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Exclusive Insight on Power M&A and Project Financing

Power Finance & Risk

The weekly issue from Power Intelligence www.powerintelligence.com

In This Issue

Industry Current

Christopher Crane

Christopher Crane and **Nick Akins**, presidents and ceos of **Exelon** and **American Electric Power**, respectively, talk about the impact of emissions regulations on generation fleets and ratepayers with **John Whitlock** of **Standard & Poor's**.

See story, page 7

 ISSN# 1529-6652

Top Stories

Shanghai EPC Co. Scouts U.S. Solar

Sky Solar Holdings, a Shanghai-based solar engineering, procurement & construction firm, is looking to buy into solar photovoltaic development pipelines in the U.S. Sky Solar has been on the ground in Canada for two years and is plotting its growth into the U.S market, says **Peter Liu**, managing director in Richmond Hill, Ontario.

The group anticipates solar developers needing access to capital and experienced EPC companies in the coming years, making this a good time to step in, Liu says. The company wants to repeat the strategy it used in Europe and Canada—buying into projects near permitting, signing on as the EPC and then exiting its stakes upon completion, says Liu.

Sky Solar aims to assemble a development pipeline of up to 100 MW in the U.S. It is

(continued on page 12)

ArcLight Increases Midstream Focus

Daniel Revers

ArcLight Energy Capital Partners will scope more midstream investment opportunities for its recently closed $3.3 billion fund and keep power to about half of its commitments, **Daniel Revers**, managing partner, told *PI* in an exclusive interview.

The midstream focus marks a deviation from ArcLight's earlier funds, where the Boston-headquartered shop made a name for itself in power. The increased attention on midstream is partly due to the increasingly crowded power space and the fact that the midstream sector has ample opportunities.

(continued on page 11)

European Banks Eye PF Securitizations

European lenders are said to be weighing securitizing project finance loans as an alternative to straight sales.

Incoming Basel III regulations requiring banks to shore up capital against loans and exposure to Greek and Italian sovereign debt have prompted several lenders to put portfolios on the block in the past few months. **Bank of Ireland** and **BNP Paribas** have recently sold power and infrastructure loans at discounted prices up to 8% below par, reflecting the oversupply on the secondary market, financiers say (*PI*, 10/18 & 11/15). **Allied Irish Bank**, **Banco Espirito Santo**, **Crédit Agricole**, **Dexia** and **Société Générale** are among other lenders looking to sell loans.

Securitizations of these portfolios offers the specter of par, as investors generally pay

(continued on page 11)

At Press Time

Brookfield Wraps Cross Sound Cable Refi

Brookfield Asset Management has closed a refinancing of its move to maintain ownership of the Cross Sound Cable in the Long Island Sound.

Brookfield initially picked up the 24-mile transmission line when it acquired **Prime Infrastructure Group** in 2010. The line was put on the block by lender **Commonwealth Bank of Australia** earlier this year in lieu of foreclosure after a $193.5 million loan matured in February. Brookfield then stepped into the auction, run by **Rothschild**, in the second round with an offer to keep the line (*PI*, 9/6).

Bank of Tokyo-Mitsubishi UFJ, **Mizuho Corp. Bank** and **Sumitomo Mitsui Banking Corp**. wrapped a deal supporting the $190 million acquisition this month, deal watchers say. The refinancing is said to be in the neighborhood of the purchase price. The acquisition closed last quarter.

A Brookfield spokesman in Toronto declined to comment while bank officials either declined to comment or didn't return calls.

Waste-To-Energy Sponsor Tags Banks For P.R. Deal

Developer **Energy Answers International** of Albany, N.Y., has mandated lenders to participate in its $500 million waste-to-energy Arecibo project in Puerto Rico, says **Sean Mahoney**, project development manager. Energy Answers hopes to wrap a financing by year-end. Mahoney did not respond to inquiries regarding the identity of the lenders in the deal.

The sponsor also is planning to wrap a financing supporting its $1 billion Fairfield combined heat and power project in Baltimore, Md., by early next year. **BNP Paribas** is leading the Fairfield deal. Private equity firm **Energy Investors Funds** is contributing equity to the two projects. **Puerto Rico Electric Power Authority** has a 30-year offtake agreement for Arecibo. Whether Energy Answers has secured a PPA for Fairfield couldn't be learned.

An EIF spokesman in Los Angeles and a bank official declined to comment.

Boralex, Gaz Métro To Scout Wind Funds

Boralex and Gaz Métro will look to finance the $169 million, 69 MW second phase of their wind project in Seigneurie de Beaupé, Quebec, in late 2012 or early 2013. "It depends on how the market behaves," says **Guy Daoust**, Boralex director of finance and treasury in Montreal.

Boralex and Gaz Métro will approach the market after they meet to formalize their financing plans, notes **Helene St-Pierre**, Gaz Métro treasurer in Montreal. The sponsors will seek a roughly $140 million financing supporting phase two. They will likely discuss the deal with the lenders that helped finance the 272 MW first phase, which include **Bank of Tokyo-Mitsubishi UFJ**, **BNP Paribas**, **Deutsche Bank**, **LBBW**, **Mizuho Corporate Bank** and **Sumitomo Mitsui Banking Corp**. And they may approach Canadian life insurance companies.

