

Power Finance & Risk

Exclusive Insight on Power M&A and Project Financing

By the publisher of GlobalCapital

● PROJECT FINANCE

Panda Power to Expand Texas Plant After Outage

Panda Power Funds plans to expand its gas-fired Shannon plant, which suffered forced outages earlier this month.

Page 5

● MERGERS & ACQUISITIONS

Details Emerge on Cross Sound Cable Deal

An **Argo Infrastructure Partners** subsidiary is on course to clinch its acquisition of Cross Sound Cable Transmission.

Page 7

● PEOPLE & FIRMS

Oppenheimer Lures Northland Analysts

Oppenheimer has hired two senior research analysts to cover renewables stocks, among other things.

Page 12.

Q&A: Brad Nordholm and Himanshu Saxena, Starwood Energy

Starwood Energy's investment strategy is built on three pillars: Transmission assets, gas-fired generation, and renewables. This year, the Greenwich, Conn.-based affiliate of **Starwood Capital** has been active in all three of those areas, signing a debt financing for a Texas wind project it jointly owns with **Alterra Power** (PFR 7/1), acquiring almost 1 GW of gas-fired capacity in three different markets, and—most recently—in partnership with **Abengoa Trans-**

mission & Infrastructure, winning the contract for a 114-mile transmission line between Del-

aney, Calif., and Colorado River, Ariz. (PFR 7/17).

Brad Nordholm, the firm's CEO and managing director, and **Himanshu Saxena**, its managing director, talked to *PFR* editor **Richard Metcalf** last week about the appeal of transmission assets, the evolution of the debt finance market, the prospects for mergers and acquisitions in PJM, the emergence of non-utility offtakers in the renewables space, and the impact of **President Obama's** [PAGE 10 »](#)



Brad Nordholm



Himanshu Saxena

Sponsors Eye Alternatives as YieldCo Woes Persist

Richard Metcalf,
Ross Lancaster

Canadian Solar has revealed it has back-up plans to monetize its assets should the shaky market for yieldco equities scupper its planned asset spin-off, while **SunEdison's** warehouse facilities proliferate.

In Canadian Solar's second quarter earnings call on Aug. 18, its CEO **Shawn Qu** said he expected the company to make a confidential filing with the U.S. **Securities and Exchange Commission** for its proposed yieldco soon.

"We continue to target being ready for the yieldco launch at the end of this year or earlier next year," Qu told analysts. "The yieldco continues to be the preferred way to securitize our utility-scale solar portfolio in low-risk OECD countries such as the U.S., Canada, Japan and the UK."

The Guelph, Ontario-based developer's CFO, **Michael Potter**, echoed Qu later in [PAGE 8 »](#)

PJM Auction Heralds M&A Bonanza

Richard Metcalf

The announcement of the results of the 2018/19 base residual auction for capacity in PJM on Friday will spur merger and acquisi-

tion activity in the region in the coming months, say deal watchers.

The market for M&A deals in PJM has been paused for months while participants await the out-

come of the auction, with the sales of at least three large portfolios on hold, **Himanshu Saxena**, m.d. at **Starwood Energy** tells *PFR* (see Q&A above).

The potential sellers include strategic asset owners such as **American Electric Power** and financial players that want to sell assets that have matured and recycle the [PAGE 7 »](#)



● IN THIS ISSUE

PROJECT FINANCE

- 5 | Panda Power to Expand Gas-fired Texas Plant
- 5 | Greenskies Gets Debt, Tax Equity for Small Scale Solar
- 6 | Moody's Ranks Speculative-grade Merchant Projects

MERGERS & ACQUISITIONS

- 7 | Dominion Midstream Partners Acquires Iroquios Stake
- 7 | Details Emerge on Cross Sound Cable Deal

INDUSTRY CURRENT

- 9 | Corporate Renewable Purchases Trigger Dodd-Frank Reporting Requirements

PEOPLE & FIRMS

- 12 | Northland Senior Analyst Team Heads to Oppenheimer
- 12 | BeEdison Aims To Ease C&I Solar With Ratings

DEPARTMENTS

- 3 | Generation Auction & Sale Calendar
- 5 | Project Finance Deal Book
- 5 | Power Tweets
- 12 | Alternating Current

● AT PRESS TIME

SunEd Draws \$253M for Solar Project Amid Stocks Storm

As downward pressure on **SunEdison's** stock price continued on Aug. 19, the renewable energy developer announced that it had executed a reassuringly straightforward financing exercise for a Colorado solar project.

The developer drew \$253 million from a warehouse facility to finance the construction of the 120 MW Comanche solar project in Pueblo. The funds come from SunEdison's \$1.5 billion non-recourse **First Reserve Warehouse**, originally formed to finance SunEdison and TerraForm Power's \$2.4 billion acquisition of **First Wind** (PFR 11/18).

Wells Fargo has committed to contribute tax equity to the Comanche project, which has a 25-year power purchase agreement with **Xcel Energy**.

In a statement on Aug. 20, SunEdison said that Comanche would be Colorado's largest solar facility.

SunEdison stock began that day on a slight upward trajectory before taking some deep drops. The stock price reached its intraday high of \$13.65 by 8.35am before beginning to tumble, hitting an intraday

low of \$12.58 at 10.35am.

The last four weeks have been tough on the company's capital markets performance. The share price has fallen from \$31 on July 21 to \$12.10 at close on Aug. 20.

Amid that drama, the \$253 million draw-down marks a moment of relative predictability.

"It is clearly part of the execution that they've been committing to and you are going to see them do this week in, week out," says **Julien Dumoulin-Smith**, executive director at **UBS Investment Research**.

The developer intends to expand the First Reserve Warehouse facility to finance the construction of more projects, but SunEdison will not need to make further equity contributions to the expansion of the facility.

"You should expect more of these in coming weeks," says Dumoulin-Smith. "Their deep principal goal right now is to address the liquidity concern, and raising funds and executing on construction with warehouses is the principal way in which they intend to execute on their capex, so it makes sense."

But given the volatility in public markets, the short term warehouse strategy will be costly, says another deal watcher.

