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Power Finance & Risk

Exclusive Insight on Power M&A and Project Financing

By the publisher of GlobalCapital

Avenue Capital to Refinance Portfolio with Term Loan B

Olivia Feld

An investment bank is arranging a term loan B to refinance the 1.4 GW portfolio of merchant gas-fired projects that **Avenue Capital Partners** purchased from **Tenaska Capital Management** earlier this year.

Goldman Sachs is sole bookrunner and arranger on the $340 million package for the New York-based asset manager.

The transaction consists of a $310 million term loan B and a $30 million revolving credit facility. The term loan and revolving credit facility have six and five-year tenors, respectively.

Price talk on the term loan B is 550 to 575 basis points over Libor, say deal watchers.

The portfolio, called Middle River Power, consists of the 830 MW High Desert Power Project combined-cycle gas-fired facility in Victorville, Calif., the 300 MW Big Sandy gas-fired project in Kenova, W.Va., and the 250 MW Wolf Hills PAGE 5 »

Refinancings of U.S. Power Assets, Year to Date, 2016

Sponsor	Project	Arranger	Size
Avenue Capital	Portfolio (1.4 GW Gas)	Goldman Sachs	$340M
Northern Star Generation	Portfolio (1.05 GW Gas, Dual-Fuel)	MUFG	$200M
Panda Power Funds	Sherman (758 MW Gas)	Jefferies	$360M
Freeport LNG	Freeport LNG, Train 2 (4.4M mtpa)	Credit Suisse, Goldman Sachs, HSBC, Royal Bank of Canada	$1.25B

Source: PFR data

Details Emerge on Starwood Acquisition of NextEra Projects

Olivia Feld

Starwood Energy Group Global is purchasing two merchant gas-fired projects totaling 840 MW in Pennsylvania from a subsidiary of **NextEra Energy Resources**. The firm has mandated a bank to syndicate acquisition financing for the portfolio over the summer.

Greenwich, Conn.,-based Starwood is buying the 790 MW Marcus Hook Energy Center combined-cycle project and the adjacent 50 MW Marcus Hook 50 Energy Center simple-cycle project, both located primarily in Marcus Hook, Pa.

MUFG is arranging acquisition financing for Starwood, say deal watchers. The seven-year $630 million bank loan backing the projects is in the PAGE 7 »

Loans for Chile Transmission Line Near Close

Richard Metcalf

A $739 million dual-currency debt financing backing a "landmark" transmission line connecting Chile's two main grids could close as soon as this month.

The 379-mile project is being developed by **Transmisora Eléctrica del Norte** (TEN), a 50-50 joint venture between **Engie Energía de Chile** and **Red Eléctrica**. PAGE 6 »

Texas IPP to Refinance Thermal Portfolio

Olivia Feld

Houston-based **Northern Star Generation** has mandated a bank to refinance a portfolio of five thermal projects in Florida and Nevada.

MUFG is the sole arranger on the deal, which consists of a $200 million term loan collateralized against five of the independent power producer's projects. The nine-year loan is priced at 200 PAGE 5 »

POWER UP: CHECK OUT A SELECTION OF THE WEEK'S POWER AND UTILITY NEWS ON TWITTER PAGE 11

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AT PRESS TIME

8minutenergy Plots Calif. Solar Project Financing

8minutenergy Renewables is planning to seek financing for several utility-scale solar projects in California in the coming months.

The San Francisco-based sponsor has announced that it has signed power purchase agreements for the 28 MW Redwood 4 project and says it will soon announce another PPA for the larger Springbok 3 project in Kern County. SpringBok 3 will be over 100 MW, says a spokesperson for 8minutenergy.

"There's strong appetite now for large solar assets. There's no shortage of capital now chasing those projects," 8minutenergy president and co-founder **Tom Buttgenbach** tells *PFR*.

8minutenergy will look for approximately $45 million in project financing for the Redwood 4 project, says Buttgenbach, adding that the financing will likely consist of between $20 million and $25 million each of debt and tax equity. The sponsor will not look to sell equity in the project.

The company is considering grouping Springbok 3 and Redwood 4 into a larger project financing for a portfolio of over 400 MW of projects in the first quarter of 2017. 8minutenergy declined to identify the other projects in the portfolio.

The sponsor is also evaluating whether to add a storage component to the Redwood 4 project. Whether the project is included in the portfolio financing is dependent on that decision. If the sponsor goes ahead with the storage component, the project will be financed separately.

Pacific Gas and Electric Company has signed a PPA with the Redwood 4 project under its Solar Choice program.

The demise of the yield companies did put a temporary dampener on the market, says Buttgenbach, but the low interest rate environment has led to significant interest from institutional investors.

"It's put a lot of pressure on institutional investors to find yield-generating assets. We see very strong interest from institutional investors, insurance, pension funds, who are looking for long-term solar assets," he says.

8minutenergy developed three other Redwood projects totaling more than 90 MW in Kern County. The developer worked with **Macquarie Capital** to finance the projects (PFR, 3/16/15). The three projects, which have been online since the end of 2015, were acquired by **sPower** in January 2015, says a spokesperson for sPower in Utah.

D.E. Shaw Renewable Investments and 8minutenergy developed the 137 MW Springbok 1 and 155 MW Spingbok 2 solar projects. **U.S. Bank** invested tax equity in the Springbok 1 project and **KeyBanc**, **Santander**, **OneWest Bank**, **CoBank** and **Siemens Financial Services** arranged debt financing (PFR, 6/10/15). **Citigroup** and **State Street** have tax equity stakes in the Springbok 2 project (PFR, 6/20).