Boralex and Gaz Métro wrapped the C$725 million ($698.29 million) financing backing the 272 MW first phase earlier this month (PI, 11/11). **Hydro-Québec** has a 20-year offtake agreement for the second phase of the Seigneurie de Beaupé farm, which is slated for operation in 2014.

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Generation Auction & Sale Calendar

Generation Sale DATABASE

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

Seller	Assets	Location	Advisor	Status/Comments
• Abengoa Solar	45% Stake (250 MW Solana Solar CSP)	Gila Bend, Ariz.	TBA	Banco Santander is taking a 45% stake to fund construction and will look to sell slices (see story, page 6).
AES	Cayuga (306 MW Coal)	Lansing, N.Y.	Barclays Capital	Talks are on-going with prospective buyers as a January interest payment looms (PI, 11/14).
	Greenidge (105 MW Coal)	Dresden, N.Y.		
	Somerset (675 MW Coal)	Barker, N.Y.		
	Westover (83 MW Coal)	Binghamton, N.Y.		
AES Solar, Riverstone Holdings	Stakes (Solar pipeline)	Variou, Europe	Morgan Stanley	Bids for a partnership stake are due the week of Sept. 19 (PI, 9/12).
AES Thames	Thames (208 MW Coal-fired)	Montville, Conn.	Houlihan Lokey	Less than a dozen shortlisted bidders are preparing second round bids (PI, 9/26).
AE Investor II	Astoria Energy II (4%, or 23.3 MW)	Queens, N.Y.	Whitehall & Co.	First round bids were scheduled for Fri., Sept. 16 (PI, 9/19).
ArcLight Capital Partners	Waterside (72 MW peaker)	Stamford, Conn.	Citigroup, Barclays Capital	Final bid deadline pushed to November (PI, 10/17).
	Crockett (162 MW Cogen)	Crockett, Calif.		
	Hobbs (604 MW CCGT)	Hobbs, N.M.		
	Hamakua (60 MW CCGT)	Honokae, Hawaii		
	Borger (230 MW Cogen)	Borger, Texas		
	Neptune (391 MW, 65-mile transmission line)	Sayreville, N.J., to Long Island, N.Y		
Black Hills Corp.	Stake (29 MW Wind project)	Huerfano County, Colo.	None	Entities with tax appetite have bid for the 50% stake (PI, 11/14).
Boralex	Various (186 MW Biomass)	Maine	TBA	ReEnergy Holdings is buying the five facilities for $93 million.
Conti Group, Grupo Arranz Acinas	Development pipeline (550 MW Wind)	Texas, Kansas, Minnesota	Alyra Renewable Energy Finance	Teasers went out in late July (PI, 8/1).
Coram Energy	Stake (102 MW Wind project)	Tehachapi, Calif.	Marathon Capital	Coram is selling a 50% stake in a wind project co-owned by Brookfield Renewable Power (PI, 8/22).
EDF EN Canada	50% Stake (300 MW Wind)		TBA	Enbridge is paying $330 million for the stake in Lac Alfred (PI, 11/14).
First Solar	Topaz (550 MW PV)	San Luis Obispo County, Calif.	No advisor	Enbridge is in talks to buy the project (PI, 9/26).
LS Power	Bluegrass (495 MW Simple Cycle)	LaGrange, Ky.	TBA	The Kentucky utility subsidiaries of PPL will jointly own the assets (PI, 11/14).
Macquarie Capital, Fomento Econ mico Mexicano	Stakes (396 MW wind project)	Oaxaca, Mexico	TBA	Bidders are in due diligence (PI, 10/10).
NextEra Energy Resources	Blythe (507 MW Combined-cycle)	Blythe, Calif.	Credit Suisse, Citigroup	LS Power is looking to put debt on two of the assets (PI, 10/3).
	Calhoun (668 MW Peaker)	Eastaboga, Ala.		
	Doswell (708 MW CCGT & 171 MW Peaker)	Ashland, Va.		
	Cherokee, (98 MW CCGT)	Gaffney, S.C.		
	Risec (550 MW CCGT)	Johnston, R.I.		Entergy Wholesale Commodities is buying the plant for $346 million (PI, 10/31).
Newind, WindRose Power	CCI (120 MW wind project)	Childress County, Texas	RedWind Consulting	Teasers have gone out for the project (PI, 9/19).
• Quintana Infrastructure & Development	Stakes (450 MW Gas-, Diesel-fired)	Defiance County, Ohio	TBA	Selling stakes to investors including BlackRock and Starwood (see story, page 6).
Starwood Energy Group	Thermo Cogeneration (272 MW CCGT)	Fort Lupton, Colo.	None	Tri-State Generation and Transmission Association is buying the plant (PI, 10/10).
Tenaska	High Desert (800 MW CCGT)	Victorville, Calif.	Barclays, Citi	Teasers dispatched and preliminary bids expected early to mid-November (PI, 10/31).
	Rio Nogales (800 MW CCGT)	Seguin, Texas		
Third Planet Wind Power	Petersburg (40.5 MW Wind)	Petersburg, Neb.	Morgan Stanley	Edison Mission Energy is buying the project (PI, 10/10).
Tuusso Energy, Akula Energy Ventures	TA High Desert (209 MW Solar)	Tehachapi, Calif.	Marathon Capital	Said to be close to a purcahse sale agreement (PI, 10/17).
U.S. Power Generating Co.	Astoria Generating (2.1 GW Gas-fired)	Queens, N.Y.	Perella Weinberg Partners	Perella Weinberg has been hired to advise on strategic alternatives (PI, 9/26).

