarter.*

DEVELOPER: **Cheniere Energy**

PROJECT: Sabine Pass gas liquefaction project.

LOCATION: Sabine Pass, La.

FINANCING: A \$3.6 billion, seven-year term loan A priced at 350 basis points over LIBOR for the first four years and then steps up to 375 bps over LIBOR for the remainder. It includes \$2 billion in equity from **Blackstone**.

COMMITMENT SIZES: \$30-\$150 million.

UPFRONT FEES: 22.5-27.5 bps.

ADVISOR: **Soci t  G n rale**.

LEADS: **Bank of Tokyo-Mitsubishi, Cr dit Agricole, Credit Suisse, HSBC, JPMorgan, Morgan Stanley, Royal Bank of Canada** and Soci t  G n rale.

DURATION OF TRANSACTION: The effort started with Cheniere looking for an equity investor in mid-2011. It closed at the end of July 2012.

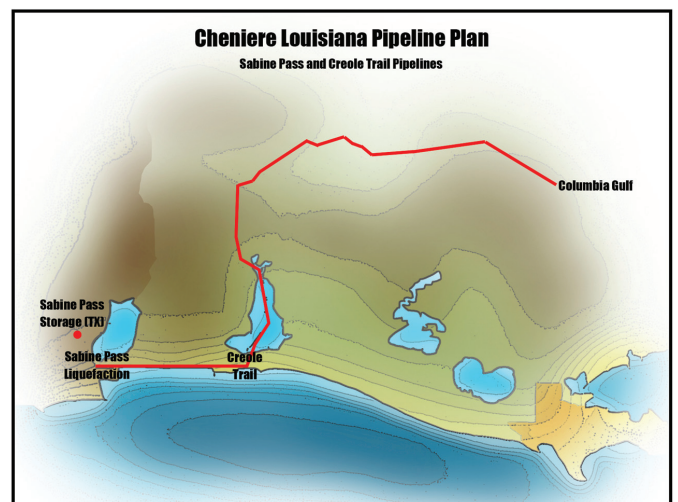
### WHY IS THE DEAL NOTEWORTHY?

The first financing of a liquefaction export facility in the U.S. is part of the much talked about natural gas boom and the largest project finance deal this year. Cheniere was able to secure financing, while about a dozen other LNG projects are waiting in the pipeline for federal approval. The sheer size of the deal makes it stand out, as it single handedly matched the second quarter's 16 deals in terms of the amount borrowed. It also

points to a deeper project finance market than seen in recent years, when transactions over \$1 billion have been rare.

### AT THE NEGOTIATING TABLE:

**Roberto Simon**, managing director and head of project and energy finance at Soci t  G n rale, says there was some concern about the deal overstressing lender capacity, but it got done and he says the lender appetite is still there for future projects. A number of banks expressed interest late in the deal and asked to be considered for the next round of financing, which Simon expects to hit the market early next year. This, along with the number of banks involved and tight spreads, would indicate that lenders are keen to get involved in the LNG market.



Source: Power Intelligence via Cheniere Energy

*Deal Snapshot is a quarterly feature in which we focus on significant, interesting deals. For submissions or more information, contact Senior Reporter **Nicholas Stone** at 212.224.3260 or [nicholas.stone@powerintelligence.com](mailto:nicholas.stone@powerintelligence.com)*

## PROJECT FINANCE DEAL WRAP SHEET Q3

The following power project finance deals closed between July 1 and Sept. 30. For a complete listing of active and closed deals, please visit <http://www.powerintelligence.com/ProjectFinanceDeal.html>.

Sponsor	Project	Location	Lead(s)	Loan	Amount	Tenor
Panda Power Funds	Temple (600 MW Gas)	Temple, Texas	Ares Management, Morgan Stanley	Term	\$340.16M	6-yr
Innergex	Kwoiek Creek (49.9MW Hydro)	British Columbia, Canada	ManuLife	Term	\$165.8M	39-yr
Cheniere Energy	Unidentified (Export LNG Facility)	Sabine Pass, La.	Crédit Agricole, BTMU, Credit Suisse, HSBC, JPMorgan, Morgan Stanley, RBC, SocGen	Mini-Perm	\$3.6B	7-yr
Inkia Energy	Unidentified (500 MW Hydro)	Cerro del Aguila, Peru	BBVA, Crédit Agricole, HSBC, Scotia, SocGen, SMBC		\$530M	12-yr
LS Power	Centinela (100 MW Solar)	Calexico, Calif.	Banco Santander, Prudential Financial Services	TBA	\$400M	TBA
Panda Power Funds	Sherman (500 MW Gas)	Sherman, Texas	Goldman Sachs, Credit Suisse	Construction	\$372.3M	Const. + 4-yr