8minutenergy says it has nearly 5.5 GW of projects under development in North America and has been awarded more than 1.5 GW in PPAs. ■

Power Finance & Risk

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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
Alcoa	Portfolio (328.38 MW Hydro)	Stanly County, N.C.		The portfolio of hydro assets, know collectively as the "Yadkin Project", is being sold to Cube Hydro, I Squared Capital's hydro platform (PFR, 7/18).
Atlantic Power	Piedmont (55 MW Biomass)	Barnesville, Ga.		John Hancock is considering buying the asset (PFR, 8/1).
Brookfield Renewable Partners	Price (189 MW Wind)	Sault Ste. Marie, Ontario	Scotiabank, TD Securities (Seller)	Brookfield Renewable is selling the three facilities, plus an expansion project, in a portfolio (PFR, 7/18).
	Comber (166 MW Wind)	Lakeshore, Ontario		
	Gosfield (51 MW Wind)	Kingsville, Ontario		
EDF Renewable Energy	Slate Creek (150 MW Wind)	Sumner and Cowley counties, Kan.		Axium Infrastructure, Industrial Alliance Insurance and Financial Services are acquiring a stake in the project (PFR, 7/11).
El Paso Electric	Four Corners (1,540 MW, 7% stake)	Fruitland, N.M./Navajo Nation		El Paso Electric is selling its 7% stake, representing 108 MW, to Pinnacle West Capital Corp. (PFR, 7/25).
Enel Green Power North America	Odell (200 MW Wind)	Cottonwood, Jackson, Martin, and Watonwan counties, Minn.		Algonquin Power & Utilities is taking full ownership in the project, acquiring Enel's 50% stake (PFR, 8/1).
● EnSync	Portfolio (1.3 MW Solar, 800 kWh Storage)	Hawaii Island and Maui		AEP Onsite's purchase of the portfolio is the first sale of solar-plus-storage residential and C&I projects in Hawaii (see story, page 11).
First Energy	Bay Shore Unit 1 (136 MW Coal)	Lucas County, Ohio		FirstEnergy is soliciting offers for the plant (PFR, 8/1).
● First Solar	Rancho Seco (11 MW Solar)	Sacramento County, Calif.		D.E. Shaw is buying the construction-stage asset, which has an offtake agreement with the Sacramento Municipal Utility District (see story, page 8).
● Energy Future Holdings	Oncor	Dallas, Texas	Bank of America Merrill Lynch, Credit Suisse, Deutsche Bank, JP Morgan, UBS, Wells Fargo (Buyer)	NextEra is acquiring Oncor (see story, page 7).
● Greenleaf-TNX	Portfolio (140 MW Solar)	California		A U.S. subsidiary of Hong Kong-based Sky Solar is planning to purchase the portfolio, most of which is in California, this year (see story, page 10).
KDC Solar	Portfolio (164 MW Solar)	New Jersey	Moelis & Co.	The private equity-backed developer is offloading its entire solar portfolio (PFR, 6/20).
Kinder Morgan	Southern Natural Gas (7,600-mile pipeline)	Southeastern U.S.		Southern Company is taking a 50% stake in the pipeline system (PFR, 7/18).
● NextEra Energy Resources	Marcus Hook (790 MW Gas)	Marcus Hook, Pa.	Barclays	Starwood Energy Group Global is acquiring the projects from a NextEra subsidiary (see story, page 1).
	Marcus Hook 50 (50 MW Gas)			
Panda Power Funds	Liberty (Gas 829 MW), Stonewall (778 MW), Patriot (829 MW)	Bradford County, Pa., Loudoun County, Va., Lycoming County, Pa.	Goldman Sachs	Panda Power Funds is selling a 2.5 GW portfolio of assets in PJM (PFR, 5/16).
● Petrobras	Nova Transportadora do Sudeste (1,150 miles Pipeline)	São Paulo, Rio de Janeiro, and Minas Gerais states, Brazil		A Brookfield-led consortium that includes China Investment Corp., GIC and First Reserve is close to acquiring the pipeline network, say Brookfield officials (see story, page 8).
Quantum Utility Generation	Quantum Pasco Power (123 MW Gas)	Dade City, Fla.	Merit Capital Partners (Seller)	Quantum is selling two peakers in Florida and Nevada (PFR, 6/6).
	Nevada Cogeneration Associates 2 (85 MW Gas)	Las Vegas		
Santander	Cubico Sustainable Investments (1,689 MW Wind, Solar, Hydro)	Latin America, Europe		Two Canadian pension funds, PSP Investments and the Ontario Teachers' Pension Plan, have taken equal shares of Santander's one-third stake in the renewables platform, which owns 1,464 MW of wind assets in Latin America (PFR, 8/1).
Sempra U.S. Gas & Power	Apple Blossom (100 MW Wind)	Huron County, Mich.		Sempra has acquired the project from Geronimo Energy (PFR, 8/1).
SunEdison	TerraForm Global (917 MW Solar, Wind)	Latin America, Africa, Asia		SunEdison is preparing to market its emerging markets yieldco to prospective buyers (PFR, 7/25).
SunEdison	King Pine (600 MW Wind)	Aroostook County, Maine	Rothschild	Pattern Energy has agreed to acquire the project (PFR, 6/27).
	Mount Signal 2 (201 MW Solar)	Imperial County, Calif.		Mount Signal 2 and Mount Signal 3 are being acquired by affiliates of 8minutenergy and D. E. Shaw (PFR, 7/11).
	Mount Signal 3 (245 MW Solar)			
TransCanada	Portfolio (4,510 MW Gas, duel-fuel, wind, hydro)	U.S.	JP Morgan	TransCanada is selling the assets to partly finance its $13B acquisition of Columbia Pipeline Group (PFR, 3/28).
● Unknown	Portfolio (8 MW Solar)	California, Colorado, Delaware, New Jersey, North Carolina, Oregon		John Hancock provided CleanCapital with acquisition financing for an 8 MW portfolio of C&I projects (see story, page 10).
● Veresen	Glen Park (32.65 MW Hydro)	Watertown, N.Y.		Cube Hydro, I Squared Capital's hydro platform, has closed its acquisition of the project (PFR, 6/14).

● **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 Fotios Tsarouhis at (212) 224 3294 or e-mail fotios.tsarouhis@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	Redwood 4 (28 MW Solar)	Kern County, Calif.	TBA	Debt, Tax Equity	$45M	TBA	8minutenergy Renewables is planning to finance a number of projects in the coming months (see story, page 5).
		SpringBok 3 (100 MW+ Solar)			TBA	TBA	TBA	
	Ares-EIF, Oaktree Capital	Linden (943 MW Gas)	Linden, N.J.	Morgan Stanley, MUFG, Barclays, Investec, GE Energy Financial Services, ICBC	Debt	$1.125B	7-yr	The financing package consists of a $1 billion senior secured loan and a $125 million senior secured loan (PFR, 6/20).
	Advanced Power	Cricket Valley (1 GW Gas)	Dover, N.Y.	GE Energy Financial Services, BNP Paribas, Crédit Agricole, ICBC, Bank of America Merrill Lynch	Debt	TBA	TBA	Arrangers of the debt financing are meeting with other financial institutions about backing the deal (PFR, 6/20).
●	Avenue Capital Partners	Desert Power (830 MW Gas)	Victorville, Calif.	Goldman Sachs	Term Loan B	$310M	6-yr	Avenue Capital is refinancing the portfolio, which it acquired from Tenaska earlier this year (see story, page 1).
		Big Sandy (300 MW Gas)	Kenova, W.Va.					
		Wolf Hills (250 MW Gas)	Bristol, Va.		Revolver	$30M	5-yr	
●	Enel Green Power	Parque Solar Villanueva (427 MW Solar)	Coahuila, Mexico	TBA	TBA	TBA	TBA	Enel has approached banks to request proposals for project finance backing the projects (see story, page 6).
		Parque Solar Villanueva III (327 MW Solar)						
		Parque Solar Don José (238 MW Solar)	Guanajuato, Mexico					
	Invenergy	Lackawanna (1.5 GW Gas)	Jessup, Pa.		Equity, Debt			Invenergy has hired Lazard to raise equity for the project (PFR, 6/13).
	Mainstream Renewable Power	Sarco (170 MW Wind), Aurora (129 MW Wind)	Atacama region, Chile; Los Lagos region, Chile	SMBC, MUFG	Debt	$450M	17-yr	The sponsor is in the late stages of negotiations (PFR, 6/20).
	NextDecade	Rio Grande (27 mtpa LNG), Rio Bravo (137-mile Pipeline)	Brownsville, Texas	Sumitomo Mitsui Banking Corp.	Debt	TBA		NextDecade has requested permission to build the $20 billion project (PFR, 5/16).
				TBA	Equity	TBA		
●	Northern Star Generation	Vandolah (680 MW Dual-Fuel)	Hardee County, Fla.	MUFG	Term Loan	$200M	9-yr	Northern Star Generation is refinancing the projects with a term loan (see story, page 1).
		Orlando (125 MW Gas, 50%)	Orlando, Fla.					
		Mullberry (115 MW Dual-Fuel)	Bartow, Fla.					
		Orange (104 MW Gas)	Bartow, Fla.					
		NCA 1 (90 MW Gas)	Las Vegas					
	NRG Energy	Portfolio (100 MW Community Solar)	U.S.	Deutsche Bank	Debt	$80M		Deutsche Bank arranged a roughly $80 million loan for a 100 MW portfolio of development projects (PFR, 6/20).
		Carlsbad Energy Center (632 MW Gas)	Carlsbad, Calif.	TBA	Debt	$650-$850M	TBA	Banks are competing to arrange financing for the Princeton, N.J.-based energy company (PFR, 4/18).
	NTE Energy	Killingly Energy Center (500 MW Gas), Reidsville Energy Center (500 MW Gas), Pickaway Energy Center (1 GW Gas)	Killingly, Conn.; Rockingham County, N.C.; Pickaway County, Ohio	TBA	Debt	$2B		NTE is planning to raise $2 billion to finance the three projects (PFR, 4/25).
	Quantum Utility Generation	Moundsville (549 MW Gas)	Marshall County, W. Va.	TBA	Debt	$500M	TBA	Quantum, which has approached prospective arrangers to finance the project, has mandated BNP Paribas to sell a stake in the project (PFR, 6/6).
	sPower	Portfolio (Solar)	Los Angeles County, Calif.	JPM Capital Corp.	Tax Equity	$70-$100M		The JP Morgan vehicle is buying tax equity in the portfolio project-by-project (PFR, 7/25).
●	Transmisora Eléctrica del Norte	TEN (379 mile Transmission)	Chile	KfW-IPEX Bank, MUFG, Mizuho, Sumitomo-Mitsui Trust Group	Debt	$739M	18-yr	The dual-currency loans could close as soon as this month (see story, page 1).
				Santander, Banco de Chile, Banco Estado de Chile, Banco BCI	Term Loan (Chilean Peso)			
	Valhalla	Cielos de Tarapacá (600 MW Solar)	Tarapacá Region, Chile	Not officially mandated	Equity			Valhalla is in talks with Marathon Capital to arrange financing for the project (PFR, 6/27).
		Espejo de Tarapacá (300 MW Hydro)						
●	Vivint	Portfolio (307 MW Solar)	U.S.	Investec (lead), ING Capital, Silicon Valley Bank, SunTrust Robinson Humphrey	Debt	$313M	5-yr	Vivint has closed its term loan (see story, page 5).

● **New or updated listing**

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

PROJECT FINANCE

Avenue Capital to Refinance Portfolio with Term Loan B

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Energy gas-fired facility in Bristol, Va.

The loans have been rated BB- and assigned a preliminary 1 recovery rating by **S&P Global Ratings** and rated B2 with a stable outlook by **Moody's Investors Service**.

Big Sandy and Wolf Hills, both of which are in the **PJM Interconnection** market, rely heavily on reliability pricing model capacity revenue through May 2020, notes the report published by Moody's on July 28.

The High Desert project, which is in the **California Independent System Operator** market, has resource adequacy contracts with what are described as "load serving entities" through the end of 2016, says the Moody's report, adding that it expects the project to negotiate additional contracts for 2017 and beyond.

The package will take out the remaining debt from a $425 million term loan B and $30 million revolver arranged by **UBS** and Goldman Sachs in 2013. The four and a half year package closed at 375 basis points over Libor with a 100 bps Libor floor and 99.5 original issue discount.

The refinancing reduces the amount of debt backing the portfolio by $100 million and moves the maturity out five years from 2017 to 2022, notes the Moody's report, adding that Avenue Capital has injected $25 million in equity into the portfolio in addition to the purchase price.

Avenue Capital acquired the portfolio from Tenaska in February (PFR 9/26). **Barclays** advised Tenanska on the sale.

Tenaska had initially hired **Bank of America Merrill Lynch** and Barclays to sell the projects in 2013 (PFR, 9/26/13).

It could not immediately be established when commitments are due by. A spokesperson for Avenue Capital in New York did not respond to a request for comment and a spokesperson for Goldman Sachs in New York declined to comment. ■

Texas IPP to Refinance Thermal Portfolio

« FROM PAGE 1

basis points over Libor, say deal watchers.

The projects in the portfolio are all contracted and operational:

- the 115 MW Mulberry dual-fuel project in Bartow, Fla.,
- the 90 MW NCA 1 gas-fired project in Las Vegas,
- the 104 MW Orange gas-fired project in Bartow, Fla.,
- a 50% stake in the 125 MW Orlando gas-fired project in Orlando, Fla., and
- the 680 MW Vandolah dual-fuel project in Hardee County, Fla.

The refinancing will take out a $146 million term loan B arranged by **BNP Paribas** in 2012, which was priced at 350 basis points over Libor with a 1.25% floor, according to deal watchers at the time.

The portfolio "has gone through a lot of changes" since the BNP-led deal, says a financier. "Assets have been peeled off. It has a long and complex history."

The list of assets in the 2012 financing could not immediately be established.

The 2012 deal replaced debt outstanding from a larger package of loans led by **Lehman Brothers** and BNP Paribas in 2007 (PFR, 12/11/12).

In addition to the five projects on which the latest refinancing is secured, Northern Star also owns two waste coal projects: the 88 MW Cambria project in Ebensburg, Pa., and the 111 MW Colver project in Colver, Pa.

Northern Star is jointly owned by the **UBS International Infrastructure Fund** and affiliates of **Harbert Power** and the **California Public Employees' Retirement System**.

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

Vivint Closes Loan Package

Vivint Solar has closed a $313 million five-year term loan to refinance a portfolio of rooftop solar projects.

The Lehi, Utah-based company will use the proceeds to repay an existing aggregation facility secured on 11 tax equity funds. The new loan is secured on those funds and an additional twelfth fund, which together own more than 307 MW of rooftop solar assets across the U.S.

The deal was 1.5 times oversubscribed, which is a sign of growing liquidity in the syndicated loan market for residential solar companies, said **Ralph Cho**, co-head of power and infrastructure at **Investec**, one of the four joint bookrunners on the deal.

ING Capital, **Silicon Valley Bank**, and **SunTrust Robinson Humphrey** were the other joint bookrunners.

The term loan is priced at 300 basis points over Libor for the first four years, and 325 bps for the fifth year, according to a filing with the U.S. **Securities and Exchange Commission**. Vivint will enter into interest rate hedges with the joint lead arrangers for at least 75% of the principal.

Vivint had been talking to Investec about a loan before the announcement of its proposed $2.2 billion merger with **SunEdison**, which later collapsed. Vivint's ability to raise funds was hampered while the deal was active (PFR, 6/14).

Since the cancellation of the acquisition, Vivint has obtained a $200 million term loan from investment funds and accounts advised by **Highbridge Principal Strategies** and secured a $75 million tax equity investment from an undisclosed investor (PFR, 3/22, PFR, 5/23). ■

PROJECT FINANCE

Dual-currency Debt for Chile Transmission Line Nears Close

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The line will connect the Interconnected System of Norte Grande (SING) to the Central Interconnected System (SIC), allowing generation from the north of the country to be delivered to the central zone, where demand is high.

"It's a landmark deal," says a banker at one of the mandated lead arrangers on the dollar-denominated tranche, **KfW-IPEX Bank**, **MUFG**, **Mizuho and Sumitomo-Mitsui Trust Group**. "It's very close to getting done," he adds.

Santander is advising the joint venture on the financing, and is also participating in the Chilean peso-denominated tranche alongside **Banco de Chile**, **Banco Estado de Chile** and **Banco BCI**.

The relative sizes of the two tranches, which both are expected to have a tenor of 18 years, could not immediately be learned.

The total slated cost of the project is approximately $900 million.

The deal will likely be the second debt financing for a major transmission line in Chile to close this year. The first was **Interchile**'s $738 million loan package for its Cardones-Polpaico and Encuentro-Lagunas lines, which closed in February (PFR, 2/24).

The TEN project will stretch from Mejillones in Chile's northern Antofagasta Region to Copaipó in the Atacama region, at the northern end of territory served by the SIC grid.

The project was initially developed by Engie Energía de Chile, which sold a 50% stake to Red Eléctrica for $218 million in January. As part of the deal, TEN repaid half of a $172 million shareholder loan that Engie Energía de Chile had provided to the project company.

Paris-based **Engie** owns a 52.8% stake in Engie Energía de Chile, which is listed on the **Santiago Stock Exchange**.

The pricing on the loans could not immediately be learned. Spokespeople for Engie in Paris, Red Eléctrica in Madrid and Santander in Boston either declined to comment or did not respond to inquiries by press time. ■

Enel Approaches Banks for Mexico Project Finance

When the results of the first Mexican power auction were announced earlier this year, it was widely assumed that one of the winning sponsors, **Enel Green Power**, would use its balance sheet to finance its newly contracted projects rather than tap the project finance market.

But the company, the global renewables arm of Italian utility **Enel**, has recently approached banks to request proposals for project finance deals.

"Enel always does corporate financing," said one Latin America project finance banker, who was surprised by the request. "We didn't even reach out to them."

Three EGP projects obtained 15-year power purchase agreements totaling 992 MW in the auction, the results of which were announced at the end of March (PFR, 3/30).

Two of the projects, the 427 MW Parque Solar Villanueva project and the 327 MW Parque Solar Villanueva III project, are located in Coahuila, while the third, the 238 MW Parque Solar Don José project, is in Guanajuato.

Deal watchers were struck by the aggressive bidding in the auction, and Enel was one of the most competitive bidders, securing one PPA priced as low as $35.44/MWh.

"We are not philanthropists," insisted **Francesco Venturini**, cfo of EGP, when questioned on the low PPA prices at the **Bloomberg** Future of Energy Summit in New York on April 4. "We make money on every single project we develop, construct and operate. These prices are achievable and there is a margin attached to them" (PFR, 4/4).

In its first quarter earnings report, published in May, Enel put the capital expenditure for the three Mexico projects at less than $900 million and said it expected to make an internal return on equity of between 12% and 14%.