• **New listing**

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.*

Project Finance Deal Book

Deal Book is a matrix of energy project finance deals that *Power Intelligence* is tracking in the energy sector.

Live Deals

Sponsor	Project	Location	Lead(s)	Loan	Loan Amount	Tenor	Notes
Bloom Energy	Unidentified (Fuel Cell)	TBA	RBS	TBA	TBA	TBA	Sponsor taps RBS to lead financing (PI, 10/31).
• Boralex, Gaz Métro	Unidentified (69 MW Wind)	Seigneurie de Beaupré, Quebec	TBA	TBA	TBA	TBA	Sponsors expect to finance phase two in 2012 (see story, page 2).
Competitive Power Ventures	Ashley (200 MW Wind)	McIntosh County, N.D.	TBA	TBA	TBA	TBA	Sponsor initiates talks with lenders, tax equity providers (PI, 8/8).
Competitive Power Ventures	Cimarron (165 MW Wind)	Gray County, Kan.	TBA	TBA	TBA	TBA	Sponsor initiates talks with lenders, tax equity providers (PI, 8/8).
Edison Mission Energy	Portfolio (Wind)	U.S.	WestLB	TBA	$220M	TBA	Siemens commits to deal (PI, 11/21).
Energy Answers International, Energy Investors Funds	Arecibo (80 MW Waste-to-Energy)	Arecibo, P.R.	BNP	TBA	TBA	TBA	Sponsors mandate lenders (see story, page 2).
• Energy Answers International, Energy Investors Funds	Fairfield (140 MW Combined Heat and Power)	Baltimore, Md.	TBA	TBA	TBA	TBA	Financing expected to wrap by early 2012 (see story, page 2).
Enova Energy Group, NuPower	Plainfield (37.5 MW Biomass)	Plainfield, Conn.	Carlyle	TBA	$170M	TBA	Carlyle tapped as lender after SocGen drops out (PI, 10/31).
First Wind	Palouse (100 MW Wind)	Whitman County, Wash.	KeyBank	TBA	$180M	20+-yr	Key Wind to lead financing (PI, 10/24).
Gradient Resources	Patua (132 MW Geothermal)	Reno, Nev.	BNP, Dexia, Scotia	TBA	$600M	TBA	Project to be financed in phases (PI, 10/17).
Invenergy	Bishop Hill I (200 MW Wind)	Henry County, Ill.	BayernLB, Rabo, Santander	Term/Bridge	$422M	10-yr	Deal wraps (PI, 11/21).
Invenergy	Hardin Wind (300 MW Wind)	Hardin County, Ohio	TBA	Term	$500M	TBA	Sponsor reaches out to lenders (PI, 9/19).
Macquarie Mexican Infrastructure Fund, Macquarie Capital, Fomento Económico Mexicano	Oaxaca (396 MW Wind)	Oaxaca, Mexico	Banorte, BBVA, Crédit Agricole, HSBC	TBA	TBA	16-yr	Four lenders join financing (PI, 10/10).
NextEra Energy Resources	Lone Star (300 Miles Transmission)	Texas	BoTM, Crédit Agricole, Mizuho, RBC	TBA	TBA	TBA	Sponsor mandates banks to lead financing (PI, 11/21).
NextEra Energy Resources	Various (230.8 MW Wind)	California and Oklahoma	TBA	Refi	TBA	TBA	Sponsor reaches out to lenders about refi (PI, 10/14).
Northland Power	Manitoulin Island (60 MW Wind)	Maitoulin Island, Ontario	Manulife	TBA	TBA	TBA	Manulife expects to name a second lender (PI, 10/31).
Odebrecht	Chaglla (406 MW Hydro)	Peru	BNP	TBA	$650M	TBA	Financial close targeted for February (PI, 11/21).
Pattern Energy	Ocotillo (315 MW Wind)	Imperial Valley, Calif.	TBA	TBA	TBA	TBA	Sponsor targets financial close in 2012 (PI, 10/24)
Peregrine Midstream Partners	Ryckman Creek (18-35 bcf Gas Storage)	Uinta County, Wyo.	TBA	TBA	$160M	TBA	Deal wraps (PI, 11/21).
Tenaska Solar Ventures	Imperial Solar Energy Center South (130 MW Solar PV)	Imperial Valley, Calif.	BBVA, BoTM, Lloyds, MUFG, MS, RBS	TBA	$600M	TBA	Sponsor mulls bond component to deal (PI, 10/31).
Westar Energy, AEP. MidAmerican	Prairie Wind (Transmission)	Wichita, Kan. To Oklahoma	TBA	TBA	TBA	TBA	Westar to scout financing in late 2012 (PI, 10/14).
Wind Capital Group	Post Rock (201 MW Wind)	Lincoln and Ellsworth, Kan.	BayernLB, Rabo	Term/ Construction	$300M	TBA	Mizuho, NordLB, UniCredit and Union Bank join deal (PI, 10/17).
• Wind Capital Group	Unidentified (150 MW Wind)	Osage County, Okla.	BayernLB, Rabo	TBA	TBA	TBA	Lawsuit delays financing until 2012 (see story, page 5).

• **New Financing**

*To report updates or provide additional information on the status of financings, please call Senior Reporter **Brian Eckhouse** at (212) 224-3624 or e-mail beckhouse@iiintelligence.com.*

Project Finance

Developer Circles LatAm Wind Funds

The **Inter-American Development Bank** will loan Argentine developer **Wind Power Energia** $150 million toward the construction of four wind farms totaling 546 MW. The projects, three in Brazil and another in Uruguay, will cost $1.4 billion to build. The deal will wrap next month.

Wind Power Energia is a subsidiary of **IMPSA**, the largest Latin American wind equipment manufacturer and second largest manufacturer of hydro equipment in the region. **John Graham**, project team leader at the IDB's structured and corporate finance department, oversaw the deal.


IMPSA Wind Turbine

Graham declined to comment on pricing and tenor. How the sponsor will fund the remaining projects' costs couldn't be learned. **Rubén Sanchez Perco**, IMPSA's wind business contact in Buenos Aires, didn't reply to an email by press time.

The three Brazilian projects will generate 481 MW. The project in Uruguay will represent at least 13% of the country's objective to develop 500 MW of wind capacity in the next five years. The farms are expected to be operational by 2014.

Wind Capital Deal Pushed Back

Wind Capital Group has told lenders that a more than $200 million financing supporting its 150 MW wind project in Osage County, Okla., likely won't wrap until next year. The Osage Nation has reportedly filed a suit against the developer in federal court to arrest construction.


GE 1.6 MW Turbine

St. Louis-based Wind Capital previously tapped relationship lenders **BayernLB** and **Rabobank** to take part in a club deal backing the project (*PI*, 8/11). **NordLB** is among other lenders looking at the deal, while **JPMorgan** is expected to provide tax equity. The loan has a 10-year tenor. Pricing is slated to start at LIBOR plus 225-250 basis points.

The **Associated Electric Cooperative** of Springfield, Mo., has a 20-year offtake agreement for Osage. Wind Capital executives had hoped to have the Osage farm, which will utilize **GE** 1.6 MW turbines, operational by next summer.

Bank officials or spokespeople declined to comment or didn't respond to inquiries. A Wind Capital spokeswoman in St. Louis didn't immediately address an inquiry.

Mergers & Acquisitions

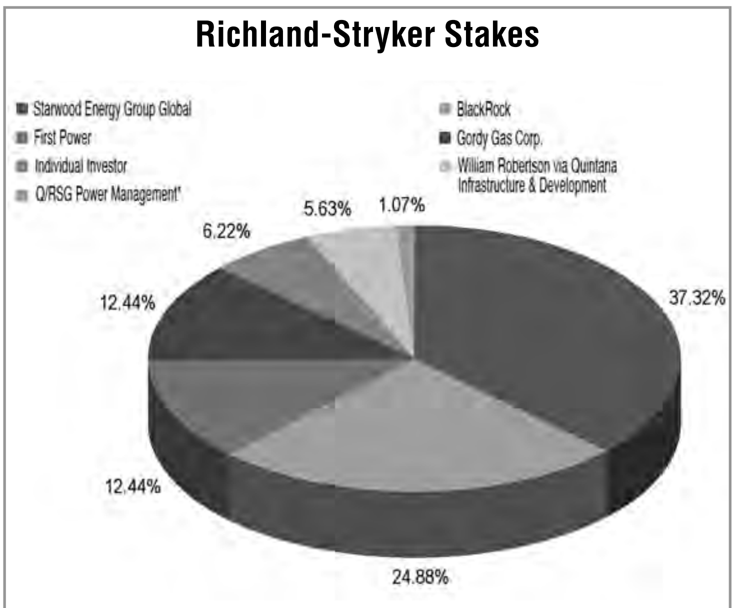
Quintana Sub Sells Generation Stakes

Quintana Infrastructure & Development is selling off a majority of its ownership in two gas- and diesel-fired plants totaling 450 MW in Ohio to a consortium of financial owners, including **BlackRock** and **Starwood Energy Group Global**.

The incoming investors are converting debt on the plants to equity, according to a filing with the U.S. **Federal Energy Regulatory Commission**. The investors include affiliates of BlackRock, Starwood, **Gordy Gas Corp**., **Frist Power**, **Post Oak Investment Management** and three individual investors. The transaction comprising the 432 MW Richland and 18 MW Stryker in Defiance County, Ohio, is expected to be closed by the end of the year.

Quintana planned to finance its acquisition of the plants from **FirstEnergy** with debt that would lead to selling equity stakes (*PI*, 8/23). That acquisition closed last quarter. The amount of debt on the plants could not be learned. Officials either didn't return calls or declined to comment.

Quintana Infrastructure & Development is an affiliate of Houston-based private equity shop **Quintana Capital Group** that primarily invests in upstream oil, gas and coal investments.



*comprised of Post Oak Investment Management, two individual investors and William Robertson via Quintana Infrstructure & Development

Source: U.S. Federal Energy Regulatory Commission

Santander Inks Abengoa Project Stake

Banco Santander is taking an equity stake in **Abengoa Solar**'s $1.9 billion Solana concentrating solar project in Gila Bend, Ariz. The investment will be used to partially fund construction. Santander plans to close a transaction by year-end for a 45% stake according to a Nov. 18 filing with the U.S. **Federal Energy Regulatory Commission**.

Santander is taking a 100% stake in a holding company that owns 45% or 112.5 MW of the 250 MW Solana project; Abengoa will remain the majority owner. Santander expects to sell portions of its stake to additional third party investors, according to the filing. The pair will file with FERC once others investors are brought in.

Abengoa has the option to repurchase the Santander stake when the project goes online or within three years of consummation of the equity transaction. The project is slated for operation in the second half of 2013.

Abengoa received a $1.45 billion federal loan guarantee from the U.S. **Department of Energy** for Solana (*PI*, 1/5). **Arizona Public Service Co**. has a 30-year power purchase agreement with the project.

The purchase price of the stake could not be immediately learned. Officials and spokespeople for the companies did not immediately respond to calls.

Corporate Strategies

Great Plains Sub Debuts CP Program

KCP&L Greater Missouri Operations initiated a $450 million commercial paper program in order to save on borrowing costs. Borrowing under the CP program to fund the utility's daily operating costs is cheaper than using its revolving credit facilities, says **Tony Carino**, director of investor relations at **Great Plains Energy**, its parent in Kansas City, Mo.

> **FAST FACT**
> Borrowing under the CP program to fund the utility's daily operating costs is cheaper than using its revolving credit facilities.

The dealers of the CP program were chosen from the pool of banks on KCP&L-GMO's revolvers, which backstop the program, Carino notes. **Banc of America** is the lead arranger on a $200 million revolver that expires in 2013 and **Union Bank** is the syndication agent. **Barclays Bank**, **Bank of Nova Scotia**, **BNY Mellon**, **BNP Paribas**, **Commerce Bank**, **Deutsche Bank**, **JPMorgan Chase**, **KeyBank**, **Royal Bank**

of Scotland and **Wells Fargo** are among the participants on the revolver, which is priced at 225 basis points over LIBOR. KCP&L-GMO has drawn down an aggregate $28 million from the revolver as of Sept. 30. **Moody's Investors Service** assigns a Prime-3 short-term rating to the program.

Carino declined to identify the CP program dealers. How much the company will be saving on the CP program could not be learned.

In other news, the company has signed two 100 MW power purchase agreements for undisclosed wind projects that will go toward satisfying renewable portfolio standards in Missouri and Kansas. KCP&L-GMO is also in the process of sifting through bids for a request for proposals for 220 MW of wind generation.

Industry Current

Exelon, AEP CEOs Talk Emissions Rules Impact

*This week's Industry Current is an edited transcript of a conversation between **Nick Akins**, president and ceo of Columbus, Ohio-based **American Electric Power**, **Chris Crane**, president and ceo of Chicago-based **Exelon** and **John Whitlock**, managing director and analytical manager in **Standard & Poor's** electric utility ratings team. The discussion, which took place during a lunch hosted by S&P at the **Edison Electric Institute**'s Financial Forum on Nov. 7, focuses on the impact of recent federal emissions rules on generation fleets and ratepayers and dealing with regulators.*


John Whitlock

S&P: What are your positions on the U.S. **Environmental Protection Agency**'s Casper rule under which states must by 2014 reduce sulfur dioxide emissions by 73% and nitrogen oxide emissions by 54% from their 2005 levels?

Crane: We understand its basis and we support the rule. We understand that there are some issues around it and we think that it's appropriate to take a little time and fix those. We've been dealing with regional type rules for a few years, and having that overall federal footprint gives us the predictability that we need to make our investments, so we support it—but we also support making sure it's done properly.

Akins: It's probably a little bit different than Chris' position. But we really aren't debating the health effects. I think certainly there are issues around that in terms of the analysis that's done and what the real health effects are, but the point here is that you know the air is cleaner than it ever has been. The environment is cleaner than it ever has been. Our company has spent $7.2 billion dollars putting scrubbers on our system and reduced over 80% of the NOx and SOx—and so we really are throwing another $6-8 billion at achieving that other 15%-20%.

The real issue is not around those emission targets, it's really around the timetable associated with it. Talking about the reliability implications of truncating the amount of generation—particularly coal-fired generation—in this country, and that timeframe is just ridiculous. It just cannot be done. To take 25% of the fleet out and for us 6,000 MW of our 25,000 MW of coal-fired generation is not something that can be done overnight, let alone by the end of 2014. It's going to be an issue when you take into account workforce development, the supply that's available to us, and the time it takes to do these projects. It takes five years to put a large scrubber and SCR [selective catalytic reduction] in place in the power plant, and many people don't realize that it takes more work hours to put these facilities in than it did in many cases to build the original plant. These are literally chemical plants that happen to produce electricity by the time we get through. We're saying, yes we can achieve the objectives that the EPA is requiring, but it can't be done in the amount of time that's been given to us, so that's where the EPA needs to relax and make sure that we don't impair the economy.

The jobs impact is real, because in this economy, it really isn't the time to be forcing and truncating 25% of the coal fleet. It really needs to be staged out with the replacement moving to a cleaner-energy environment where you have fully scrubbed coal units and you're replacing with natural gas-fired capacity and renewables and so forth.

> "We really are throwing another $6-8 billion at achieving that other 15-20% [of Nox and Sox reduction]."

S&P: What effect will the EPA rule ultimately have on the industry?