"I would assume that are probably in the ballpark of paying about 800 basis points all in," says Dumoulin-Smith. ■

PFR Power Finance & Risk

EDITORIAL
Richard Metcalf
Editor
(212) 224-3259

Olivia Feld
Managing Editor
(212) 224-3260

Ross Lancaster
Contributor

Stuart Wise
Data Associate

Kieron Black
Sketch Artist

PRODUCTION
Gerald Hayes
Manager
Caroline Barylak
Designer
Andy Bunyan
Associate

ADVERTISING
James Barfield
U.S. Publisher,
Capital Markets Group
(212) 224-3445

PUBLISHING
Emmanuelle Rathous
Marketing Director

Vincent Yesenosky
Head Of U.S. Fulfillment
(212) 224-3057

Nina Bonny
Customer Service Manager
(212) 224-3433

**SUBSCRIPTIONS/
ELECTRONIC LICENSES**
One Year \$3,147 (In Canada add \$30 postage, others outside U.S. add \$75)

Alyssa Rinaldi
Account Executive
(212) 224-3043

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

CORPORATE
Richard Ensor
Chairman

John Orchard
Managing Director,
Capital Markets Group

Customer Service
PO Box 4009, Chesterfield, MO 63006-4009, USA
Tel: 1-800-715-9195
Overseas dial: 1-212-224-3451
Fax: 212-224-3886
UK: 44 20 7779 8704 Hong Kong: 852 2842 8011
E-Mail: customerservice@iintelligence.com

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

Editorial Offices
225 Park Avenue South, New York, NY 10003
Power Finance & Risk is a general circulation newsweekly.
No statement in this issue is to be construed as a recommendation to buy or sell securities or to provide investment advice.
Power Finance & Risk ©2014
Institutional Investor, LLC ISSN# 1529-6652
Copying prohibited without the permission of the publisher.

COPYRIGHT NOTICE: All materials contained in this publication are protected by United States copyright law and may not be reproduced, distributed, transmitted, displayed, published, broadcast, photocopied or duplicated in any way without the prior written consent of Institutional Investor. Copying or distributing this publication is in violation of the Federal Copyright Act (17 USC 101 et seq). Infringing Institutional Investor's copyright in this publication may result in criminal penalties as well as civil liability for substantial money damages. ISSN# 1529-6652

Postmaster
Please send all undeliverable Mail and changes of addresses to:
PO Box 4009 Chesterfield, MO 63006-4009 USA

GlobalCapital

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 **Richard Metcalf**, editor, at (212) 224-3259 or richard.metcalf@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
Akuo Energy	Florida II (50 MW Wind)	Uruguay		Eurus Energy Group has acquired a minority stake (PFR 8/3).
BayWa r.e.	Beethoven (80 MW Wind)	Trippe, S.D.		NorthWestern Energy is buying the project for \$143M (PFR 8/3).
Blackstone and others	Portfolio (523 MW Rooftop Solar)	U.S.	Morgan Stanley	TerraForm Power will acquire Vivint Solar's assets for \$922 million (PFR, 7/27).
● Brookfield Infrastructure Partners	Cross Sound Cable (Transmission, 23% stake)	New England, New York	Citigroup, HSBC (seller)	An affiliate of Argo Infrastructure Partners is set to acquire the stake for \$30M before the end of August (see story, page 7).
Campbell County Wind Farm Holdings	Campbell County Farm (95 MW Wind)	South Dakota		ConEdison is acquiring the project (PFR 7/20)
Ecoplexus	Shawboro PV1 (20 MW Solar)	Currituck County, N.C.		Duke Energy Renewables acquired the project (PFR, 7/27).
Energy Future Holdings	Transmission & Distribution Assets	Texas		Hunt Consolidated is acquiring EIF subsidiary Oncor as part of bankruptcy exit (PFR, 8/17).
GE Energy Financial Services	Linden (1.6 GW Gas)	New Jersey		GE EFS is due to finalize a buyer for its 50% stake (PFR 8/3).
Gestamp Renewables	Portfolio (2.5 GW Solar)	U.S., Latin America, Europe, Asia, Africa	Bank of America Merrill Lynch	KKR is acquiring an 80% stake in Gestamp Asetym Solar for about \$1B (PFR, 7/27).
Infigen Energy	Portfolio (1.1 GW Wind)	U.S.	UBS	ArcLight Capital is buying the portfolio for \$272.5M (PFR 7/20)
	Portfolio (Roughly 95+ MW Solar)		Greentech Capital Advisors	The pipeline was sold for \$37.9M to an unidentified global solar developer (PFR 7/20)
Invenergy	Portfolio (930 MW Wind)	U.S., Canada		SunEdison and TerraForm Power are buying the portfolio (PFR, 7/13).
LS Power	Bluegrass (594 MW Gas)	Oldham County, Ky.		East Kentucky Power Cooperative is buying the project (PFR, 8/17).
MACH Gen creditor group	Athens (1.08 GW Gas)	Greene County, N.Y.		Talen Energy is paying creditors including BAML and Credit Suisse \$1.175B for the portfolio (PFR, 7/27).
	Millenium (360 MW Gas)	Charlton, Mass.		
	Harquahala (1.092 GW Gas)	Maricopa County, Ariz.		
● National Grid, New Jersey Resources	Iroquois (Gas Pipeline, 25.93%)	New York, Connecticut		Dominion Midstream Partners is acquiring the stake (see story, page 7).
Oak Creek Renewable Energy	Tres Mesas Phase 3 (up to 240 MW Wind)	Tamaulipas, Mexico		The Marubeni affiliate plans to sell a stake in the project (PFR, 7/6).
Pattern Development, MetLife Capital	Gulf Wind (286 MW Wind)	Kenedy County, Texas		Pattern Energy Group is paying \$85.8M for the 60% stake (PFR, 7/27).
Petrobras	Pipeline Network (4038-mile)	Brazil		First Reserve is mulling a bid for an interest in the assets (PFR, 8/17).
	Portfolio (1.5+ GW Thermal)	Brazil		The portfolio could be in the market soon, according to a source (PFR, 6/21).
Pristine Sun	Portfolio (150MW-300MW)	U.S.		The developer will transfer the assets to a JV it has with ReneSolar (PFR, 8/10).
Renova Energia	Portfolio (830 MW Solar, Wind, Hydro)	Brazil		SunEdison is acquiring the assets and a 15.7% stake in Renova's shares (PFR, 7/13).
Rockland Capital	Lakeswind (68 MW Wind)	Rollag, Minn.		TransAlta is buying the projects for \$75.8M. Deal slated to wrap in September (PFR 8/3).
	Mass Solar Portfolio (21 MW Solar)	Massachusetts		
Suncor Energy	Kent Breeze (20 MW Wind)	Ontario		TransAlta will have a 100% ownership of Kent Breeze (PFR 7/20)
	Wintering Hills (88 MW Wind)	Alberta		TransAlta is purchasing a 51% stake in Wintering Hills (PFR 7/20)
TransAlta Corp.	Poplar Creek (376 MW Gas)	Fort McMurray, Canada		Suncor Energy is buying the plant in exchange for two of its wind farms (PFR 7/20)

● New or updated listing

The accuracy of the information, which is derived from many sources, is deemed reliable but cannot be guaranteed.