Part of the reason EGP was able to bid so low in the auction was that, as a subsidiary of an investment grade European utility company, it could raise debt at the corporate level at a much lower cost than its rivals could borrow non-recourse project debt, said deal watchers.

Enel's senior unsecured debt is rated Baa2, BBB and BBB+ by **Moody's Investors Service**, **S&P Global Ratings** and **Fitch Ratings**, respectively.

It is unclear why, despite this, EGP has recently made inquiries about project finance. A spokesperson for the company in Rome was not immediately able to comment, but there are several possible reasons, according to deal watchers.

EGP might be considering raising project level debt because its global project pipeline is so large that the capital expenditure could put a strain on Enel's credit strength, according to the project finance banker.

Earlier this year, Enel revised its capital expenditure for growth for the next three years up from €14.3 billion ($16.1 billion) to €17 billion ($19.1 billion). EGP is on course to increase its rate of installation globally from 1 GW to 2 GW a year, Venturini said in April.

However, rating agency analysts say Enel is comfortably positioned in its current rating band.

Non-recourse project debt is often excluded from rating agency analysis, so this could in theory be a reason for Enel to raise project-level debt instead of corporate debt, said **Pilar Auguets**, an analyst at Fitch in Madrid. But she adds: "Enel is very well-placed in the rating they have with us, so there is no need for them to do this for that reason." Fitch includes Enel's non-recourse project cash flows in its analysis, Auguets adds.

Enel might have made the requests to obtain pricing information to compare different financing models or to carry out a competitive analysis of the market, suggests the project finance banker.

No project finance mandates are thought to have been signed yet for any of the projects that won contracts in the March auction, but Aldesa and GBM Infraestructura are expected to hire banks soon for their two wind projects totaling 60 MW in Yucatán, Parque Eólico Chacabal and Parque Eólico Chacabal II. ■

Details Emerge on Starwood Acquisition of NextEra Projects

« FROM PAGE 1

market and will be syndicated throughout August, adds a financier. Pricing on the loan could not be established by press time.

The total consideration for the projects is $760 million, including estimated working capital, says NextEra, which expects the sale to result in net proceeds of approximately $255 million after repayment of the existing project debt, according to a statement issued by the company on July 29.

Juno Beach, Fla.,-based NextEra announced its acquisition of **Energy Future Holdings Corp.**'s stake in **Oncor** and released its second quarter earnings on the same day (see story below).

Barclays is financial adviser to NextEra on the sale of the Marcus Hook projects, and **Simpson Thacher & Bartlett** is the company's legal counsel. **Morrison & Foerster** is Starwood's counsel.

The deal is slated to close in the fourth quarter, pending regulatory approvals.

The projects were previously owned by NextEra subsidiary **Florida Power & Light**. The Marcus Hook Energy Center has been online since 2004, while the Marcus Hook 50 Energy Center has been online since 1987.

The Florida utility shelved an auction of the larger of the two projects in 2005. Deal watchers speculated that the second round bids in that auction did not hit the seller's desired sale price. At the time, the project had a capacity of 744 MW (PFR, 7/8/04).

Scotia Capital, **Royal Bank of Scotland**, **ANZ Investment Bank** and **Credit Suisse First Boston** arranged a $400 million construction and term loan for the Marcus Hook Energy Center in 2003 (PFR, 3/7/04).

A spokesperson for MUFG in New York declined to comment. **Brad Nordholm**, ceo of Starwood, did not respond to a request for comment by press time. ■

NextEra To Acquire Oncor

NextEra Energy has agreed to acquire **Energy Future Holdings**' 80% stake in **Oncor Electric Delivery Co.**, the company announced on July 29, putting to rest years of speculation over who would ultimately buy the Texas utility from its bankrupt parent company.

The deal, which values Oncor at $18.4 billion, is part of the restructuring undertaken by EFH, which filed for Chapter 11 bankruptcy protection in April 2014. That enterprise value falls short of the $20 billion-plus figure that some analysts had suggested in recent weeks.

NextEra will pay $9.5 billion in cash and shares for the 80% stake, most of which will be used to repay EFH's creditors, including about $5.4 billion of first lien debtor-in-possession financing.

The relative amounts of cash and NextEra common stock will depend on cash on hand at EFH at the closing of the transaction.

NextEra expects to finance the cash portion of the deal with the issuance of $1.5 billion of convertible equity units, a yet to be announced amount of debt, and the proceeds of "recycling capital", which usually means asset sales.

NextEra also announced the sale of 840 MW of gas-fired projects in Pennsylvania to **Starwood Energy Group Global** for $760 million on July 29. That transaction will raise about $255 million for the seller, once existing project debt is repaid (PFR, 7/29).

A group of six banks led by **Credit Suisse** and **Bank of America Merrill Lynch** is advising NextEra on the Oncor acquisition. The company's other financial advisers are **Deutsche Bank, JP Morgan**, **UBS** and **Wells Fargo**. **Chadbourne & Parke** is NextEra's legal counsel.

Oncor's management will retain its Dallas headquarters and its management will remain in place, according to an investor presentation published by NextEra the same day.

Speculation that NextEra might acquire Oncor has been circulating for over two years (PFR, 7/29/14), and senior management at the company was interrogated on it as recently as July 27.

On NextEra's quarterly earnings call, **Evercore ISI** analyst **Greg Gordon** brought up the rumors to ceo **James Robo**.

"I doubt you're going to answer this question, but someone has to ask it," said Gordon. "Is there anything that you can say publicly about the Oncor process?"

"I know you had to ask it," replied Robo. "And I'm not going to comment on it."

FAILED DEALS

A consortium led by Dallas-based **Hunt Consolidated** had previously agreed to acquire Oncor in August 2015, but the deal eventually collapsed (PFR, 4/10/15). Although the proposed $18 million acquisition won approval from both the **U.S. Bankruptcy Court for the District of Delaware** and the **Public Utility Commission of Texas**, the conditions set by the PUC proved unacceptable to the Hunt family.

The NextEra deal will also require approval from the bankruptcy court and the Texas PUC.

