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Power Finance & Risk

Exclusive Insight on Power M&A and Project Financing

By the publisher of GlobalCapital

PROJECT FINANCE

Sponsor Ponders Chile Project

AES Corp. is deciding whether to proceed with the Alto Maipo hydro project in Chile, say analysts.

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MERGERS & ACQUISTIONS

26 GW IPP Confirms Sale Talks

Houston-based **Calpine Corp.** has disclosed that its board is in active negotiations to find a buyer.

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PEOPLE & FIRMS

Banker Returns to Buy-Side

A project finance banker has moved back into the buy-side with a job at **Siemens Financial Services**.

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First Solar Finds Potential Buyers for Projects Once Intended for Yieldco

Fotios Tsarouhis, Olivia Feld

First Solar has lined up a buyer for one California solar asset and is negotiating the sale of a second, both previously destined to be dropped into the company's jointly-owned yield company.

The Tempe, Ariz.-based solar shop has entered into an agreement to sell its 40 MW Cuyama project in Santa Barbara County and is in late-stage exclusive talks to offload the 280 MW California Flats project in Monterey County, cfo **Alexander Bradley** said on the company's quarterly earnings call on July 27.

The identity of the buyer of each project could not immediately be learned.

The Cuyama project is currently under construction and slated to be completed by the end of the year. The California Flats Solar Project is also under construction and 66% complete, despite it not being fully permitted as of June 30, according to the company's 10-Q filing with the U.S. **Securities and Exchange Commission**.

Both projects are fully contracted. **Apple** has a 25-year power purchase agreement for 130 MW of California Flats' output and **Pacific Gas and Electric** will purchase the remaining 150 MW under a separate PPA (PFR, 2/20/15). PG&E will purchase Cuyama's full output under a 25-year PPA.

First Solar expects to close the sale of Cuyama this quarter and complete its divestment of California Flats before the end of the year.

The two projects were listed on the right of first offer list for **8Point3 Energy Partners**, the developer's joint yield company with **SunPower Corp.**, alongside the 179 MW Switch Station project, which was sold to **EDF Renewable Energy** in a deal that closed on June 30 (PFR, 5/9).

However, earlier this year First Solar and Sun-

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Yieldco Explores "Options" to Reduce ERCOT Exposure

Richard Metcalf

TerraForm Power, the yield company that **Brookfield Asset Management** is in the process of taking over from **SunEdison**, is exploring ways to mitigate its exposure to the Texas market, where it owns two hedged wind projects.

Challenging market conditions in **ERCOT** are among the factors that the company blamed for a downward revision of its 2017 income estimates during an earnings call on Aug. 1.

"Similar to many of our peers with exposure in ERCOT, there is greater than anticipated capacity build-out combined with these rolling transmission repairs, and these have driven down prices," said the yieldco's cfo, **Rebecca Cranna**, on the

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NRG Shoots to Sell Thermal Plants by Year End

Olivia Feld

NRG Energy plans to close sales of a number of its conventional projects by the end of the year.

"Given where we are in the processes and the fact that we started earlier on some of them, in particular, in the conventional side, my expectation is, it would have a clear line of sight by the end of the year," said **Mauricio Gutierrez**, ceo of NRG Energy, in response to a question on the

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Recurrent Appoints Multiple Senior Directors

Olivia Feld

Recurrent Energy, which lost at least a dozen staff in the past year, has made a trio of senior hires.

The **Canadian Solar**-owned utility-scale solar sponsor announced its first senior appointments since the departure of at least 8% of its work force last winter on Aug. 1.

Among the

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

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PROJECT FINANCE

Sempra Energy has four Great Valley solar projects under construction in Fresno County, Calif.

Wells Fargo to Invest Tax Equity in Sempra Solar Quartet

Wells Fargo is investing tax equity in a portfolio of four California solar projects owned by **Sempra Energy**.

The bank will acquire all the tax equity interests in the 102.5 MW Great Valley Solar 1, 62.5 MW Great Valley Solar 2, 20 MW Great Valley Solar 3 and 20 MW Great Valley Solar 4 projects, according to a July 31 filing with the U.S. **Federal Energy Regulatory Commission**.

All four of the facilities, which are under construction in Fresno County, are contracted under 20-year power purchase agreements.

Great Valley Solar 1, 2, 3 and 4 will sell their output to **Marin Clean Energy**, S**acramento Municipal Utility District**, **Southern California Edison** and **Pacific Gas and Electric**, respectively.

The size of the tax equity investment and the total construction cost of the projects could not immediately be learned. Representatives of Sempra in San Diego and Wells Fargo in San Francisco did not respond to inquiries. ■

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Do you have questions, comments or criticisms about a story that appeared in ***PFR***? Should we be covering more or less of a given area? The staff of ***PFR*** is committed as ever to evolving with the markets and we welcome your feedback.