## STRATEGIES

### Standardization Holds Up Solar Securitization

A lack of uniform standards for commercial solar installations is the main obstacle to structuring the market's first securitization of solar panel revenues, says **Paul Detering**, ceo of **Tioga Energy**. The San Francisco-based solar developer is among a handful of solar shops toying with financing through securitization.

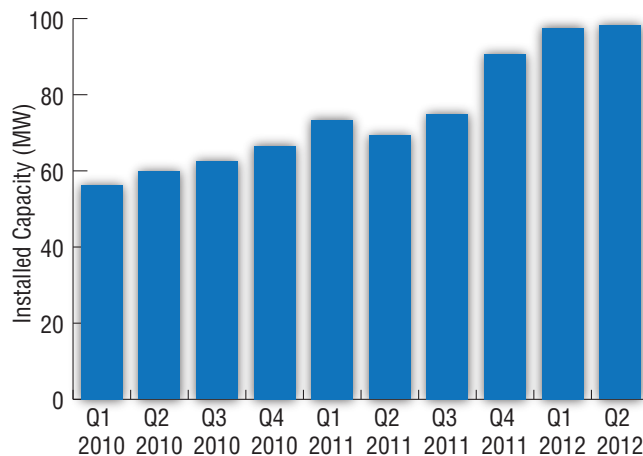
Among the challenges is establishing standards for pooling projects and determining best practices for servicing. "Who is the operating company—or servicer—going to be? Does it have to be independent from the solar developer?" Detering told *PI* sister publication *Securitization Intelligence*. "Solar is an asset that has to be maintained; it's not hard and there's not a whole lot to it, but there's more than just servicing a mortgage or debt obligation," he notes.

Residential solar developers **SolarCity** and **SunRun** have looked into financing through securitization of residential installations. Tioga is among the few to emerge, along with **NRG Energy**, on the commercial side (*PI*, [9/26/11](#) & [4/15/11](#)).

Detering expects a residential portfolio will be the first to get done and will be followed by commercial solar. "I think commercial has potential down the road once the industry learns how to do it around residential. To me it's even questionable whether it's a 2013 event," he says. "The likelihood for residential is good for 2013—not a slam dunk, but it's good." It's possible that a mixed pool of commercial and residential assets will emerge.

Tioga has been holding talks about securitizations for the last six to nine months to determine what is necessary to complete a securitization and understand how to reconcile the issues. "You get the first one done and then you get the second one done and through that process people will learn a lot and start looking at commercial portfolios as well," he says.

#### U.S. Residential PV Installations: 2010-2012



Source: Power Intelligence via SEIA

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Utility investors, lawyers, bankers and analysts gathered in Phoenix, Ariz., for the 47<sup>th</sup> Annual Edison Electric Institute Financial Conference to hear utility executives outline how they'll deal with damage from superstorm Sandy, the future of natural gas prices and when, or whether, the federal government might tackle energy policy. Over 1,000 registrants were prowling the halls of the J.W. Marriott Desert Ridge & Spa from Nov. 11-14. Senior Reporter **Holly Fletcher** filed the following stories.

## Gas Generation *(Continued from page 1)*

producer **Range Resources Corp.**, said that his industry will produce enough shale gas to meet domestic needs as well as excess for export while keeping prices down. The consensus from speakers across the conference pegged gas to be in the \$3.50-\$5.50 per mmbtu range until about 2020, with gains to \$5 not until later in the decade.

**Thomas Fanning**, president and ceo of **Southern Co.**, and **Thomas Farrell**, president and ceo of **Dominion**, warned against operating on the premise of cheap gas alone. With increased demand, as the economy picks up and if exports take off, gas is likely to hit volatility in the future, Farrell said. "I hope [Pinkerton's] right," Fanning told the crowd. "I hope gas prices stay cheap forever. I can't bet on that." Pinkerton predicted gas will remain in

the \$3.50-\$5.50 per mcf for the remainder of his lifetime.