The regulatory hurdles that utility mergers must overcome will be fresh in the memories of NextEra's senior management. The announcement of company's agreement to buy Oncor comes two weeks after the **Hawaii Public Utilities** Commission rejected NextEra's proposed acquisition of **Hawaii Electric Industries**. The unraveling of that deal saddled NextEra with a $90 million break-up fee to be paid to Hawaii Electric, as well as up to $5 million to reimburse the proposed target's transaction-related expenses (PFR, 7/18). ■

FAST FACT

$90M

Break-up fee to be paid by NextEra following the cancellation of its acquisition of Hawaii Electric Industries

MERGERS & ACQUISITIONS

D.E. Shaw Buys Solar Project on Ex-Nuclear Site

An affiliate of **D. E. Shaw Renewable Investments** has acquired a solar project on the site of a decommissioned nuclear plant in Sacramento County, Calif., from **First Solar**.

The 11 MW Rancho Seco project is under construction on 60 acres of the defunct Rancho Seco Nuclear Generating Station's campus, approximately 25 miles from California's capital.

The property belongs to the **Sacramento Municipal Utility District**, with which the Rancho Seco solar project signed a 20-year power purchase agreement last year (PFR, 11/5/15).

SMUD will allocate the project's output to customers that have signed up for its SolarShares program, including the Sacramento Golden 1 Center multi-purpose indoor arena.

Customers enrolled in the program pay SMUD a flat monthly fee based upon their historical energy use and the share of a nearby project's capacity that they want to receive. They then earn credits on their monthly bill for their share of the project's generation.

The Golden 1 Center will receive about half of the Rancho Seco project's output through the program, with the remainder to be sold to other commercial customers. No other customers have so far enrolled in SolarShares, but SMUD is in negotiations with the **California Department of General Services**.

The roughly 5.5 MW the Golden 1 Center receives from the Rancho Seco project will account for some 85% of the arena's demand. The center, which is being developed by the **City of Sacramento**, will generate the remaining 15% from solar panels mounted on its roof.

Rancho Seco is so far the only project enrolled in SolarShares, though there are plans for additional facilities to participate in the program, says a spokesperson for SMUD in Sacramento.

The purchase price for the Rancho Seco solar project could not immediately be learned.

The project has obtained all required approvals, says a spokesperson for First Solar in Tempe, Ariz., who referred other queries to DESRI. A spokesperson for **D.E. Shaw** in New York did not immediately respond to a request for comment.

NUCLEAR HISTORY

The 913 MW Rancho Seco nuclear reactor was taken offline in 1989 after Sacramento residents voted 53.4% to 46.6% to shutter the facility in a referendum on June 7 of that year.

The basis of the referendum was "public concern about plant safety coupled with poor economic performance," according to a September 1993 report by the U.S. **Congress' Office of Technology Assessment**.

Decommissioning of the project and cleanup of the site took 20 years and cost $500 million, the *Sacramento Bee* reported in 2009.

Besides the Rancho Seco solar project, the site is also home to the 500 MW Cosumnes gas-fired baseload facility, which went online in June 2006.

Cosumnes and the Rancho Seco solar project are the only generation assets on the property, but Rancho Seco is not the first solar project in the site's history, says the SMUD spokesperson. An approximately 3.2 MW solar array occupied part of the site from 1984 to 2013, when it was decommissioned. ■

Brookfield, Optimistic on Brazil, Close to Agreeing to Petrobras Deal

A consortium led by **Brookfield Infrastructure Partners** is close to reaching an agreement to acquire **Petrobras**' **Nova Transportadora do Sudeste** natural gas pipeline unit, BIP's ceo said on the company's second quarter earnings call on Aug. 3. An exclusive negotiation period ends this month.

BIP expects to enter into the agreement to acquire the roughly 1,550 mile pipeline system before the end of the year. In addition to BIP, the consortium includes **China Investment Corp.**, **First Reserve**, and Singaporean sovereign wealth fund **GIC**.

Petrobras initially set an initial 60-day exclusivity period for negotiations, with an option that would extend the period to 90 days, according to a Petrobras securities filing dated May 12. That option was triggered last month, with the extended period expiring in August.

Petrobras estimates the value of the assets at approximately $5 billion. Brookfield Infrastructure plans to invest at least $700 million in the deal. The expected contribution of the other consortium members and the total expected purchase price could not immediately be learned.

A spokesperson for BIP in New York declined to comment. Spokespeople for Petrobras in Rio de Janeiro did not immediately respond to requests for comment.

CONFIDENCE AMID 'UPHEAVAL'

Should the deal be agreed to, BIP will acquire long-life pipeline assets that serve as south-central Brazil's primary gas source. Nova Transportadora do Sudeste's business is fully contracted under long-term ship-or-pay agreements.

The pipelines "serve as the sole infrastructure that brings natural gas to the core economic regions in the highly populated states of São Paulo, Rio de Janeiro, and Minas Gerais," Brookfield Infrastructure ceo **Sam Pollock** said on the company's second quarter earnings call on Wednesday.

The acquisition talks come as Brazil prepares to host the 2016 Summer Olympics in the midst of a national political and economic crisis. Brazil's **Federal Senate** is expected to decide the fate of President **Dilma Rousseff**, who was impeached by the **Chamber of Deputies** and suspended from office in May, within the next month (PFR, 4/6).

Pollock referenced the political upheaval on the Aug. 3 earnings call, saying BIP is "taking a contrarian view" in a global economy wary of Latin America's biggest economy.

"While the country is experiencing political turmoil and a severe economic downturn, it is an economy with significant growth potential, solid underlying fundamentals and a strong democratic regime that is well-positioned for a good recovery in the medium-term," said Pollock.

Brookfield Infrastructure has been 41% owned by **Brookfield Asset Managers** since it became independent from the Toronto-based company in a 2008 spin off. ■

Our exclusive deal coverage includes:

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- Increased coverage of Mexico and Latin America
- The PPA Pulse and Yieldco Sweep
- Q&As with corporate, banking, legal and investment executives who are leading the industry

MERGERS & ACQUISITIONS

Start-Up Secures Debt from John Hancock for Solar Portfolio

Financial technology company **CleanCapital** has closed debt financing from **John Hancock Life Insurance Co.** for its acquisition of an 8 MW portfolio of commercial and industrial solar projects.

John Hancock provided an undisclosed amount of senior debt to fund CleanCapital's purchase of a $21 million portfolio of 14 solar projects in six states: Delaware, Colorado, California, North Carolina, Oregon and New Jersey.

