

Power Finance & Risk

Exclusive Insight on Power M&A and Project Financing

● MERGERS & ACQUISITIONS

● CASE STUDY

● LATIN AMERICA

Greenbacker charges into battery sector

Greenbacker Renewable Energy has made its maiden battery storage investment with the acquisition of assets from **Stem**. [Page 5](#)

Evolugen – MPT Finco project bond offering

Evolugen locked in November 2019 rates for a refinancing of project bonds that do not mature until November 2020. [Page 8](#)

Policy boost for private power auction

Zona Energia's forthcoming private power auction program in Chile stands to benefit from a recent market reform. [Page 13](#)

Contracted Texas solar projects launched into crowded M&A market

Taryana Odayar, Shravan Bhat

Apex Clean Energy and **Invenenergy** are the latest developers to kick off sale processes for solar projects this year, as would-be buyers evaluate a slew of renewable energy assets that have been put on the market in recent months.

Although lockdown measures imposed in various states to keep the Covid-19 virus at bay have slowed down auction pro-

cesses and made due diligence more difficult, this does not appear to have deterred sellers, with sales being launched throughout May and June (*PFR*, 6/6).

Given the wide range of options available to investors, developers and their investment bankers are playing up the unique selling points of the assets they are peddling to make them stand out from the crowd. [PAGE 5 »](#)



"Due diligence in the domestic environment"

Three Rivers debt relaunched into bank market

Taryana Odayar

The debt financing of **Competitive Power Ventures'** Three Rivers gas-fired combined-cycle plant in PJM Interconnection has been relaunched after being postponed earlier in the year.

BNP Paribas and **MUFG** are said to be leading the \$800 million raise for the 1,250 MW project

in Grundy County, Illinois, which comprises a \$750 million, seven-year term loan as well as ancillary facilities.

Crédit Agricole is administrative agent.

The deal was relaunched on June 16 with pricing starting at 350 bp over Libor, 50 bp wider than when the deal was initially launched in March [PAGE 7 »](#)

Sale underway for Midwest cogen asset

Taryana Odayar

BP Energy Co is in the process of looking for an investor to take a majority stake in a gas-fired cogeneration plant in the Midwest.

The company launched the sale of an 80% stake in its 525 MW Whiting Clean Energy (WCE) facility in Whiting, Indiana, some time ago and binding bids were due on June 15. BP is aiming to sign a purchase [PAGE 6 »](#)

Sunrun launches term loan

Taryana Odayar

Residential solar, storage and energy services company **Sunrun** has launched a seven-year term loan into the bank market.

Investec and **Silicon Valley Bank** are arranging the \$270 million loan, which was launched on June 16 with pricing at 300 bp over Libor.

The size and pricing of the deal could change, says a deal watcher. [PAGE 10 »](#)



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● THE BUZZ

California Dreamin'

As **Pacific Gas & Electric's** bankruptcy proceedings appear to roll inexorably toward resolution, owners of power and renewable energy projects tied to the utility through power purchase agreements are beginning to indulge in pleasant thoughts of a return to normal for their project finance arrangements.

Bond buyers gave the beleaguered utility's restructuring plan a vote of confidence last week by heavily oversubscribing its jumbo offering of first mortgage bonds, allowing the bookrunners to ratchet in pricing dramatically and the company to raise several billion dollars more than it was aiming for (see story, page 11).

Immediately following the blowout deal, **Moody's Investors Service** leaped into action, upgrading several projects' public ratings – Crocket Cogeneration, Panoche Energy Center, Topaz Solar.

PG&E's own corporate rating remains in dou-

ble-B territory for now, but deal watchers say the utility could regain its investment grade status as early as this fall, depending on how the wild-fire season goes.

Canny sponsors that previously paid down project debt to appease lenders will be ready to take advantage by leveraging their projects back up, whether by drawing on accordion features or with other strategies.

"There are automatic issuances and redraws and so on," says an official at one sponsor with affected assets. "They vary in just how automatic and pre-wired they are."

With project bonds, individual noteholders have different appetites for the additional debt. "Some want to be taken out and others like the paper."

In the case of bank loans, the more pressing issue is the widening in spreads since accordions were negotiated.

"Depending on the accordion terms, banks are going to say: 'Unless you locked in the rate, we'll say the spread is this.'"

