WWW.POWERFINANCERISK.COM VOL. XXI, NO. 44 / November 05, 2018

Power Finance & Risk

Exclusive Insight on Power M&A and Project Financing

AltaGas to Peddle Hydro Assets

Taryana Odayar

Fresh from its latest round of asset sales, **AltaGas** is looking to offload even more generation, in the form of hydro projects, in order to fund capital projects.

The Calgary-based company intends to sell assets totaling between $1.5 billion and $2 billion in the near term, including stakes in its 277 MW Northwest Hydroelectric Facilities portfolio, according to the company's third quarter results, released on Oct. 30.

A sale of AltaGas's remaining 55% stake in the NorthWest Hydro assets would make up about three-quarters of the $1.5 billion to $2 billion figure, said **Elias Foscolos**, a senior equities analyst at **Industrial Alliance Securities** in Calgary.

"It's hard to speculate what other assets are being sold, but I would assume that it's the California assets because those are the majority of the remaining power assets left, and the intention of the company seems to be focused on power and gas," he added. "Some of the WGL power assets could be put on the block too."

According to AltaGas' website, its remaining generation assets in California are:

- the 507 MW Blythe Energy Center gas-fired facility, which is contracted through 2020 with **Southern California Edison** and located in Blythe;
- the 50 MW Ripon Energy Facility gas-fired plant, whose power purchase agreement expired in May and is being replaced with a resource adequacy contract until the end of the year;
- the 45 MW Pomona Energy Facility gas-fired cogeneration project, which is undergoing a repowering, and the 20 MW Pomona Energy Storage Facility, which is contracted through 2027, both located in Pomona; and
- the 535 MW Sonoran Energy Facility, a shovel ready, gas-fired project in Blythe.

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Tax Equity Roundtable 2018

In September, *PFR* and **Mayer Brown** teamed up to bring together a panel of tax equity experts to review the latest developments and innovations in this fascinating area of renewable energy finance, as well as the outlook for the coming years. Check out the full transcript in this week's issue. PAGES 7-14 »

Price Talk Out for Talen Term Loan B

Shravan Bhat

Initial price talk is circulating for the $475 million term loan B financing of two **Talen Energy Supply** gas-fired projects in **PJM Interconnection**.

MUFG, as sole bookrunner on the seven-year deal, held a lender presentation on Oct. 30 and has gone to the market with pricing of between 375 and 400 basis points over Libor, *PFR* understands.

New York-based PAGE 16 »

Fortistar Preps Behind-the-fence Generation Refi

Richard Metcalf

A Fortistar-led consortium is preparing to refinance a portfolio of behind-the-meter generation assets located at steel mills in Indiana.

Investec is leading on the $240 million seven-year credit facility, which will replace $215 million of acquisition financing that the South African bank arranged in 2014 (PFR, 12/18/14).

The lead PAGE 18 »

IN THIS ISSUE

PPA PULSE

Recurrent's Solar-plus-battery Win

Canadian Solar subsidiary Recurrent Energy has inked two 15-year power purchase agreements for the output for what it claims is "the largest contracted solar-plus-storage project in California."

The offtakers under the PPAs are two community choice aggregators, **Silicon Valley Clean Energy** and **Monterey Bay Community Power**, which launched a joint procurement process in September 2017.

The contracts will support the financing of Recurrent's Slate project in Kings County, which comprises 150 MW of solar generation and 180 MWh of battery storage. The battery has a nameplate capacity of 45 MW, allowing for four hours of flexible delivery.

SVCE has signed up for 55% of the output and MBCP for the remaining 45%.

Most requests for proposals for renewable energy projects these days include the option of including a proposal for battery storage, say deal watchers, although it is not always clear precisely what service the prospective offtakers want the batteries to provide.

"There are varying levels of understanding of what they want from storage," says an official at an energy and infrastructure investment group. "Sometimes it's literally just, 'give us a storage option'."

Under the PPAs signed by the two CCAs, they "will have the flexibility to fill the battery when wholesale energy prices are low and then discharge the energy when prices are higher to meet their unique load requirements in a cost-competitive manner," said **Shawn Qu**, chairman and ceo of Canadian Solar, in a statement.

GEORGIA ON MY MIND

Nashville-based solar sponsor **Silicon Ranch** has solidified its relationship with Georgia renewables co-operative **Green Power EMC**, signing 30-year power purchase agreements for two projects totaling in 100 MW in Clay County, Ga.

The projects are expected to cost $89 million in total and be online by the end of 2021.

The sponsor and the co-op have previously collaborated on at least five projects totaling 220 MW in Georgia (PFR, 9/8/17).

MINER DIGS SOLAR

Telson Mining Corp. has signed a 10-year power purchase agreement for PAGE 18 »

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	Adviser	Status/Comment
Abengoa	A3T (220 MW Gas)	Mexico	TBA	Private equity firms are sizing up the project, which part of Abengoa's insolvency divestments (PFR, 10/8).
AltaGas	Busch Ranch (29 MW Wind, 50%)	Huerfano County, Colo.		The project's utility offtaker and co-owner Black Hills Electric Generation is buying the remaining 50% stake (PFR, 10/29).
● AltaGas	Portfolio (277 MW Hydro, 55%)	Canadan	TBA	AltaGas is looking to raise around $1 billion from the portfolio stake sale (see story, page 1).
Blackstone	Lonestar Portfolio (1,110 MW Gas, Coal)	Texas	Citi	The sale of the portfolio, code named Project Matador, is said to be entering a second round (PFR, 10/15).
Cypress Creek Renewables	Portfolio (83 MW Solar)	North Carolina	TBA	British asset-manager John Laing Group has bought the two development-stage assets (PFR, 10/29).
D.E. Shaw	Deepwater Wind	U.S.	Ernst & Young (buyer)	Denmark's Ørsted is buying the offshore wind platform for $510 million (PFR, 10/15).
Duke Energy	Renewables Portfolio (2,907 MW Wind, Solar)	U.S.	Morgan Stanley	Duke is running a sale process to formalize inbound interest it has received (PFR, 10/1).
Engie N.A., Harbert Management Corp., Mitsui & Co.	Astoria I, II (1,230 MW, Gas, 50%)	Queens, N.Y.	Morgan Stanley, PJ Solomon	As the sale of the assets nears a second round of bidding, deal watchers note varying levels of interest (PFR, 10/15).
EDF Renewables North America	Brickyard Hill (157 MW Wind)	Atchison County, Mo.		An Ameren Corp. subsidiary has signed a build-transfer for the project, which is due online in 2020 (PFR, 10/29).
EDP Renewables	Meadow Lake VI (200 MW Wind)	Benton County, Ind.	CIBC	CIBC launched the sale of the contracted, development-stage assets in June (PFR, 8/27).
	Prairie Queen (200 MW Wind)	Allen County, Kan.		
	Sharp Hills (250 MW Wind)	Special Areas 3 & 4, Alberta		
	Nation Rise (100 MW Wind)	North Stormont, Ontario		
Eletrobras	Various Wind Assets (880 MW Net)	Brazil		An auction was scheduled for Sept. 27 (PFR, 8/27).
First Solar	GA Solar 4 (200 MW Solar)	Twiggs County, Ga.	TBA	Belgian developer Origis is buying the asset, which is contracted under a Georgia Power PPA (PFR, 10/29).
● GE Energy Financial Services, Global Infrastructure Partners	Towantic (751 MW Gas)	Oxford, Conn.	TBA	Osaka Gas USA is picking up a 50% stake in the Competitive Power Ventures-developed project (see story, page 6).
GenOn Energy	Bowline (1,139 MW Gas)	Haverstraw, N.Y.		GenOn is optimizing the project as it looks to increase it value and put it back on the market (PFR, 10/29).
Invenergy	Bishop Hill (132.1 MW Wind, 10%)	Henry County, Ill.		WEC Energy Group is increasing its ownership in the operating project from 80% to 90% (PFR, 10/29).
● KKR & Co., Recurrent Energy	Portfolio (70 MW Solar)	California		A Goldman Sachs Asset Management fund has bought the cash equity interests (see story, page 5).
Mainstream Renewable Power	Andes Portfolio (1.3 MW Wind, Solar)	Chile	KPMG London	The Irish developer is seeking an equity partner to build and operate its $1.65 billion renewable portfolio in Chile (PFR, 9/17).
National Renewable Energy Corp.	Lily (103 MW Solar)	South Carolina	EOS Capital (seller), PwC (buyer)	KKR portfolio company X-Elio has acquired the development-stage asset (PFR, 10/22).
North American Power Group	Rio Bravo Fresno (28 MW Biomass, 50%)	Fresno, Calif.		NAPG is in talks with potential buyers of its 50% stakes in the projects (PFR, 8/27).
	Rio Bravo Rocklin (28 MW Biomass, 50%)	Lincoln, Calif.		
OCI Power	Project Ivory (50 MW Solar)	Dawson County, Texas	Marathon Capital	D.E. Shaw Renewable Investments has acquired the project after a competitive sale process (PFR, 10/29).
Open Road Renewables, MAP Renewable Energy	Hillcrest (260 MW [DC] Solar)	Brown County, Ohio		Innergex Renewable Energy is buying the asset, which is expected online between 2020 and 2021 (PFR, 10/29).
● Solarpack	Portfolio (36 MW Solar)	Chile		A subsidiary of French developer Cap Vert Energie paid $45 million for the development-stage assets (see story, page 5).
Starwood Energy Group Global	Portfolio (460 MW Wind, 51%)	Texas	Whitehall	Skyline Renewables, a partnership between Transatlantic Holdings and Ardian has emerged as the buyer (PFR, 10/29).
Sumitomo Corp. of Americas	Turquoise Liberty (10 MW Solar)	Washoe County, Nev.		An Algonquin Power & Utilies Corp. subsidiary is buying the under-construction project (PFR, 10/22).
	Turquoise Nevada (50 MW)	Washoe County, Nev.	Whitehall	Whitehall is running the sale process for the project, which is due online by the end of 2020 (PFR, 10/29).
Heorot Power	Tanner Street Generation (82 MW Gas)	Mass.	Scotia	The sale of the project was launched in July under the code name Project Riverhawk (PFR, 10/15).