Crane: I think it will mean a newer fleet, a more efficient fleet, a more reliable fleet. The units that are at risk right now are very old and low capacity. If they're running 15% of the time, you're lucky. In separate zones, there may be reliability issues, but when you look at it across the system, and you put transmission into it and do the reliability studies—and you understand that there is excess capacity because of the economy—there are adequate resources to provide

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

the transition into this new fleet that I think the consumer will benefit from in the long run. If there are reliability issues in specific pockets, there are controls in place that will allow those assessments and allow extra time for those transactions or transitions.

S&P: If these rules force companies to move to shut down coal units—most likely the dirtiest and smaller units—what is that going to mean to reliability for the industry in general?

Akins: If it's done in a rational way, it won't impact reliability. If the EPA goes forward with the requirements that they have in place and the timeframe, it will impact reliability in those areas. I agree with what Chris is saying. The movement of all this is going to be toward a cleaner energy environment. But there's more than just the EPA driving this. There's the advent of shale gas and technological adjustments on the customer side, so it's going to happen, regardless. The impact is the timing, and there would be very real reliability considerations because these smaller units are located in the areas of the system that require black started voltage support capabilities [to maintain the integrity of the grid and prevent blackouts]. We have to have a rational way for replacing that.

S&P: Turning to coal, which is a focus of AEP's fleet, does coal still have a place in the future of the electricity generation, and what will it take to build new coal plants in this country?

> "Coal has to have a place in the energy mix in this country, along with nuclear and everything else. This country needs everything."


Nick Akins

Akins: Coal has to have a place in the energy mix in this country, along with nuclear and everything else. This country needs everything. It needs an energy policy that's coherent, that's consistent, and one that we can invest in. I don't believe really that there'll be new coal units proposed at this point, given the overhang of the environmental situation. Also, I think the technology needs to advance a little bit from a coal perspective. Certainly, shale gas is having an impact, and you can have long-term shale gas prices with the heat rate or the efficiency of a new natural gas unit. In this environment, we're going to focus on natural gas and then perhaps later on pick up with more coal-fired generation. But in the future, it's going to be definitely more natural gas, more nuclear, if you can do it. And then smart grid and renewables until we can really get a good handle on what the future holds for coal.

S&P: Do you worry about rate-payer fatigue, with all the different costs and things being added on, and the economy kind of tripping along? When is the customer going to say, enough, I can't take any more pain?


Christopher Crane

Crane: We watch that closely. The reality is that in the next couple of years our consumers are going to see rate reductions. Energy forwards look flat. Heat rates in [later] years are up a little bit, but from a capacity and from an energy standpoint in our two primary markets, we're seeing levels beneficial to the consumer. With the latest legislative package approved in Illinois, we've agreed to an average of a 2.5% maximum rate cap per year now through 2014 just to make sure that we're not taxing the consumer significantly. There's always the impression from the customer that they're paying more each year when it isn't happening, so communication is going to be important.

Akins: I do think we have to be concerned about rate-payer fatigue because we have so many capital requirements on this system. With estimates of $1.84 trillion just to refurbish the system through 2035, and add another $160 billion for environmental [issues], and you're upwards of $2 trillion dollars just for refurbishment. That's a massive amount of capital, and if we're going to make this transformation to a cleaner-energy economy, we have to be very judicious about how we deploy capital. We have to make sure that we're doing it wisely across the board. Transmission investment is key, because obviously you can optimize among grids and not have to spend a lot of capital for new power plants, for example. I'll give you an example back on the EPA front: We already removed particulate matter at our power plants by 99.6%, and the EPA requirements would go as high as 99.8%; for that additional 0.2%, it's costing us between $600 million and $700 million. I understand why we're trying to get there, but to spend that kind of capital on that versus refurbishment of the grid, transmission, and those kinds of things. That's the kind of decision we really need to rationally make to mitigate the impacts on customers.

S&P: You both operate in multiple jurisdictions. What are some of the lessons you've learned in dealing with regulators?

Crane: We have a lot to learn. We've learned a lot in Illinois, communicating not only with the legislative body and the regulatory body but the elected officials—doing more communications, understanding their priorities, but also explaining the business model so they understand: you know we're an investor owned utility. We're being asked to put equity to work. We need to understand what we can get for a fair return. We're not trying to sacrifice safety or reliability, but there has to be a balance. We have done much better in Pennsylvania on that and will continue to do so. But I think there's a lot of room for us to continue to improve and develop relationships that, since 2007, have been somewhat strained or damaged—and I wouldn't put it on the back of the politician or the regulator. I think we need to take the accountability on communicating better and making sure before we get into adversarial situations that it's not the first time we've talked.

Akins: It's important to know that we serve 11 states, and all the regulatory jurisdictions are different. They have different facts, different issues they're dealing with, and they actually have different thought processes of where they want the utilities to go. That's why we've moved more to an operating company model where there's a clear line of sight, particularly with what we're going through with the recapitalization and the transformation of our industry. We're going to have to get out in front with the regulator to explain what it is we're trying to do, see if they agree with it, and get that buy-in up front, so we that we can all move forward together. Otherwise, we're going to wind up in a situation where we just get crossways because we didn't have those discussions early on.

A longer version of this article was published by Standard & Poor's on its Global Credit Portal on Nov. 15, 2011.