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
Alterra Power, Starwood Energy	Shannon (204 MW Wind)	Clay County, Texas	Citi, Santander, RBC	Construction, Letters of Credit	\$287M	TBA	The loan is backed by \$219M of tax equity from Citi and Berkshire Hathaway (PFR, 7/6).
Boralex	Côte-de-Beaupré (23.5 MW Wind)	Québec	National Bank of Canada	Term Loan	C\$64.4M	19.5-yr	The deal has been sealed (PFR, 8/17).
	Frampton (24 MW Wind)	Chaudière-Appalaches, Québec	National Bank of Canada	Construction/ Term Loan Bridge Loan, Letters of Credit	C\$73.5M C\$7.9M	19.5-yr TBA	The construction loan is priced at just under 200bps (PFR, 8/10).
Canadian Solar	Aria (9 MW Solar)	Springwater, Ontario	Manulife	Construction, Term	C\$52.8M	TBA	Both projects will be sold to Concord Green Energy once completed (PFR, 7/27).
	Earth Light (10 MW Solar)	Pefferlaw, Ontario	TBA	TBA	TBA	TBA	
Cemig	Unnamed Project (Capacity Unknown)	Minas Gerais, Brazil	TBA	Debt	TBA	TBA	The sponsor intends to seek debt for the project, which is pegged at a cost of \$1.14B (PFR, 8/17).
Competitive Power Ventures	Towantic (805 MW Gas)	Oxford, Conn.	GE EFS, ING, Natixis, MUFG, NordLB, Mizuho	Debt	TBA	TBA	The sponsor is in the market for debt and is in talks with the lenders listed here (PFR, 8/17).
	Fairview (980 MW Gas)	Cambria County, Pa.	TBA	TBA	Debt, Equity	TBA	The sponsor will be in the market for debt when the deal launches in Q3'16 (PFR, 6/15).
Fermaca	El Encino-La Laguna (289-mile Pipeline)	Mexico	Citigroup, Goldman Sachs, ING, NordLB, Santander, Banamex, Sabadell	Loan	\$584M	3.5-yr	The loan was priced at 187.5 bps over LIBOR (PFR, 8/3).
Greenskies Renewable Energy	127 C&I Projects (Capacity Unknown, Solar)	U.S.	First Niagara Financial Group	Loan	\$165M	TBA	The proceeds will be used to fund small-scale projects across 12 states (see story, page 5).
			TBA	Tax Equity		TBA	
Innergex	Mesgig Uguj's'n (150 MW Wind)	Avignon, Québec	Manulife, Canada Life Insurance Co, Caisse de Dépôt et Placement du Québec	Construction/ Term	C\$280M	20-yr	The deal is slated to close by end of August (PFR, 8/10).
Invenergy	Clear River (900 MW+ Gas)	Burrillville, R.I.	TBA	TBA	TBA	TBA	The project is slated to cost \$700M to develop (PFR, 8/10).
Invenergy	Portfolio (2 GW Gas)	U.S., Canada	Morgan Stanley, ICBC	Term Loan B, RCF	\$537M, \$70M	7-yr, 5-yr	Invenergy is struggling to close the deal (PFR, 8/17).
Magnolia LNG	Magnolia LNG (80 mtpa LNG)	Lake Charles District, La.	TBA	Debt	<=\$3B	TBA	Teasers are likely to be sent out in early October (PFR, 8/10).
Moxie Energy	Freedom (900 MW Gas)	Luzerne County, Pa.	BNP Paribas, Citigroup, GE EFS, MUFG Union Bank	Debt	\$600M	TBA	The deal is slated to close by end of October (PFR, 8/3).
NTE Energy	Middletown (525 MW Gas)	Butler County, Ohio	BNP Paribas, Crédit Agricole	Debt	\$414M	TBA	Deal slated to wrap in a month (PFR, 8/3).
Pattern Development	Conejo (122 MW Solar)	Chile	Crédit Agricole, SMBC, Société Générale, Santander	Term Loan, VAT Facility	\$205M	15-yr+	The deal has closed (PFR, 8/17).
Panda Power Funds	Panda Sherman (1,200 MW Gas post expansion)	Grayson County, Texas	TBA	TBA	TBA	TBA	The 450 MW expansion project is pegged at a cost of \$200M to \$300M (see story, page 5).
SunEdison	South Plains II (300 MW Wind)	Floyd County, Texas	Citi	Construction Loan	\$360M	TBA	The project is expected to be acquired by TERP on completion in 2016 (PFR, 8/10).
			Berkshire Hathaway, Citi	Tax Equity	\$360M	TBA	
SunEdison	Comanche (120 MW Solar)	Pueblo, Colorado	First Reserve Warehouse	Warehouse facility	\$253 million	TBA	SunEdison drew on its \$1.5 billion First Reserve Warehouse facility for the construction financing (see story, page 2).
			Wells Fargo	Tax Equity	TBA	TBA	
SunEdison	Quilapilun (110 MW Solar)	Chile	CorpBanca, DNB	Debt	\$160M	TBA	The deal has wrapped. The project is on TERP's call right project list (PFR, 8/3).

New or updated listing

The accuracy of the information, which is derived from many sources, is deemed reliable but cannot be guaranteed.

PROJECT FINANCE ●

Panda Power To Expand Texas Plant After Outage

Panda Power Funds will expand a gas-fired plant in Texas with a little help from a municipal development organization, after the facility was hit by forced outages earlier in the month.

The expansion will increase the capacity of the combined-cycle facility in Sherman, the county seat of Grayson County, from 758 MW to 1,208 MW.

The cost of the upgrade is pegged at between \$200 million and \$300 million, and the **Sherman Economic Development Corp.**, a municipal development organization supported by sales tax receipts, will provide a \$2.5 million development incentive in three performance-linked installments.

The expanded facility will contribute \$2 billion to the economy of North Texas, said **Robby Hefton**, chief executive of the **City of Sherman**, in a statement. The project is due to be complete in 2019.

Panda Power Funds' plans for financing the remaining project costs could not be learned

immediately.

The existing financing for the Sherman project comprises a \$372 million term loan B and a \$30 million letter of credit, both due to mature in 2018. The term loan B was priced at 750 basis points over Libor in September 2012 in a deal arranged by **Credit Suisse** and **Goldman Sachs** (lead left) (PFR 9/20/12).

The announcement of the expansion plan comes just a week after **Standard & Poor's** placed the project company on CreditWatch negative in response to forced outages at the plant earlier in the month. S&P rates the project B.

The lack of a capacity market in Texas means that merchant projects like Sherman are reliant solely on sales to the energy market, and the hot summer months are when such projects generate much of their cash flows.