Ah, well. Some people are never happy. ■

PFR Power Finance & Risk

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

Feel free to contact **Richard Metcalf**, editor, at (212) 224-3259 or richard.metcalf@powerfinancerisk.com

GENERATION AUCTION & SALE CALENDAR ●

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

Generation Sale ■ DATABASE

Seller	Assets	Location	Adviser	Status/Comment
● Apex Clean Energy	Angelo (195 MW Solar)	Texas	Fifth Third	Auction launched in June (see story, page 1).
	Rivanna (12.5 MW Solar)	Virginia		Investors contacted in March (see story, page 1).
● BNDES	AES Tietê (25.89%)	Brazil	BR Partners	Sale proces launched (see story, page 12).
● BP	Whiting (525 MW Cogen, 80%)	Indiana		Bids were due June 15 (see story, page 1).
Castlelake	Summit Wind (57.5 MW Wind)	Alameda County, CA	FTI	Auction launched in May (PFR, 5/18).
Castleton Power	Portfolio (400 MW Gas)	Texas	Cantor Fitzgerald	An equity raise is in the works (PFR, 6/1).
Copenhagen Infrastructure Partners	Greasewood (255 MW Solar)	Pecos County, Texas	CohnReznick	Auction relaunched this month (PFR, 6/15).
● Ecoplexus	Sage (150 MW Solar)	North Carolina	CCA Group	Second round bids due late July (see story, page 6).
First Solar	Platform (Solar)	US	BofA, CohnReznick	Auction yet to official launch (PFR, 6/15).
GenOn	Heritage (2.4 GW Gas)	PJM Interconnection	Jefferies	Auction launched this month (PFR, 6/15).
Glidepath Power Solutions	Clermont (80 MW Storage)	New York	Guggenheim	Teasers circulated on April 20 (PFR, 4/27).
Grasshopper Solar	Green Light (150 MW [DC] Solar)	Canada, US	Onpeak	Auction launched in May (PFR, 6/8).
Grenergy	Portfolio (52 MW Solar)	Chile		A sale is planned (PFR, 6/1).
Hanwha QCells	Dodgers (250 MW Solar)	Texas	Paragon	Seller acquired the assets in February (PFR, 5/4).
HPS Investment Partners	Spruce Finance (Solar)	US	Onpeak	Auction launched in May (PFR, 6/1).
● Invernergy	Titan 1 (800 MW Solar)	Texas	Marathon Capital	Bids due July/August (see story, page 1).
Lightstar Renewables	Portfolio (18.5 MW Solar)	New York	Captura	Initial LOIs were due May 22 (PFR, 6/15).
● Navitas Holdings	Chuspa (10 MW Hydro)	Panama		Polaris is the buyer (see story, page 12).
● Oakwood Construction	Sigurd (80 MW Solar)	Utah		DESRI is the buyer (see story, page 9).
● Orion, MAP Energy	Clines Corners (1 GW Wind)	New Mexico		Pattern is the buyer (see story, page 6).
Petrobras	Portfolio (578 MW Oil)	Brazil	Goldman Sachs	Teasers issued by May (PFR, 5/18).
	Portfolio (172 MW Gas, Oil, Hydro)	Brazil	Crédit Agricole	Teasers issued this month (PFR, 6/15).
	NTS (Pipeline, 10%)	Brazil	Santander	Teasers issued in May (PFR, 5/26).
● Petrobras, Wobben	Mangue Seco III & IV (52 MW Wind)	Brazil	Crédit Agricole, DNB Markets	Sale process in binding phase (see story, page 12).
PNE USE	Chilocco (167 MW Wind)	Kay County, Oklahoma	Marathon Capital	Auction launched in May (PFR, 6/8).
RWE Renewables	Portfolio (861 MW Wind)	US	Marathon Capital	Auction in second round (PFR, 6/8).
Shell New Energies	Silicon Ranch (Solar)	US	Morgan Stanley	Auction launched in May (PFR, 6/1).
Solterra Partners, Leyline Renewable Capital	Wilkes (75 MW Solar)	Wilkes County, NC		Initial bids had come in by May (PFR, 5/11).
Sphera Energy	Portfolio (150 MW Chile)	Chile		An equity investor is sought (PFR, 6/1).
Starwood Energy	Stephens Ranch (376 MW Wind)	Texas	Marathon Capital	Auction launched in April (PFR, 5/18).
● Stem Inc	Pacifica (7.9 MW/16.5 MWh Storage)	California		Greenbacker is the buyer (see story, page 5).
Swift Current	Castle Gap (196 MW Wind)	Texas	Lazard	Auction was launched in May (PFR, 6/8).

● 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
Arroyo Energy	El Arrayán (115 MW Wind)	Chile	SMBC, Crédit Agricole	Debt	\$140M	7-yr	Closing delayed until August (PFR, 6/8).
Atlas Renewable Energy	Pimienta (400 MW (DC) Solar)	Campeche, Mexico	DNB, IDB Invest, Bancomext	Private Placement	\$200M		Closing is expected by early June (PFR, 5/18).
	Javiera, Sol do Desierto (314 MW Solar)	Chile	DNB	Private Placement	\$253M	16-yr	Deal closed June 1 (PFR, 6/15).
	Juazeiro (187 MW Solar)	Brazil	IDB Invest	Debt	\$90M		Negotiations are underway (PFR, 5/26).
Calpine Corp	Geysers (725 MW Geothermal)	California	BNP, Crédit Agricole, MUFG, Natixis	Term Loan	\$900M	7-yr	Deal closed at L+200 with step-ups (PFR, 6/15).
				Letter of Credit	\$200M		
Capital Dynamics	Ventura (100 MW/400MWh Storage)	California		Debt			Korean investors are working on a deal (PFR, 6/1).
The Carlyle Group, EIG Global Energy Partners	Hamilton (1,671 MW Gas)	Pennsylvania	Morgan Stanley (left), BNP, CS	Term Loan B	\$900M	7-yr	Deal allocated on June 11 (PFR, 6/15).
				Revolver	\$115M	5-yr	
Castleman Power Development	Portfolio (400 MW Gas)	Texas	ING Capital	Term loan	\$160M	7-yr	Price talk was said to be 325 bp before the Covid-19 outbreak (PFR, 4/13).
				Ancillary Facilities	\$20M		
Competitive Power Ventures	Three Rivers (1,250 MW Gas)	Grundy County, Illinois	MUFG, BNP Paribas	Construction debt	\$750M	7-yr	Deal relaunched on June 16 (see story, page 1).
				Ancillary Facilities	\$50M		
Copel	Portfolio (Transmission)	Brazil	BNDES	Debt	\$87.94M	23.5-yr	Deal has closed (see story, page 13).
DESRI	Sigurd (80 MW Solar)	Sevier County, Utah	HSBC, Société Générale, City National Bank	Debt			Deal has closed (see story, page 9).
			M&T Bank	Tax equity			
EnfraGen	Portfolio (200 MW Distributed Solar)	Chile					The financing is expected to close before the end of the summer (PFR, 4/13).
Engie	Novo Estado (Transmission)	Brazil	BNDES	Debt	\$485M		Deal has closed (see story, page 12).
Fisterra Energy	Tierra Mojada (875 MW Gas)	Jalisco, Mexico		Bond refinancing			Morgan Stanley is understood to be pursuing the mandate (PFR, 5/4).
Grupo Ibereólica, EDF	Cabo Leones 1 (175 MW Wind)	Chile	DNB	Refinancing		18-yr	The sponsors are nearing financial close (PFR, 5/26).
Grupo Ibereólica, GPG	Cabo Leones 2 (204 MW Wind)	Chile	Crédit Agricole	Construction Debt			Cred Ag has won the mandate (PFR, 5/26).
Key Capture Energy	Portfolio (1.5 GW Storage)	US		Capital Raise			The sponsor is in talks with investment banks (PFR, 5/4).
OPDEnergy	Portfolio (150 MW Wind, Solar)	Chile	SMBC	Debt			Close expected in June (PFR, 6/8).
Polaris Infrastructure	Portfolio (33 MW Hydro)	Peru	Brookfield	Debt	\$27M		Deal has closed (PFR, 6/15).
Recurrent Energy	Pflugerville (144 MW Solar)	Travis County, Texas		Debt, Tax Equity			The deal is in the market (PFR, 6/1).
Solar Frontier Americas	Central 40 (40 MW Solar)	Stanislaus County, CA	KeyBank	Debt	\$60.1M	7-yr	The deal has closed (PFR, 6/15).
Solar Frontier Americas	Pioneer (110 MW Solar)	Adams County, CO	CIT, CoBank	Debt	\$79.6M	7-yr	Deal closed May 21 (see story, page 7).
Sonnex	Portfolio (100 MW Solar)	Chile	Natixis	Term loan	\$87M		Deal has closed (see story, page 13).
Sunenergy1	Portfolio (100 MW Solar)	US	CIT, ING Capital	Construction Debt			Financing close is months away (PFR, 5/26).
Sunnova	TEP IV B & C (Solar)	US		Tax equity			Deal closed; CohnReznick advised (PFR, 6/15).
Sunrun	Portfolio (Resi Solar)	US	SVB, Investec	Debt	\$270M	7-yr	Deal launched June 16 (see story, page 1).
Taaleri Energia	Escalade (336 MW Wind)	Knox County, Texas	NordLB, Mizuho, Santander, SocGen	Construction debt			Deal has closed; 93% equity sold to AIP, Akuo Energy, Ilmarinen, and Taaleri SolarWind II (see story, page 7).
			BHE Renewables	Tax equity			

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NORTH AMERICA MERGERS & ACQUISITIONS ●

Greenbacker debuts in storage with acquisition from Stem

Greenbacker Renewable Energy has acquired its first energy storage assets – a portfolio of behind-the-meter projects in California – from developer **Stem**.

Collectively known as Pacifica Storage, the sixteen projects – some of which are operational – have a total capacity of 7.9 MW/16.5 MWh. The portfolio is expected to be fully operational in the second quarter of 2021.

The projects will participate in California's Self Generation Incentive Program, which offers rebates to residential and non-residential ratepayers for installing energy

storage.

The deal closed on June 9.

"Expanding into energy storage is a logical next step in our acquisition strategy," said **Charles Wheeler**, CEO of Greenbacker. "Maximizing energy efficiency dovetails perfectly with our core mission of driving returns for shareholders by investing in renewable energy infrastructure, since it allows us to not only reduce carbon emissions through sustainable energy technologies, but enables off-takers to manage their energy costs by reducing their need to draw

electricity from the grid during periods of peak demand when prices are typically higher."

The 7.9 MW of battery storage brings the total capacity across Greenbacker's generation and storage fleet to 552.6 MW.

The developer of the Pacifica Storage portfolio, Stem, has been on the market itself since early this year, having tapped **Morgan Stanley** and **Greentech Capital Advisors (Nomura Greentech)** to run an auction process, as previously reported (*PFR*, 2/5). ■

Contracted Texas solar projects launched into crowded M&A market

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For instance, the teaser for **PNE USA's** 167 MW Chilocco Wind Farm plays up the possible "marketing message" that could be derived from its location on tribal land in Kay County, Oklahoma (*PFR*, 6/2).

The teasers for the Apex and Invenergy projects that were put on the market recently both note that they have 15-year as-generated power purchase agreements in place, which is likely to make for competitive auctions.

"I think it will definitely be in demand," says a project finance banker of the 800 MW Invenergy project, which is the first phase of a proposed 1,310 MW project near Dallas called Titan. "I would expect a good price."

PPAs with a non-utility corporation and municipal entities cover 750 MW of its output. The unit contingent contracts settle at the Ercot North Hub.

Marathon Capital is advising Invenergy on the sale and will take indicative bids toward the end of July or in early August, with the aim of inking a deal before Titan's

expected notice-to-proceed date in October.

Marathon is also advising Invenergy on a tax equity raise for the project, which is expected to come online between the fourth quarter of 2021 and the first quarter of 2022.

Apex, meanwhile, has retained **Fifth Third Securities** as financial adviser as it explores the sale of its 195 MW Angelo plant in Tom Green County, for which it secured an offtake contract in the past three months.

The offtaker is a *Fortune* 500 company with double-B credit ratings, according to the teaser. The contract settles at the Ercot West Hub.

The project is due to be online in March 2022, according to Ercot interconnection queue data.

Apex had originally called it Concho Solar but had to rename it after Ercot notified the developer that it had already received an application for an interconnection under the same name.

The marketing materials were distributed to potential investors on June 16 and first round

bids are due on July 31.

A second round of bidding is expected to conclude on August 28 and Fifth Third is aiming to secure a buyer – one that can arrange debt and tax equity – by the fourth quarter of this year, around the same time that the project is expected to reach notice to proceed.

Apex already has at least one other project up for sale elsewhere – its 12.5 MW Rivanna facility in Albemarle County,

Virginia, which is within PJM Interconnection.

This project has a 25-year fully-bundled busbar PPA with **Dominion Energy**, priced at \$40.95/MWh with a 2.5% annual escalator.

The Rivanna project is due to be online in late 2021 or early 2022. It is part of a 442.5 MW development-stage solar portfolio in Virginia that Apex acquired from **SolUnesco** in early 2019 (*PFR*, 1/7/19). ■

Live Texas renewables auctions

Seller	Description of asset	Capacity	Adviser
Invenergy	Titan solar	800 MW	Marathon Capital
Starwood Energy Group Global	Two operational wind farms	376 MW	Marathon Capital
Copenhagen Infrastructure Partners	Greasewood solar	255 MW	CohnReznick Capital
Hanwha Q Cells	Dodgers solar portfolio	250 MW	Paragon Energy
Swift Current	Castle Gap wind	196 MW	Lazard Frères & Co
Apex Clean Energy	Angelo solar	195 MW	Fifth Third

Source: Power Finance & