Power Finance & Risk

Exclusive Insight on Power M&A and Project Financing

By the publisher of GlobalCapital

AWARDS

12th Annual Deals & Firms Of The Year Awards

PFR is extending the voting process for our 12th Annual Deals & Firms Of The Year Awards to April 3. Visit www.powerfinancerisk.com to send in your votes.

PEOPLE & FIRMS

Chadbourne Partner Heads To TerraForm

Evelynn Limm, partner at Chadbourne & Parke in Los Angeles, is leaving the firm to join TerraForm Power as managing director of North American origination. Page 6

PROJECT FINANCE

D.E. Shaw, 8minute Stalk $1B+ For Solar

A D.E. Shaw affiliate and 8minute Renewable Energy are talking to prospective lenders for financing backing more than $1B of solar projects. Page 6

Abengoa, EIG Hunt Mexico CCGT Financing

Olivia Feld

Abengoa and **EIG Global Energy Partners** are looking to finance their 924 MW Norte III combined cycle project in Ciudad Juárez in northern Mexico. The project will be the largest combined cycle plant in Mexico when complete and online in 2017.

Financing will likely be in the form of a mini-perm, according to a banker. The deal is slated to close in the third quarter of this year. **BNP Paribas**, **BBVA**, **Mizuho Bank** and **NordLB** are some of the banks reportedly eying the deal. The project recently closed a bridge financing for 12 months, adds the banker.

The project is expected to cost around $700 million, which will be financed with a mix of equity and non-recourse debt. Debt is expected to be in the region of EUR 511 million ($542 million), according the latest earnings presentation from Abengoa.

Washington D.C.-based **EIG Global Energy Partners** is an equity investor in the project, after EIG and Abengoa jointly committed $2.5 billion of equity into the Abengoa Projects Warehouse 1. The warehouse vehicle will fund Aben- PAGE 12 »

Schaefer Exits Blackstone

Olivia Feld

Jim Schaefer, senior managing director and global head of energy, power & renewables, has left **Blackstone Advisory Partners** in New York.

Schaefer has been head of the Blackstone energy advisory shop since January of last year. Prior to his post at Blackstone, Schaefer was global head of power and renewables at **UBS** in New York for more than seven years. Schaefer brought along UBS Managing Directors **Dayan Abeyaratne** and **Keith Lord** to Blackstone. The trio's strong relationships with clients in the utility, power and energy sectors was seen as likely to make the firm a strong contender for advisory roles (PFR 8/11).

Before joining UBS, Schaefer was a managing director at **Lehman Brothers** in New York from 1999 to 2006.

Jim Schaefer

Schaefer has advised on several multi-billion dollar M&A deals including **OGE Corporation**'s $11 billion joint venture with **CenterPoint Energy** and **ArcLight Capital Partners** in 2013, **Constellation**'s $1.1 billion acquisition of **Boston Generating Co.** (PFR, 1/4/2011), and **Avista**'s acquisition of **Alaska Energy and Resources Company** (PFR, PAGE 12 »

ISS Scouts Buyers For 500 MW Solar Portfolio

Nischinta Amarnath

Innovative Solar Systems is talking to prospective buyers for a portfolio of shovel-ready utility-scale solar projects totaling roughly 500 MW in North Carolina. The roster includes 10 projects ranging from 35 MW to 80 MW in capacity. The Asheville, N.C.-company expects to sell these assets before the fourth quarter.

Potential buyers include independent power producers, investment firms, hedge fund managers and private equity players. The identities of those prospects and whether Innovative Solar Systems was working with an advisor on the sales could not be learned.

"These projects take a better part of the year to build, and there's a push for investors to get these projects up and running in the first half of 2016," says **John Green**, ceo and managing partner at ISS in Asheville, N.C., of buyers look- PAGE 12 »

POWER UP: CHECK OUT A SELECTION OF THE WEEK'S POWER AND UTILITY NEWS ON TWITTER PAGE 6

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THE BUZZ

Credit: Fotolia

The Coal-Fired Question

Utilities and operators of U.S. coal-fired generation are planning to shutter hundreds of assets, as more stringent emissions regulations come in to effect and the cost of maintaining the aging plants and bringing them into compliance meets little favor with ratepayers. As much as 110 GW of coal-fired capacity could come offline, according to **Teri Viswanath**, director of commodity research at **BNP Paribas** (PFR, 1/16).

Those factors, and others, surround **We Energies** cancelled sale of its 431 MW Presque Isle coal-fired asset in Marquette, Mich., to **Upper Peninsula Power Co.** (see story, page 5). The utility, which is undergoing a $9.1 billion merger with **Integrys Energy Group**, had struck a deal with UPPCO after a request for proposal process to sell Presque Isle fell flat and MISO denied the utility's request to shutter the remaining active units at the plant (PFR, 3/5/14).

MISO's decision to keep Presque Isle operating, citing power supply shortfalls in the region, points to a part of the market that is becoming increasingly bullish on coal-fired generation despite the odds. After taking home a pile of coal-fired generation in Ohio in its acquisition of **Duke Energy** assets, **Dynegy Corp**. is expressing interest in **AES Ohio**'s fleet (see story, page 5). The Houston-based shop is among several players betting on coal-fired generation, taking a view that eventually rising oil and gas prices, and other circumstances, will make existing coal-fired generation more viable and competitive.

The same story does not apply to proposed new-build, coal-fired facilities. **Summit Power Group** is looking at significant delays and cost overruns for its planned 400 MW integrated combined cycle coal gasification project in Texas (PFR, 10/17). More recently, Indiana state regulators have revoked an air permit for **Leucadia National Corp**.'s planned $2.8 billion coal-gasification last week, at the developer's request. The state had committed to buying the plant's synthetic gas for 30 years and reselling it to consumers. ■

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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**, editor, at (212) 224-3165 or sara.rosner@powerfinancerisk.com

GENERATION AUCTION & SALE CALENDAR

These are the current live generation asset sales and auctions, according to Power Finance and Risk's database.
A full listing of completed sales for the last 10 years is available at http://www.powerfinancerisk.com/AuctionSalesData.html

Generation Sale DATABASE

Seller	Assets	Location	Advisor	Status/Comment
American Electric Power	Portfolio (7,923 MW Gas, Coal)	Indiana and Ohio	Goldman Sachs	AEP has tapped Goldman to conduct a strategic evaluation of the assets (PFR, 2/9).
Apex Clean Energy	Balko (314 MW Wind)	Beaver County, Okla.	Macquarie Capital	D.E. Shaw is buying the project (PFR, 1/12).
Apex Clean Energy	Kay (314 MW Wind)	Kay County, Okla.		Southern Power Co. is considering buying the project (PFR, 1/12).
Apex Clean Energy	Kingfisher (298 MW Wind)	Oklahoma		The deal has wrapped. First Reserve bought the project (PFR, 2/9).
ArcLight Capital Partners	Bayonne (512 MW Gas)	New Jersey	Morgan Stanley	Macquarie is assuming $510M in debt and paying $210M in cash (PFR, 2/9).
EIG Global Energy Partners	Blue Mountain (50 MW Geothermal)	Nevada		Baseload Clean Energy Partners, a subsidiary of Khosla Ventures, bought the project (PFR, 3/16).
ET Solar Energy Corp., Geenex	Halifax (20 MW Solar)	Roanoke Rapids, N.C.		Duke Energy Renewables is buying the asset (PFR, 1/12).
Exelon Corp.	Fore River Energy Center (809 MW Gas)	Massachusetts	Citigroup	Calpine has issued unsecured bonds to fund the $530M purchase (PFR, 2/9).
Footprint Power	Salem Harbor (674 MW Gas)	Massachusetts	Macquarie Capital	Highstar Capital and Oaktree are taking equity stakes in the project (PFR, 1/19).
Gestamp Solar	Portfolio (280 MW Solar)	California		Solar Frontier Americas is buying the portfolio (PFR, 3/16).
● Innovative Solar Systems	Portfolio (500 MW Solar)	Asheville, N.C.		ISS is talking to prospective buyers and expects to sell its projects by year-end (see story, page 1).
● Main Street Power	Various (150 MW Solar DG)	U.S., Latin America, the Caribbean	Marathon Capital	AES Corp. has bought Main Street Power for $25 million (see story, page 5).
PPL Corp., Riverstone Holdings	York project (49 MW Gas)	Pennsylvania		PPL and Riverstone agree with FERC to sell one of two asset portfolios (PFR, 2/2).
	Ironwood (660 MW Gas)	Pennsylvania		
	Bayonne (158 MW Gas)	New Jersey		
	Camden (145 MW Gas)	New Jersey		
	Elmwood Park (65 MW Gas)	New Jersey		
	Newark Bay (120 MW Gas)	New Jersey		
	Pedricktown (118 MW Gas)	New Jersey		
	Holtwood (248 MW Hydro)	Pennsylvania		
	Wallenpaupak (44 MW Hydro)	Pennsylvania		
	Crane (399 MW Coal)	Maryland		
Quantum Utility Generation	Choctaw (760 MW Gas)	Mississippi		Tennessee Valley Authority has agreed to acquire the plant for $34M (PFR, 2/23).
SunEdison	Crucero (71.2 MW Solar)	Maria Elena, Chile		ECOSolar has acquired a minority stake of less than 20% in Crucero (PFR, 2/16).
TradeWind Energy	Decatur Parkway (80 MW Solar)	Georgia		Southern Power will own 100% of the two solar projects (PFR, 3/2).
	Decatur County (19 MW Solar)			
Verso Paper Corp.	Various (118.4 MW)	Bucksport, Maine		American Iron & Metal is buying the plants as part of its $60M acquisition of the Bucksport Paper Mill (PFR, 12/15).
Verso Paper Corp.	Bucksport Power (185 MW Cogen)	Bucksport, Maine		American Iron & Metal is buying the plants as part of its $60M acquisition of the Bucksport Paper Mill (PFR, 12/15).

● **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 Editor Sara Rosner at (212) 224 3165 or e-mail sara.rosner@powerfinancerisk.com

PROJECT FINANCE

Deal Book is a matrix of energy project finance deals that Power Finance & Risk is tracking in the energy sector.
A full listing of deals for the last several years is available at http://www.powerfinancerisk.com/Data.html

Live Deals: Americas

Sponsor	Project	Location	Lead(s)	Loan	Loan Amount	Tenor	Notes
● 8minutenergy Renewables & D. E. Shaw Renewable Investments	Springbok (133 MW Solar)	Kern County, Calif.	TBA	Debt, Tax Equity	$130M	TBA	Negotiations are at a final stage (see story, page 1). Financing is slated to close in April 2015 (PFR, 3/9).
	Springbok 2 (150 MW Solar)	Kern County, Calif.	TBA	Debt, Tax Equity	$420M	TBA	Both players are in the market for debt and equity (see story, page 1).
	Lotus (50 MW Solar)	Madera County, Calif.	TBA	Debt, Equity	$100M	TBA	Both players are in the market for debt and equity (see story, page 1).
● Abengoa, EIG	Norte III (924 MW Gas)	Ciudad Juárez, Mexico	TBA	Debt, Equity	$542M	TBA	The deal is slated to close in the third quarter (see story, page 1).
Advanced Power	Cricket Valley (1 GW Gas)	Dover, N.Y.	TBA	Debt	TBA	TBA	Advanced Power is considering launching a financing to back the project estimated to cost $1.4B (PFR, 3/2).
	Carroll County Energy (755 MW Gas)	Ohio	BNP, Crédit Agricole	TBA	TBA	TBA	Deal is set to wrap in the next few weeks (PFR, 2/9).
Algonquin Power & Utilities Corp.	Odell (200 MW Wind)	Minnesota	NordLB, BayernLB, Santander, CIBC, Deutsche Bank	TBA	TBA	TBA	Deal is likely to wrap in Q2 (PFR, 2/16).
Competitive Power Ventures	Orange County (650 MW Gas)	New York	TBA	Debt, Equity	$900M	TBA	The project is slated to be online in 2016 (PFR, 2/23).
Deepwater Wind	Block Island (30 MW Wind)	Block Island, R.I.	Société Générale, KeyBank	Debt	$290M	TBA	The project will be complete by the fourth quarter of 2016 (PFR, 3/9).
E.ON, GE	Grandview (211 MW Wind)	Amarillo, Texas	Bank of America, JPMorgan	Tax Equity	$222M	TBA	Sponsors have garnered tax equity from Bank of America and JPMorgan (PFR, 2/9).
EDP Renewables North America	Rising Tree III (99 MW Wind)	Kern County, Calif.	TBA	Tax Equity	TBA	TBA	EDPR is seeking tax equity investment in the project (PFR, 3/2).
Enel Green Power North America	Osage (150 MW Wind)	Massachusetts	JPMorgan	Tax Equity	TBA	TBA	Enel has obtained tax equity from JPMorgan (PFR, 2/9).
Energy Investors Funds	Keys Energy Center (735 MW Gas)	Brandywine, Md.	Natixis, MUFG Union Bank	TBA	TBA	TBA	Deal is set to wrap in the next few weeks (PFR, 2/2).
First Reserve	Kingfisher (298 MW Wind)	Oklahoma	Morgan Stanley, OneWest Bank, Santander	Senior Secured Construction Loan, Letters of Credit	TBA	TBA	Rabobank pulled out of the deal before close (PFR, 2/23).
Freeport LNG	Quintana Island (LNG Export Facility)	Texas	TBA	TBA	$4B	TBA	Deal is expected to wrap in the second quarter (PFR, 2/23).
IENova, PEMEX	Los Ramones II Norte (274-mile Pipeline)	Mexico	Santander	Commercial Bank Tranche	TBA	12-yr	Deal is set to wrap in the next few weeks (PFR, 1/26).
				Development Bank Tranche	TBA	20-yr	
Northland Power	Nordsee One (332 MW Offshore Wind)	Germany	TBA	Term Loans	$847M	TBA	Developer is talking to lenders for financings (PFR, 3/16).
	Grand Bend (100 MW Wind)	Ontario	TBA	Term Loans	$212M	TBA	Developer is talking to lenders for financings (PFR, 3/16).
Penn Energy Renewables	Various (37 MW Solar)	Ontario	Rabobank	TBA	$125M	TBA	Deal wrapped (PFR, 2/2).
Quantum Utility Generation	Passadumkeag (40 MW Wind)	Penobscot County, Maine	Mizuho, Sumitomo Mitsui Banking Corp.	Construction loans, Term loans	$95M	TBA	Construction of the project will be complete by year-end (PFR, 3/16).
Rockland Capital	Eagle Point (240 MW Gas)	Westville, N.J.	Investec	Refinancing	$170M	TBA	The deal wrapped on an oversubscription at the end of February (PFR, 3/9).
	Sabine (100 MW Gas)	Orange, Texas					
	Lakeswind (50 MW Wind)	Rollag, Minn.					
Solar Star Funding	Solar Star Projects (579 MW Solar)	Rosamund, Calif.	Barclays, Citigroup, RBS	Senior secured series B notes	$325M	TBA	The issuance was upsized by $10M (PFR, 3/9).
SunEdison	Crucero (71.2 MW Solar)	Maria Elena, Chile	IDB, OPIC, CorpBanca, Clean Technology Fund	Non-recourse senior secured loans	$155M	19-yr	Deal has wrapped (PFR, 2/16).