Feel free to contact **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	Adviser	Status/Comment
Ares-EIF	Newark (705 MW Gas)	Newark, N.J.	Citi	Indications of interest are expected by late July or early August (PFR, 7/3).
	Plum Point (670 MW Coal)	Osceola, Ark.	Citi	Bids for the portfolio were due the first week of June (PFR, 5/30).
	Carneys Point (262 MW Coal)	Carneys Point, N.J.		
	Logan (219 MW Coal)	Logan Township, N.J.		
	Morgantown (62 MW Waste coal)	Morgantown, W.Va.		
Ares-EIF, I Squared Capital	Oregon Clean Energy Center (869 MW Gas)	Lucas County, Ohio	Barclays, Credit Suisse	The two banks are running a sale process for the project (PFR, 5/15).
Apex Clean Energy	Portfolio (12 GW, mostly Wind)	U.S.	CohnReznick Capial	The company is looking to sell itself to a strategic investor (PFR, 5/1).
Bester Energy	Torreoncitos (36 MW Solar, 50%)	Chihuahua, Mexico		InfraRed Capital Partners is acquiring a 50% stake in the projects (PFR, 7/31).
	Rancho el Trece (36 MW Solar, 50%)	Chihuahua, Mexico		
Canadian Solar	Portfolio (703 MW DC Solar)	U.S.		Canadian Solar has taken second-round bids (PFR, 6/12).
● Calpine Corp.	Entire Portfolio (26 GW)	U.S.		The company has confirmed it is in active negotiations to find a potential buyer (see story, page 9)
● EDF	Great Western Wind (225 MW Wind, 50%)	Ellis and Woodward counties, Okla.		Alliant Energy Corp. closed its purchase of a 50% stake in the project on July 28 (PFR, 6/26).
● Engie	Trompezon (157 MW Solar)	Aguascalientes, Mexico		Engie is looking for "business partners" for the two contracted renewable projects (see story, page 8).
	Tres Mesas 3 (52 MW Wind)	Tamaulipas, Mexico		
● European Energy, Eolica Tecnologia, Solar Tecnologia	Boa Hora (91 MW DC Solar)	Tacaimbó, Pernambuco, Brazil		AES Tietê has acquired the project, with its 20-year contract, and intends to relocate it to São Paulo (see story, page 10).
Eversource Energy	Portfolio (1.2 GW Biomass, Coal, Hydro, Oil)	New Hampshire	JP Morgan	The auction for the assets is in a second round and final bids are due in August (PFR, 7/3).
● First Solar	Cuyama (40 MW Solar)	Santa Barbara County, Calif.		First Solar has signed an agreement to sell the project to an undisclosed buyer (see story, page 1).
	California Flats (280 MW Solar)	Monterey County, Calif.		First Solar is negotiating the sale of the project (see story, page 1).
● First Solar, SunPower	8Point3 Energy Partners (432 MW Solar, 50%)	U.S.	BAML (First Solar), Goldman Sachs (SunPower)	SunPower has decided to sell its stake in the yieldco (see story, page 8).
Infinity Renewables	(6.6 GW Wind, Solar)	U.S.	CIBC	The company is for sale (PFR, 6/5).
Kenon Holdings	IC Power (3,894 MW Gas, Hydro, Oil, Wind)	Latin America, Caribbean, Israel		Kenon has entered negotiations to sell the subsidiary (PFR, 7/31).
● Koch Industries	Odessa (1,054 MW Gas)	Odessa, Texas		Vistra Energy, the parent company of TXU Energy and Luminant, closed its acquisition of the project on Aug. 1 (PFR, 7/17).
Morgan Stanley	NaturEner USA (399 MW Wind)	Montana		Morgan Stanley is selling NaturEner, which owns development wind assets in Alberta as well as the 399 MW operational wind portfolio in Montana (PFR, 5/15).
NRG Energy	Portfolio (6 GW Conventional), NRG Yield	U.S.	Citi, Goldman Sachs, Morgan Stanley	NRG is looking to raise $4 billion from the sales (PFR, 7/17).
Odebrecht	Chaglla (406 MW Hydro)	Huánuco Region, Peru	Itaú, Scotiabank, SMBC Nikko Securities	Odebrecht is expected to select a buyer this summer (PFR, 6/12).
● FIMI Opportunity Funds, Bronicki Investments	Ormat Technologies (727 MW Geothermal, 22.1%)	U.S., Guatemala, Guadeloupe, Kenya		ORIX closed its acquisition of a 22.1% stake in Ormat for $627 million on July 26 (PFR, 5/29).
● RES Americas	Cactus Flats (148 MW Wind)	Concho County, Texas		Southern Power is acquiring the project, which is contracted with General Mills and General Motors (see story, page 8).
SunEdison	Canadian Hills Wind (298.45 MW Wind)	Canadian County, Okla.	Rothschild (seller)	Dutch fund manager DIF has closed its acquisition of the projects (PFR, 7/31).
	Goshen Phase (124.5 MW Wind)	Bonneville County, Idaho		
	Meadow Creek (119.7 MW Wind)			
	Rockland (79.86 MW Wind)	American Falls, Idaho		
	Portfolio (Community and industrial solar)	Minnesota		Swedish company Nordic Solar has acquired two of the 22 projects that were slated for acquisition by SoCore (PFR, 7/31).
● Teck Resources	Waneta Dam (496 MW Hydro, 66.7%)	British Columbia		BC Hydro is exercising its right of first offer to purchase the stake, overriding a previous agreement with Fortis (see story, page 9).
● TerraForm Power	Portfolio (11.4 MW Resi solar)	Arizona, California, Colorado, Connecticut, Massachusetts, Maryland, Nevada, New Jersey, New York		Greenbacker Renewable Energy Co. has acquired the portfolios in two separate transactions (see story, page 9).

● **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)	Deal Type	Loan Amount	Tenor	Notes
Acciona	Puerto Libertad (270 MW Solar)	Sonora, Mexico	TBA	TBA	TBA		Acciona plans to expand the project by 90 MW (PFR, 7/17).
AES Corp.	AES Southland (1.4 GW Gas, Battery Storage)	Los Angeles and Orange counties, Calif.	MUFG, JP Morgan, Citi	Term Loan	$520M	C+7-yr	The banks were marketing the loan at Libor+175 bps (PFR, 5/30).
				Letter of Credit	$300M	C+7-yr	
				Private Placement	$1.5B	22-yr	The private placement was priced at T+215 bps, which includes a 25 bp premium for a delayed draw feature (PFR, 6/26).
Advanced Power	South Field (1.1 GW Gas)	Columbiana County, Ohio	GE EFS	Debt	TBA	TBA	GE EFS is left lead on the debt raise. Other joint lead arrangers will be selected later this year (PFR, 5/1).
Alterra Power Corp.	Flat Top (200 MW Wind)	Comanche and Mills counties, Texas	BlackRock Real Assets	Equity, 49%	TBA		Alterra Power Corp. has closed debt, equity and tax equity for the project (PFR, 7/31).
			Citi, RBC, Santander	Debt	$288M	TBA	
			BHE, Citi	Tax Equity	$221M		
American Power Ventures	Renaissance (1 GW Gas)	Greene County, Pa.	Fieldstone (adviser)	Debt, Equity	$900M		The sponsor has mandated boutique investment bank Fieldstone Private Capital Group to raise debt and equity for the project (PFR, 4/17).
EDP Renewables North America	Portfolio (297.1 Wind)	Indiana, Oklahoma, Wisconsin	BNY Mellon	Tax Equity	$370M		BNY closed its investment in the three-project portfolio on July 14 (PFR, 7/24).
EDF Renewable Energy	Nicolas-Riou (224.25 MW Wind)	Bas Saint Laurent, Québec	TBA	Debt	≤$500M		EDF and its co-owners, groups representing several municipalities and a First Nation, are seeking debt financing for the project (PFR, 7/10).
Iberdrola	Two unknown projects (370 MW Wind)	Santiago and Hermosillo, Mexico	TBA	TBA	TBA	TBA	Construction on the projects was expected to begin in July (PFR, 7/17).
Invenergy	Wind Catcher (2 GW Wind)	Cimarron and Texas counties, Okla.	TBA	Debt	$2B		Invenergy is preparing to raise financing for the project (PFR, 7/31).
LS Power Development	Armstrong (603 MW Gas)	Shelocta, Pa.	BNP Paribas, CIT Bank, Deutsche Bank, GE Energy Financial Services, ICBC,	Term Loan	365M	7-yr	The debt will finance LS Power's acquisition of the projects, collectively known as Spruce Generation, from Dynegy (PFR, 7/31).
	Troy (584 MW Gas)	Luckey, Ohio		Letter of Credit	$30M		
NRG Energy	Buckthorn (100.5 MW Wind)	Erath County, Texas	RBC Capital Markets	Construction Loan	$97M	TBA	The project represents John Laing's second U.S. wind project and its first renewables investment in Texas (PFR, 7/17).
				Letters of Credit	$26.6M	TBA	
				Tax Equity Bridge Loan	$117.2M		
			John Laing Group	Equity	90.50%		
NRG Energy	Buckthorn (154 MW Solar)	Pecos County, Texas	Crédit Agricole, Santander, Keybanc, MUFG, SMBC	Mini-perm	$140M	C+7-yr	NRG Energy has completed project financing for the facility (PFR, 6/12).
				Tax Equity Bridge Loan	$55M	TBA	
				Letters of Credit	$35M	TBA	
Pattern Development	Henvey Inlet (300 MW Wind)	Henvey Inlet First Nation, Ontario	TBA	Debt	TBA		Pattern is seeking debt for the project (PFR, 6/19).
Quantum Utility Generation	Moundsville (643 MW Gas)	Marshall County, W.Va.		Debt	TBA		Quantum could launch a debt financing for the project this year (PFR, 2/6).
			BNP Paribas	Equity			
Sojitz Corp., Shikoku Electric Power Co., Sojitz Corp. of America, Eiffage	Huatacondo (98 MW Solar)	Huatacondo, Tarapacá, Chile	SMBC, Mizuho, Iyo Bank	Debt	$73.31M	18-yr	Nippon Export and Investment Insurance is insuring $47.2 million of the debt (PFR, 7/3).
Swift Current Energy	HillTopper (175 MW-200 MW Solar)	Logan County, Ill.		Debt, Tax Equity	TBA		The sponsor plans to finance the project with debt and tax equity (PFR, 2/13).
Terna	Unknown (132-mile Transmission)	Uruguay	BBVA	Debt	$25M	15-yr	The transmission, which will stretch from the country's east to northern Uruguay, is backed by a loan BBVA claims is the first project finance "green loan" (PFR, 7/24).
			Inter-American Development Bank		$56M	17-yr	
Tyr Energy	Hickory Run (1 GW Gas)	Lawrence County, Pa.	BNP, BAML	Debt	TBA		The deal was expected to come to the market shortly after the announcement of the PJM auction results (PFR, 6/12).
US Solar Corp.	Portfolio (100 MW Community Solar)	Minnesota	North Sky Capital	TBA	TBA		North Sky Capital is being advised by New Energy Capital Partners (PFR, 7/3).
● Wells Fargo	Great Valley portfolio (205 MW Solar)	California	Wells Fargo	Tax Equity	TBA		Wells Fargo is investing tax equity in the four-project portfolio (see story, page 2).

● **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 Managing Editor Olivia Feld at (212) 224-3260 or e-mail olivia.feld@powerfinancerisk.com

PROJECT FINANCE

AES in Talks with Lenders to Chile Hydro Project

AES Corp. is deciding whether to proceed with the Alto Maipo hydro project in Chile, according to analysts, amid talks with creditors over a technical default as the over-budget development seeks a new contractor.

On July 31, majority sponsor AES revealed a series of difficulties hampering progress with the run-of-river project in a filing with the U.S. **Securities and Exchange Commission**. AES owns 62% of the 531 MW project.

The problems include "construction difficulties, including greater than expected costs and slower than anticipated productivity by construction contractors towards the agreed-upon milestones," which has led to the termination of a contract with one of the companies originally hired to build the project, **Constructora Nuevo Maipo**.

This put the project into technical default, according to ratings agency **Moody's Investors Service**.

Barclays analysts expect that AES, which has made a $360 million equity investment in Alto Maipo and is due to invest $60 million more, will make a decision soon whether to continue with the venture or abandon it.

"We expect AES will make a decision in the next few weeks on whether to move forward with the project," wrote analysts **Gregg Orrill** and **Daniel Ford** in a research note on Aug. 1.

Having initially pegged the cost at $2 billion, AES is forecasting a 22% increase in the budget, putting the final price tag at around $2.44 billion.

MULTILATERALS ON THE HOOK

So far, the bulk of the financing for Alto Maipo has come from a syndicate of nine banks, mostly multilateral institutions, in the form of a $1.2 billion 20-year loan signed in December 2013 (PFR, 12/12/13).

The banks are now in talks with AES's Chilean subsidiary **AES Gener**, according to the **Inter-American Development Bank**, which provided $200 million of the 2013 loan.

"We have taken note of the recent communication of AES Gener to the **Superintendencia de Valores y Seguros** [Securities and Insurance Commission] in Chile, and joined the rest of the creditors of Alto Maipo in discussions with AES Gener," a spokesperson for the IDB tells *PFR* via email.

The **International Finance Corp.** stumped up $150 million of the 2013 deal, while the **Overseas Private Investment Corp.**, a U.S. agency, also provided $250 million.

> **"We expect AES will make a decision in the next few weeks on whether to move forward with the project"**

OPIC's financing of Chilean renewable projects has been under U.S. government scrutiny since 2016 because around $890 million of loans, representing three out of five Chilean projects financed by the agency, have had to be restructured, *Reuters* reported in June (PFR, 6/1).