● **New or updated listing**

The accuracy of the information, which is derived from many sources, is deemed reliable but cannot be guaranteed.
To report updates or provide additional information on the status of financings, please call Taryana Odayar at (212) 224 3258 or e-mail taryana.odayar@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)	Deal Type	Loan Amount	Tenor	Notes
Advanced Microgrid Solutions, Macquarie Capital	Electrodes (50 MW Battery Storage)	California	Macquarie Capital	Debt	$75-100M	10-yr	Sponsors are putting together financing for the second tranche of the 50 MW portfolio (PFR, 9/24)
AES Gener, Mitsubishi	Cochrane (483 MW Coal)	Chile	Citi, Goldman Sachs, HSBC, SMBC	Bank Loan	$180M	4-yr	As is typical with hybrid refinancings, the bond will not ammortize till the bank loan is fully repaid (PFR, 10/22).
				Bond	$725M	16-yr	
Apollo Global Management	Former GE EFS private equity portfolio	Mostly U.S.	RBC, Goldman Sachs, BMO	Debt	TBA	TBA	The three banks are said to have underwritten a back-levered financing for Apollo (PFR, 10/15).
Ares-EIF	Hill Top Energy Center (620 MW Gas)	Greene County, Pa.	Morgan Stanley	Private Placement	TBA	TBA	Ares has foregone a bank mini-perm for a bond to match the tenor of a gas netback under negotiations (PFR, 10/8).
Ares-EIF, Novi Energy	C4GT (1,060 MW Gas)	Charles City County, Va.	TBA	Debt, Equity	TBA	TBA	The shovel-ready project is in talks for debt and equity (PFR, 9/17).
Atlantic Power Corp.	Portfolio (1,447 MW, Gas)	U.S.	Goldman Sachs	Debt	$470M	5-yr	A group of banks is refinancing the sponsor's term loan B with final commitments due Nov. 2 (PFR, 10/29).
Avangrid Renewables, Copenhagen Infrastructure Partners	Vineyard (800 MW Offshore Wind)	Massachusetts	CCA Group (adviser), Santander (adviser)	Debt, Tax Equity	$3.5B	TBA	The capital structure for the estimated $3.5 billion, two-phase project remains to be finalized (PFR, 10/8).
Balico	Chickahominy (1,650 MW Gas)	Charles City County, Va.	TBA	Debt, Equity	TBA	TBA	A development team, formerly at Cogentrix, has hired a financial advisor to begin the equity raise (PFR, 8/20).
Capital Power Corp.	Meadowlark (99 MW Wind)	McHenry County, N.D.	JP Morgan	Tax Equity	TBA		Meadowlark has a long-term commodity swap with Morgan Stanley Capital Group (PFR, 10/22).
Centaurus Renewable Energy	Techren I (100 MW Solar)	Clark County, Nev.	U.S. Bank	Tax Equity	TBA		U.S. Bank has not announced whether it would bring in third party tax equity (PFR, 10/29).
EDP Renewables	Arkwright (78.4 MW Wind)	Chautauqua County, N.Y.	JP Morgan	Tax Equity	$74.2M		The $156 million project began operations last months (PFR, 10/29).
Enel Green Power	Delfina (219.4 MW Wind)	Brazil	TBA	TBA	TBA		Enel is adding 29.4 MW of capacity, expected to cost $40 million (PFR, 10/22).
FGE Power	Goodnight (500 MW Wind)	Armstong County, Texas	Karbone	Tax Equity	TBA		The sponsor has already secured a cash equity commitment for the project from Fortistar (PFR, 5/29).
● Fortistar	Primary Energy (298 MW Waste Heat)	Indiana	Investec	Debt	$240M	7-yr	The deal is expected to launch mid-November, replacing the $215 million acquisition financing from 2014 (see story, page 1).
GE EFS	Shady Hills (573 MW Gas)	Pasco County, Fla.	TBA	TBA	TBA	TBA	GE EFS is aiming to have all the permits in place and reach financial close in December (PFR, 5/21).
Longview Power	Longview (700 MW Coal)	Maidsville, W.Va.	Houlihan Lokey (adviser)				Longview Power has hired Houlihan Lokey for a potential refinancing (PFR, 4/9).
Middle River Power III	Portfolio (523 MW Gas)	San Joaquin Valley, Calif.	MUFG	Debt	TBA	6-yr	The Avenue Capital Partners subsidiary is raising financing to fund its acquisition of three projects from AltaGas (PFR, 9/24)
Morgan Stanley Infrastructure Partners	Bayonne Energy Center (644 MW Gas)	Bayonne, N.J.	Crédit Agricole, ICBC, Investec, KEB Hana, Nomura	Mini-perm	$500M	7-yr	Pricing on the acquisition financing reverse flexed 25 bp to 250 bp over Libor with 25 bp step ups (PFR, 10/29).
	Red Oak (805 MW Gas)	Sayreville, N.J.	Investec, ICBC, Nomura	Term Loan A Refinancing	$369M	7-yr	Pricing starts at 275 bp over Libor and the deal includes a $35 million revolver (PFR, 10/22).
NTE Energy	Reidsville (500 MW Gas)	North Carolina	Whitehall	Debt, Equity	$650M	TBA	The City of Camden, S.C., signed a 20-year PPA with Reidsville, becoming it twelfth customer (PFR, 10/1).
NTUA Generation	Kayenta II (27 MW Solar)	Navajo County, Ariz.	Karbone (adviser)	Tax Equity	$13.3M		Prospective tax equity investors for the $39 million project received teasers on Oct. 18 (PFR, 10/29).
Origis Energy	FL Solar 5 (52 MW Solar)	Orange County, Fla.	Wells Fargo	Tax Equity	$35M		Wells also provided construction financing for the project that will serve Disney World next month (PFR, 10/29).
● Petroquímica Comodoro Rivadavia	Bicentinario (126 MW Wind)	Argentina	KfW, IDB Invest	Debt	$108M	TBA	Danish export credit agency EFK is guaranteeing the KfW tranche provided Vestas supplies the turbines (see story, page 17).
Pine Gate Renewables	Peony (39 MW Solar)	Orangeburg County, S.C.	Live Oak Bank	Debt		20-yr	Macquarie Group have provided the construction debt for the project, which is expected online in December (PFR, 10/29).
			U.S. Bank, Publix	Tax Equity			
Southern Power (Southern Co.)	Portfolio (1.6 GW Wind)	Texas, Oklahoma, Maine	TBA	Tax Equity	-$1B		The sponsor aims to raise tax equity on the portfolio by the end of the year (PFR, 6/4).
● Talen Energy Supply	Portfolio (2.3 GW Gas)	Northampton County, Pa.	MUFG	Term Loan B	$475M	7-yr	Two operating gas-fired projects in PJM are being levered up at 375 to 400 basis points over Libor (see story, page 1).
● Tellurian	Driftwood (LNG)	Louisiana	Goldman Sachs, Société Générale	Equity	$8B		The sponsor has slashed the equity commitment and intends to replace the difference with debt (see story, page 16).

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MERGERS & ACQUISITIONS

Goldman Grabs California Solar Projects

Goldman Sachs Asset Management has acquired the cash equity in a 70 MW portfolio of operating solar projects in California, deploying funds from accounts that include a university endowment fund.

GSAM's renewable power group has purchased **KKR & Co.** and **Recurrent Energy**'s managing interests in the 30 MW McKenzie portfolio in Sacramento County and the 40 MW Rosamond portfolio in Kern County.

The two transactions were consummated on Sept. 28, according to paperwork filed with the U.S. **Federal Energy Regulatory Commission** on Oct. 29.

Patrick McAlpine, a v.p. in GSAM's renewable power group, and spokespeople for Goldman in New York declined to comment.

The renewable power group, which acts like a private equity fund, has raised funds from investors including **The Regents of the University of California**, a 26-member board that governs the state university, including its endowments.

ITS ALWAYS SUNNY IN CALIFORNIA

The McKenzie portfolio is split into six solar projects, each 5 MW in size, that sell their output to **Sacramento Municipal Utility District** under a 20-year power purchase agreement expiring in November 2032.

Recurrent began construction on the portfolio in mid-2011 before selling 95% of the cash equity to KKR and 100% of the tax equity to **Google** in December of that year.

The transaction, which marked KKR's first renewable investment in the U.S. and Google's first utility-scale solar deal—was nominated for Best Generation Asset M&A Deal of 2012 by *Power Intelligence* (PFR, 2/24/12).

Two years later, KKR and Google teamed up again to buy the Rosamond portfolio—comprising two 20 MW projects that Recurrent brought online in 2013—as part of a larger acquisition (PFR, 11/12/13).

Rosamond 1 has a 25-year PPA with the **City of Santa Clara** that terminates in January 2039, while Rosamond 2 is contracted with **Southern California Edison** under a 20-year PPA that expires in December 2033.

Representatives of KKR and Recurrent in New York did not respond to inquiries about the sales.

The Regents of the University of California is also the offtaker of a solar project held by a Goldman-affiliated entity—it has a 25-year PPA with the 60 MW Five Points unit in Fresno County, Calif., owned by **Global Atlantic Financial Group**, in which Goldman owns a 22% stake (PFR, 9/28/17). ■

French Developer Swoops on Solar in Chile

French sponsor **Cap Vert Energie**'s Chilean subsidiary has bought four solar projects totaling 36 MW from **Solarpack**.

CVE Chile paid $45 million for the development-stage portfolio, which is split into four 9 MW portions located in San Clemente and Linares in the Maule Region of central Chile, near Rancagua in the O'Higgins region, also in central Chile, and near Pozo Almonte, Tarapacá, in the North of the country. They are due to be online next year.

The 9 MW individual projects qualify under the country's *Pequeños Medios de Generación Distribuida* (PMGD) program, which is designed to encourage the construction of smaller distributed generation facilities.

PMGD projects do not have to pay trunk transmission tolls and benefit from price stabilization, as they are allowed to sell their output based on a 24-hour cost of energy, rather than spot prices. Participation in the scheme was lower when spot prices were high, but has increased more recently (PFR 1/26).

Earlier this year, CVE signed a $36.5 million financing for a 33 MW PMGD-eligible portfolio made up of 11 solar projects each 3 MW in size. Chile's **Banco Security** provided the debt.

"In the coming years, we plan to keep a steady pace of development of around 40 MWp per year, reaching a renewable generating capacity of 220 MWp by 2022," said **CVE Chile** ceo **Pierre Boulestreau** in a statement.

CVE Chile will be locked into selling the energy generated under the PMGD program through the price stability mechanism for four years, but then plans to sell energy directly to industrial companies in the Santiago region through power purchase agreements. ■

X-Elio Partners Up in Southeast

KKR & Co. portfolio company **X-Elio** is partnering with an Alabama-based solar construction firm as it seeks to establish a foothold in the U.S. Southeast.

The private equity-backed sponsor and its new partner, **Sofos Harbert Renewable Energy**, are aiming to bring 240 MW (DC) online in the form if two 120 MW projects, one in Alabama and one in Georgia, *PFR* has learned.

"We have the certainty that the Southeastern region of the US is going to be one of the most important solar energy markets in the upcoming years, and we as an Alabama-based company, are in the best position to help our communities in the transition to a new energy producing scheme," said **Juan Mayoral**, ceo of Sofos Harbert, in a statement.

Sofos Harbert is a partnership between Spanish solar contractor **Sofos** and Birmingham, Ala.-based construction firm **B.L. Harbert International**.

X-Elio has recently been building its platform in the U.S. primarily through acquisitions of development-stage assets from third parties. A couple of weeks ago, for instance, it acquired the 103 MW (DC) Lily Solar project in South Carolina from **National Renewable Energy Corp.** (NARENCO) (PFR, 10/16).

"In addition to our ready to build project acquisition activity, our focus and intentions in greenfield development are ramping up with this strategic partnership with Sofos Harbert," said **Jorge Barredo**, ceo of X-Elio, in a statement.

Burr & Forman, a regional law firm with 12 offices across the Southeast, is advising X-Elio on the joint venture. ■

MERGERS & ACQUISITIONS

AltaGas to Peddle Hydro Assets

« FROM PAGE 1 AltaGas previously tried to market Blythe as a package with its 330 MW Tracy combined-cycle plant in San Joaquin County, but had to go back to the drawing board (PFR, 3/5). Tracy was eventually sold to **Middle River Power III**, a Chicago-based portfolio company of New York firm **Avenue Capital Partners**, as part of a new $300 million package that also included AltaGas' 96 MW Henrietta and 97 MW Hanford peakers in Kings County, Calif. (PFR, 9/11).

HYDRO SALE

AltaGas has already spun off an approximately 10% stake in the Northwest hydro portfolio by including it as part of the initial public offering of its Canadian assets and utilities through **AltaGas Canada** (PFR, 13/9).

Earlier this year, **Axium Infrastructure** and **Manulife Financial Corp.** agreed to acquire a 35% stake in the same portfolio for C$922 million ($700 million) (PFR, 6/13).

The Northwest Hydroelectric Facilities are are located on the Iskut River in the Tahltan First Nation, approximately 620 miles northwest of Vancouver.

The portfolio consists of the 195 MW Forrest Kerr facility, the 66 MW McLymont Creek facility and the 16 MW Volcano Creek facility, each of which has a 60-year power purchase agreement with **BC Hydro**.

Whether the company has appointed one or more financial advisers on the latest sale process could not immediately be confirmed. **TD Securities**, **JP Morgan** and **RBC Capital Markets** advised on the earlier stake sale to Axium and Manulife, and deal watchers say that the same firms have probably been retained for the sale of the Northwest Hydro assets.

Representatives of AltaGas did not respond to requests for further information by press time. ■

Osaka Gas Lines up New England CCGT Stake Purchase

The U.S. subsidiary of **Osaka Gas** has filed for regulatory approval to buy a roughly 50% stake in the 751 MW Towantic gas-fired project in Oxford, Conn.

Osaka Gas USA Corp. will buy stakes from two existing investors in the project under the terms of the deal described in filings requesting the approval of the U.S. **Federal Energy Regulatory Commission** by Dec. 5.

The sellers are **Global Infrastructure Partners**, which is divesting about half of its 51% interest in the project, and **GE Energy Financial Services**, which is disposing of its entire 25% stake. GIP bought out **Warburg Pincus**' majority position in CPV's portfolio in 2015 (PFR, 4/7/15).

Officials at Osaka Gas in New York and CPV in Braintree, Mass., did not immediately respond to inquiry about the sale price or acquisition financing.

Competitive Power Ventures developed the dual-fuel facility and financed it in 2016 with $753 million of term debt arranged by **MUFG, Crédit Agricole** and **CIT Bank** (PFR, 3/11/16).

A GIP spokesperson in New York declined to comment on whether any financial advisers were involved. GE EFS is understood not to have worked with a financial adviser on this deal. A spokesperson for GE EFS declined to comment.

Separately, GE EFS announced the sale of a $1 billion generation portfolio to **Apollo Global Management** earlier this month (PFR, 10/16).

GE EFS holds the stake it is selling via a 50.01% interest in **Towantic Energy Holdings**—which in turn owns 49% of the project. The other Towantic Energy Holdings investors are **UBS Asset Management**, with 22.03% (PFR, 8/16/17), and **Ullico**, with 27.96% (PFR, 8/18/16).

Towantic has been online since June and Gov. **Dannel Malloy** of Connecticut attended a ribbon-cutting ceremony on Oct. 18.

Towantic is the fourth CPV project in which Osaka Gas has bought equity, the two firms having also collaborated on the 725 MW Woodbridge facility in Woodbridge, N.J., the 1,050 MW Fairview project in Jackson Township, Pa., and the 725 MW St. Charles unit in Charles County, Md. (PFR, 3/31/17). ■

ENGIE Scores Energy Retail Biz from Private Equity Fund

Engie Resources, the North American commercial electric supply arm of **Engie**, has reached a deal to acquire an energy retailer based in Long Island, N.Y., from a private equity firm.

Under an agreement struck on Oct. 29, the Engie unit will take control of **Plymouth Rock Energy** from **MVC Capital**, which holds the company in its MVC Private Equity Fund.

The applicants requested **U.S. Federal Energy Regulatory Commission** approval for the transaction by Nov. 29, with the deal expected to close the following day.

KeyBanc Capital Markets advised Plymouth on the sale, while **Locke Lord** provided legal advice.

Plymouth Rock is a natural gas and electricity retailer operating in 39 utility markets, serving approximately 465,000 residential customers across New York, New Jersey, Pennsylvania, Maryland, Ohio, Illinois and Massachusetts.

The financial terms of the deal were not disclosed, although MVC said the sale would yield a gross return on its equity investments in Plymouth Rock since November 2011 of about 3.4 times. Spokespeople for Engie and MVC did not respond to inquiries by press time.

"We are very happy with the purchase, and the fine job done by Plymouth staff to build this portfolio of customers," said **Graham Leith**, senior vice president, head of retail at Engie Resources, in a statement. "Plymouth's customers will join our portfolio of over 25,000 commercial & industrial power & natural gas customers, expanding our market share in New York, and it should give us a much larger presence downstate."

A consortium including **Engie North America** is currently auctioning off a pair of gas-fired assets in Queens, N.Y., namely Astoria I and II, in a process being run by **Morgan Stanley** and **PJ Solomon**. (PFR, 10/9) ■

TAX EQUITY ROUNDTABLE 2018

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Tax Equity Roundtable 2018

SPEAKERS:
David Burton, partner, **Mayer Brown**
Jeffrey Davis, partner, **Mayer Brown**
Pedro Almeida, director of finance, **EDP Renewables North America**
Rich Dovere, managing member, **C2 Energy**
Kathryn Rasmussen, principal, **Capital Dynamics Clean Energy and Infrastructure**
Marshal Salant, head of alternative energy finance, **Citi**
Richard Metcalf, editor, *Power Finance & Risk* (moderator)

PFR: A major theme this year has been the impact of tax reform and the repercussions of that, in terms of investors perhaps leaving the market or having less appetite. What impact has tax reform had?

David Burton, Mayer Brown: I think the two largest effects of tax reform have been, first, that each tax equity investor, on a high level, has 40% less tax appetite than they did before. The second thing—which correlates to that—is that the depreciation benefit is worth less, so instead of a deprecation benefit being multiplied by 35%, it's only multiplied by 21%, which means that sponsors are able to raise less tax equity than they were before for the depreciation benefit. Tax reform did not impact the tax credits themselves, other than the fact that investors have less tax appetite to offset with credits.

Jeffrey Davis, Mayer Brown: Because of 100% expensing—the so-called "bonus depreciation"—the tax benefits are potentially more front-loaded for any particular deal. So, when you have a taxpayer with lower tax capacity, it has to be a little more careful about either allocating its resources to different deals, or, alternatively, requiring that sponsors elect out of the 100% expensing bonus.

Kathryn Rasmussen, Capital Dynamics: I wouldn't say that we've experienced *huge* shifts as far as how we're viewing tax equity. There is, absolutely, less tax equity that we're getting in our deals—that is partially offset by the fact that we can raise a little bit more debt.

However, we also have a bit of a benefit just from the fact that, post-tax, we have the lower tax rate as well. So it absolutely has decreased the amount of tax equity that we can raise, but not to a point that has significantly moved our view on the projects and the assets that we're investing in.

Pedro Almeida, EDP Renewables North America: I think that outside of the factual implications on the amount of depreciation benefit, what we're seeing is that the dynamics of whether investors want to allocate capital more on an ITC [investment tax credit] basis or if they want to invest in PTCs [production tax credits] and 100% expensing are changing. Because their tax capacity has shrunk, they're more selective in allocating capital to the different alternatives in the market.

That being said, we always felt that there were different types of tax equity markets. We don't feel that EDPR is affected and we don't feel that the market has less depth. We just feel that the financial institutions and the typical investors are more selective. So, I think tax reform has mainly changed the dynamics in the market and how investors allocate capital between ITC and PTC and, as a consequence, then between wind and solar.

PFR: So yes, it is having an impact, but it might depend on the kind of sponsor or on the sponsor, to some extent?

Almeida, EDPR: Correct. I think there are

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"We spent, as well as other people, a massive amount of time during the uncertainty before the [tax] bill was finalized... literally hundreds of hours analyzing scenarios—looking at what could happen."

Marshal Salant, Citi

projects that will always get the capital that they need, and that capital will be able to be raised very competitively.

PFR: Marshal, you were nodding there. What has been Citi's response, or how has your activity adapted to tax reform?

Marshal Salant, Citi: It's a very interesting question. We spent, as well as other people, a massive amount of time during the uncertainty before the bill was finalized, and particularly working with **ACORE** and other industry groups—literally hundreds of hours analysing scenarios—looking at what could happen.

And we agree with the conclusion David Burton reached. Where has that 40% number come from? If you were a hypothetical corporation and you made $10 billion of income, you used to pay $3.5 billion in tax to the federal government. Now you're paying $2.1 billion to the federal government. And it's that difference—when you pay $3.5 billion versus $2.1 billion, you've decreased your tax bill by $1.4 billion. That is exactly 40% of what you were paying.

That, theoretically, should impact the overall tax capacity in the market. There were also massive amounts of time spent by various parties in tax equity and a whole lot of other parts of the financial world and the legal and tax world on the so-called BEAT, base erosion anti-abuse tax. And in the end, I would say that it's still not really clear what the impact is.

After all the analysis was done and we could think about all the theoretical impact that should occur, the reality is that for big developers with well-structured projects, I don't think it's really had much impact at all, which is maybe counterintuitive.

There's a couple of banks that have maybe decreased what they're doing. There's others that have said it has no impact. There's maybe one or two that look to have significantly pulled back. But overall, the amount of time spent talking about and analysing it seems so far to be far greater than the actual impact we've seen.

PFR: I've certainly heard people say that some tax equity investors, obviously not Citi, may have withdrawn entirely from the market as a result of tax reform, whether directly or because they just decided that it was too complicated and it wasn't worth trying to figure out.

Rich Dovere, C2 Energy: We haven't seen investors withdraw entirely. It almost seems like a negotiating stance. Where we sit in the market is different, in terms of project size, but if investor takes the position: "I'm leaving tax equity. I can't do any tax equity," to a certain extent, I think the response is: "But what if it were this much per credit? Or what if we did this yield, would it make it that compelling?"

Burton, Mayer Brown: I think a handful of multinationals have exited the tax equity market, reportedly due to BEAT, but that's been made up by, generally, smaller players entering the market. They're realizing that the after-tax returns are compelling compared to what they could earn on other types of investment, or for ESG [environmental, social and governance criteria] reasons.

Rasmussen, CapDyn: We're seeing a lot more first-time, second-time tax equity investors who may be sitting behind a seasoned tax equity investor who is selling down their position on the back end or post-closing or syndicating a piece of it upfront.

Salant, Citi: Anecdotally, we believe there are one or two players that have essentially pulled out. But when you ask them, they typically say, "Oh, that's not true. For our best clients and the right project, we might still be able to do it." So it's very hard to pin people down on this.

It's certainly not good for the supply/demand imbalance in the market, but it didn't have the overwhelming impact that people thought it was going to have.

Almeida, EDPR: I tend to agree with Marshal. I feel that, at least in our investor community, the people we talk to, we haven't heard anyone say they're out of the market.

PFR: I think might also be worth pointing out that the major impact, if any, on an institution's ability or willingness to invest tax equity will be much greater on those that are either foreign or have a lot of overseas business. So it may not have affected U.S. regional banks as much. Is that fair?

Burton, Mayer Brown: That's fair. It would be relatively surprising that it impacted U.S. regional banks. But foreign-owned banks or U.S.-owned banks with big foreign operations, in some circumstances, can have an issue with BEAT. BEAT, also, is going to get more challenging in future years. Currently most of the tax credits are permitted under the BEAT calculation, but that's going to change down the road.

Davis, Mayer Brown: Another interesting aspect of the BEAT is it's calculated year-by-year, and therefore, for any given year, a bank or an investor must project what its taxable income, deductions, earnings strippings, payments and so on might be, so it can determine whether it's going to be in the BEAT and figure out if it can benefit from the tax credits.

It has already set up a difference between PTCs and ITCs, where the ITC, because it's upfront and determined based on tax basis, is more predictable and an investor can look at its income and expenditures and determine whether it thinks it will be subject to the BEAT in the year the ITC arises. Whereas with the PTC, because you've got the ten-year stream based on production, it's a little more challenging. It's hard for anyone to predict what their income is going to be next year let alone ten years out.

PFR: Going back to something that Kath-

ryn mentioned, which is syndication and smaller investors coming in behind a seasoned investor, is that something that you've seen more of recently?

Davis, Mayer Brown: I've seen more new investors taking that very approach. Either they will come in after a tax equity investor that's more seasoned has signed a commitment, and they'll take a piece of that prior to funding—and that's failry common in an ITC deal—or there are some cases where the first investor puts a tax equity partnership on top of the tax equity partnership and sells an interest in that. That's oftentimes accompanied by

"Either they will come in after a tax equity investor that's more seasoned has signed a commitment... or there are some cases where the first investor puts a tax equity partnership on top of the tax equity partnership."

Jeffrey Davis, Mayer Brown

risk mitigation features and other things that might make it more attractive to an investor that's not as familiar with the underlying assets and the risks that are inherent in renewable energy projects.

PFR: Marshal, does Citi sell down tax equity in this way?

Salant, Citi: We act as principal, we also act as agents. The answer is: yes, we do both.

The good news is that if you're a sponsor looking for tax equity, there are some new participants, there is a little bit more liquidity, we are seeing more almost like secondary trading in PTCs.

The bad news is that the tax complexity has not changed. On the ITC, it's a very narrow window and you can't sell down after the deal closes. It's impractical for that to really work. Whereas with PTCs, you could hold it for a year and then sell off the back nine years. You can't do that with the ITC, but you do have that window between commitment and funding, or between first funding and second funding. And we've been a big player in that market, to the extent it makes sense.

Every large tax equity investor I know has spent the last couple of years, if not five years, trying to develop new investors, with mixed successes. There were a couple of highly successful cases, but in the past there's been a lot more talk than actual action. Lately, we've seen a little bit more pick-up, and that's been great for the market.

The reality is, for the really big players, who need a couple hundred million of tax equity, getting new entrants or regional banks in who are writing checks for $7 million, $10 million, $15 million, $20 million doesn't really work for them, because it's too unwieldy to have ten different $20 million pieces club together trying to do a $200 million deal. So for that market, they're still dependent on the big players.

There's a handful—people debate the numbers, but probably between 15 and 20—of large tax equity investors who can lead and negotiate deals, which is good for the tax equity, but it's also good for the sponsors, because they know what they're getting. And then there may be another 10 or 20 who come in behind those people, because if you're a first-time investor, it's helpful to tell your superiors or your board: "Look, we're behind Citi," or behind somebody else who's been doing this for many, many years. "They know what they're doing, so they're going to make sure that the transaction has no surprises."

That is a logical way to increase the volume, and I think that's been mostly what's happening. There are some new entrants that want to deal directly on their own and, hopefully, that will develop over time also.

Rasmussen, CapDyn: I definitely agree—more investors is definitely a good thing, especially on the sponsor side. But there is some hesitancy on our side to deal with first-time investors, so unless there's a very compelling case, we much prefer having a situation where we have a seasoned provider.

Almeida, EDPR: I agree. Let me start by saying that we embrace new investors. For the last five years, there has not been a year in which we haven't brought one or two new investors into our portfolio. We're also fortunate enough that most of our investors, as a rule, like to hold their investments until they've flipped, the exception being if we see any syndication prefunding, which is rare, in any event.

From a sponsor perspective, we need to have certainty on execution. We have our capital commitments and delivery obligations in terms of CODs [commercial operation dates], in terms of megawatts that we want to put in the ground. Last year, for instance, we made a deal, $440 million, with a single investor. Not a lot of investors can do that.

But I understand that syndication makes sense more and more now, because if you have this mix of uncertainty around what is your tax capacity and you pair that with the uncertainty of when will the assets be placed in service, especially if you're investing ITC—is it this year? is it next year?—that can have a big impact now with the lower tax bills.

Salant, Citi: It's also important that we remember that when we talk about the tax equity market, that's difficult to view as one homogeneous market. We've been saying this, as have others, probably for at least a year or two now: we've seen massive bifurcation in this market.

There are certain big, giant developers who have great relationships with banks—we've done deals with Capital Dynamics, we hope to do deals with EDPR—they're big, well-established players. And when an EDPR, a **NextEra Energy**, with an investment grade balance sheet, comes to you, there's one way to deal with transactions like that. They can raise all the tax equity they want. They can get a couple hundred million, they can deal with the big players, they'll even get oversubscribed if they want to.

The disconnect in the market is, you can go to a conference and hear people like them talking about how they're oversubscribed, what's the problem? The fact is tax equity investors are trying to get into their deals that can't. But then you hear that for every big, giant developer there may be five to ten little developers who are running around going: "I can't raise a dollar. What's wrong with this?" And it's because as of the last year or two, or maybe even three, the tax equity market isn't one market any more.

Burton, Mayer Brown: I think there's definitely bifurcation as you describe it, and there's also bifurcation around structure. There's the older, more experienced tax equity investors who maybe started in wind, and they tend to use an IRR [internal rate of return]-based flip structure and to structure even their solar deals more like a wind deal. And then there's, typically, smaller investors in solar, newer investors in solar, who don't have the wind experience and don't necessarily have all this sophistication, and they prefer investing based on a time-based flip, where you don't have to calculate the IRR and worry about getting that just right. That's much easier for a smaller, newer investor who doesn't have the sophistication of a Citibank to deal with than the kind of PTC, after-tax, IRR-style structure.

Dovere, C2: C2 definitely falls more into the middle-market developer bucket. The difference being that we started four years ago, with a balance sheet growing organically, but quickly. We view ourselves in another subsection of the tax equity market where there's the guys running around who can't raise a dollar and there's firms like us with $150 million balance sheets who can raise the tax equity that we need.

We were typically doing it deal-by-deal, because it was harder to attract institutional attention without a very large fund or an investment grade balance sheet. And so we have actually been in what I think is a very positive position, where we are able to pick up the smaller opportunities from the guys who can't raise tax equity and function in an effective aggregation role as well as have our own development assets and balance sheet, and to be able to work with tax equity to a point where we can start to garner more institutional attention.

As relates to David's comment about the time-based flip, the structures tend to be modelled off of a **U.S. Bank** structure. And I think that, actually, if they were to stipulate an IRR-based flip, it would be such an egregious number to even put on a document to make it equivalent to a six-year flip that it's just easier and more polite for them to do it as a time-based flip, because the IRRs that they're getting are already so high. It looks like a polite way of no one actually having to acknowledge what that cost of capital is.

But I would put us in that middle tier of the market where we can get the tax equity that we need. It's a lot harder and a lot more time and brain damage, especially for the individuals on the team that have to do the tax equity structuring. So that's, hopefully, what we're aspiring to move out of, but that's where we have also created a business opportunity in the market, because if you're a developer and you've got 3 MW to 5 MW, you're not getting that thing tax equity-financed unless you've got a high net worth contact. We've seen deals trade away from us that we would otherwise buy in that size range because there's a local high net worth individual and they are going to do the tax equity. That's not a market—that's a one-off situation.

Salant, Citi: Yes, and to clarify, I overstated when I said they can't raise a dollar. That's the extreme case. What I literally mean is there are many smaller developers or new developers for whom it's just very, very difficult. Hopefully, they get there eventually, but it's not like an EPDR who can put out an RFP [request for proposals] and say, "Here's our portfolio," and send it to the 20 big players who are investors and have 10 of them say they want to be in it. It's not even close to that. It's the guys who can spend weeks and months knocking on doors, trying to raise the money that they need. Much harder.

Almeida, EDPR: Yes, I totally agree with Richard. And I think that aggregation trend that you guys are seeing on the lower tier of the market, I think we, to a certain extent, can also play a role in consolidating some of the opportunities in the middle market.

There comes a point in which I think any developer will, more so in the current environment, given the new rules of the tax equity market, ask themselves whether it makes more sense for them to continue developing the project or think about consolidation and maybe bring it to us at a level where we still can have a meaningful say in how the project is structured.

Because I think we don't raise competitive tax equity only, or probably not at all because we are big. We raise competitive tax equity because we develop our projects and build them to certain standards, and we look at revenues that have a certain pedigree. And for us to be able to package that and bring it to the tax equity market, we need to be involved at an earlier stage.

We foster these relationships with middle market developers that have assets, but why would they continue developing them and feel that they would be squeezed on the tax equity market if they can work early on with sponsors that have the size and the capability to shape the product in a way that it's more sellable on the tax equity market?

"If you do a deal with EDPR... you pretty much know what the PPA's going to look like... all that stuff. You do a residential solar deal, right, it's all pre-baked... But D.G. is in the middle."

David Burton, Mayer Brown,

Burton, Mayer Brown: The other thing about smaller deals, D.G. [distributed generation] deals, is that they each have their own contracts. So if you do a deal with EDPR, as you just said, you pretty much know what the PPA [power purchase agreement]'s going to look like, you know what the O&M [operations and maintenance] agreement's going to look like, the land rights, all that stuff. You do a residential solar deal, right, it's all pre-baked, it's "take it or leave it". Mr. Jones is not negotiating his PPA with the resi solar provider.

But D.G. is in the middle, and most D.G. customers are big enough to have a general counsel who's like, "I need this to be under Oklahoma law," or whatever his or her view is, and so they're negotiated. And they're different, and that makes the diligence very expensive and time consuming, and then it's a smaller transaction on top of it. So you have many factors stacked against these D.G. transactions. They are getting done, they are profitable, but it takes a lot of elbow grease on both sides of the table to get it done.

Davis, Mayer Brown: I want to go back to David and Rich's point about the two different structures that we're seeing in the market. The suggestion was that the investors that are doing the time-based flips may be less sophisticated. I think it's also in part a product of their view of commercial risk versus tax risk. Those investors that are doing the time-based flips are oftentimes more willing to take a little more tax risk to minimize their commercial risk.

And I think it's in part because a lot of those investors may have had a history in either the low-income housing space or the historic tax credit space, and similar structures have neem frequently used there.

PFR: Let's talk about pricing. If anyone would like to say a figure, they're absolutely welcome to, but what I've been hearing is, this year, around the 6% to 7% range for tax equity. We've been talking a lot about the bifurcation into two different markets. Does pricing also come into that?

Dovere, C2: Yes.

Burton, Mayer Brown: Absolutely. But the 6% to 7% range, that's a quote for a PTC deal or somebody doing a solar deal using an IRR yield-based flip. If you're doing a time-based flip, there is no IRR, so that 6% to 7% doesn't really mean anything. They tend to quote in terms of dollar-per-credit instead.

PFR: And can you put any figures on that?

Dovere, C2: It's a function of how much cash you're taking. At the highest end, we've seen $1.38 a credit, which is not really fair comparison because it's a different dynamic. And the lowest we've seen... You know, at the beginning of the year we were getting $1.05, and that same investor's now at $1.15, $1.14, and it's just a function of how much of a preferred return they're taking. These are all modelled after the U.S. Bank structure, which, I think, prior to tax reform was $1.20 to $1.25 a credit, with a 2% pref.

Almeida, EDPR: Rich, any time I'm asked about pricing, I always say that it's too high for the risk profile of the investment.

Dovere, C2: I forgot to say that too!

Almeida, EDPR: If you look at, let's say, a long-term bank project finance or—more traditional in the U.S.—a back-leveraged deal, that can be in the 4% range. If you look at an equity investment where someone comes in, takes equity risk, the unlevered returns are going to be in the 5% to 6% range, if the asset is a quality asset. So if tax equity prices between 6% and 7%, and you're talking about a preferred return investment, senior to both back-leverage and equity, that can only be explained by the dynamics of the market and the balance between supply and demand.

It's not as outrageous as it was some years ago. I think everyone is working to make the market more liquid, to bring the supply and demand closer together. But still there is a spread.

PFR: So, still too expensive, in summary. And the figure that I've heard is, on a return basis, 100 basis points lower than at some point last year.

Salant, Citi: The discussion of pricing has always been an annoyingly difficult conversation in the tax equity market. Those of us who have been to various industry conferences for ten years, lawyers will ask questions of a panel, and not one person will admit a number, which is crazy. But they're all private, bespoke, negotiated transactions, so nobody ever wants to quote a number. Once or twice I threw out numbers, and people yelled at me: "Why are you throwing out a number?"

Clearly, for ten years, sponsors have felt tax equity was too expensive, and I can understand why they felt that way. When you look at it from the outside, it's just the financing cost that looks high, and it is, because of all the complexities. It's because of the need to use your own tax capacity for the partnership structures, the internal accounting, the GAAP accounting, below the line, above the line, not helpful to earnings... The structure, from day one, does everything it can to make it unattractive for the reporting company to be a tax equity investor, yet we have to provide a tax equity and we have to put massive amounts of capital against it.

So it'll never be something that people think is appropriately priced, because all the internal machinations banks and others have to go through to be able to do the transactions are very painful.

What you can say is that in the last year, yes, levels have gotten lower. And if 6% to 7% is the right level, where it used to 7% to 8% or even 8% or higher, what is interesting is that just about every debt rate you can think of let's say, in the last six months, 12 months, they've tended to go up a little bit, and spreads have widened. To the extent people felt it was way too expensive, maybe it's less expensive today, because it doesn't look quite as bad relative to other things.

"It's not as outrageous as it was some years ago. I think everyone is working to make the market more liquid, to bring the supply and demand closer together."

Pedro Almeida, EDPR

Burton, Mayer Brown: The other thing is that within the institution, within the bank, the tax equity does compete with other desks for the tax appetite. So, for instance, if you do low-income housing tax credits, you get Community Reinvestment Act. If those deals are paying, let's say, 5%, tax equity's going to have to pay something materially higher than 5% in order to persuade the bank not to just do all the low-income housing tax credit deals.

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Dovere, C2: Or, like us, you have solar deals that serve low-income housing. Our tax equity partners were very excited about that.

PFR: I've heard quite a bit this year about regulated utilities looking to own more renewable energy assets directly rather than contracting them through PPAs. I'm curious about how that affects tax equity, whether utilities use third-party tax equity to finance projects, or their own tax base, and when you're developing a project and if you're going to sell it to a utility company, how that affects the dynamics there.

"Offshore is something that we'll be looking at… but one of the struggles that we anticipate having is just the fact that it is a new market and you're dealing with other construction issues, other cost issues."

Kathryn Rasmussen, CapDyn

Burton, Mayer Brown: The first thing is that ITC is subject to normalization, which is a complicated tax issue for regulated utilities, but, basically, it makes ITC relatively unattractive to regulated utilities. The PTC is not subject to normalization, so you have a first fork in the road between ITC and PTC.

If it's an ITC deal, the regulated utility is probably going to want to do it as a PPA and not own it itself. If it's a PTC deal, they may very well want to own it themselves and rate-base it. And that can be very attractive to them to both get the PTCs and to be able to rate-base it.

They have to have tax appetite to be able to use the PTC, of course, and a lot of the utilities for a while didn't have tax appetite because the regulators were typically making them claim bonus depreciation, which would wipe out or exceed their tax appetite.

One of the things tax reform did is that it instituted an interest limitation rule of, basically, 30% of EBITDA, as the limit on your ability to deduct interest. But that rule is not applied to regulated utilities. However, a trade-off for that was that regulated utilities agreed to not be able to take bonus depreciation. So the regulated utilities no longer have their regulator saying, "You have to take bonus and pass through that benefit to the consumer," so now they have more tax appetite. So them owning wind PTC deals themselves and claiming PTCs themselves is potentially an attractive proposition.

Salant, Citi: Again, it's part of the supply/demand imbalance. You had all the backlog of transactions, what I call the normal-way business that people already try and do. Add to that the repowerings that people now want to do, which throws a whole new chunk of transactions out there that probably will want tax equity. Coupled with the fact that there are people who have had their tax positions change, or some publicly disclosed situations where people are in the market selling portfolios of tax equity, so you've got secondary sales of tax equity that has to find buyers. And we are aware of a couple of utilities that, for the first time, are looking for tax equity investors for their big portfolios, because they may have capacity, but they don't want to use it all for this and they actually would like to monetize some of it. And then add to that, hopefully, just off the horizon, the offshore wind market finally developing in the U.S.

So the problem is, when you take all the regular-way business and you add repowerings and secondaries and big utilities and offshore, you could have a very significant increase in the need for tax equity. And the question is: are these positives on the investor side going to be enough to absorb all of that new product that may need a home very shortly?

PFR: I'm glad you mentioned offshore wind. A lot of states, especially on the East Coast, are looking at offshore wind. New Jersey just made an announcement on that topic this week (PFR, 9/18). These projects are very large and expensive. What challenges do they present when looking to take advantage of tax credits?

Davis, Mayer Brown: The size and the cost of the projects presents a challenge by itself, because the sponsor has to be able to arrange enough tax equity financing to finance the project. And given the cost of the project and the fact that the wind projects that are offshore typically claim the ITC because of those high costs, there's a large credit upfront—a big hit in one year. So you need either an investor or, more likely, a number of investors who are able to absorb all of those tax benefits in the first year. That's why, as Marshal knows, Citi and **General Electric** were co-investors in the Block Island transaction.

Another complexity that that introduces is with respect to negotiations with the sponsor. The sponsor now has to deal with multiple investors, each of whom is typically a large institutional investor that has very strongly-held positions on certain issues, and they may not be the same issues from one investor to the next, so the developer has to figure out how to address each of those investors' issues to keep them at the table. So that, obviously, presents a lot of challenges for the sponsor in trying to round up the club of investors for offshore wind.

Rasmussen, CapDyn: I think there's no doubt that it's going to be a major part of the North American market. It has been lagging compared to Europe, where it is an established industry, so I think it's also a new market for tax equity. We do think that offshore is something that we'll be looking at, and how it's going to fit into our portfolio, but one of the struggles that we anticipate having is just the fact that it is a new market and you're dealing with other construction issues, other cost issues, even just tax equity players coming into that market for the first time. So I do think we have some of those hurdles that we would expect to see.

Davis, Mayer Brown: An additional challenge has to do with the development timeline. Because the IRS has basically given you the four-year window from when you start, which could be as much as five years if you start early in year one. And given the permitting and approvals and various hoops that developers have to jump through, they may find that they're butting up against the end of that four-year period. And tax equity, typically, doesn't want to invest in deals that aren't in the four-year safe harbour, notwithstanding the delays may have been because of various things that are permitted in the IRS guidance. So that's a real challenge.

"Or, like us, you have solar deals that serve low-income housing. Our tax equity partners were very excited about that."

Rich Dovere, C2

Almeida, EDPR: EDPR has offshore experience in Europe, and the reality is that offshore projects make sense when they're big. And so, if we have a capital constraint because of what you are saying, because people don't want to have ten investors in one deal, they just make the projects smaller than they should be. And that is, from my perspective, hindering the competitiveness of offshore, and there should be a solution for this.

But, interestingly enough, even though the tax equity ticket is large, just because the project is big, the percentage of the tax equity for an offshore project is smaller than for a typical onshore wind project. That is interesting for us, because we can bring more debt into the mix, but it creates different dynamics, because the tax equity investors, the tax equity investors also need to deviate from some of the traditional dos and don'ts of the structure and be able to come up with structures that accommodate a much larger debt component than your traditional onshore wind.

Burton, Mayer Brown: One thing that is hopeful on the tax side for offshore wind is that most of the RFP responses for offshore wind are including storage.

PFR: Battery storage?

Burton, Mayer Brown: Battery storage. And that's a nice fit with offshore wind, because offshore wind could qualify for the PTC or the ITC, but because of the high cost, the conventional wisdom is the ITC is more attractive because the 30% ITC exceeds the present value of the PTC.

And then if you have an ITC project that charges a battery, you can claim ITC on the battery as well. And conventional wisdom has been that if you had a PTC project charging a battery, it may not qualify. So the fact that offshore wind, for commercial reasons, is going with battery storage, and the tax law conveniently facilitates the pairing of offshore wind and battery storage, is helpful for the projects.

Davis, Mayer Brown: The statute requires that in order for equipment to be eligible for the ITC, it has to be electric generation equipment. The batteries by themselves aren't generation equipment, but the IRS has some old regulations that say that storage equipment can be eligible—and that has been found to include batteries under private letter rulings—presumably under the notion that they're part of, or integral to, some generating facility.

However, it may be difficult to get around the literal language of the statute, and for that reason there's a strongly-held view that you can't claim the ITC on batteries that are part of a PTC wind farm. In my view, that's an area where the industry should be pushing the IRS for additional guidance, because the stakes are high enough, and as David points out, with all the RFPs that are looking to include batteries, it's an issue that we're going to see repeatedly. Although the IRS guidance project for what equipment qualifies for the ITC has been dropped from the IRS's priority guidance plan, I understand from an IRS official that it is still open but guidance won't be coming out until 2019.