"An outage of any meaningful duration could hamper [Sherman's] ability to meet our expectations for repayment of its term loan B," wrote **Michael Ferguson** and **Aneesh Prabhu**, analysts at S&P, in a report dated Aug. 12. There is \$369.3 million outstanding under the term loan B, according to the report.

The analysts believe the project company has more than \$40 million of liquidity, which would enable it to cover its fixed costs for a prolonged period, should the outages continue. ■

Greenskies Gets \$165m Financing for Solar Projects

Connecticut-based solar energy systems provider **Greenskies Renewable Energy** has obtained a \$165 million financing package that will fund small-scale solar projects across 12 states.

The deal, which comprises loans and equity, was agreed with **First Niagara Financial Group** and a tax equity provider.

Proceeds will fund construction of photovoltaic solar projects for commercial and municipal customers. Greenskies is targeting the installation of 127 projects and aims to roll them out in 12 states, including California and Maine.

The deal marks the sixth time that First Niagara has provided financing to Greenskies since 2012. In a statement, **Peter J. Thomas**, vice president and senior relationship manager at First Niagara, said the bank was "pleased to continue developing its relationship with Greenskies".

Mike Silvestrini founded Greenskies in 2008 and remains president of the company. Greenskies serves clients in the corporate, municipal and governmental agencies sectors. ■

PFR #PowerTweets

For more news and coverage, follow @PowerFinRisk on Twitter, as well as @RichMetcalfe and @OliviaFeld.

@SunEdison

Our new Comanche #solar project will supply power for over 30,000 homes! on.mktw.net/1K850Lg #CO #Clean-PowerPlan pic.twitter.com/t315aVEDWC

@be_edison

The secret investment power of #solar yieldcos: @247WallSt with what investors don't know ow.ly/R2YhU

@Canadian_Solar

#PressRelease: #CanadianSolar Introduces New 320W Polycrystalline #Solar Module. Read more! bit.ly/1PBf2Vt pic.twitter.com/yweMUOytjE

@ShorehamSolar

#ShorehamSolarCommons [By The Number] = nearly 25 megawatts of pollution-free energy ow.ly/QVeD3

@California_ISO

New #ISO #solar generation all-time peak of 6,391 MW was reached today at 12:54. Previous all-time peak was 6,341 MW on 8/19.

@Abengoa

Arizona's 280MW Solana plant with thermal energy storage provides electricity when it is needed. http://bit.ly/1eUEt6Z

@Deloitte4Energy

Discover the top-of-mind issues for #utility executives that will require substantial investment over the near term http://deloi.tt/1E3G1aI

@GenscapeWx

Unseasonably strong #Texas cold front brings major demand & wind volatility to the #ERCOT footprint today.



PROJECT FINANCE

Moody's Ranks Similarly-Rated Merchant Projects

Moody's Investors Service has ranked the credit quality of 18 similarly rated merchant projects, placing those which rely more heavily on uncontracted cash flows at the lower end of the 'Ba' category or lower.

The report examined the credit scores of one Ba1-rated project (the 1.6 GW Linden co-genera-

tion project in New Jersey) six projects rated Ba3, eight rated B1, two rated B2 and one rated B3.

Of the Ba3-rated assets, the Channelview co-generation plant in Texas, 40% of whose cash flows stem from a contract with an affiliate of chemical company **LyondellBasell**, was

ranked the highest.

Energy Investors Funds acquired Channelview from **Global Infrastructure Partners** and **Fortistar** in January 2014.

LS Power's 900 MW coal-fired Sandy Creek plant, which has power purchase agreements for 250 MW of its output and short-term hedges for the remainder,

was the lowest ranking of the Ba3-rated assets.

"Sandy Creek has a contract, but it's in ERCOT and there are some concerns about the ERCOT market right now," **Scot Solomon**, vice president and senior credit officer at Moody's told *PFR*. Merchant power prices in ERCOT have been declining recently, according to the report.

Goldman Sachs led on the oversubscribed \$1.26 billion refinancing of Sandy Creek's debt in November 2013 (PFR 11/5/13).

All of the merchant projects rated Ba3 or higher have contracts except for the 585 MW gas-fired Astoria project in Queens, N.Y., and Chief Power, a duo of coal-fired projects in Pennsylvania acquired by **ArcLight Capital Partners** in 2014, but both are in premium capacity zones, Astoria in New York ISO and Chief Power in PJM.

Both also have fairly low leverage relative to comparable projects in the same markets, noted Solomon.

The highest ranking B1-rated project in the report is the Bayonne Energy Center in New Jersey, and it is the least reliant on uncontracted cash flow. However, *PFR* understands that the loan to which the ranking refers has been repaid since June 30, the date on which the rankings were valid.⁰⁰

The lowest ranking project mentioned in the report is the 1,884 MW coal-fired Homer City project, rated B3. Moody's expects Homer City's available cash flow to be less than its total debt servicing needs after 2015. The debt is likely to be refinanced as a term loan B, according to the report. ■

Ba-rated assets

Rank	Issuer Name	Project Name	Capacity	Fuel Type	RTO/ISO	Contract	Long-term rating
1	EFS Cogen Holdings I	Linden	942 MW	Gas	NY-ISO	70% contracted	Ba1
2	EIF Channelview Cogeneration	Channelview	856 MW	Gas	ERCOT	33% contracted until August 2018	Ba3
3	Star West Generation	Portfolio	1,676 MW	Gas	Arizona and California	Discrete mid- to long-term tolling arrangements	Ba3
4	Elwood Energy	Elwood	1,508 MW	Gas	PJM	Contracts on four units expire in 2016 and 2017	Ba3
5	Astoria Energy	Astoria Energy I	585 MW	Gas	NY-ISO	100% merchant from May 2016	Ba3
6	Chief Power Finance	Keystone, Conemaugh	3,422 MW (40% stake)	Coal	PJM	100% merchant	Ba3
7	Sandy Creek Energy Associates	Sandy Creek	945 MW	Coal	ERCOT	30% contracted, remainder primarily merchant	Ba3

B-rated assets

Rank	Issuer Name	Project Name	Capacity	Fuel Type	RTO/ISO	Contract	Long-term rating
1	Bayonne Energy Center	Bayonne	512 MW	Gas	NY-ISO	Approximately 40% merchant	B1*
2	TPF II Power	Portfolio	4,900 MW	Gas (primarily)	NY-ISO, PJM	100% merchant	B1
3	Lonestar Generation	Portfolio	1,605 MW	Gas, Coal	ERCOT	100% merchant	B1
4	La Frontera Generation	Lamar, Forney	3,002 MW	Gas	ERCOT	Gross margin 33%-37% hedged	B1
5	ExGen Texas Power	Portfolio	3,477 MW	Gas	ERCOT	Partially hedged	B1
6	InterGen	Portfolio	6,101 MW	Gas, Coal	UK, Netherlands, Mexico, Australia	Partially contracted	B1
7	Empire Generating Co	Empire	635 MW	Gas	NY-ISO	100% merchant	B1
8	Essential Power	Portfolio	1,721 MW	Gas, Oil, Dual-fuel, Hydro	ISO-NE, PJM	Partially hedged	B1
9	TPF Generation Holdings	Portfolio	1,380 MW	Gas, Coal	California ISO	Largely uncontracted	B2
10	Longview Power	Longview	700 MW	Coal	PJM	100% merchant	B2
11	Homer City Generation	Homer City	1,884 MW	Coal	PJM	Primarily merchant	B3

Source: Moody's Investors Service

*This rating is no longer valid as Bayonne Energy Center has repaid the relevant debt.