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 *PI* does not guarantee its completeness or accuracy.

AMERICAS

• **NRG Energy** has wrapped its acquisition of **Solar Power Partners**, a photovoltaic developer based in Larkspur, Calif. SPP has 30 MW of distributed solar projects in operation or under development (*Bloomberg*, 11/22).

• The Colorado **Public Utilities Commission** has approved **Xcel Energy**'s power purchase agreement with **NextEra Energy** for a 200 MW wind project in Limon. Xcel will pay $27.50 per MWh (*The Denver Post*, 11/22).

• The **China Photovoltaic Industry Alliance**, which includes **GCL Poly Energy Holdings** and **Suntech Power Holdings**, is considering filing a petition to Beijing to initiate an anti-dumping and subsidy investigation of U.S. polysilicon imports. No timetable has been set for a filing with China's commerce ministry (*Reuters*, 11/22).

• Manufacturers **JA Solar Holdings** and **LDK Solar** have reported third-quarter losses amid sagging sales and mounting inventories. JA Solar attributed the slumped demand to the European debt crisis limiting available financing for solar projects (*The Wall Street Journal*, 11/22).

• A 2009 leak at **Entergy Corp**.'s 1.18 GW Waterford 3 nuclear plant in Louisiana posed low to moderate safety significance to workers on-site, reports the **Nuclear Regulatory Commission**. Entergy officials had failed to properly contain radioactive cooling water in a 2009 refueling outage (*Reuters*, 11/22).

• The **Public Utilities Commission** of Ohio could approve **AES Corp**.' $3.5 billion acquisition of **DPL** as early as Tuesday, tying up the last remaining approval needed. The two companies anticipate closing the transaction either later this year or early next year (*Dayton Daily News*, 11/22).

• The first 80 MW construction phase of **Edison Mission Energy**'s Broken Bow wind project in Nebraska is under way and the project will be online in September. The second 75 MW phase is slated to be online by the end of next year (*The Grand Island Independent*, 11/22).

• Minnesota regulators have requested that **Minnesota Power** evaluate how to shut-down two coal-fired plants while adding gas-fired generation in the next 15 years. The plants under evaluation are the Laskin facility in Hoyt Lakes and the Taconite Harbor plant (*The Duluth News Tribune*, 11/22).

• Two North Carolina towns, New Bern and Rocky Mount, have asked that federal regulators reject **Duke Energy and Progress Energy**'s anti-competitive proposal and suggested that Duke sell power plants in order to maintain the Carolinas' wholesale market (*The Charlotte Business Journal*, 11/22).

• **Free Flow Power** is planning two hydro projects on the Monongahela River near Morgantown, W.Va. The Morgantown dam project is 2.5 MW (*The Dominion Post*, 11/22).

• **MISO** estimates that proposed emission regulations from the U.S. **Environmental Protection Agency** could shutter 13 GW of coal-fired generation in its territory. Roughly 49 GW will require some sort of environmental upgrade (*Reuters*, 11/18).

• **Mississippi Power**, a unit of **Southern Co**., has filed with state regulators for a rate increase to fund the construction of its $2.4 billion Kemper integrated gasification combined cycle coal-fired project that is scheduled to be online in 2014 (Reuters, 11/18).

• Four public utilities of counties in Southwest Washington have shelved plans to build the 80 MW Radar Ridge wind project because of its impact on the marbled murrelet, a threatened bird species (*The Seattle Times*, 11/18).

• Shareholders of both **Exelon** and **Constellation Energy** have approved their proposed merger. The deal remains subject to regulatory approval (*Reuters*, 11/18).

• **Jeffrey Butler**, president of **Connecticut Light & Power**, resigned as part of a management overhaul by parent **Northeast Utilities** in response to public outcry about the handling of outages after the October snowstorm (*The Wall Street Journal*, 11/18).

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ArcLight Increases *(Continued from page 1)*

ArcLight closed **ArcLight Energy Partners Fund V** earlier this month (*PI*, 11/3). When it went out to investors two years ago it found previous investors—primarily endowments, foundations and insurance companies—had been hard hit by the financial crisis and were not in a position to write checks. With fundraising off to a slow start, the team regrouped and decided to focus on exiting some existing investments in order to boost its list of realized assets, says Revers. It divested $4.5 billion in assets, which helped set it apart from other fundraisers. "The scarcest thing in the energy private equity arena is a realized deal," he says, adding that the divestitures piqued investor interest later in fundraising process.

The second round of fundraising led the team to money from new investors. It brought in entities from Europe and Asia, including sovereign wealth funds, as well as corporate and state pension plans, including that of Maine. Corporate plans tend to have more conservative investment strategies and be under-exposed to energy assets. "People started realizing that we were not just talking a big game," says Revers.

Of the $10.2 billion of capital under management, ArcLight has spent about $4.5 billion on power over its 10-year life. New power investments won't exceed $1.65 billion this time around, Revers says. Five commitments have been from the new fund made since 2010—four of them in midstream—including **Bronco Midstream Partners**, **Lonestar Midstream Holdings** and **Brown Bear Power**. The shop's larger strategy is still the same, largely focusing on assets with a current cash flow, i.e. contracted assets in the power space or the equivalent, he says. The identity of potential investment targets could not be learned. ***—Holly Fletcher***

European Banks *(Continued from page 1)*

fees to the servicers or creators of these buckets, narrowing the discount. Lenders may securitize portfolios up to $1 billion, says a project finance attorney who is tracking efforts at European banks. Under a securitized portfolio of gas-fired, transmission and renewables loans, lenders would sell bonds secured by the payment streams of the assets to raise capital.