The other banks in the 2013 syndicate were Norway's **DNB**, Germany's **KfW IPEX-Bank** and four Chilean lenders—**CorpBanca**, **Banco de Credito e Inversiones**, **Banco Itaú Chile** and **Banco del Estado de Chile**.

> **"[AES] is now seeking additional finance from international banks to fill the gap from Luksic's exit"**

KfW and DNB declined to comment on whether they would push for a restructuring if AES exits its position. The other banks did not respond to requests for comment.

A corporate attorney not involved in the project told *PFR* that it seemed "likely" that restructuring, refinancing or both would be necessary if AES does quit. AES did not respond to a request for comment.

The ownership of the project was reorganized in January, with AES Gener picking up a 40% ownership interest from **Minera Los Pelambres**, a subsidiary of mining company **Antofagasta**, for a nominal amount, and selling a 6.7% stake to the project's remaining construction contractor, **Strabag**.

Antofagasta, which is majority-owned by Chilean conglomerate **Grupo Luksic**, recorded a loss of $350 million as a result of its exit from the project, according to the Washington, D.C.-based **Center for International Environmental Law**.

AES "is now seeking additional finance from international banks to fill the gap from Luksic's exit," wrote CIEL in a whitepaper in February.

The original project financing was based partly on a 20-year power purchase agreement with Minera Los Pelambres for 110 MW of its output. As part of the restructuring of the ownership of the project earlier this year, the miner negotiated a reduction in the pricing of the PPA.

The project is located about 40 miles south of Santiago and will interconnect with the **Sistema Interconectado Central** grid system.

Meanwhile, the technical default that occurred when Constructora Nuevo Maipo's contract was terminated means that additional funds cannot be disbursed to Alto Maipo under the existing syndicated loan, according to Moody's. The project's cash balance includes $73 million in bank guarantees that were collected in connection with the termination of the construction company, the rating agency notes.

On Aug. 2, Moody's lowered the outlook on AES Gener's Baa3 rataing from stable to negative, citing the problems with Alto Maipo as the reason.

CRITICISM

The project has attracted criticism from environmental and human rights groups, with more than 15,000 Chileans demonstrating for the project's cancellation, according to CIEL.

The main complaints are claims of limitations to water access, erosion of the riverbed, droughts, impacts on protected areas and tourism and a risk to human rights centered on access to clean water. ■

MERGERS & ACQUISITIONS

Yieldco Explores "Options" to Reduce ERCOT Exposure

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call. "So we are prudently exploring options to reduce our exposure to these market pricing movements."

The wind assets TerraForm Power owns in Texas are a 90% stake in the 208 MW Rattlesnake project in Glasscock County and the 200 MW South Plains I project in Floyd County, Texas.

"We are prudently exploring options to reduce our exposure to these market pricing movements"

The Rattlesnake project has been online since 2015 and is two years through a 13-year hedge agreement with **Merrill Lynch Commodities**. TerraForm Power acquired it from **Invenergy** in December 2015 as part of a larger portfolio, a deal originally struck jointly with SunEdison the previous July (PFR, 7/7/15, PFR, 12/16/15). Invenergy retains a 10% stake in the project.

The South Plains I project was originally developed and financed by **First Wind**, which SunEdison and TerraForm Power acquired along with its operational assets for $2.4 billion in a deal first announced in 2014 (PFR, 11/18/14). Like the Rattlesnake project, the South Plains I facility is two years through a 13-year hedge.

The projects sell a portion of their output on a merchant basis, according to TerraForm Power's latest 10-K filing with the U.S. **Securities and Exchange Commission**, which covers the full year 2016. The yieldco is still working on its 10-Q filings for the first and second quarters of 2017.

Since 2015, when the projects came online, power prices in ERCOT have sometimes been negative, and TerraForm has paid grid operators to take the generation.

"Because our tax investors receive production tax credits from the production of energy from our wind plants, it may be economical for the plant to continue to produce power at negative prices, which results in our wind facility paying for the power it produces," the yieldco explains in the 10-K form.

Furthermore, even for the hedged portion of a project's output, the power price at the node where it interconnects with the grid can differ from the price at the hub where its hedge contract is settled. Projects can lose out financially as a result of this phenomenon, which is known as 'basis differential risk' or 'basis risk'.

The yieldco does not yet have plans to sell the projects but is considering a number of options to mitigate its exposure to price fluctuations in ERCOT, *PFR* understands. A representative of the company declined to comment beyond what was said on the earnings call.

"I'd be surprised if they're trying to sell them, but I'm also not surprised they don't like having exposure to the market," says an investment banker. "There definitely aren't buyers that will pay wide of what they paid for them."

Re-hedging the projects, on the other hand, presents its own challenges, the banker notes. "If they were to bundle some assets together, Brookfield, maybe, given its size and sophistication, could re-hedge those," he says. "But there are lenders, tax equity investors and different partnership agreements with each projects. A lot of consents would be required."

"I'd be surprised if they're trying to sell them, but I'm also not surprised they don't like having exposure to the market"

Meanwhile, progress has been made on the transfer of the sponsorship stake in the yieldco from SunEdison to Brookfield.

TerraForm Power completed the sale of its U.K. portfolio on May 11 for net proceeds of $211 million. Also in May, the waiting period for the merger under the Hart-Scott-Rodino Antitrust Improvements Act was terminated.

In June, a settlement between TerraForm Power and SunEdison won bankruptcy court approval, and more recently, in July, the **Texas Public Utilities Commission** approved the acquisition. ■

TerraForm Power Revised 2017 Estimates

	Revised Estimate	Previous Estimate
Net Revenue ($M)	590-610	570-670
Net Income/(Loss) ($M)	(150)-(130)	(50)-50
CAFD*	90-110	120

*Excludes non-operating (non-core) cash costs incurred

Source: TerraForm Power investor presentation, Aug. 1, 2017

TERP Seeks Bondholder Approval for Brookfield Deal

On Aug. 2, **TerraForm Power** asked holders of two series of high yield bonds it originally issued in 2015 for permission to alter the terms of the debt to allow for a change of sponsor from **SunEdison** to **Brookfield Asset Management**.