MERGERS & ACQUISITIONS ●

PJM Capacity Auction Could Herald M&A

« FROM PAGE 1

capital.

“Between the strategic selling and the financial selling, I think there is a fair bit of capacity that will come to market in late 2015 and early 2016,” says Saxena.

The auction, which took place last week, was the first under new rules which include severe penalties for poor performance during periods of scarcity.

Those rules could make holding single assets and relatively small portfolios riskier, increasing the pressure to consolidate the power market into

larger portfolios.

“Both in PJM and New England now, the penalties for non-performance are significant,” **Aneesh Prabhu**, an analyst at **Standard & Poor’s** tells *PFR*. “If you’re out on a day when the [independent system operator] announces a contingency, the penalties could shave off a significant amount of your annual capacity earnings.”

Generators with larger fleets can avoid a penalty if one of their facilities goes offline by offsetting it with generation from another plant in the same sub-region.

Prabhu declined to identify specific assets or portfolios that could be put on the market, but suggested that portfolios of around 3,000 MW to 4,000 MW made up of four or five assets could be potential candidates for sale.

“There are quite a few gas-fired single assets, a few coal-fired single assets and there are a few portfolios comprising five or six gas-fired assets held by private equity, and those could change hands,” says Prabhu. The buyers would likely be private equity firms or indepen-

dent power producers.

This year’s auction, which will determine the size of capacity payments made in 2018 and 2019, was originally scheduled for May, but was delayed by three months while the **Federal Energy Regulatory Commission** considered amendments to the market rules (*PFR* 5/21).

Those rule changes included the introduction of harsh penalties for underperformance when capacity is most needed in the region, following the polar vortex last year during which there were serious shortfalls. ■

Dominion’s MLP Acquires Iroquios Stake

Dominion Midstream Partners, the master limited partnership of **Dominion Resources**, is acquiring a 25.93% stake in **Iroquios Gas Transmission**.

Dominion Midstream has entered into agreements to buy the stake from **National Grid** and **New Jersey Resources**. The deal will be backed with the issuance of around 8.6 million common shares in the MLP, which have an agreed-upon value of \$286.5 million.

Dominion Resources already owned a 24.72% stake in Iroquios, which

owns and operates a regulated 416-mile gas pipeline, prior to the transaction.

The acquisition will benefit both Dominion Midstream and Dominion Resources, said a deal watcher. “Naturally if you build your pipeline that’s much better for a master limited partnership or yieldco structure,” he added.

Dominion Resources added to its own portfolio last week, investing around \$500 million in the Utah-based Four Brothers solar project as part of a joint venture with **SunEdison**. ■

Details Emerge On Brookfield Cable Deal

A subsidiary of **Argo Infrastructure Partners** is slated to seal its acquisition of the Cross Sound Cable transmission line from an affiliate of **Brookfield Infrastructure Partners** before the end of August, a deal watcher tells *PFR*.

The deal, which was struck with Argo’s AIA Energy North America fund in April, is Brookfield’s first capital recycling initiative of the year, says a company spokesman in Toronto, Canada, adding that the sale is for a 23% stake in the transmission asset.

The acquisition will close in the third quarter of this year for \$30 million in cash proceeds, according to a statement that Brookfield issued with its second quarter results on Aug. 5.

New York-based Argo is not using an advisor for the acquisition, adds the deal watcher. The investment manager worked with **Mitsubishi UFJ Financial Group** to finance a portion of the purchase (*PFR*, 4/20/14).

Brookfield Infrastructure Partners is being advised by **Citigroup** and **HSBC**, adds the deal watcher. The Brookfield

spokesperson declined to comment on whether an advisor is being used but confirmed that definitive agreements have been signed between the buyer and the seller and that the transaction is in the final stages of regulatory approvals.

The transmission line is 24 miles long and connects the electric transmission grids of New England and Long Island, N.Y. The cable has a 20-year contract with the **Long Island Power Authority**. The line has been operational since 2004.

The acquisition is the debut investment by Argo’s AIA Energy North America fund. The \$500 million fund is backed by a number of institutional lenders including the **California State Teachers’ Retirement System**, and is focused on power, renewables and energy infrastructure in the U.S. and Canada.

Brookfield refinanced the Cross Sound Cable line a year after acquiring it from **Prime Infrastructure Group** in 2010 (*PFR*, 11/23/11).

A spokesperson for Argo in New York declined to comment. ■

● STRATEGIES

Sponsors Eye Alternatives as YieldCo Woes Persist

◀ FROM PAGE 1

the call, saying the plans remained “on track”, but added that the company had alternative plans to monetize its assets if necessary, referring to recent volatility in the yieldco market.

The alternatives available to the company include selling the projects that would otherwise go into the yieldco, keeping them on its balance sheet until the capital markets become more favorable, and forming a private yieldco with a strategic partner, according to a research note published by JPMorgan the day after the call.

The third option, creating a private yieldco, is similar to the strategy SunEdison has adopted in creating so-called private warehouses to hold large portfolios of assets prior to dropping them into its developed market yieldco, **TerraForm Power**.

Insurance companies and private equity firms are among the potential partners Canadian Solar could work with to form a private yieldco, according to the JPMorgan report.

On Aug. 19, the day before the Canadian Solar results announcement, SunEdison announced the creation of its fourth warehouse facility, and its second such debt raising in as many weeks.

SunEdison collaborated with **West Street Infrastructure Partners III**, a **Goldman Sachs**-owned fund, to raise the \$1 billion construction and operating asset warehouse facility.

The WSIP warehouse is a five-year facility that can expand to as much as \$2 billion in size. WSIP III is committing \$300 million in equity and **Bank of America**, **Morgan Stanley Senior Funding** and **Deutsche Bank** are providing \$700 million of debt to complete the facility.