● **New or updated listing**

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To report updates or provide additional information on the status of financings, please call Senior Reporter Olivia Feld at (212) 224-3260 or e-mail olivia.feld@powerfinancerisk.com

MERGERS & ACQUISITIONS

AES Wraps Main Street Power Purchase

AES Corp. has sealed its purchase of Boulder, Colo.-based solar developer **Main Street Power** for $25 million. **Marathon Capital** is the financial advisor to Main Street Power on the deal.

AES will fund its purchase through cash on hand. The acquisition is a part of the Arlington, Va.-based company's strategy to start building a distributed generation portfolio. AES did not work with a financial advisor.

Main Street Power has 50 MW of operating distributed generation in the U.S. and 100 MW under development across the U.S., Latin America and the Caribbean. The purchase will help AES cater to electric utilities that are increasingly looking to play in non-grid connected generation, according to a deal watcher. "AES best fit the category of a market forward-facing company that is interested in a distributed generation platform," says **Terry Grant**, managing director at Marathon Capital in San Francisco. Grant led the transaction for Marathon.

Residential, commercial and industrial developers that offer distributed generation platforms have been eliciting interest from passive financial investors, private equity firms, strategic energy-focused investors and pure-play energy companies. This transaction is the latest in a string of deals focused on distributed generation. **Tenaska** recently acquired a controlling stake in **Soltage** (PFR, 3/13) while **Canadian Solar** bought **Recurrent Energy** last month (PFR, 2/6).

Main Street Power, renamed **AES Distributed Energy**, was founded in 2009 with investments from over 60 high net-worth individuals and private equity players.

We Energies Nixes Coal-Fired Plant Sale

We Energies has called off the sale of its 431 MW Presque Isle coal-fired facility and electric distribution assets in Michigan to **Upper Peninsula Power Co**.

The sale may have fallen through because UPPCO and one of We Energies' long-term customers, **Cliffs Natural Resources** failed to agree on a contract for UPPCO to sell power to Cliffs once UPPCO acquired the plant in Marquette, Mich., a We Energies official tells *PFR*. We Energies signed a five-year contract with Cliffs, which will buy power from Presque Isle for its Empire and Tilden mines, in February. Power for both mines accounts for 80-85% of the load for Presque Isle.

We Energies expects to operate Presque Isle until Dec. 31, 2019 or until a new generation facility is built, according to a settlement agreement before the **Michigan Public Service Commission**. The Milwaukee-based utility now aims to invest in, or build, a CCGT cogeneration facility in Marquette, Mich., by 2020 so that it can retire its Presque Isle.

Michigan **Gov**. **Rick Snyder** announced a plan in January to replace generation in the Upper Peninsula, including a tentative partnership agreement between Cliffs and **Invenergy** to build and own a natural gas-fired facility to supply capacity to Cliffs' mining operation and local utilities. We Energies may be a partial investor in the proposed natural-gas fired plant, along with Invenergy, or build the plant if Cliffs and Invenergy do not arrive at an agreement, a company spokesman says, adding that both Cliffs and Invenergy are in early stages of discussion.

We Energies shelved a request for proposal to sell Presque Isle after receiving little interest in the asset (PFR, 3/5/14). MISO later denied We Energies' request to retire the five remaining active units at Presque Isle, citing power needs and generation shortfalls in the Upper Peninsula. Green Bay, Wis.-based UPPCO emerged as a potential buyer for the asset last year, after We Energies announced a $9.1 billion merger with **Integrys Energy Group** in June. The combined entity, **WEC Energy Group**, will serve nearly 4.3 million electric and natural gas customers across Wisconsin, Illinois, Michigan and Minnesota.

Officials at UPPCO, Invenergy, Cliffs Natural Resources and the governor's office in Michigan either declined to comment or did not respond to inquiries by press time.

Dynegy Scopes Potential AEP Coal-Fired Sale

Dynegy is open to buying Ohio coal-fired generation from **AEP Ohio**, if the **American Electric Power Co**. subsidiary opts to sell the assets. AEP Ohio is working with **Goldman Sachs** on a strategic evaluation of its 7,923 MW Ohio fleet.

Houston-based Dynegy is betting on a rise in oil and gas prices, analysts say, which could make coal-fired generation more competitive against gas-fired capacity. "Dynegy is a strategy player and a huge risk-taker," a deal watcher notes. "Dynegy wants to have clean coal."

Dynegy is on track to acquire more than 5,000 MW in Ohio through its $2.8 billion acquisition of nine coal-fired plants from **Duke Energy.** Dynegy is particularly interested in acquiring AEP's stakes in assets that AEP co-owns with Duke. AEP and Duke co-own roughly 2,100 MW across three Ohio plants, comprising the Conesville facility in Coschocton, the Stuart plant in Brown and the Zimmer plant in Clermont.

AEP Ohio has not decided on a course of action for its Ohio fleet, a company spokeswoman says, adding that a timeline has not been set for completing the strategic evaluation with Goldman Sachs. A spokesperson for Goldman Sachs in New York did not respond to inquiries by press time.

Conesville, Coshocton and Zimmer are part of a 2,677 MW power purchase agreement package that AEP has submitted to the **Public Utilities Commission of Ohio** for approval. The PUCO is expected to decide on the package by June 1 (PFR, 2/2). The trio of plants could be a part of a sale if PUCO rejects the PPA package. PUCO rejected AEP's 435 MW PPA package last month, citing ambiguities on how the profits from plants in that package would benefit ratepayers.

The Duke purchase is slated to wrap in April, following approval from the U.S **Federal Energy Regulatory Commission** (PFR, 3/3). Goldman Sachs, **Lazard** and **Credit-Suisse** were Dynegy's financial advisors for that transaction (PFR, 8/22/14).

PROJECT FINANCE

8minutenergy, D.E. Shaw Hunt $1B+ For Calif. Projects

8minutenergy Renewables and **D.E. Shaw Renewable Investments** are seeking to raise over $1 billion in financing for a portfolio of utility scale solar projects in California.

The project partners are looking for $420 million in debt and $200 million in tax equity for the 150 MW Springbok 2 project in Kern County, Calif. The two sponsors have also partnered on the adjacent 133 MW Springbok project, which is in the market for $280 million in debt financing (PFR, 3/2).

Paragon Energy Advisors is acting as financial advisor to 8minutenergy on both Springbok projects. Financing for Springbok 2 is several months behind Springbok, according to the deal watcher. 8minutenergy and D.E. Shaw are in final negations for $130 million from a tax equity investor for Springbok, which has a power purchase agreement with the **Southern California Public Power Authority**.

Springbok is due to be complete in June 2016 while Springbok 2 is due to be complete in August 2016. Springbok 2 is awaiting final regulatory approval for its offtake agreement with an undisclosed party.

8minuteenergy is also looking to raise another $100 million in debt and $45 million in tax equity for the 50 MW Lotus project in Madera County, Calif. The project has a power purchase agreement with **Southern California Edison**. Construction is slated to begin in the third quarter of this year and the project is due to be online in June 2016.

The California-based solar developer worked with **Macquarie Capital** to finance the construction of 90 MW Redwood solar project in Kern County, Calif., in June. **Citigroup** and **Morgan Stanley** led an institutional bond issuance for the first three phases of 8minutenergy's 266 MW Mount Signal solar project in Imperial County, Calif. (PFR, 12/6/2012).

Spokespeople for New York-based D.E. Shaw Renewable Investments and Paragon Energy Advisors did not respond to inquiries. ■

PEOPLE & FIRMS

TerraForm Taps Chadbourne Partner For Origination

Evelyn Lim, partner at **Chadbourne & Parke** in Los Angeles, is leaving the firm to join TerraForm Power as managing director for North American origination. Limm will report to **Chris Moakley**, president of North American originations.

The North American origination team is responsible for third party acquisitions for **SunEdison**'s yield company. Lim will remain based in Los Angeles. Her last day at Chadbourne is March 27. When Lim will start her new role at TerraForm and Chadbourne's plans for replacing her, could not be immediately learned.

Lim joined Chadbourne in 2012 with project finance Partner **Paul Kaufman**. Together they built Chadbourne's Los Angeles-based project finance practice. Both attorneys focused on renewable energy transactions. Lim has represented clients including **NRG Energy**, **Ares Capital**, **DE Shaw & Co.**, **Rabobank** and **EDF Renewables**.

Lim was senior v.p. and general counsel at Oregon-based renewables shop **Element Power** from 2009 to 2012. Lim was also general counsel at **First Wind** from 2006 to 2009, where she helped raise more than $2 billion from lenders, tax equity investors and other investors. SunEdison acquired First Wind last year (PFR 11/18). ■

#PowerTweets

For more news and coverage, follow @PowerFinRisk on Twitter, as well as Editor @SaraReports, @OliviaFeld and @NishAmarnath.

@Sustainablehero
Rt @BarackObama: "Every 3 weeks we produce as much solar power as we did in all of 2008." —President Obama #solar

@TylersWunsch
Most #US coal reserves are not owned by #coal companies, but by the federal gov, which could just stop giving them away at subsidized rates.

@WestMonroe
Preparing for #DistributedGeneration Growth: How #Utilities can Benefit from a #DERMS: http://bit.ly/1FCXBR0 via @WMPUtilities

@noahnexus
A novel approach to unlocking utility data. @UtilityAPI aims to be the matchmaker for #distributedgeneration and utilities. #CleantechSF

@CarlSiegrist
MT @laplacanancy Using #science to bust natural gas myths: http://j.mp/1aZDktD @EPA pls prioritize #renewables!

@MalloryLadd1
Michael Howard, @EPRINews, emphasizes need to integrate #distributedgeneration into the new #grid 2.0, but need new #storage tech to do so.

@forgefirst
The 'strong get stronger' in #energy bear #markets as #oil $WCP #equity deal to finance solid purchase is 10X oversubscribed @BNN

@End_Fin_Ltd
Wood Mackenzie's - close to 17% of forecast 2015 US coal production is at risk of idling or closure, totaling 162 mt #coal #US

@SEIA
Don't mess with #Texas! They just cracked the Top 10 in total #solar capacity http://seia.us/1MRkwbF

@wuestenhagen
From module manufacturer to #solar #yieldco - case study with multinational #PV company Canadian Solar in #REMHSG

INDUSTRY CURRENT

Yieldco Fever and Beyond: Advances in Renewable Energy Financing

This week's Industry Current is written by **Randy Male**, managing director at boutique investment banking firm **Bostonia Partners** in Boston.

Randy Male

Yield companies are hot. It seems every renewable energy project owner either wants to become a yieldco, or sell to one. As we stand in the midst of the yieldco craze, it is timely to consider the benefits and shortcomings of this emerging funding strategy and look forward to where yieldcos may lead and what may come next.

Yieldcos are one of the latest financing models developed to more efficiently unlock value and promote wider investment in renewable energy. There are two related motivations for forming a yieldco: to optimize value for a portfolio of existing renewable energy assets, and to access low cost capital for additional asset acquisitions by tapping the public equity markets.

Thus far, most yieldcos have been formed by large project owners who float a new public company with a portfolio of their operating renewable energy projects, the way **Pattern Energy**, **NextEra Energy Resources** and **Abengoa Solar** have. Their selected projects generally have long-term power contracts with credit-worthy counterparties which therefore have less risk than projects with hedge off-take agreements or projects that sell their power directly into the wholesale market – merchant projects.

Fundamentally, yieldcos are a portfolio aggregation strategy that optimizes value for the portfolio owners, including the project owner who sells to the yieldco. By creating a publicly traded portfolio of low risk, cash flowing renewable energy assets, a powerful new financing strategy is created, attracting a lower cost of capital to the renewable energy market and broadening the investor base.

It has also demonstrated the value of project aggregation. Pooling projects can lower risk through diversification and reduce financing costs by spreading expenses over more megawatts. Yieldcos are enjoying considerable interest and demand due to their novelty, inherent cost efficiency and because interest rates are historically low.

The value of a yieldco is derived from two sources; the existing operating asset portfolio is intended to produce a low risk, steady stream of cash flows which would be paid to investors as dividends – thereby producing yield like a bond. Secondly, the yieldco is expected to add additional assets to the portfolio, either by acquiring other operating assets, or by acquiring newly developed projects from affiliated companies or independent developers. This element of the yieldco business model produces value through growth.

Yieldcos do have shortcomings and limitations. Growth requires yieldcos to continuously acquire new projects — however the pool of available projects is not infinite. Even with new wind, solar and hydro projects coming on line every year, there is a limit to how many yieldcos can efficiently operate before asset prices are bid up to levels that erode yieldco returns too far. Also, as interest rates rise, yieldcos' relative capital cost advantage will erode since a portion of a yieldco's value is derived from the fixed yield on its portfolio of contracted projects. So the embedded bond-like value of a yieldco will tend to work against it in a rising interest rate environment.

From the perspective of renewable energy project developers, yieldcos' value have so far been limited to projects with long-term power contracts with credit worthy counterparties – largely utilities. They have generally not provided an attractive option for hedged and merchant projects or for many smaller projects. Yieldcos have so far focused on acquiring the low hanging fruit - large, contracted projects that generate reliable, low risk cash flows.