Executives were cautiously optimistic on federal energy policy. Every fuel used for generation today has enjoyed government support, noted **Joseph Kelliher**, executive v.p. of federal regulatory affairs for **NextEra**. "We shouldn't bet on one fuel or technology or move toward what's cheapest," he said.

Dealing with the fiscal cliff and tax reform will be top priorities ahead of energy, though the level of gridlock on those issues could foreshadow whether an energy plan can be reached. Crane expressed doubts over whether the political will is there.

Government support is needed because open markets won't support pricey baseload projects, Fanning and Crane agreed. That's why the \$14 billion 2.2 GW Vogtle plant, Southern's nuclear power project in regulated Georgia, could be the only new nuclear project to get built in the next decade.

—Holly Fletcher

## Utilities Set To Sustain Bond Activity

Utilities are expected to continue to cash in on low—in many cases, record low—rates in the bond market. "It's a good time to be a corporate treasurer," **Glen Grabelsky**, managing director at **Fitch Ratings** told attendees at a breakfast panel last Monday.

Much of the debt issued in 2012 has carried a 'three handle,' or rate in the 3% range, he said, making it an attractive time to refinance or to line up funding for capital expenditures. Rates are expected to remain low for the foreseeable future under the next Obama administration, he said.

This fall **Public Service Company of Colorado** tapped the market with two issuances totaling \$800 million—one with a 2.25% coupon and the other with a 3.6%—after a sister utility, **Northern States Power**, tied down similar record low rates ([PI, 9/19](#)).

Investors have appetite for utility notes in the U.S. as well as Europe in part because of the stable returns. In Europe, utility debt has attracted attention as other bonds, particularly government debt, have taken a confidence hit.

Utilities, though, are not immune from government downgrades and can be heavily impacted by persistent sovereign problems more than other corporates, said **Richard Hunter**, managing director and lead for Fitch's ratings in Europe, Middle East and Africa. In many cases utility holding companies that have

the most exposure in a single country, such as **Iberdrola** in Spain, are at risk for a downgrade because a lower government rating points to weakened economic fundamentals, which often negatively

impact power demand.

In the U.S. investors have kept their eyes on whether the credit problems would impact utility and distribution companies under **Iberdrola USA** such as **Central Maine Power**, analysts said. In most cases, the U.S. utility subsidiaries are ring-fenced, but a credit change at the parent could put the company on a watch, the analysts noted. Fitch no longer factors in possible financial contributions from parent Iberdrola to the U.S. units, according to a spring report.

## Puget Scouts New Credit Facilities

**Puget Energy** is talking with lenders about lining up two new credit facilities. **Puget Sound Energy**, its utility subsidiary, has three credit facilities totaling \$1.15 billion and the aim is to replace them with two facilities totaling \$1 billion, **Don Gaines**, v.p. of finance and treasurer, told *PI* on the sidelines.

The Bellevue, Wash.-based company has reached out to the lenders on the existing facilities about coming into the new deal although leads have yet to be chosen, Gaines said. Puget has 26 banks in its existing facility and will look to a handful of those banks to lead. The company will choose them by the end of the month. Puget typically likes to have two active leads and three passive leads.

The current facilities expire in 2014. The new structure will be a \$650 million facility for general corporate purposes and a \$350 million facility for energy hedging. Both have targeted maturity dates of 2018. The deal is expected to be finalized in February.

Puget is reducing the sizes because it has a reduced capital expenditure program over the next few years. If a need for extra capital arises, it will look to the bond market.



Richard Hunter



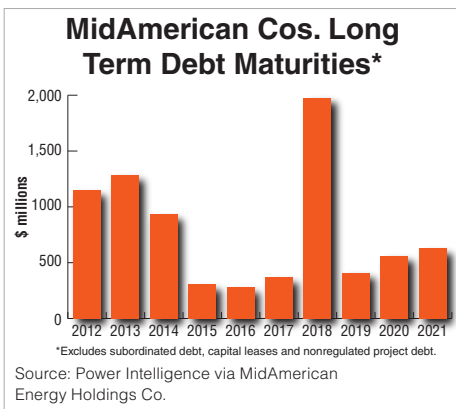
## EEI FINANCIAL

## MidAmerican To Hunt \$1B+ Financing

**MidAmerican Energy Holdings** will look to raise north of \$1 billion in 2013, primarily in the bond market, for utility units and projects including the Topaz solar project and transmission development in Texas, **Patrick Goodman**, executive v.p. and cfo, told attendees.