But the process is complex and lengthy, notes **Jacob Worenklein**, partner at **Bingham McCutchen** in New York, who attempted roughly a decade ago to securitize a portfolio of SocGen assets when he was global head of the bank's energy, power, infrastructure and project finance sectors. Each loan in a securitization needs to be reviewed individually and be assigned a shadow credit rating by an analyst who studies project finance assets—a laborious effort, considering securitizations of portfolios often feature 100 or more individual loans. That analyst then needs to collaborate with a securitization analyst.

"Securitizations are viable and potentially helpful for banks seeking capital or liquidity relief, but lenders needing more expeditious relief may need to pursue sales of assets," Worenklein says. He declined to discuss the specific SocGen effort.

The tenor of project loans and interest rate fluctuations within portfolios may also present obstacles to securitization efforts. Project loans tend to have long maturities, often 10 years or more, while securitizations tend to be up to seven years. The floating rate debt—generally based on LIBOR-- also poses a challenge. "If rates move in a downward direction at any point, people tend to refinance at the same time," says a senior project financier in New York. Pre-payments can make securitizations difficult to manage.

Banks may also struggle to shape the composition of a portfolio.

Securitizations tend to have certain thresholds, such as limiting the percentage of assets in a bundle beneath a specific credit rating, and generally require diversity across geography, sector, tenor and credit rating. A portfolio may also need contracted and merchant assets. "If you're going to do a $1 billion portfolio, you may need 100 assets," a syndicator in New York says.

Lloyds TSB attempted a public securitization of U.K.-based project finance loans in March, but failed. A spokeswoman in London confirmed the effort, declining to elaborate. The bank ultimately sold the loans in private trades. Other lenders that have considered or tried similar to execute similar deals since the 2008 financial collapse include **Credit Suisse** and **HSH Nordbank**, bankers say. The status of those deals and why attempts were not successful could not be learned. Bankers at institutions that are selling portfolios declined to comment or did not return calls.

—Brian Eckhouse

Shanghai EPC

(Continued from page 1)

developing 35 MW in Canada and has 77 MW either online or under construction in the Czech Republic, Germany and Spain.

Ideally, a portfolio would have short- and medium-term projects in the 2-20 MW range, says Liu, explaining that the company wants some to go into construction next year with some in 2013. The company would finance construction although it is looking for an advisor to work on tax equity investments, he says.

Sky Solar is backed by venture capital fund **IDG Capital Partners**, which is affiliated with **International Data Group**.

—Holly Fletcher

Conference Calendar

- **Infocast** will host Distributed Solar Summit Nov. 30-Dec. 2 at the Doubletree San Diego Downtown in San Diego, Calif. To register, visit http://informationforecastnet.com/index.php/conference/distsolar11.

- **Infocast** will host Monetizing Grid Services West Nov. 30-Dec. 2 at the Network Meeting Center in Santa Clara, Calif. To register, visit http://www.infocastinc.com/index.php/conference/gridwest.

- **Infocast** will host Projects & Money 2012 Jan. 18-20 at the Harrah's New Orleans in New Orleans, La. To register, visit http://infocastinc.com/index.php/conference/570.

- **Euromoney Seminars** will host the 3rd Annual Canadian Power Finance Conference Jan. 25-26 at The Fairmont Royal York in Toronto. To register, visit http://www.euromoneyseminars.com/eventdetails/0/4339/3rd-Annual-Canadian-Power-Finance-Conference.html.

- **Green Power Conferences** will host Solar Power Generation USA Jan 31.-Feb. 2 at the Rio All Suites Hotel and Casino in Las Vegas, Nev. To register, visit http://www.greenpowerconferences.com/

ALTERNATING CURRENT

Solar Takes Holiday Stage In Tokyo

Companies in Japan are using solar power to brighten up the holidays despite power shortages stemming from nuclear reactors going offline.

A brilliant blue light display depicting a Christmas tree on a building in the west side of the Takashimaya Times Square, a part of the Shinkuju Ward that is recognized for its lighting decorations, is being powered by solar generation, *CleanTechnica* reports. The country looked to reduce its dependence on nuclear after the March disaster at the Fukushima reactors.

The 184-feet display is lit from 5 p.m. to 9 p.m. daily and powered by 126 solar panels that charge 70 storage batteries. **Next Energy and Resource**, a renewables company, and **Moriwakit Japan**, which readies holiday display lights, collaborated on the Takashimaya Christmas campaign.

Quote Of The Week

"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 in order to attract investor interest in its latest $3.3 billion fund (see story, page 1).

One Year Ago In Power Finance & Risk

Capital Power Income LP had put its 1.4 GW portfolio of assets in the U.S. and Canada on the market; **Greenhill & Co**. advised on the U.S. fleet, while **CIBC World Market**s ran the Canada auction. [**Atlantic Power Corp**. is using equity and bond issuances to raise $506.5 million for its purchase of most of the assets (*PI*, 11/3).]

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Do you have questions, comments or criticisms about a story that appeared in *PI*? 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.