SunEdison’s latest warehouse completion comes as yieldco dividend yields have spiked, making drop downs problematic, says **Mahesh Sanganeria**, equity analyst at **RBC Capital Markets**.

‘PERFECT STORM’

The high yields are the result of unease around the energy sector, too many yieldcos coming to the market during the last couple of months, and—specific to SunEdison—some investors’

unfamiliarity with the consumer credit profile of **Vivint Solar**, last July’s acquisition (PFR 7/20).

“It created a perfect storm where everything came together and made investors nervous about yieldcos,” says Sanganeria.

TerraForm Power, the yieldco SunEdison launched in 2014, has an exclusive call right to operating assets financed with the new ware-

“It created a perfect storm where everything came together and made investors nervous about yieldcos.”

house facility.

The dividend yield on TerraForm Power stock was 5.26% at 3.30pm Aug. 20, according to **Nasdaq**, when its share price reached \$24.43, down from a closing price of \$38.81 a month ago.

Following the announcement of the WSIP warehouse facility, SunEdison worked overnight to price \$650 million of 6.75% senior A perpetual convertible preferred stock at \$1,000 a share.

The proceeds will be used for general corporate purposes, including funding working capital and growth initiatives, SunEdison said

in a statement Tuesday.

FURTHER FORAYS

That raise, just hours after the warehouse announcement, followed the previous week’s syndication of the \$280 million debt portion of another SunEdison warehouse facility, **TerraForm Private Warehouse**, which is \$525 million in aggregate size (PFR 8/12). The company has made it clear that it will consider further forays into the capital markets.

In a statement Aug. 17, the company said: “SunEdison continues to explore financing alternatives, including upsizing its existing warehouse facilities and adding new warehouse facilities”.

With a bulging global portfolio of over 4 GW of projects, SunEdison’s rush to bolster its warehouse facilities shows it is willing to wait for the sentiment around yieldcos to improve, says Sanganeria.

“They are probably indicating that they are hopeful this market will become vibrant again and it’s just a matter of them having to follow an interim plan for maybe 18 months so they don’t lose all the good-quality projects they have,” he adds.

“The key take away is that SunEdison is committed to the yieldco model, which seems bust in today’s market, and will not make any compromises to achieve a good drop down into TerraForm,” says Sanganeria. ■

YieldCo Announcement ‘Not to Blame’ For Dip in Canadian Solar Stock

Publicly-listed **Canadian Solar**’s share price fell sharply after the release of its earnings statement. On Aug. 18, the closing price was \$24.69 a share, and the following day the stock closed at \$20.20, according to **Nasdaq**.

However, that had less to do

with the yieldco announcement and more to do with the company’s gross margin figures, which were hit by the sale of solar panels into the U.S., according to a deal watcher.

“The fact that they are equivocating regarding the yieldco is something everyone can understand, given the way all the MLPs and yieldcos have traded off recently,” he said.

In the earnings call, the company’s cfo, **Michael Potter**, blamed lower gross mar-

gins in the second quarter of 2015 compared to the previous two quarters on countervailing duties and anti-dumping costs imposed by a ruling of the U.S. **Department of Commerce**.

“The company has previously signaled that they had workarounds, and indeed they do, but apparently not soon enough,” says the deal watcher. “So they are taking this massive hit on their gross margins on sales of products into North America in the near term.” ■

INDUSTRY CURRENT ●

Corporate Renewable Energy Purchases Can Trigger Dodd-Frank Swap Reporting Requirements – Part I

This week's Industry Comment is written by **Paul Forrester**, a partner in the Chicago office of **Mayer Brown**. Forrester's corporate finance and securities practice is especially focused on structured credit, including collateralized loan obligations, energy financings and project development and financing. Here, he examines the swap reporting requirements that result from the recent rise of non-utility renewables offtakers.

Corporate purchases of renewable energy are on the rise in the U.S. According to the **American Wind Energy Association**, almost 25 percent of all wind power purchase contracts signed in 2014 were with corporate buyers and other non-utility companies. These buyers include brand-name companies such as **Amazon, Dow, Google, Facebook, Ikea, Mars, Microsoft** and **Yahoo**, as well as the **U.S. General Services Administration** and public and private universities.

Corporations are often attracted by wind energy's unique ability to hedge against rising prices for other fuels—just as utilities buy fixed price wind energy to protect their consumers against volatility in the price of other fuels. Purchasing clean, renewable wind power also helps many companies and non-utility purchasers achieve internal environmental and clean power targets. Corporate investment in renewable energy is occurring both on- and off-site, and through both direct ownership and long-term purchase or similar agreements. Off-site long term agreements, however, can raise an unexpected reporting issue under related Dodd-Frank Act requirements.

SOME DODD-FRANK CONTEXT

Title VII of the Dodd-Frank Act is called the Over-the-Counter Derivatives Reform and Transparency Act. It covers "swaps" and is

intended to establish a comprehensive regulatory framework to reduce risk, increase transparency and promote market integrity within the financial system by, among other things (and in the words of the **Commodity Futures Trading Commission**): "(1) Providing for the registration and comprehensive regulation of swap dealers and major swap participants; (2) imposing clearing and trade execution requirements on standardized derivative products; (3) creating rigorous record-keeping and real-time reporting regimes; and (4) enhancing the Commission's rulemaking and enforcement authorities with respect to all registered entities and intermediaries subject to the Commission's oversight."

The CFTC and the **Securities and Exchange Commission** have primary rulemaking authority over the provisions in Title VII of Dodd-Frank. They are required to make certain rulemakings jointly and generally to consult with each other and with the **U.S. Treasury** and others in their individual rulemakings. The jurisdictional boundaries between the CFTC and the SEC are based on whether a transaction is a "swap" or a "security-based swap." The SEC has authority over security-based swaps, which are based on a security, loan or a "narrow" security index. The CFTC has authority over all other "swaps," except "mixed swaps" for which the CFTC and the SEC share joint authority.

How Does a Corporate Buyer's Desire to Hedge Its Price for Power Raise these Reporting Requirements?

The Dodd-Frank Act includes special treatment for certain hedging transactions by so-called end-users (specifically, exemptions from clearing and possibly margin for non-cleared swaps). However, despite requests that it do so, the Act does not categorically exclude such hedging from other regula-



Paul Forrester

tion. In fact, in the joint Product Definition final rule that defines a swap, the CFTC and SEC generally followed the language of the Dodd-Frank Act in crafting a broad definition (contained, in the case of the CFTC, in the CFTC's regulation 1.3(xxx)) with several reasonably broad exceptions described in the final rule's preamble. These exceptions deal with various categories of contracts (e.g., insurance), including an exclusion for

forward contracts that are intended to be physically settled. Accordingly, a traditional power purchase agreement that provides for physical settlement will not likely be a swap and, as a result, will not need to be reported, cleared or margined. In addition, a typical "book-out" (subsequently agreeing to a financial settlement instead of required physical settlement) is not likely to cause a physically settled PPA to become a swap, even though the contract is not in fact physically settled.