The company will return to the bond markets for a second tranche financing its 586 MW Topaz solar project in San Luis Obispo County, Calif. This is expected in the first half of the year. MidAmerican sold \$850 million in notes in a 144A deal in February.

On the utility side, the company will head to the bond market for



issuances at its **PacifiCorp** and **MidAmerican Energy Co.** utility subsidiaries. PacifiCorp, based in Portland, Ore., will be in the market for \$300-400 million while MidAmerican Energy Co., based in Des Moines, Iowa, will aim to line up \$500-600 million later in the year to repay a wind turbine supplier for a project that is underway, he said.

MidAmerican will be looking for some financing for its transmission joint venture with **American Electric Power, Electric Transmission Texas**, as the two make progress on developing 460 miles of 345 kV lines in West Texas' Competitive Renewable Energy Zones.

## Iberdrola Shifts Gears To Preserve Cash, Cut Debt

Iberdrola will try to reduce debt and sell off non-core assets as it retrenches to deal with a credit downgrade and persistent uncertainty about Spain's economy.

The company is looking to cut debt by \$6 billion over the next few years, in part through asset sales, an Iberdrola investor relations official said at the conference. The company is planning to reduce debt from about EUR32 billion (\$40.6 billion) to EUR26 billion (\$33 billion) in the next two years. In the U.S., subsidiary **Iberdrola Renewables** is selling three wind farms in Texas and Ohio as well as wind and solar development assets (PI, 7/11). All divestitures will be complete by the end of next year.

Iberdrola is also reducing capital expenditures in the coming years

and has identified other assets that would be sold if more liquidity is needed but before it looked down to subsidiaries for capital, he said. Those assets include stakes in infrastructure assets in Spain, Mexico and the U.S. and U.K.

The utility and distribution subsidiaries in the U.S. are not likely to be sold because they provide the company access to capital in the U.S. market in the event it is unable to tap debt markets in Spain, the official said. The company would rely on its units to issue capital to send up the chain in a worst case scenario.

Iberdrola has stockpiled \$11.3 billion in cash and will hold that in reserve. The company would be able to meet its financial obligations for 33 months with that money.

## Guards Block Bankers From Co. Open Visits

Bankers were not allowed into the open company visits at the conference this year, a move that took some by surprise. The policy, said to be an annual rule by a conference official, irked some bankers who have attended the session in years past, including last year. Armed guards checked badges to make sure that attendees had the proper designation. Those who did not sport the right badges were turned away from the company sessions.

A conference official told *PI* the rules were the same as in years past. There is no indication in conference material that access to company visits is limited but, according to the official, bankers and media are excluded.

The open company visits are held in the afternoon on Monday and Tuesday to allow quick chats with as many utilities as an attendee can pack in through a speed-dating style set-up. Meeting times can also be arranged but are subject to delays because of walk-ups. This year, unlike the 2011 conference in Orlando, security guards stood in front of the main room where many utilities held court.

Despite the rule, a handful of bankers did make it into the room to stop by tables, utility executives said, musing over how some had made it in. Attendees that had been told by utility executives to stop by had to make other arrangements to meet up. Two bankers heard through the grapevine that they would be stopped so sent e-mails to utility executives and waited in the hall. One said that next year if the trouble re-occurred he would just find a buddy who wasn't a banker and use his ID badge.

The heat-carrying guards spurred many conversations, perhaps more than the restricted entry to the open visits, as attendees remarked about this unusual component to the conference. One conference-hopping banker mused, "Well, this is Arizona. What do you expect?"



## EEI FINANCIAL

## Ford: Electric Cars Central To Utilities, Automakers



Bill Ford

The automotive and power industries need to collaborate on how electric vehicles, or EVs, will integrate into the power grid because the future of the cars is central to both industries, **Bill Ford Jr.**, executive chairman of **Ford Motor Co.**, told a packed room during the keynote on Monday.