The yield company issued an $800 million eight-year note with a 5.875% coupon in January 2015 to partly refinance acquisition costs (PFR, 1/27/15). A $300 million 10-year issuance paying 6.125% followed in July of the same year.

The yieldco is offering bondholders $2.50 for each $1,000 of the notes they hold as an incentive to give their consent.

RBC Capital Markets is acting as the consent solicitation agent on the deal, which expires at 5pm New York time on Aug. 10. ■

NRG Shoots to Sell Thermal Plants by Year End

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timeline for the planned divestment during the company's second quarter earnings call.

The independent power producer announced last month that it was planning to sell 6 GW of assets, its yield company and renewables platform as part of a transformation plan to improve the company's balance sheet. **Citi**, **Goldman Sachs** and **Morgan Stanley** are advising NRG on the project sales.

NRG says it aims to raise between $2.5 billion and $4 billion from the asset sales, the monetization of 50% to 100% of its interest in **NRG Yield** and the divestment of its renewables business. The company says it owns approximately 150 generation assets with a total capacity of almost 50 GW.

The portfolio of generation assets stands out among other projects currently for sale because they are offered as an "integrated and comprehensive set of businesses and assets", added Gutierrez on the call.

Dynergy, **Calpine**, **FirstEnergy** and **American Electric Power** all have conventional assets in the U.S. for sale, while **Morgan Stanley**, **Starwood Energy Group** and **Covanta** are some of the owners that have renewable assets for sale.

NRG reported losses of $626 million in the second quarter of the year on Aug. 3, whereas its yieldco reported a profit of $45 million in the same period, in results published the same day.

NRG's share price has risen since it announced its so-called three-year transformation plan. At the end of trading on Aug. 3, the stock was trading at $23.98, compared to $16.30 on July 11, the day before the strategy was unveiled.

DROPDOWNS

The announcement that NRG Yield is for sale has not halted dropdowns from its sponsor. On Aug. 1, the company closed the sale of its remaining 25% interest in **NRG Wind TE Holdco**, a portfolio of 12 wind assets, to NRG Yield for $41.5 million.

NRG has also offered the yieldco 38 MW of distributed and small utility-scale solar projects that are not on its right-of-first-offer list and the opportunity to form a new distributed solar partnership enabling up to $50 million in investment by NRG Yield, according to the company's filing with the U.S. **Securities and Exchange Commission**.

GENON BANKRUPTCY

NRG was able to exclude its subsidiary **GenOn Energy**'s earnings from its report, having deconsolidated the bankrupt company from NRG's consolidated financial statements. GenOn filed for Chapter 11 bankruptcy protection on June 14, after the company formally entered into a restructuring agreement with its creditors. ■

AES, AIMCo Seal sPower Purchase

AES Corp. and **Alberta Investment Management Corp.** have closed their acquisition of **sPower** from **Fir Tree Partners**.

The terms of the $1.58 billion deal were agreed to earlier this year, following an auction run by a group of investment banks led by **Barclays** (PFR, 2/24).

Citi, **CohnReznick Capital** and **Marathon Capital** were the other sell-side advisers, while **Credit Suisse** advised AES and AIMCo.

The U.S. **Federal Energy Regulatory Commission** approved the deal on April 21 and it closed on July 25.

sPower owns 1.3 GW of operational solar and wind assets in 11 U.S. states and a 10 GW-plus development pipeline spanning 21 states, according to its website. The company also owns approximately 30 MW of solar generation in the U.K.

While contracted solar assets continue to be highly valued, non-contracted, early-stage development pipelines fetch far less in the market, notes a New York-based investment banker who was not involved in the deal.

"If it has a power purchase agreement, that's really where you can flip the switch and have more value creation," he says. "It's tough to say the [development] assets were really worth a whole lot." ■

Analyst Highlights Potential for Canadian Match-up

The **Caisse de depot et placement du Quebec**, fresh from an acquisition of additional shares in Boralex that made it the independent power producer's largest shareholder, could potentially seek to merge the company with **Innergex Renewable Energy**, according to an analyst report circulated last week.

"We believe CDPQ could eventually be a catalyst for the two companies to form a larger global player in the increasingly competitive sector," **RBC Dominion Securities** analyst **Nelson Ng** and research associate **Trevor Bryan** wrote in a research note dated Aug. 1.

In addition to its 17.3% stake in Kingsey Falls, Québec-based Boralex, CDPQ owns a 10% interest in Innergex, making it the second-largest shareholder in that company.

The report highlights similarities between the companies that the analysts say make them a good fit. Both companies primarily own and operate wind and hydro assets in Canada and France and both are expanding into the U.S.

The research note is not the first time rumors of a merger between the two companies have circulated, says a deal watcher, who cautions that serious movement toward a merger is unlikely in the next 12 months.

Any such deal would require the Caisse to acquire stakes from other minority shareholders in each company, the report notes. Longueuil, Québec-headquartered Innergex's relationship with **Desjardins**, which owns a stake in the company and has partnered with it on acquisitions, would need to be reevaluated.

But a merger would bring "larger growth opportunities", specifically in the offshore wind market, according to the report. ■

MERGERS & ACQUISITIONS

SunPower to Sell Stake in Yieldco

SunPower is the latest sponsor to announce that it is exiting its yield company investment. The San-Jose, Calif.-based company says it plans to sell its shares in **8Point3 Energy Partners**, following **First Solar**'s decision to sell its stake in the jointly-owned yieldco.

SunPower has received "significant initial interest" in its stake or the entire partnership, the company revealed in its second quarter earnings call on Aug 1.

Based on feedback from the market, SunPower will seek to sell its stake rather than look to find a new partner to replace First Solar. In April, First Solar said that it was exploring options for the sale of its interests in 8point3.

Should the sponsor find a suitable buyer, SunPower says it will use the proceeds to make strategic investments and retire its convertible bond due in 2018. The company also says it might also look to refinance the convertible.

Projects on the yieldco's right-of-first-offer list, such as SunPower's minority stake in the 100 MW Boulder Solar I Facility in Nevada, will continue to be offered to 8Point3 but could instead be sold to third parties.

FAST FACT

432 MW

Total size of 8Point3 Energy Partners' portfolio.

MONETIZING RESI LEASES

SunPower also announced that it is looking at ways to finance its approximately 400 MW of residential leases. The company added 31 MW of residential assets in the second quarter.