Salant, Citi: We'd like to think at Citi that we have good experience here. We did the Block Island deal, the **Deepwater Wind** deal, as was mentioned. We've done a lot of deals in Europe. For example, we did the Walney Extension off the coast of England, which is the largest offshore wind farm. So because of that expertise, we get asked to talk to clients and potential clients about this.

There are all these technical challenges on the tax side. What does continuous work really mean when you're out in the ocean? And you're not going to be able to show that you did a lot of work onsite...

PFR: ...building roads and things.

Salant, Citi: Yes, there's a lot of language about roads. Well, that's not going to apply for the thing you're building in the ocean. And the numbers are big, and we have to convince everybody about the risks.

I think it's fair to say, in Europe there's not a big premium between financing, offshore versus onshore, because they have the history, they've proven that they can do it. In the U.S. we've only got this one little project that's very successful, but it's small compared to the ones that are coming. And when you go to do multi-billion projects, it's going to require a lot of people participating, with a lot of capital, and we're going to spend a lot of time talking about the best way to do it.

PFR: So onshore wind-plus-battery-storage, in particular, has this mismatch between the PTC and the ITC. But there's been solar with battery storage integrated into it, and I guess that's a slightly simpler proposition from a tax equity point of view. Has a lot of financing been done on that basis so far?

Burton, Mayer Brown: It depends on what a lot is. There have been a number of projects that have combined solar and storage, but it's not every project, it's not half the projects, but it has happened.

And even that has tax questions about. An early IRS ruling said, "You just have to charge it with the solar, you're fine." And then the most recent ruling, which is still a couple of years old, said, "Well, if you charge it less than 75% with solar in the first five years, you fall off a cliff and you have to pay back the ITC." The IRS analysis in the rulings has evolved to reach that determination.

Davis, Mayer Brown: The easy case is the battery is built at the same time as the solar project. It's co-located, it's under the same ownership, and the battery is charged 100% from the solar—there's nothing coming from the grid. It becomes a little more complex where, as David talks about, you get into the dual-use property rules, because the battery is now charged by the grid for some portion of time.

Other facts that make it a little more complicated might be the batteries aren't co-located. They're not right there with the solar project, they may be located somewhere else, or they may be owned by a different party. And these are things that the IRS has not yet addressed and that the industry's struggling with, underscoring the need for additional guidance.

"Absolutely, we're thinking about the phase out. But right now, for all intents and purposes, as a practical matter, it's a bit early. I won't say too early, but a bit early"

Marshal Salant, Citi

Almeida, EDPR: Let me give another example where the current status quo might be hindering innovation. We are looking at hybrid projects, wind and solar, in our other geographies, and potentially those could have storage as well. You would be able to put together an energy product that is shaped more appropriately. You might be able to use the infrastructure that's just sitting there, and so wind could use it part of the day, solar could use it at another part of the day. How do we deal with that under current tax guidance?

Davis, Mayer Brown: Pedro raises a great point, because the diurnal nature of wind versus solar, you're going to get solar just during the day, but you get your best wind at night. The so-called hybrid project would allow you to potentially use some pieces of equipment for both solar and wind and therefore cut the cost of having a certain megawatt capacity of wind and a certain megawatt capacity of solar.

In fact, I submitted on behalf of a client a comment letter to the IRS requesting guidance on that very point. There are really compelling arguments that you ought to be able to use that type of hybrid equipment and claim the PTC for the wind production and the ITC for the solar equipment, but we'll have to wait to see whether the IRS agrees.

Dovere, C2: I would love for that to be the case. But as far as the storage goes, it's actually something that we think is very exciting on the D.G. side. We're going to retrofit our projects with storage. We're only talking about building a couple megawatts of *new* projects that will have it, but we basically just negotiated that if there's anything that tax equity has a problem with, we'll just take the tax credit ourselves, so just allocate 95% to us. There's obviously a functional limit to that, but it's still a couple million dollars a year worth of batteries.

PFR: It strikes me that a lot of these difficulties with integrating different technologies will be resolved when the PTCs go away entirely, because there will be no compatibility issue any more. Are people thinking already about the phaseout and how that will affect financing, or is it too early?

Salant, Citi: Absolutely, we're thinking about it. But right now, for all intents and purposes, as a practical matter, it's a bit early. I won't say too early, but a bit early.

Rasmussen, CapDyn: It's never too early to start thinking about the future and what our future funds are going to look like, where we're going to allocate our investment dollars in the future. However, if it's qualified for the safe harbour, you have four years to do it. That's another five years, essentially, a little over five years from today. And a lot can change in five years. We've seen costs dramatically go down. How much more they can go down... We'll see. But we do expect there will be improvements in production, whether it's more efficient turbines or more efficient solar panels. A number of things are going to feed into what the landscape looks like in 2023.

Burton, Mayer Brown: In terms of the extension, that's really a political judgement, and I know my political crystal ball has been not working too well since 2016, but I think there's a possibility of an extension given the right president and the right Congress. But we'll have to wait and see.

PFR: And under the existing schedule, there would still be a 10% ITC for solar projects, that there is no existing plan to get rid of that, right?

Salant, Citi: That is correct, yes.

PFR: And, also, there'll be depreciation, so there may still be a role for this kind of structure beyond the planned phaseout?

Burton, Mayer Brown: Right, I believe so. Ten percent ITCs are much smaller than the current 30%, but it's still a material number that I think people would want to monetize. The 100% expensing ratchets down over time, but you still have five-year MACRS [Modified Accelerated Cost Recovery System] depreciation, which is still relatively accelerated. And there were always and are tax-oriented deals done on equipment and things that don't qualify for tax credits. So I think there's always going to be some structuring and tax planning and tax motivation as long as there's some level of tax credit and accelerated depreciation available. ■

LITIGATION

Colstrip Owners Hit Former Parent PPL with $733M Suit

One of the owners of the Colstrip coal-fired plant in Montana and a related pension plan, both affiliates of **Talen Energy**, have brought two lawsuits against **PPL Corp.**, claiming $733 million that they say the utility holding company misappropriated when it owned the plant, leaving it unable to meet its environmental and financial liabilities.

The plaintiffs in the case are **Talen Montana**, which owns 50% stakes in units 1 and 2 of the Colstrip plant and 15% stakes in units 3 and 4, and **Talen Montana Retirement Plan**, which covers about 770 active and former employees of Talen Montana and the plant. Talen Montana also operates the 2,094 MW facility.

> **"We believe that we acted appropriately with regard to the sale of PPL Montana's hydroelectric generating assets, and that the subsequent distribution of proceeds was in compliance with applicable laws."**

Both suits center on the 2014 sale of Talen Montana's (then PPL Montana's) hydro assets to **NorthWestern Corp.** for $900 million and the distribution of the $733 million net proceeds, the same day, to its then-parent company PPL, which the plaintiffs characterize as a "scheme" to render Talen Montana insolvent to the benefit of PPL's shareholders.

"We believe that we acted appropriately with regard to the sale of PPL Montana's hydroelectric generating assets, and that the subsequent distribution of proceeds was in compliance with applicable laws," a PPL spokesperson tells *PFR*. "As such, we will defend ourselves vigorously against these actions."

Besides PPL and its subsidiaries, the accusations are being levied against several individual officers, directors and employees of PPL that had control over PPL Montana, including **Paul Farr**, who was ceo of **Talen Energy Corp.** until **Riverstone Holdings** took the company private in 2016.

NEGATIVE VALUATION

At the time of the hydro portfolio sale to NorthWestern, the only other assets Talen Montana owned were the almost 50-year-old J.E. Corette coal-fired plant in Billings, which has since been retired, and the Colstrip stakes.

In the suit, filed in the **First Judicial District of the State of Montana, County of Lewis & Clark**, on Oct. 29., the plaintiffs note that NorthWestern had previously bid $740 million for the hydro assets alone but only $400 million for both the hydro and coal-fired assets, implying a negative valuation of the coal-fired plants of several hundred million dollars.

Talen Montana and the pension plan allege that the subsequent distribution of the proceeds of the hydro sale to parent company PPL hollowed out PPL Montana, leaving it unable to meet its obligations to the state, including projected costs totaling about $500 million to comply with a 2012 administrative order of consent imposed by the **Montana Department of Environmental Quality**, and its creditors, including the pension plan.

The accusations include breach of fiduciary duty, negligent misrepresentation, constructive fraud, deceit and unjust enrichment.

SHORT-LIVED FLOAT

The Colstrip and Corette plants were part of the initial portfolio of assets that PPL contributed, along with Riverstone, to form Talen Energy Corp., which was listed on the **New York Stock Exchange** in 2015 (PFR, 6/10/14).

The public listing was short lived, however, as Riverstone took the company private the following year after its share price plummeted against a background of tough merchant power markets (PFR, 6/3/16).

It is not clear why it has taken until now, more than two years after the take-private, for Riverstone to reveal the financial situation at Talen Montana, and whether the liabilities and risks associated with the Colstrip plant were accurately reflected in the prospectus for Talen Energy's flotation on the NYSE.

The suit accuses Talen Montana's PPL-appointed managers of concealing estimates and assessments of the liabilities from the company they managed, charging that they "knew, or recklessly ignored, that the Distribution would have precisely this effect," of rendering the company insolvent.

PFR has contacted Talen, which is now wholly owned by Riverstone, for further comment.

> **"[T]he Distribution rendered PPL Montana insolvent. And its PPL-controlled managers knew, or recklessly ignored, that the Distribution would have precisely this effect."**

TRUST

Talen Montana wants the $733 million that it is hoping to recover to be placed in a trust to fund what it says are PPL's legacy obligations, including environmental remediation obligations in Montana, and to satisfy its creditors, which include Talen Montana's pension plan. It is also seeking an award of punitive damages.

Brown Law Firm, Taylor Luther Group and **Quinn Emanuel Urquhart & Sullivan** are advising the Talen companies on the dispute. Whether PPL has appointed legal counsel could not immediately be established. ■

MERGERS & ACQUISITIONS

Buyer Emerges for Dominion's Blue Racer

First Reserve has agreed to buy **Dominion Energy**'s 50% stake in Blue Racer Midstream, its joint venture with **Caiman Energy II**.

The energy-focused private equity firm emerged as the winning bidder following a competitive sale process run by **Goldman Sachs**. The equity will come from its First Reserve Fund XIII and various affiliated investment funds.

First Reserve will pay up-to-$1.5 billion for the stake, of which $1.2 billion is upfront and up-to-$300 million dependent on performance and due to be paid from 2019 through 2021.

The transaction is expected to close before the end of the year, pursuant to regulatory approvals, according to Dominion's third quarter earnings report.

Dominion and Caiman Energy forged the Blue Racer joint venture in 2012 to own, operate, develop and acquire midstream assets in the Utica Shale region and adjacent areas in the Marcellus Shale region.

Dominion publicly identified it as a non-core asset for sale back in July (PFR, 7/18).