Ford said designing EVs and getting them onto the road is a marathon rather than a sprint that will be influenced by new technologies, the cost of oil and what he called “the charging experience.”

Owners need to have easy access to charging stations that allow them to deviate from a set path between charging stations so

they can feel confident enough driving a car to just go about their daily routine. “We need to do everything we can to make charging the experience easier and more accessible,” he said.

Ford would like for owners’ cost of charging to be broken out of utility bills to help clarify the cost. The costs associate with EVs—the upfront purchase price and the cost to charge—are paramount in the decision about whether or not to buy, he said. The company sees an uptick in interest in EVs on its Web site when gasoline in a region hits \$4 or more. More people, i.e. ratepayers, will buy electric cars when the initial cost can be repaid within four years.

The number of electric miles driven has doubled in the last two years and Ford will have six electric models of its standard car fleet on the road by year-end.

## Crisis Management Gets Prioritized

Crisis management is becoming a higher priority for utilities in the wake of events like the 2010 **BP** offshore oil spill in the Gulf of Mexico and storms like Sandy. The key is preparation and training, speakers echoed throughout the conference.

Houston-based **CenterPoint Energy** has ramped up its planning for emergencies in the last 18 months and undertaken a broad training program to make sure employees across the company know how to respond and can be deployed quickly. “We hope we never have to use them, but if we do, we’re prepared,” **David McClanahan**, president and ceo said.

**James Robo**, the ceo of **NextEra Energy**, told attendees at a

**Standard & Poor’s** event that communication with customers is key—year-round and all the time, not just in times of stress. Robo said a company can lose a reputation very quickly in the face of a serious event and that tear-down can impact the relationship with regulators. Customers don’t notice when they get great reliability from their power company so its important to keep telling them, said **Joseph Kelliher**, executive v.p. of federal regulatory affairs at NextEra.

Robo said NextEra had \$2 billion in storm-related costs in 2004 and 2005 and that securitization is one method to help finance the costs. He said it’s key to plan ahead for mechanisms to finance damage costs.

### Reporter’s Notebook

- More announcements about utilities retiring coal-fired plants in PJM are expected now that President **Obama** will remain in the White House for another term, speakers said, citing clarity on where emission regulation policy will go.
- **Christopher Huskison**, president and ceo of **Emera**, said the company continues to view utility M&A as a growth opportunity, but high valuations right now make any plays less likely.
- Five years from now **DTE Energy** is slated to have a 70:30 split between its utility and unregulated operations, said **Gerry Anderson**, chairman, president and ceo. The company is planning to grow its renewables and industrials services units as well as pipeline and storage businesses.
- **Fortis** will use the proceeds from a \$200 million offering of preferred shares that closed Nov. 13 at \$25 per share to finance a



Christopher Huskison

portion of the \$900 million, 335 MW Waneta hydro project under construction in southeast British Columbia, Canada, **Barry Perry** v.p. of finance and cfo, told *PI*.

- Commercial solar installations, such as those installed on rooftops of big box stores like **Wal-Mart**, are likely to hit grid parity between 2016-2020, said **Glen Grabelsky**, managing director at **Fitch Ratings**.

- **David Crane**, ceo of **NRG Energy**, told **Ameren** executives from the panelist stage to thank their crews for helping restore power to parts of New Jersey that were hit by superstorm Sandy. He said that he bought the crew working near his home coffee from McDonald’s but wanted to make sure they heard the gratitude through their company, too.

- Congress is expected to tackle the fiscal cliff, expiring tax cuts and, possibly immigration, before it takes up energy policy, speakers said.



David Crane

## EEI FINANCIAL

## Emera Readies \$7.4B Transmission Projects

Emera is planning a series of transmission projects totaling \$7.4 billion that will link the island of Newfoundland to the Canadian mainland in Labrador and Nova Scotia in a three-part transmission project that will ultimately connect to existing lines in Maine.

The company is working on two transmission lines with **Nalcor Energy**, a Crown corporation based in St. John's that is developing the 824 MW Muskrat Falls hydro project on the Churchill River in Labrador. The first transmission phase will tie the Muskrat Falls project to Churchill Falls in western Labrador.