"As you know, we have done several back leverage transactions in the past and hope to close our next transaction in the near future," said **Charles Boynton**, cfo of SunPower and ceo of 8Point3, on a call with investors, adding that the company expects to close a back levered deal as soon the third quarter.

MORE SALES TO COME

8Point3's owners have each sold a number of assets initially destined for the yieldco in the past two quarters and both are planning to sell more. SunPower is waiting for the 110 MW El Pelícano project in Chile to be operational before selling it in the fourth quarter.

First Solar said last week that it has lined up a buyer for one California solar asset, the 40 MW Cuyama project in Santa Barbara County, and is negotiating the sale of a second, the 280 MW California Flats project in Monterey County (see story, page 1). ■

Engie Seeks Partners in Mexico Push

Engie is planning to invest $2 billion in Mexican energy projects in the next few years as it seeks "business partners" for 200 MW of contracted renewables in the country.

The French utility intends to complete the investments, which will be made through local subsidiary **Engie Mexico**, between 2017 and 2020, a spokesperson for the company in Paris tells *PFR*.

"To carry out this ambitious plan, Engie seeks to attract potential business partners," the spokesperson adds, responding to a question about whether the company was seeking equity investors for two renewables projects that were recently awarded long-term contracts.

"Engie Mexico is currently working on an extensive growth plan in the renewable energy market as well as in natural gas, both distribution and transportation, electricity generation and cogeneration, and energy services," says the spokesperson.

Engie operates two gas-fired cogeneration plants totaling 330 MW and three gas transmission pipelines stretching 802 miles combined. The company also provides gas distribution services through **Engie MaxiGas**.

In October, the company won long-term contracts for two renewable projects in Mexico's second power auction (PFR, 10/6).

The 157 MW Trompezon Solar Park and the 52 MW Tres Mesas 3 Wind Farm are both under construction. ■

FAST FACT

$2 billion

Amount Engie plans to invest in Mexican energy projects between 2017 and 2020.

Southern Power Acquires RES Wind Project in Texas

Southern Power has purchased a 148 MW wind project that is under construction in Texas from **RES Americas**.

The project, called Cactus Flats and located in Concho County, has a 15-year power purchase agreement with **General Mills** for two-thirds of its output and another long-term PPA with **General Motors** for the remaining third (PFR, 12/9).

The price paid for the project by the **Southern Company** subsidiary could not immediately be learned.

RES has been hired by Southern Power to complete construction of the project, which is expected to be online in the third quarter of 2018.

The transaction is RES's second sale of a renewable project to Southern Power. The Atlanta-based wholesale generator acquired the 102 MW Lamesa solar project in Dawson County from RES in July 2016 (PFR, 7/7/16). The Lamesa project has been online since May.

The deal closed on July 31, spokespeople for Southern Power in Atlanta and RES Americas in Austin, Texas, tell PFR. The companies declined to comment on the purchase price. ■

FAST FACT

250 MW

Combined capacity of Southern Power's two wind generation assets in Concho County and Dawson County.

MERGERS & ACQUISITIONS

BC Hydro Halts Fortis Dam Deal

Fortis will no longer acquire **Teck Resources**' two-thirds stake in the 496 MW Waneta Dam hydro project in British Columbia, after **BC Hydro** exercised its right of first offer over the asset.

BC Hydro, which already owns the other one-third interest in the facility, will assume full ownership of the project, including a transmission line that crosses into the U.S., known as Line 71, and local transmission assets in British Columbia. The Vancouver-based utility will match the C$1.2 billion ($876 million) that Fortis had agreed to pay.

"BC Hydro was presented with a unique opportunity to purchase the remaining two-thirds interest in the Waneta Dam and our analysis shows that this purchase is in the best interest of our customers," **Ken Peterson**, executive chair of **BC Hydro**, said in a statement issued Aug. 1.

"Our number one priority is to keep rates low, and this purchase will help make rates more affordable."

BC Hydro will acquire the two-thirds stake under "substantially the same terms and conditions" as those of the Fortis deal, the company said in the statement.

As under the arrangement with Fortis, **Teck Metals** will have a 20-year power purchase agreement for two-thirds of the project's output that will support its industrial operations in Trail.

Teck is obligated to pay Fortis an approximately C$28 million ($22.3 million) fee for terminating the acquisition.

RBC Dominion Securities analyst **Robert Kwan** and senior associate **Tim Tong** wrote that BC Hydro's move was a "slight negative" for Fortis in a note published Aug. 1.

The planned purchase of the majority stake in Waneta Dam by St. John's, Newfoundland and Labrador-headquartered Fortis had been the biggest North American single-asset deal agreed to so far this year, according to data from **PwC** (PFR, 5/15). Fortis and Teck announced the deal in May (PFR, 5/15).

Fortis had planned to bankroll its acquisition of the project with a mix of cash on hand, debt and equity.

CIBC World Markets is advising Teck on the sale of its stake in the project. ■

Calpine Confirms Sale Discussions

Calpine Corp. has disclosed that its board is in active negotiations to find a buyer for the independent power producer.

The company announced that its board of directors and management are in discussions regarding a potential sale of the company in its second quarter results, released on July 28.

The board decided to explore strategic alternatives for the company early in the spring, according to the statement, which adds that the company is working with financial and legal advisers on a potential sale. The identities of the advisers have not been disclosed.

Rumors have been circling in the market about a possible sale of the company for months. The company announced that it was entertaining asset sales to reduce its debt burden when it reported its end of year earnings in February (PFR, 2/13).

Calpine has been steadily selling a number of plants over the past year. It sold the 375 MW Mankato project in Mankato, Minn., in October and the 590 MW Osprey gas-fired project in Auburndale, Fla.,and in January (PFR, 1/5, PFR, 9/1/16). The company also agreed to sell the 360 MW Washington Parish Energy Center, which is under development in Louisiana, earlier this year (PFR, 4/28).

The Houston-based IPP lined up a buyer for the 520 MW South Point Energy Center, a combined cycle facility in Bullhead City, Ariz., last year, only for the deal to be canceled. Two subsidiaries of **Berkshire Hathaway Energy**-owned **NV Energy** agreed to buy the project for for $76 million, but the deal was terminated after it was rejected by the **Public Utilities Commission of Nevada** (PFR, 3/8).