"We are very pleased with the attractive valuation achieved through the competitive sale process which represents a multiple range of approximately 14 times to 16 times estimated 2018 EBITDA based on bookends of potential payments to be received under the earn-out structure," said **Thomas Farrell**, chairman, president and ceo of Dominion, in a statement.

First Reserve has obtained financing from Goldman, **Barclays** and **RBC** to support the acquisition, while **Simpson Thacher & Bartlett** acted as the firm's legal adviser, said a spokesperson for First Reserve in New York. The official declined to comment further on the financing.

Troutman Sanders represented Dominion on the sale.

The Richmond-based utility holding company will use the proceeds to reduce parent-level debt. The company is aiming to slim down its debt by around $8 billion through a combination of equity issuance, non-core asset sales and the project financing of its Cove Point LNG facility (PFR, 9/10, 9/4).

Dominion recently agreed to sell three generation assets located in Pennsylvania, Rhode Island and Louisiana for a combined $1.32 billion (PFR, 9/25). ■

Invenergy Weighs Option to Sell Chunk of Renewables to CDPQ

The clock is ticking on an option **Invenergy** has to sell an additional stake in its renewables portfolio to **Caisse de dépôt et placement du Québec**.

The option dates from April, when CDPQ signed a deal to increase its shareholding in the portfolio holding company, **Invenergy Renewables**, from 31.73% to roughly 53% by buying 15.89% from **Liberty Mutual** and 4.78% from Invenergy (PFR, 5/22).

Invenergy disclosed the existence of the option, which gives it the right to sell an additional interest of up to 11.38% to CDPQ, in an Oct. 31 filing with the U.S. **Federal Energy Regulatory Commission**.

The independent power producer said in the filing that it had not yet exercised the option, which expires on Jan. 10 of next year. It has asked FERC to approve the potential transaction by Dec. 17.

Invenergy and CDPQ did not respond by press time to inquiries pertaining to when the option might be exercised.

The Invenergy Renewables portfolio comprises mainly wind projects but also includes solar and battery storage assets.

If Invenergy exercises the put in full, its share of Invenergy Renewables will dip from 46.4% to 35.02%, while CDPQ's share would grow to 64%. ■

PROJECT FINANCE

Price Talk Out for Talen Term Loan B

« FROM PAGE 1

spokespeople for the bookrunner declined to comment on the deal, which includes a $25 million revolver.

The projects backing the deal—both located in Northampton County, Pa.—are the 600 MW Lower Mount Bethel combined-cycle unit and the 1,700 MW Martins Creek dual-fuel project (PFR, 10/26).

While Lower Mouth Bethel came online in 2004, Martins Creek has been operational since 1975, which could help to explain the relatively wide margin. The facilities sell their output spot into the wholesale market.

Lower Mount Bethel has a 7,170 Btu/kWh heat rate, while the larger, older Martins Creek project has higher heat rates of 11,744 Btu/kWh and 10,676 Btu/kWh for its gas and oil-fired units, respectively.

Moody's Investors Service rated the notes Ba3 on Oct. 31, forecasting the projects will earn approximately $300 million of capacity revenue during the period 2019 through May 2022 and approximately $90 million annually thereafter.

Talen will use the expected $385 million net proceeds of the deal to pay down corporate debt maturing in 2021 and 2022 through a $400 million cash tender offer, which was announced on Oct. 30 and expires on Nov. 28.

"The sole purpose is to de-risk near term maturities," said **Stacey Peterson**, senior v.p, treasurer, and head of investor relations at Talen, via email.

The independent power producer is offering $950 for each $1,000 of its 4.6% senior notes due 2021 in the tender of offer and $1,035 for each $1,000 of its 9.5% senior notes due 2022. Its 6.5% senior guaranteed notes, due 2024, are also included in the tender, at $670 for each $1,000.

"Talen today has a very low level of secured debt, well below the peer group average, with only $1 billion of loans supported by all of Talen's assets as collateral (with exception of **New MACH Gen**)," noted Peterson.

New MACH Gen is a Talen subsidiary that handed over the 1,018 MW Harquahala gas-fired project in Tonopah, Ariz., to creditors as part of a restructuring in July (PFR, 7/31). ■

PROJECT FINANCE

E.On Partners Up for Panther Creek Wind Repowering

E.ON has found a partner on its first repowering project in the U.S.—its Panther Creek I and Panther Creek II wind farms in West Texas.

The German electric utility holding company is partnering with **General Electric** for the repowering of the projects, which originally came online in 2008 and have a combined capacity of 258 MW.

"This is the largest repowering project we've undertaken at E.ON and we expect this trend to continue as we see our turbine fleet mature," said **Anja-Isabel Dotzenrath**, ceo of E.On, in a statement.

GE will erect and commission the projects, scheduled to be completed in the third quarter of 2019, as part of its equipment delivery contract.

The projects—located across Glasscock, Howard and Sterling counties—are part of a larger 457 MW facility built in three stages by E.On.

- The first phase saw the 142.5 MW Panther Creek I project come online in Sept. 2008, fitted with 95 GE 1.5 MW SLE turbines.
- The second phase, the 115.5 MW Panther Creek II project, came online in Dec. 2008 and has 77 GE 1.5 MW SLE turbines.
- The final 200 MW Panther Creek phase III came online in 2009 and is fitted with 133 GE turbines.

In 2013, E.On secured institutional equity financing totaling approximately $96.2 million plus a commitment to fund further capital contributions from **JP Morgan,** in exchange for partial interest in the Panther Creek I and II projects.

Repowerings can qualify for production tax credits, as **Leeward Renewable Energy** has demonstrated, most recently lining up **Citi** as lead tax equity investor for the repowering of its Mendota Hills wind project in Lee County, Ill. (PFR, 10/4).

E.On and GE spokespeople in Austin, Texas and New York respectively, did not respond to requests for further details by press time. ■

Coming Soon: PFR Special Report on Offshore Wind

As market participants prepare for the U.S. offshore wind industry to take off, *PFR* is producing a special report on the topic, featuring a roundtable discussion sponsored by **Orrick, Herrington & Sutcliffe** and **Fitch Ratings**.

The report is due to be published in December, shortly before the deadline for applications in New Jersey's first offshore wind solicitation.

The panelists were:

- **Chris Moore** and **Paul Zarnowiecki**, partners at **Orrick**
- **Greg Remec**, senior director, global infrastructure and project finance at **Fitch Ratings**
- **Eric Thumma**, director of policy and regulatory affairs at **Avangrid Renewables**
- **Anne Marie McShea**, offshore wind program administrator at **New Jersey Board of Public Utilities**
- **João Pedro Summavielle**, head of corporate finance at **EDP Renewables**
- **Rael McNally**, director alternative investments, infrastructure and renewable power, at **Blackrock**
- **Jennie Rose**, director of infrastructure debt at **Barings**
- **Jorge Camiña**, director of infrastructure debt at **Allianz Global Investors**

The offshore wind roundtable follows on from the highly successful tax equity roundtable *PFR* held in September with **Mayer Brown**.

If you would like to sponsor a roundtable on a power and renewable energy financing topic, please contact **John Weber**, commercial director of *PFR*, at john.weber@powerfinancerisk.com. ■

Argentine Sponsor Nets Wind Project Funds

Argentine sponsor **Petroquímica Comodoro Rivadavia** has signed a $108 million financing from a group of development banks for a 126 MW wind farm in the south of the country.

The deal, for the Bicentinario wind project in Santa Cruz, includes a roughly $58 million tranche provided by Germany's **KfW IPEX-Bank** and a $50 million portion provided by **IDB Invest**.

The KfW tranche is guaranteed by Danish export credit agency **EFK**, on the basis that **Vestas Wind Systems** is supplying the turbines.

The Bicentinario project will sell 100 MW of its output to Argentina's wholesale power market administrator, **Cammesa**, under a long-term power purchase agreement, while the remaining 26 MW will be sold under a corporate PPA.

IDB Invest, part of **the Inter-American Development Bank** group, has been an active lender in Argentina's renewables sector this year. In April, the bank took a $10.75 million ticket in a $60.15 million debt package for an 80 MW solar project being developed in the country by China's **Jinko Solar** (PFR 4/19). ■

PROJECT FINANCE

Recurrent's Solar-plus-battery Win

« FROM PAGE 2 the output of a solar project in Guerrero, Mexico.

The Canadian company will use the output of the Energia Solar Alaia IV project to power its Campo Morado mine, which began producing zinc and lead concentrates, with gold, silver and copper as byproducts, in May.

The miner will pay 1,100 pesos/MWh ($54/MWh), indexed to inflation, for the duration of the take-or-pay contract, which can be extended at the end of its 10-year term.

The owner or owners of the solar project could not immediately be identified.

PAPAL PPA

Con Edison Solutions has installed solar arrays totaling about 500kW at five Catholic parishes on Staten Island and in Yonkers, N.Y., after signing 20-year power purchase agreements.

The **Archdiocese of New York** chose ConEd after a competitive procurement process involving more than 10 solar developers.

"Preventing further environmental degradation has become a top priority for the Catholic Church under Pope **Francis**," said Bishop **John O'Hara**, auxiliary bishop of the Archdiocese, in a statement.

In his second encyclical, *Laudato Si'*, the pope called for people to take "swift and unified global action" against global warming, practice responsible development and protect the planet. ■

Fortistar Preps Behind-the-fence Generation Refi

« FROM PAGE 1 arranger is expected to launch the deal into syndication in a couple of weeks, a banker tells *PFR*.

The original deal financed the Fortistar consortium's take-private of **Primary Energy Recycling Corp.**, which had previously been listed on the **Toronto Stock Exchange**, for $241.4 million.

The consortium includes **John Hancock Life Insurance Co.**, **Prudential Capital Group** and **Ares Capital Corp.**

Headquartered in Oak Brook, Ill., Primary Energy owns and operates four waste-heat-to-energy projects and has a 50% stake in a pulverized coal-fired plant with a total combined generating capacity of 298 MW. The facilities can also produce 1.8 million pounds per hour of steam. They are:

- the 48 MW Ironside Energy combined-heat-and-power project, which has been online since 2001,
- the 88 MW North Lake waste heat-fired project, which has been online since 1996,
- the 95 MW Cokenergy waste heat-fired project, which has been online since 1998, and
- the 61 MW Portside cogeneration project, which has been online since 1997.

All of them are located in East Chicago at a steel mill owned by **ArcelorMittal** except for Portside, which is at a Portage facility owned by **U.S. Steel**. They sell their output to their hosts under separate contracts, the shortest of which has two years left to run and the longest 22 years. ■

Tellurian Cuts Equity Buy-In for LNG Project

Houston-headquartered **Tellurian** is slashing the equity buy-in commitment for its Driftwood LNG export terminal project and intends to replace the difference with a larger helping of debt.

The company is now looking for equity investments of $500 per tonne of LNG with the aim of raising a total $8 billion in equity, according to an investor presentation filed with the U.S. **Securities and Exchange Commission** on Oct. 25.

Previously, the company was offering equity interests at $1,500 per tonne to raise $24 billion.

The supply of liquefied natural gas to investors at cost remains a part of the deal, but at a slightly higher price to reflect the cost of project financing.