However, if there is no intention to physically settle such sales and purchases (as is the case with the so-called "contracts for differences" often used by corporate buyers of renewable energy), and, as a result, the transaction represents a financial hedge, the CFD will be a swap, which will trigger the related Dodd-Frank reporting requirements.

Notably, the CFTC's definition of a swap includes an anti-evasion provision (set forth in CFTC regulation 1.6) to the effect that a transaction that is willfully structured to evade any amendments made to the Commodity Exchange Act by the Dodd-Frank Act shall be deemed a swap for purposes of such amendments and the rules, regulations, and orders of the Commission promulgated thereunder. ■

Check back next week for the second installment of this Industry Current.

● Q&A: BRAD NORDHOLM AND HIMANSHU SAXENA, STARWOOD ENERGY

Q&A: Brad Nordholm and Himanshu Saxena, Starwood Energy

◀ FROM PAGE 1 Clean Power Plan.

PFR: What makes transmission contracts attractive to a private equity firm such as Starwood in the current market conditions?

NORDHOLM: Transmission in North America is hugely attractive as an investment because it's essential energy infrastructure, a hard asset that has probably the most desirable form of contracted cash flow, either a bilateral contract or a tariff, with high investment grade entities or the government behind it. It has perfectly structured and recurring cash flow over a long period of time, attributes that investors—particularly investors in what you might call core energy infrastructure—find most desirable. Also, while there are barriers to entry for almost all kinds of power generation assets, the barriers to entry for transmission are probably higher than anything.

PFR: I understand that your joint venture with Abengoa, DCR Transmission, will be seeking debt financing for the Delaney-Colorado River transmission line. Can you say anything about what stage you are in that process?

SAXENA: Right now we are in the development phase of the project and not yet ready for construction financing. When we are, then we'll come to the market. We expect that there will be pretty robust interest both from banks and institutional investors in financing the construction of that project.

PFR: How is the market for debt financing for transmission projects evolving?

SAXENA: The market is continuing to get better for borrowers. We've seen the pricing continue to come in, terms continue to get better. Banks are once again willing to lend for very long periods. There's pretty strong competition between the institutional lenders and the bank lenders, which is leading to very attractive terms. What can change that? We don't see a trigger event other than what will happen at the **Federal Reserve** this year.

If the Fed starts to raise rates faster than we expect, then perhaps the cost of liquidity and cost of funding for the banks might go up, and it could slow down the momentum. But the balance between the number of quality projects looking for financing versus number of banks and institutional lenders looking to invest continues to work in the favor of the borrowers. In transmission especially there aren't that many projects coming to the market for financing, and when they do, they end up being highly subscribed.

PFR: Moving on to generation assets, will mergers and acquisitions in the PJM zone increase once the capacity auction results there are announced?

SAXENA: The market for M&A for PJM assets in 2015 for the last few months has been on pause, waiting for the PJM auction to be cleared up. I think the expectation is that when the auction results come out, people will have a better view on what PJM wants with the capacity performance product and how the market is responding to that need,

“We expect more assets will come to market, which will increase the probability that we will find something that is interesting to us.”

and that will provide clarity for valuations. And with more clarity comes more transactions.

PFR: What kinds of portfolios do you expect to come to the market when M&A activity picks up?

SAXENA: I think both single assets and large portfolios will come up for sale. There are at least three large portfolios currently in the market. Those sale processes have been pushed out pending the PJM auction because it was hard for buyers to come up with a view

on value with this much uncertainty, so large portfolios are in the market, there are more portfolios that are expected to come to market and they are all waiting for this uncertainty to be lifted.

PFR: But only if there is the rationale for those transactions in the first place. What is the driver behind this activity?

SAXENA: I think some of it is that companies like **American Electric Power** that have unregulated generation businesses have been thinking for a while about bringing those assets to the market, simply because it doesn't fit with the rest of their portfolio. That kind of seller is opportunistic, but ultimately they have to be sellers. Then there are the financial players who are simply looking to recycle capital and sell assets that have matured in their portfolios. So between the strategic selling and the financial selling I think there is a fair bit of capacity that will come to market in late 2015 and early 2016.

PFR: Do you expect opportunities to arise for Starwood Energy out of this process?

SAXENA: We like the PJM market, we like investing in places where there is a liquid market, and if there is a capacity market that makes it even more interesting. With this clarity coming in, we do expect more assets will come to market, which will increase the probability that we will find something that is interesting to us.

PFR: How do you see the market for renewables?

NORDHOLM: We think it's very interesting. The big story about renewables over the last five years is that we've had a precipitous drop in building costs, specifically for wind and solar, and we've had a marked improvement in their efficiency and performance. Putting that together means that in the right locations, solar and wind power generation technologies are becoming economic, they're becoming very competitive and that creates opportunity.

SAXENA: Another recent development is that you've seen several coun-

PAGE 11 »

Q&A: BRAD NORDHOLM AND HIMANSHU SAXENA, STARWOOD ENERGY ●

« FROM PAGE 10 terparties that are not classic utilities interested in buying renewable power for very long tenors. They're doing it sometimes to manage their costs, other times because it's a great story for them to power their warehouses and data centers with renewable energy. You've seen deals being done by corporations like **Microsoft, Google, Yahoo, Amazon**, even companies like **Ikea** and **Walmart**. This year there have been as many industrial and tech buyers buying wind over the long term as utilities buying wind. That is a very positive development, because now you are no longer subject to a utility commission approving a contract, and a utility going through a full request for proposals process.

NORDHOLM: We think this is one of the big stories, one of the big trends. One way to describe it is the disintermediation of the public utilities. It used to be that these companies would buy their power from the public utilities. Now they're contracting with independent power producers like ourselves and others to get their power directly. And they're doing it from these renewable power projects. That is something new and quite dramatic.

PFR: But it's only possible for non-utilities to buy power directly from generators in certain states, isn't it?

SAXENA: That's right. Texas is one state where you can do it. There are other states where you cannot, and in those states you have other, synthetic, structures. We have seen buyers that are looking for contracts for difference, for example. They are entering into purely financial agreements instead of physical agreements to buy power, so they are hedging their cost but not really taking possession of the electrons. So, the structure of the trades and the deals are different on a state by state basis.

PFR: But that doesn't affect the economics or the viability of this trend?

SAXENA: If it's appropriately structured then it does not.

PFR: Do you think we'll see uncontracted utility scale renewables, such as merchant

solar, in the future?