Calpine reported an over-$200 million quarter-on-quarter loss and an over-90% fall in income from operations in its second quarter earnings report.

Unusually, the company's management refused to take questions during the call with investors on July 28. ■

TerraForm Power Offloads Resi Solar Portfolio

TerraForm Power has sold its 11.4 MW residential solar portfolio, the yield company revealed in its 2016 annual report, which was filed on Aug. 1.

The sales of the assets, which were held through two subsidiaries, netted the yieldco $6.5 million and are expected to bring in a further $600,000 in the third quarter of the year.

Greenbacker Residential Solar II acquired the solar units in two transactions which both closed in the first half of this year.

In the first deal, which closed on March 31, Greenbacker purchased **Enfinity Colorado DHA 1**, a 2.5 MW portfolio of contracted solar projects on public housing units owned by the **Denver Housing Authority** in Colorado, for $1.1 million.

Then on June 30, the same buyer paid $5.4 million for **TerraForm Resi Solar Manager**, an 8.9 MW of residential solar projects in Arizona, California, Connecticut, Massachusetts, Maryland, Nevada, New Jersey and New York.

The TerraForm Resi Solar Manager projects all have 20-year power purchase agreements. As of June, the weighted average remaining contract life was 18.6 years. **Morgan Stanley Renewables** is the tax equity investor in the projects.

"PRIVATE YIELDCO"

Greenbacker Residential Solar II is a subsidiary of **Greenbacker Renewable Energy Co.**, a publicly registered, unlisted company backed by GGIC, which is a fund managed by private equity firm **Franklin Park Holdings**.

Greenbacker has been described as a "private yieldco" (PFR, 5/17) because although it is not listed and traded publicly on an exchange, it raises capital by offering shares to investors in the private market. ■

MERGERS & ACQUISITIONS

First Solar Finds Potential Buyers for Projects Once Intended for Yieldco

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Power announced they were undertaking a "strategic review" of their stakes in the yieldco (PFR, 4/7). **Bank of America Merrill Lynch** is advising First Solar on the strategic review, while **Goldman Sachs** is advising SunPower (PFR, 5/3).

The company is "still exploring" a sale of its interest in 8Point3, ceo **Mark Widmar** said on the call, responding to a question on the fate of the yieldco posed by **Sophie Karp**, director and senior equity analyst at **Guggenheim Securities**.

STRONG DEMAND FOR PROJECTS

First Solar expects to realize "considerably higher valuations" for the California Flats and Cuyama projects compared to what the yieldco would have paid, said Widmar on the call, citing "continued vigorous market demand for our high-quality systems".

A spokesperson for First Solar in Tempe declined to comment. A representative for 8Point3 Energy Partners in San Jose, Calif., did not respond to a request for comment.

"There is, without question, demand for the types of projects that First Solar develops," says an equity analyst, noting that company is focusing on its roots as a module manufacturer.

First Solar, which was founded in 1999, originally focused entirely on the production and sale of photovoltaic modules for solar facilities before moving to developing its own projects in the late 2000s.

The company also anticipates selling assets in Japan and India in the second half of this year. ■

AES Plots 1,600-Mile Move for Brazil Solar Project

The Brazilian division of **AES Corp.** has acquired a 91 MW (DC) solar project in the country and asked the regulators if it can move the as-yet-unbuilt facility from Pernambuco to São Paulo.

AES Tietê bought the Boa Hora solar project for R$75 million ($24 million) from **European Energy**, **Eólica Tecnologia** and **Solar Tecnologia**.

AES wants to move the project about 1,600 miles across the country and plans to put in a request with Brazil's **National Electric Energy Agency** (ANEEL) to build the solar facility at a site less than two miles from its existing 1.4 GW Água Vermelha hydro plant in São Paulo.

AES Tietê will "promptly file" the request with ANEEL, the company said on Aug. 1.

"If the request to transfer the solar complex to the State of São Paulo is not accepted, the company will continue to build it in the Municipality of Tacaimbó," the company added.

AES Tietê plans to invest around R$300 million ($96 million) in the project, which is slated to be online on Nov. 1, 2018.

The 20-year power purchase agreement was awarded to the original Boa Hora consortium in Brazil's eighth reserve energy auction, which was held in November 2015. The PPA is priced at R$291.75/MWh ($95.40/MWh). ■

PEOPLE & FIRMS

Asset Manager-turned Banker Joins Siemens Private Equity Group

Brett Macune

After spending a year and a half working as a project finance banker, a former asset management professional has returned to the buy-side, taking up a role at the private equity arm of **Siemens**.

Brett Macune, who left **East West Bank** in April, started work as a senior risk manager at **Siemens Financial Services** in Atlanta on Aug. 1.

Before joining California-based East West Bank in 2015, he had worked at asset management companies including **Trust Company of the West** and **Babson Capital Management**.

In his new role, Macune reports to **Mark Brewer**, who is a director in Siemens Financial Services' private equity group.

The team originates and manages private equity investments in energy projects in the Americas to support equipment sales by its German parent company.

The firm's holdings include an interest in the 778 MW **Panda Power Funds** Stonewall project in Loudon County, Va., and a 27% stake in the 940 MW **Clean Energy Future** Lordstown combined-cycle gas-fired project in Lordstown, Ohio, according to recent filings with the U.S. **Federal Energy Regulatory Commission**.

The co-owners of both projects—Panda Power Funds in the case of Stonewall and a fund managed by **Macquarie Infrastructure Real Assets** in the case of Lordstown—initiated sale processes for their stakes in the facilities last year (PFR, 5/10, PFR, 8/8). In each case, no sale agreement has yet been announced.

Separately, Siemens netted a stake in a merchant wind project in Iowa when another subsidiary, **Siemens Wind Power**, merged with Spanish turbine manufacturer and project sponsor **Gamesa** in April (PFR, 4/12).

BACK TO THE BUY-SIDE

Macune has worked in power since 2004, when he was a summer intern in wind development at **GE Energy** in Tehachapi, Calif. The following year, he joined **JP Morgan** as an associate in the public finance utilities group.

In 2006, Macune joined TCW, where he worked as a senior associate under **William Van Herwarde** and **Brian Daly** until Daly left for **Conning Asset Management** in 2008 (PFR, 3/10).

Macune left TCW in the same year and, after a brief spell in the New York office of London-based investment firm **CITE Investments**, rejoined Van Herwarde at private equity shop **Cardinal Hill Energy** in 2009.

The TCW trio was reunited when Macune and Van Herwarde joined Daly at Babson Capital Management in 2012 (PFR, 7/20/12).

Macune left Babson in 2015 to take up a first vice president position at East West Bank in Atlanta.

East West Bank plans to recruit someone to replace Macune, sources tell *PFR*. **Robert Botschka**, senior v.p. and head of energy project finance at East West Bank in New York, declined to comment.

Macune referred an inquiry to Brewer, who declined to comment. ■

POWER TWEETS

The Guardian @guardian Jul 19
Pennsylvania nuns oppose fracking gas pipeline through 'holy' land

AuffretTimothee @TimotheeAuffret Jul 25
Quite small project (17MW wind farm in La Coruna / $13.5m banking debt provided by Bankia) but historic: 1st subsidy-free wind farm in Spain

DOE Press Staff @EnergyPressSec Aug 2
While @SecretaryPerry is honored to be mentioned, he is happy where he is & focused on carrying out mission POTUS gave him to lead @ENERGY

AmazoniaLot1AB @AmazoniaLot1AB Aug 3
The coal-fired Navajo Generating Station will close on 2019 and they're investing now in solar energy! #CleanEnergy

Fox News @FoxNews Jul 31
Californians urged to save energy during August's solar eclipse to reduce the strain on solar power resources.

Elon Musk @elonmusk Jul 31
Replying to @FoxNews
Batteries!

VANITY FAIR @VanityFair Jul 26
Does anyone in the White House, writes Michael Lewis, really understand what the Department of Energy actually does? http://vntyfr.com/Bx2DJuC

Ben Serrurier @benserrurier Jul 31
Persistent, overly-bullish load forecasts continue to be a contributing factor to the struggles of large generation project.

PEOPLE & FIRMS

Recurrent Appoints Multiple Senior Directors

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appointees is **Kyle Johnson**, who has joined the San Francisco-based company as managing director and head of origination and structuring, a company spokesperson tells *PFR*.

Johnson is responsible for overseeing a team of originators focused on power marketing and contract structuring for the company's 4 GW portfolio, she adds.

He joins Recurrent from **Dewars Street Capital**, where he was co-founder and principal in San Francisco from 2015. During the same period, Johnson spent seven months in at **California Clean Power** in Somoma, Calif., where he was a contracted consultant working as a director in procurement.


Kyle Johnson

Before that, Johnson worked at **Constellation** for 16 years, from 1999 to 2015. When he left the company, he was m.d., origination, in San Francisco, a title he had held for seven years. Prior to this, he had worked in a variety of roles in origination and as senior vice president and co-head of retail pricing.

Joining Johnson in senior positions at Recurrent are **Michael Avidan**, who is senior director of corporate origination, and **Michael Arndt**, managing director of development.

Avidan joins Recurrent from **SunPower** where he was director, senior partnerships and business development, for three years. Before that, he worked at **Pacific Gas and Electric Co.** in a variety of roles.

Arndt was most recently at **NRG Energy**, where was was v.p., business development West, for just over two years. Before that, he was chief operating officer, U.S., at **Element Power** in Portland, Ore. Arndt started at Recurrent in May, according to his **LinkedIn** profile.

All three are based in San Francisco.

The recent departures from Recurrent included **Josh Goldstein**, formerly senior v.p., finance and capital markets, and **Mitch Randall**, who was the company's president (PFR, 4/4). Goldstein has since landed at **8minutenergy** and Randall at **PureGen Power**.

A slew of other project finance specialists also left Recurrent in the last few months, several of whom have since formed their own shop called **Intersect Power** (PFR, 7/10). ■

ALTERNATING CURRENT

Grid Operators Prep Total Eclipse Plans

Total solar eclipses occur as a result of a peculiar, cosmic coincidence—the sun and moon, because of their relative sizes and distances from our planet, appear the same size in the sky.

But utilities and grid operators will be leaving nothing to chance on Aug. 21, when the next total eclipse is set to darken the heavens over the U.S.

The last time the U.S. witnessed a coast-to-coast total eclipse was in 1918, when grid management was a somewhat different business, to say the least.

In the last 10 years, solar photovoltaic generation in the U.S. has grown from almost nothing to more than 52 million MWh per year, according to the U.S. **Energy Information Administration**.

As a result, utilities and grid operators such as **California ISO** have been preparing for the eclipse for the best part of a year. At its peak, the eclipse will knock out about 6 GW of solar generation in California alone.

The missing megawatts with be replaced with hydro and gas-fired capacity, and CAISO has been coordinating with gas-fired generators to ensure capacity will be available. The grid operator will host a conference call with market participants two days before the eclipse.

If all this work has been a strain, market watchers haven't noticed. "I haven't heard anyone express anxiety about it," says a renewables-focused investment banker. ■

Reinsurer Boosts Americas Renewables Team

A European reinsurance firm has expanded its renewables-focused team in the U.S., hiring a vice president who previously worked at a residential solar company.

Jay Goldin, who led business development at residential solar installer **Enphase Energy** until October, joined **Munich Re Green Tech Solutions** in San Francisco as v.p. in June, according to his **LinkedIn** profile.

The firm offers risk transfer tools including solar performance warranty insurance and defective component cover for wind turbine manufacturers.

Goldin will work with **Álvaro Nuñez**, who is based in New York, to develop products aimed at project sponsors and lenders in the Americas. The team is headed by **Michael Schrempp** in Munich.

The renewables-focused business is part of **Munich Re Risk Solutions**, which sits within the reinsurance division of **Munich Re**. The group also includes asset manager **MEAG**, which last year bought a $92.5 million private placement issued by **Ormat Nevada** and **Northleaf Capital Partners** to refinance a 20 MW geothermal project in Nevada (PFR, 11/30).

Further details of the firm's plans for expanding its renewable project risk transfer products in the Americas could not immediately be learned. Nuñez referred an inquiry to Goldin, who could not immediately be reached. E-mails to Munich Re GTS in Germany were not returned by press time. ■