BEYOND YIELDCOS

Looking at the successful attributes of yieldcos and considering some of their limitations, we can see where potential future portfolio aggregation models may evolve. Certainly we should expect to see aggregation plays moving down market – manifested as portfolios of smaller sized projects. Indeed we are seeing players currently aggregating projects in the 1 MW to 10 MW range. This will likely continue and may lead to new vehicles which, would likely be smaller than the $400 million to $500 million yieldcos we have seen so far.

One recent example of this mid-market focused yieldco was **Sol-Wind**. Sol-Wind was seeking to raise $100 million through an IPO to acquire a portfolio of mid-sized solar and wind projects. The added novelty of this vehicle was Sol-Wind's Master Limited Partnership (MLP) structure, which was an attempt to effectively capture the tax attributes of the portfolio. Unfortunately, the Sol-Wind IPO was pulled. It may have been the complex structure, investor concerns about the tax efficiency of the MLP structure, the relatively small size of the offering or some combination of these factors that led to its poor market reception. However, it does demonstrate the need to progress the yieldco concept, or versions of it, into underserved segments of the renewable energy market.

We are also beginning to see interest in creating private yieldcos. As the name suggests, a private yieldco would raise funding through private placements rather than a public offering. A private yieldco may have several advantages over a public yieldco, including the avoided cost of public company filing and reporting, a faster and less expensive route to capital, and greater control for project sponsors over their portfolios. It may also prove a more efficient funding vehicle for smaller project portfolios. One possible drawback PAGE 8 »

INDUSTRY CURRENT

« FROM PAGE 7 is that a private yieldco would likely have a higher capital cost since the investor pool will be more limited than a public offering could access.

Another funding model we may soon see would be aggregated portfolios formed through closed end funding vehicles. This structure would resolve the growth dilemma, since the portfolio would be of fixed size and duration. If executed efficiently and repeatedly, a closed end funding model could produce portfolios with varying characteristics appealing to different investor appetites – pure contracted assets, mixed portfolio of contracted, hedged and merchant assets as well as generation types; pure play wind or solar versus combined wind, solar, hydro.

It is also likely we will begin to see aggregated portfolios increasingly include hedged and merchant projects – which will increase investment risk, and therefore provide opportunities for greater return potential. This would open a sizeable pool of projects for investment so far largely passed over by yieldcos. It is also possible that we could even see portfolios include pre-construction assets, which could further enhance returns.

Yieldcos have ushered in a new paradigm to the renewable energy financing market and point the way for further opportunities to efficiently fund project aggregations while providing additional avenues for both institutional and retail investors to invest directly in renewable energy projects along a risk continuum and asset characteristics they find attractive.

Here at Bostonia we believe there a number of favorable market forces that support continued advancement in the number and types of financing options for renewable energy projects including:

- Growing interest among both institutional and retail investors in renewable energy assets as an appealing investment;
- Continued reduction in equipment and project costs;
- Technology improvements creating greater operating efficiencies and production yields
- Increasing number of seasoned operating assets creating a deeper pool of operational data and asset diversity;
- Steadily lowering transaction expenses as financing parties become more comfortable with the asset class and process;
- Relentless efforts by both developers and financial advisors to develop new funding vehicles and tap new sources of capital in an effort to drive down financing costs.

All of these elements will contribute to making renewable energy projects attractive to new types of investors and the development of new portfolio aggregation models that efficiently deliver the needed returns for investors. This will unlock tremendous additional renewable energy development and provide investors seeking to invest directly in renewable energy assets and additional options along the risk reward spectrum. ■

12th ANNUAL DEALS & FIRMS OF THE YEAR AWARDS

PFR

RECOGNIZING EXCELLENCE IN THE POWER INDUSTRY IN THE AMERICAS

Power Finance & Risk is kicking off voting for the 12th Annual Deals & Firms of the Year Awards, a process that lauds excellence across the power industry in 2014.

Please take a few minutes to acknowledge some outstanding firms, sponsors and transactions in 18 categories below, such as project finance law firm of the year, best project finance borrower, yield company of the year, best generation M&A deal, and best M&A advisor. Voting is open to all firms active in the power sector in 2014.

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- Project Finance Borrower Of The Year
- Best Institutional Investor In Power
- Best Project Finance Lender For Non-Renewables Generation
- Best Project Finance Lender For Renewables Generation
- Project Finance Bond Arranger Of The Year
- Renewables Project Finance Deal Of The Year
- Non-Renewables Project Finance Deal Of The Year
- Project Finance Law Firm Of The Year
- Best Seller Of Power Assets
- Best Buyer Of Power Assets
- M&A Asset Deal Of The Year
- Best Renewable Asset M&A Advisor
- Best Non-Renewable Asset M&A Advisor
- Best Corporate M&A Advisor
- Best Law Firm For Asset M&A
- Best Tax Equity Investor
- New Market Participant Of The Year
- Yield Company Of The Year.