The portfolio consists of operational ground-mounted and rooftop distributed generation projects which have offtake agreements with school districts, universities, a utility and a **Fortune** 100 company. The sellers of the facilities have not been disclosed, but are described as leading developers in the C&I space by CleanCapital.

The New York-based start-up was founded in 2015 by **Jon Powers**, **Thomas Byrne**, **Kevin Johnson** and **Marc Garrett**. The company invests in and manages operational C&I solar projects on behalf of investors, including institutional investors, family offices and investment funds.

"Our value proposition to our investors is that we are doing high level due diligence," Powers tells *PFR* from Washington, D.C. Powers was previously federal chief sustainability officer at the **White House Council on Environmental Quality** and before that, director of outreach at the **U.S. Army Energy Initiatives Task Force**.

Last summer the company built a list of every C&I project 10 MW in size or smaller in the U.S., which led to an initial pipeline of over $100 million of deals in exclusivity, he says.

The decline in yield companies has been advantageous for the company, Powers adds. "We're in a really unique time because of where the yieldcos, from their business model, failed. There's not a lot of existing opportunities for mid-level developers, specifically in the C&I space."

Jon Powers

CleanCapital is also developing a technology platform to streamline the sale process for developers and monitoring experience for investors.

A spokesperson for John Hancock in Boston did not respond to a request for comment by press time. ■

Sky Solar Seeks to Aquire Second Greenleaf Portfolio

Hong Kong-based **Sky Solar Holdings** is seeking to follow its recent acquisition of a 22.5 MW portfolio from **Greenleaf-TNX** with a second, larger purchase from the San Mateo, Calif.-based renewables sponsor.

Sky Capital Americas, a U.S. subsidiary of Sky Solar, has announced that it plans to acquire a 140 MW portfolio of development-stage solar assets from Greenleaf. Sky Solar says it plans to enter into "definitive documents" to acquire the portfolio within the third quarter of 2016.

In July, Sky Solar announced it had acquired the 22.5 MW portfolio of ground-mounted, carport and rooftop solar projects from Greenleaf (PFR, 7/27).

Similarly to the portfolio Sky Solar acquired last month, the majority of the projects in the 140 MW portfolio are located in California. The location of the remaining facilities could not be immediately established. The projects are slated to be online within the next two years.

Most of the assets listed on Greenleaf's website have been sold to Sky Solar, but the company still has an active pipeline, says Greenleaf managing member **Charlie Fiechter**.

> **"We are expanding our development efforts and will increase the amount of new projects we pursue."**

"We have a broad development pipeline inside the U.S.," he told *PFR* in an e-mail on July 27.

"In general our focus [is] in 1 to 10 MW large commercial C&I projects and small utility (feed-in-tariff) projects. We are expanding our development efforts and will increase the amount of new projects we pursue," he adds.

In addition to Asia and the Americas, Sky Solar develops, owns and operates solar projects in Europe and Africa. As of March 31, it had developed projects totaling an aggregate capacity of 259.1 MW and owned and operated 133.1 MW of projects. Details of the company's portfolio could not be established at press time.

Last summer, Sky Solar obtained $85 million in loans from the **Inter-American Development Bank** and two funds administered by the IDB, to finance the construction of 70 MW of solar projects in Uruguay (PFR, 7/14/15).

A spokesperson for Sky Solar

Charlie Fiechter

in Short Hills, N.J., was not immediately available for comment. Fiechter declined to comment on the pending acquisition. ■

STRATEGIES

Dominion Issues Debt for Questar Acquisition

Dominion Resources priced $1.3 billion of corporate bonds across three tranches on Aug. 4, some of which will go toward its $4.4 billion acquisition of **Questar**.

Mark McGettric, Dominion's cfo, had indicated that the company would not wait to begin issuing the debt that would be needed for the acquisition on the company's second quarter earnings call the previous day.

"We will be opportunistic on this," he said regarding the bond and mandatory convertible unit issuances that would make up the bulk of the long-term financing for the acquisition. "There's a lot of interest in both, from what we hear from bondholders and investors, and we'll go to the market when we think the timing is right."

The next morning, Dominion launched a three-tranche senior unsecured bond transaction with **Mizuho** and **RBC Capital Markets** as bookrunners.

The use of proceeds was given as "general corporate purposes, including to fund in part our merger with Questar," in a prospectus filed with the U.S. **Securities and Exchange Commission** on the day of the deal. It was not specified how much of the issuance would be allocated towards the merger.

Dominion Resources expects to raise between $1.25 billion and $1.55 billion this year for its "base financing needs" in addition to the $1.5 billion it will use to fund the Questar purchase, according to an investor presentation published after the second quarter earnings call.

The debt could include private placements, asset-level loans and hybrid bonds, the presentation notes.

Before the Aug. 4 transaction, Dominion had already raised $500 million of debt, not including debt raised by its **Virginia Electric and Power Company** subsidiary.

The initial price thoughts on the three, five and 10-year bonds were in the area of 110 basis points, 125 bps and 160 bps over U.S. Treasuries, respectively. The pricing tightened during execution, with guidance on all three tranches coming in 20 bps inside initial price thoughts.

A banker at one of the bookrunners said that amount of price movement was consistent with what had been seen in the market recently.

The final pricing was 85 bps, 100 bps and 135 bps, which the banker said represented a new issue concession of about 2 bps on the three-year, 3 bps on the five-year and zero on the 10-year.

The three-year was sized at $500 million, while the five and 10-years were sized at $400 million each.

The deal was more than five times oversubscribed, with investors showing a slight preference for the five-year note, the banker added.

Dominion's senior notes are rated Baa2, BBB and BBB+ by **Moody's Investors Service**, **S&P Global Ratings** and **Fitch Ratings**, respectively. The rating from S&P is one notch lower than the company's issuer credit rating, which the agency says is because Dominion has priority obligations exceeding 20% of its total assets. ■

EnSync Sells Contracted Solar-Plus-Storage Projects

EnSync Energy Systems has sold a portfolio of five contracted Hawaii solar projects, including three combined generation and storage projects, to **AEP OnSite Partners**.

The five projects, located on the Big Island and Maui, have a total generating capacity of 1.3 MW and a combined storage capacity of 800 kWh, **Dan Nordloh**, executive v.p. at EnSync, tells *PFR* from the company's Milwaukee headquarters.