The largest and second phase with Nalcor is a 683-mile, 900 MW-capacity transmission line that will increase reliability in Newfoundland by connecting the isolated grid, powered by oil, to hydro from the mainland.

The third line will connect Newfoundland down to an existing line in Nova Scotia that runs across the border into Maine. The maritime link has been granted an expedited review process by Nova Scotia as well as a federal loan guarantee from the Canadian government and is expected to receive final approval by mid-year.

All the lines are slated for completion by 2017.

"[The project as a whole] is transformational both for the company and the region,"

**Christopher Huskison**, president and ceo of Emera, told analysts and investors in the Emera breakout session Tuesday.

Emera, which is **First Wind's** partner in **Northeast Wind**, has also teamed up with **National Grid** on a \$2 billion, 230-mile underground transmission line that will go from Orrington, Maine, to Tewksbury, Mass., carrying hydro and wind power toward the

Boston market. Huskison said that First Wind has roughly 1 GW of wind projects under construction in the region and the line will move that power down the coast. Development on the **Northeast Energy Link**, as the project is termed, is underway although development will heat up in 2016 and 2017.

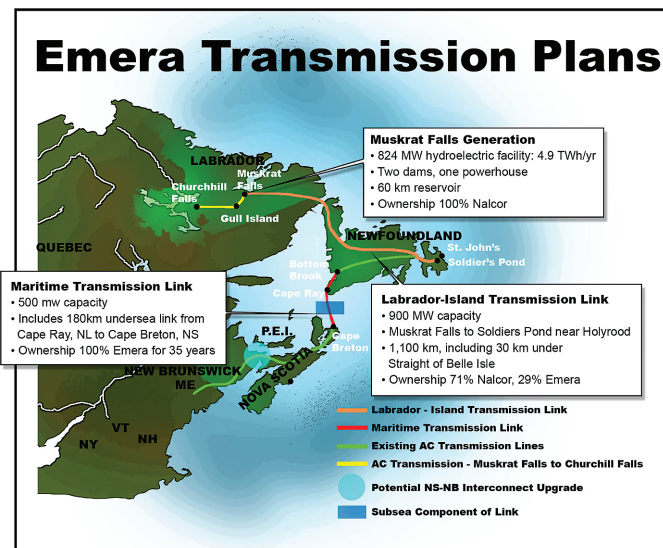
Emera, based in Halifax, Nova Scotia, owns Maine utilities **Bangor Hydro** and **Maine Public Service**, as well as **Bayside Power** in New Brunswick.

### Caribbean Solar

The company will also pursue solar development at its utility properties in the Caribbean, Huskison told *PI* on the sidelines.

Emera owns majority stakes in **Grand Bahama Power** on Grand Bahama island and **Barbados Light & Power** in Barbados as well as about a fifth of **Lucelec** on the island of St. Lucia.

Until recently the cost of solar was prohibitive to development in the Caribbean, which is a natural place for solar installations, said an attendee on the sidelines who works with companies looking at development in the region. Now that panel prices and development costs have come down it is being seen as a generation source that could displace some of the generation



Source: Emera

that requires oil imports.

How the solar market will grow is still being blueprinted in legislation and Emera is waiting for lawmakers to decide how utilities and independent power producers can be involved. Right now, an IPP owns a project smaller than 1 MW in Barbados, Huskison said.

### Seen N' Heard

• **Beer in my Hand** ... Wanna-be cowboys (and girls) showed up for some Western-style fun at Monday's Wild, Wild West Casino night held outside and complete with a tomahawk toss, two fire pits, brisket, country music and a Corona-toting mule.

• **Say Cheese!** Paparazzi and entertainment reporters lined a red carpet Sunday night to capture attendees' moment in the limelight before the opening network event dubbed Movie

Premier Night that featured photo opps with **Marilyn Monroe**, **James Bond** and **Charlie Chaplin** lookalikes.

• Music evoking the soundtrack behind an epic good guy versus bad guy fight in a thriller played in the background as people piled into the general session named "Game Changers" on Monday at the **J.W. Marriott Desert Ridge & Spa**.



The paparazzi work the red carpet.