Visit https://www.surveymonkey.com/s/pfr2015awards to submit your votes. Votes must be received no later than April 3.

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By the publisher of GlobalCapital

Abengoa, EIG Hunt Mexico CCGT Financing

« FROM PAGE 1 goa's contracted projects as they go into construction. EIG has a 55% stake in the vehicle while Abengoa has the remaining 45% stake (PFR, 2/25).

Mexico's **Comisión Federal de Electricidad** selected Abengoa to carry out the Norte III project, as part of the government's National Investment Plan 2014-2018. **Iberdrola** originally garnered a contract to build the Norte III project, however, that was voided after Abengoa, one of the bidders in the tender, contested the award (PFR, 8/15). Abengoa is responsible for the engineering, design and construction of the project, in addition to its operation and maintenance for a 25-year period. The project has an offtake agreement with the CFE in Mexico.

Spokespeople for EIG in Washington D.C., and BBVA in Madrid did not immediately respond to inquiries. A BNP Paribas spokeswoman declined to comment ■

Schaefer Exits Blackstone

« FROM PAGE 1 11/5/2013). Blackstone recently partnered with **Onyx Renewable Partners**, which deploys capital to develop, finance and operate utility-scale renewables projects in North America (PFR, 12/18).

Schaefer could not be reached immediately and a spokesperson for Blackstone did not respond to inquiries. Blackstone's plans for replacing Schaefer and the exact date of his departure could not be immediately learned. ■

ISS Scouts Buyers For 500 MW Solar Portfolio

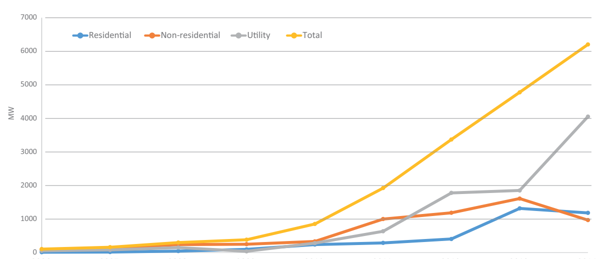
« FROM PAGE 1
ing to capture the 30% investment tax credit before it decreases to 10% in 2017.

ISS has already sold 300 MW of contracted projects during the past 12 months. **Principal Solar**, based in Dallas, bought ISS' 72.9 MW Fayetteville and 78.5 MW Hope Mills facilities in Cumberland County, N.C. The deals will close by August this year, and both projects are on track to be online in early next year (PFR, 3/10).

ISS won long-term offtake contracts in two large requests for proposals launched by **Duke Energy** in North Carolina, including a 15-year PPA for a 48 MW solar project in Bladen County. ISS' development pipeline comprises roughly 50 new projects totaling more than 1 GW.

The market for solar projects in the U.S. has become a sweet spot for investors and developers, as the industry continues to mature and players look to leverage the ITC. Most recently, **Tenaska** bought a controlling stake in N.J.-based solar shop, **Soltage** (PFR, 3/13) and **Solar Frontier Americas** is in talks with **Gestamp Solar** to buy up to 280 MW of utility-scale solar projects in California (PFR, 3/12). ■

Annual U.S. Solar PV Installations



Source: Solar Energy Industry Association

● ALTERNATING CURRENT

Google Combines Wind Power With Kite Surfing

AC

Google is unveiling airborne wind turbines that are based on the designs of an avid kite-surfing engineer. The Google X laboratory has tested several of 28-foot long models in Alameda County, Calif., and off the windswept coast of Pigeon Point at Pescadero, Calif. The devices are set to take flight next month.

Google's development of these wind turbines, labeled **Project Makani**, began after its acquisition of Alamada County, Calif.-based energy startup **Makani Power** in 2013. Makani Power was co-founded by late engineer **Corwin Hardhamthat**, who was also an avid kite-surfer. Hardhamthat conceptualized and created kite-like devices to harness wind.

The Project Makani kite-turbines mimic the form of an airplane's wingspan. Each of them has eight propellers, designed for takeoff, as well as a tether to hold it to the ground, when required. The propellers double as flying wind turbines once the kite ascends.

Google has been mapping solutions aimed at addressing the encumbrances associated with building tall, ground-based wind turbines that weigh hundreds of tons on average. Wind speed is not only faster but also more consistent at higher altitudes. "There's an enormous benefit to going up higher," Astro Teller, head of 'moonshot' projects at Google X told delegates at a keynote address at the South by Southwest conference on March 17 in Austin. "If this works as designed, it would meaningfully speed up the global move to renewable energy," Teller adds, of the Project Makani turbines. ■

● QUOTE OF THE WEEK

"From the perspective of renewable energy project developers, yieldcos' value have so far been limited to projects with long-term power contracts with credit worthy counterparties – largely utilities."

Randy Male, managing director at boutique investment banking firm **Bostonia Partners** in Boston (see Industry Current, page 8).