Of the three combined solar and storage projects, one is located at, and has a power purchase agreement with, **Century West** condominiums in Honolulu. Another is at the **University of Nations**, an unaccredited educational institution in Kona, Hawaii, which will also buy the generation.

The solar-plus-storage PPAs are the first of their kind in Hawaii, according to a statement issued by EnSync earlier this week.

A spokesperson for **AEP Energy** in Columbus, Ohio, did not respond to requests for comment. ■

POWER TWEETS

Jigar Shah @JigarShahDC
Since 2014, 59% of residential solar installations were in zip codes with median incomes of $40,000-$70,000 per year seia.org

Andrew Cuomo @NYGovCuomo
Today we announce the establishment of NY's Clean Energy Standard mandating 50% renewables by 2030: on.ny.gov/2aJN3ZS #NYActsonClimate

Olivia Feld @oliviafeld
"People don't have such good memories," a banker tells me when asked about the resurgence of the turbine loans for wind project developers.

ThompsonEnergy @ThompsonEnergy
Transco's proposed $471.9 million Dalton Expansion #natgas pipeline project in GA, NC & VA authorized by @FERC. bit.ly/2aFacIL

IEA @IEA
Growth in global #gas consumption to increase at avg. annual rate of 1.5% from 2015-2021 bit.ly/2aXLab8 pic.twitter.com/lig0UPAuO0

Richard Metcalf @MetcalfReports
PPA prices in the latest Chile power auction will be about 50% lower than last time, says Energy Minister Pacheco df.cl/noticias/empre...

STRATEGIES

Michigan Utility Prices $450M Post-Earnings Bond

Consumers Energy Co. issued a $450 million bond on Aug. 1 after releasing its second quarter earnings report the previous week. Other utilities are expected to follow suit in the coming days as they seek to meet their funding needs before the market slowdown at the end of August.

Investors were eager to take a look at Consumers Energy's deal following a series of earnings reports from utility companies, said a banker at one of the active bookrunners, **Bank of America Merrill Lynch**, **Citigroup**, **MUFG**, **Mizuho** and **Scotiabank**. "I think that will persist in the sector," he added, referring to the positive reception of the deal.

The Michigan-based regulated utility company's 30-year first mortgage bond was announced with initial price thoughts in the 120 basis points over U.S. Treasuries. The bookrunners set the size of the deal at $450 million and indicated that it would not grow. Guidance was in the 110 bps area and the bond was priced at 105 bps.

"We ended up with interest well north of what we announced, which was $450 million 'will not grow', and we were able to price it inside of their existing bonds," said the bookrunner, without giving the precise size of the order book.

The company's FMBs are rated A1 by **Moody's Investors Service**, A by **S&P Global Ratings** and A+ by **Fitch Ratings**.

Consumers Energy will use the proceeds of the bond to pay off at maturity its 5.5% first mortgage bond due Aug. 15 and for general corporate purposes.

A recent report from research firm **CreditSights** noted that bonds issued by utility companies which source more than 30% of their generation from coal could come under selling pressure as insurance companies divest from firms that rely on coal for their revenues (PFR, 7/28).

Consumers Energy, which is a wholly-owned subsidiary of Jackson, Mich.-based **CMS Energy**, retired seven coal-fired units totaling about 950 MW at three of its facilities in April. As a result, it produces less than 24% of its generation from coal, according to its second quarter investor presentation. In 2005, the figure was 41%.

"Insurance companies do tend to be big supporters of the space," said the banker. "The sector issues long and does a lot of 30-year deals, and insurance companies are certainly the biggest buyers of long-duration fixed-income corporate bonds, so you have a natural alignment there."

However, there are also many non-insurance investors that support the same deals, he adds, and most investors do not appear to be avoiding deals purely on the basis of coal-fired generation.

"We haven't seen anyone who said, 'normally we'd be here but now I can't because of some recent viewpoints regarding energy generation and coal'," he said. ■

North America Investment Grade Energy & Utility Corporate Bonds, Year to Date, 2016

dealogic

Rank	Lead manager	Amount $M	No of issues	Share %
1	JP Morgan	6,312	23	11.57
2	Scotiabank	4,803	19	8.81
3	Bank of America Merrill Lynch	3,713	26	6.81
4	Barclays	3,444	22	6.31
5	Citi	3,397	21	6.23
6	Morgan Stanley	3,134	15	5.74
7	MUFG	3,129	20	5.74
8	RBC Capital Markets	2,898	15	5.31
	Total eligible issuance	**54,549**	**94**	**100**

All bookrunners, data to August 4, 2016

ALTERNATING CURRENT

Apple Wins Approval to Sell Generation

Apple has officially entered the power generation business. The technology company was granted market-based rate authority to sell generation it owns or controls by the U.S. **Federal Energy Regulation Commission** on Aug. 4.

Apple Energy, a wholly owned subsidiary of Apple, filed an application with the regulator on June 6 asking for approval to sell wholesale power and other grid services directly to customers in **PJM Interconnection**, **New York Independent System Operator**, **ISO New England**, **California Independent System Operator**, **Midcontinent Independent System Operator** and **Southwest Power Pool**.

The Cupertino, Calif-based company owns the Ft. Churchill 19.9 MW solar project in Lyon County, Nev., the 18 MW Apple Campus 2 solar and fuel cell projects at the company's new headquarters in Cupertino, the 50 MW Bonnybrooke solar project in Pinal County, Ariz., and the 67.5 MW Apple Data Center solar and biogas projects in Catawba County, N.C. Apple has a 25-year power purchase agreement to buy 130 MW from the **First Solar** 280 MW California Flats solar project in Monterey County, Calif., (PFR, 2/20/15).

The company's data centers in California, North Carolina, Oregon and Nevada run on clean power. Apple says that it is constantly looking for ways use solely renewable power.

Google won approval to sell wholesale power from FERC in 2010 (PFR, 2/18/10). ■

QUOTE OF THE WEEK

"It's put a lot of pressure on institutional investors to find yield generating assets. We see very strong interest from institutional investors, insurance, pension funds, who are looking for long-term solar assets."

Tom Buttgenbach, president and ceo of **8minutenergy**, on the impact of low interest rates on the investment environment for solar projects (see story, page 2).