## ECP Scouts *(Continued from page 1)*

groundwork for a potential public exit when a window of opportunity opens. It also owns the 812 MW MassPower, 548 MW Milford Power, 812 MW Lake Road and the 168 MW Dighton in New England and the 575 MW Liberty Power gas-fired in Eddystone, Pa.

ECP sold 25.1% of **Summit Midstream Partners** via an IPO on the **New York Stock Exchange** in September.

An ECP spokesman in Short Hills, N.J., did not respond to questions regarding the possibility of an IPO.

The scale and merchant nature of its fleet has led bankers to question whether an IPO in its current form would pique investor interest. ECP gravitates toward uncontracted assets in markets where congestion or load growth could raise value in the coming years. To that end, observers pointed to ECP's recent agreement to acquire a contracted gas-fired plant in South Carolina from Calpine as a possible step toward balancing the portfolio with stable cash flows (*PI*, 11/6).

The 847 MW Broad River plant in Gaffney, S.C., is under contract with **Carolina Light & Power**, a unit of **Duke Energy**, and is a departure from ECP's modus operandi when buying plants. Observers who expect that Broad River will be housed under EquiPower are viewing it as a step toward expanding geographic diversity. EquiPower would own about 3 GW with Broad River in its portfolio. ECP has not announced where the plant will be housed and a spokesman did not respond to an inquiry.

The public markets have not been kind to power players in recent years. **Noble Environmental Power**, **First Wind** and **BrightSource Energy** have all attempted, and yanked, IPOs (*PI*, 10/3). EquiPower, however, is a more traditional player that could find a home on an exchange, says one analyst. There are stark differences in risk between renewables developers subject to changing political winds and a power producer.

—Holly Fletcher

## CALENDAR

• **Total Energy USA** will host the first ever Total Energy USA Conference and Exposition Nov. 27-29 in Houston.

**Platts** will host the 6th annual Global Energy Outlook Forum on Nov. 29 at the Digital Sandbox, New York.

• **Euromoney Seminars** will host the 4th Annual Canadian Power Finance Conference Jan. 16-17 at the Fairmont Royal York in Toronto.

• **Euromoney Seminars** will host the 8th Annual U.S. Power & Renewable Finance Conference Feb. 13-14 at the Westin New York at Times Square.

• **Euromoney Seminars** will host the 7th Annual Latin America Energy & Infrastructure Finance Forum March 5-6 at the Biltmore Hotel at Coral Gables in Miami.

## ALTERNATING CURRENT

### Cardiac Power

### Michigan Researchers Work To Power Pacemakers With Beating Hearts

**University of Michigan** researchers are working on a technology that would harness energy created by a beating heart to generate enough power to run a pacemaker, according to *Michigan Engineering*. Yes, the hollow muscle that keeps blood pumping through your body creates enough energy to fuel a gadget that keeps it beating at a normal rate.

Right now, pacemakers run on batteries to create electrical pulses that prompt the heart to beat at a normal rate (the average human heart beats 72 times per minute) and those batteries must be replaced roughly every seven years.

The cardiac power generator being developed at the **University of Michigan Department of Aerospace Engineering** in theory could produce 10 microwatts of power through a piezoelectric energy harvester that uses motion,



Thinkstock/iStockphoto

in this case heartbeats, to generate power.

Researchers presented their findings at an **American Heart Association** conference earlier this month, although a

prototype has not yet been built. The technology derives from technology designed for unmanned airplanes where power is generated from wing vibrations.

## QUOTE OF THE WEEK

"I hope [John Pinkerton's] right. I hope gas prices stay cheap forever. I can't bet on that."—**Thomas Fanning**, president and ceo of **Southern Co.**, on why the company is pursuing nuclear power development as a reliability fuel for the future even as Pinkerton, executive chairman at oil and gas producer **Range Resources Corp.**, promises that gas will remain about \$3.50-5.50 per mcf for the remainder of his lifetime (see story, page 1).

## ONE YEAR AGO

**JPMorgan Capital Corp.** made a tax equity investment in three **NextEra Energy Resources** wind projects in California. [JPM most recently worked with **State Street Corp.** affiliate **Antrim** to make another tax equity investment in two NextEra wind farms in Colorado (*PI*, 10/29).]