SAXENA: We've seen a lot of developers talking about merchant solar and it hasn't happened in the U.S. so far. The key is whether lenders and tax equity investors are interested in financing solar and wind projects with no contract of any kind, and the answer so far is no. So what we are seeing is not totally merchant solar projects but a lot of discussion about building solar projects with five to seven-year hedges. We've seen a number of such projects being discussed in Texas. People are looking for five to seven-year assurance, and beyond that they are exposed to merchant pricing. Some of those projects may get done.

NORDHOLM: With solar and wind projects, the cost of production approaches zero. When the wind blows and the sun shines they are

“Now they're contracting with independent power producers like ourselves and others to get their power directly. And they're doing it from these renewable power projects. That's something new and quite dramatic.”

going to produce electricity, and if they were merchant you'd be realizing the market price for electricity at the time it's produced. So there's an intellectual case for doing merchant solar and wind, but if you can't finance, you don't have an efficient cost of capital.

PFR: But there have been wind farms that have been financed on the basis of hedges.

SAXENA: There have and there's a pretty well-developed market for that. We've done it ourselves. In general, you have a creditworthy counterparty, either a bank or another counterparty, provide you with a long-term hedge. We've done deals with a 13-year hedge. That provides us with long-term revenue assurance, and based on that revenue certainty we can finance those projects with tax equity

investors and lenders.

PFR: What was your reaction to the recent Clean Power Plan announcement by President Obama? Has it influenced your strategy?

SAXENA: We were pretty excited to see the details of the Clean Power Plan. It creates a tremendous investment opportunity for us over the next several years. The CPP will significantly change the way we make and use electricity in the U.S. and any change of this magnitude creates opportunities. For us, we're thankfully on the right side of history in this debate: We don't own any coal-fired generation and we don't plan to buy any. We believe that over time, with or without CPP, coal has to be replaced with gas-fired and renewable generation, and those are the two areas where we have very strong expertise and interest. We expect that utilities and others, even in reluctant states, are going to start incorporating the Clean Power Plan in their long term planning process, whether it's utilities in the southeast or in other markets where there has been limited penetration of renewables. Even as they are fighting it in the courts, you will start seeing more renewables RFPs, even before the rules are fully set and the legal challenge is fully completed. This will create very interesting development opportunities for us.

NORDHOLM: We don't see this as having an impact on our strategy, we see it as affirming our strategy, and with our focus on renewable technology, transmission and natural gas-fired generation, we've been honing our expertise and experience for this new environment.

PFR: Are there any other areas to watch out for in the second half of 2015 in terms of power M&A or project finance?

NORDHOLM: We're always paranoid. It's our business to be concerned about world events. We're concerned about election cycle politics in Washington; we're concerned about interest rates and the potential impact they might have. These are the things to be mindful of, but we're generally quite enthused about the overall trends that we're seeing in the market. ■

● PEOPLE & FIRMS

Northland Senior Analyst Team Heads to Oppenheimer

Two senior research analysts specializing in renewables stocks left **Northland Securities** last week to take up new positions at **Oppenheimer and Co.**

Colin Rusch and **Noah Kaye** have been hired as managing director and executive director respectively, and will cover industrial efficiency and resource optimization at their new firm, **John E. Parks**, director of research at New York-based boutique investment firm Oppenheimer, tells *PFR*.

The duo was previously based in Minneapolis-headquartered broker Northland's New York office, where Rusch led the industrial efficiency and resource optimization team. The pair covered about 30 stocks, focusing on solar generation, renewables financing, distributed generation, energy storage and grid modernization, among other technologies.



Colin Rusch



Noah Kaye

Rusch began his equity research career as an associate at **Piper Jaffray** in 2005, where he focused on clean-tech. He joined **Broadpoint Capital** in 2007, where he was a senior research analyst, before taking up a similar role at **ThinkEquity** in 2009. Rusch joined Northland in 2013.

Rusch made a number of media appearances during his career at Northland, discussing energy storage technologies on **CNBC**, **Fox Business** and **Bloomberg**.

Kaye joined Rusch's research team at ThinkEquity in 2009, having previously been a director of public affairs at the **Solar Energy Industries Association**.

A spokesperson for Northland declined to comment for this article, and the firm's plans to replace the two senior analysts could not immediately be learned. ■

BeEdison Aims To Ease Commercial and Industrial Solar

BeEdison, the diligence services affiliate of **Distributed Sun**, is hoping to create a credit assessment service that will increase solar energy investment in the commercial and industrial sectors.

Collaborating with **S&P Capital IQ**, BeEdison intends to produce risk assessments of commercial real-estate owners and tenants that could be off-takers in power purchasing agreements for solar energy projects.

"A major goal of the BeEdison/S&P Capital IQ co-branded service offering is to promote greater transparency in

a young marketplace where credit risk tends to be opaque," a BeEdison spokesperson tells *PFR*. "In the long term, we hope that our service offering will lay the groundwork for more rapid securitization of C&I solar portfolios."

BeEdison and S&P will award credit scores to potential off-takers after analyzing information such as three years of financial statements or three years of tax returns, as well as third party data.

The service will be run on a case by case basis, with developers and investors requesting credit risk assessments from BeEdison and S&P. The two parties began market testing in July and expect to have an accurate assessment of demand for the service by the end of the year. ■

● ALTERNATING CURRENT

Students Head Down Under For Solar Race



University of Minnesota students have unveiled a solar-powered hybrid car that they will take to the other side of the world to race across Australia.

The 25-strong team estimates that they have spent over 50,000 hours during the last two years designing and building the solar-electric hybrid car.

The next stage of their journey sounds no less arduous: a 1,877 mile race across the outback from Darwin, in Australia's Northern Territory, to Adelaide, South Australia.

The students are competing in the fourteenth World Solar Challenge race, in the "cruiser class" section, not to be confused with the cruiserweight class in boxing. The cruiser category is for "solar cars [that] are designed for practicality and marketability as well as speed", according to the University.

A race crew of 17 team members will travel to Australia, and the driver and passenger can look forward to a basic level of comfort.

In a statement, the University says "The U of M team's car will include a few comfort features seen in regular cars, such as doors and padded car seats for the driver and one passenger".

The competition was set up in 1987 to promote research into solar-powered cars.

Around 46 teams are competing in this year's race, which will take place from Oct. 18 to 25. The University of Minnesota finished in second place last year. ■

● QUOTE OF THE WEEK

"Now they're contracting with independent power producers like ourselves and others to get their power directly. And they're doing it from these renewable power projects. That's something new and quite dramatic."

Brad Nordholm, ceo of **Starwood Energy**, on the trend of corporate non-utilities signing up for renewables offtake agreements.