The investment vehicle being marketed to investors, **Driftwood Holdings**, was formed to own and operate associated gas producing assets and pipelines as well as the Driftwood LNG export facility itself.

The sponsor plans to retain 42% of the equity in the company, representing up to 11.6 million tonnes per year of export capacity.

Under the revised deal, Tellurian expects to raise approximately $20 billion of project debt, an almost sixfold rise from the previous estimate of $3.5 billion.

The Driftwood terminal is located on the west bank of the Calcasieu River, south of Lake Charles, in Louisiana.

The total cost, including the investment required to build 1,000 miles of pipelines and upstream gas production facilities, is pegged at $28 billion. Assuming it is developed fully, the project will be capable of exporting up to 27.6 mtpa once it is complete.

NEW STRATEGY

Until recently, LNG liquefaction project financing was usually based on 20-year power purchase agreements with investment-grade buyers, but as such contracts have become scarcer amid the global LNG supply glut and falling prices, sponsors have increasingly been looking at sub-investment-grade entities and shorter contracts.

Tellurian's response with Driftwood has been to bring in offtakers as equity investors, including fixed-price LNG sales at cost over the lifespan of the project as part of the deal.

Goldman Sachs and **Société Générale** are advising Tellurian on the capital raise for Driftwood, which has generated interest among state-owned enterprises, oil companies, utilities, diversified chemical companies and trading houses, says **Amit Marwaha**, Telluria's director of investor relations who adds that 35 potential investors have progressed to the data room stage, up from 20 in May.

Tellurian is aiming to select partners by the end of the year, obtain permitting in the first half of 2019 and reach a final investment decision late in the first half of 2019. Construction would then begin, with the project expected to commence operations in 2023 and begin delivering LNG to the investor-offtakers in 2024.

The proposed LNG price for the offtakers is $3 per million British thermal units plus approximately $1.50/mBtu to pass through debt service costs. ■

STRATEGIES

D.G. Solar Sponsor Closes Equity Fund

C2 Energy Capital, a New York-based sponsor focused on distributed solar and storage, has raised fresh third-party funds as it builds its fleet.

The company, which was awarded *PFR*'s Best Buyer of Power Assets award in 2016 (PFR, 5/27) closed its latest fund, called C2 Taiyo Fund I, at $21 million. Together with tax equity and debt, the developer expects this to translate into $150 million of assets.

Some 50% of the funds have already been committed to identified investments.

"This capital enables C2 to offer effective solutions to bring projects over the finish line," said **Richard Dovere**, the firm's co-founder and managing member, in a statement. "This discretionary capital is differentiating – over the next two years we will have an unparalleled ability in the distributed generation segment to provide solutions for clients and developers."

Willkie Farr & Gallagher advised C2 on the formation and structuring of the transaction, while **Mayer Brown** advised on tax and project finance aspects.

Among C2's existing assets are a 51 MW portfolio of under-construction, utility-scale solar projects in South Carolina that it acquired from **Southern Current** (PFR, 1/24), an operating portfolio exceeding 50 MW of other solar facilities throughout the U.S. and over 400 MW of other projects under construction and in development. ■

Sunnova pricing, Hannon Armstrong deal light up solar ABS

A deal from solar finance company Sunnova that was priced two weeks ago and a first time solar securitization from Hannon Armstrong, announced last week, are rekindling the market for solar ABS in the fourth quarter.

Houston-based Sunnova sold its $262.7m deal, SNVA 2018-1, on October 26. It was the company's second outing in the securitization market, following an April 2017 issuance.

The issuer priced the senior bonds of the deal tighter than those of its first trade, selling the $202m 'A' notes at 175 basis points over interpolated swaps, for a yield of 4.874%, compared to 4.95% last year.

However, the subordinate bonds were priced at a higher yield than the equivalent tranche of the 2017 deal. The class 'B' notes were priced at 465bp over swaps, for a yield of 7.719%, compared to 6% for last year's offering.

The deal was led by **Credit Suisse**. **Kroll Bond Rating Agency** assigned an A- rating to the senior class, while the junior notes were not rated.

Meanwhile, Hannon Armstrong, a real estate investment trust with investments that sit at the intersection of renewable energy and real estate, is in the market with its first ever residential solar securitization, SunStrong 2018-1.

ABS-15G documents filed by **KPMG** indicate that **Deutsche Bank** and **Crédit Agricole** are the banks on the deal, which will securitize 37,568 residential solar leases.

The Annapolis, Maryland-based REIT completed a $100.5m securitization in 2015 backed by cash flows from wind, solar and other renewable energy assets on its balance sheet. ■

PFR #PowerTweets

For more news and coverage, follow @PowerFinRisk on Twitter, as well as @richmetcalf, @Shravanbhat and @Taryana_Odayar.

NYSERDA @NYSERDA Oct 30
Suppliers, manufacturers & service providers to the #OffshoreWind industry. Grow your business in New York–become a supplier to the burgeoning #NYOffshoreWind industry & attend the New York Offshore Wind Supplier Conference on 11/15

Lynn Jurich @LynnJurich Oct 25
Great meeting with the Governor of #PuertoRico today to discuss how we transform the islands energy grid to be cleaner, resilient, and reliable. @ricardorossello

GE Energy Fin Svcs @GEEnergyFinServ Oct 25
#ElectricityForAll. According to an @IEA report, the population of those without access to electricity fell to 1.1bn in 2016, down from 1.6bn in 2000.

John Berger @SunnovaCEO Oct 31
.@DukeEnergy kept solar leases and PPAs out of NC for years. Now, Duke wants to offer solar leases through their unregulated affiliate DECER, something that the regulated Duke Energy fought everyone else from doing.

CPV Energy @CPVEnergy Oct 30
State-of-the-art projects like the CPV Valley Energy Center and the CPV Towantic Energy Center help reduce carbon emissions by displacing older, less efficient generation.

Silicon Ranch Corp @SiliconRanchCo Oct 30
BREAKING—State and local officials announce our $89 million investment in two solar farms in Clay County, GA. "Silicon Ranch is truly a leader in solar innovation—and I commend them for investing in Georgia."—Lt. Gov. Casey Cagle

PEOPLE & FIRMS

GE EFS Stalwart Retires After 40 Year Career

A managing director at **GE Energy Financial Services** has stepped down after a 40-year career in finance, *PFR* has learned.

The project finance veteran, **Paul Naumann**, had been at GE EFS for over a decade when he retired. Spokespeople for GE EFS in New York declined to comment.

Naumann's departure follows the announcement in June, amid a major reorganization of the division, that **Tim Howell**, m.d., power and development, and **Kevin Walsh**, m.d. and head of renewable energy, would be retiring at the end of this year and the first quarter of 2019, respectively (PFR, 6/14).

Naumann joined GE EFS's 60-strong debt finance group as m.d. of energy origination in 2007, after a four-year spell with **Fortis Capital** (PFR, 11/21/07).

From 2003 to 2007, he had served as managing director in Fortis' global energy and utilities group, known for its hedging capabilities—particularly in the wind sector (PFR, 1/12/07).

Fortis had hired Naumann from **Deutsche Bank** in 2003, where he had led the New York project finance team for four years (PFR, 9/29/03).

Naumann began his banking career with **UBS** in 1978, where he spent 20 years, rising to the position of head of Americas project finance (Euromoney, 6/1/98). ■

Investec Hires In-house Counsel for Power and Infra

Investec has hired an attorney who previously worked in the project finance group at a major law firm in New York to advise its power and infrastructure team.

Sean Kulkarni joined the South African bank this month and will work closely with co-heads of power and infrastructure finance **Ralph Cho** and **Michael Pantelogianis**, *PFR* understands.

Kulkarni was previously a senior associate at **Mayer Brown**, where he had worked for six years, focusing on project finance and Latin America.

"It's always good to have your own in-house counsel looking at deals," a project finance banker observes.

Transactions Kulkarni may already be casting an eye over include a $369 million debt package Investec is putting together to refinance **Morgan Stanley Infrastructure Partners**' 805 MW Red Oak combined-cycle gas-fired project in New Jersey and a $240 million refinancing for **Fortistar**'s **Primary Energy Recycling Corp.** waste-heat-to-energy portfolio in Indiana (PFR, 10/15, page 1).

Earlier in his career, Kulkarni handled capital markets transactions at **Sullivan & Cromwell** in London and was an international trade policy fellow for the ranking member of the U.S. **House of Representatives**' Committee on Ways and Means. ■

FAST FACT

$369 million

The refinancing Investec is arranging for Morgan Stanley Infrastructure's 805 MW Red Oak project.

Southern Co. Green Bond Pioneer Heads to BNP

Steven Nichols, who handled **Southern Company**'s groundbreaking entry into the green bond market in 2015 as capital markets manager, has joined **BNP Paribas**'s sustainable finance team in New York.

Having joined the French bank as a director in September, Nichols reports to **Hervé Duteil**, chief sustainability officer, Americas, a spokesperson for the bank tells *PFR*.

Nichols worked at Southern Co.'s Atlanta headquarters for three years, raising more than $35 billion in long-term capital markets transactions, including $3.5 billion of green bonds, the most of any corporate issuer in the U.S. to date.

The utility holding company's first green offering, issued through unregulated generation subsidiary **Southern Power**, was a $1 billion trade split equally between a two-year and a 10-year tranche.

As well as being the company's first green bond, it was also the first time the issuer structured a bond to allow it to clear through European exchanges, resulting in a 15% allocation to Europe.

"I can't prove it but I suspect that the green bond helped with that," Nichols told *PFR* at the time (PFR, 12/1/15).

As the first green bond offering from an investment grade U.S. utility company, the deal was a landmark in sustainable finance in the U.S., paving the way for similar issuances from **Westar Energy**, **MidAmerican Energy** and most recently **DTE Electric Co.**

BNP was not a bookrunner on Southern's inaugural green bond, but was on Westar's debut green bond offering in 2016, MidAmerican's in 2017 and DTE's earlier this year. It not the green structuring agent on any of those deals, however.

In his new role, Nichols "will contribute to continue expand the Bank's leading franchise in sustainable finance among U.S. clients," says the BNP spokesperson. ■

Award-winning Latham Lawyer Heads to Morgan Lewis

A senior lawyer who once won *PFR*'s project finance attorney of the year award has taken a partnership at **Morgan, Lewis & Bockius** after more than 10 years at **Latham & Watkins**.

Amy Maloney stepped down at Latham in mid-September, having relocated to Boston in July, and started at Morgan Lewis on Oct. 22.

She began her career at New York firm **Dewey Ballantine** in 2004, handling a mix of project finance structuring, construction financing and tax equity deals for three years. She left Dewey in 2007 following its merger with **LeBoeuf, Lamb, Greene & MacRae**.

Joining Latham & Watkins' New York office that same year, Maloney went on to become a partner at the firm in 2013, remaining in the partnership until August of last year, when she became counsel.

She was named *PFR*'s joint project finance attorney of the year in 2016 along with **Laurae Rossi** of **Winston & Strawn.**

In July, Maloney relocated to Latham's Boston office, before stepping down in mid-September prior to taking up her new role at Morgan Lewis. ■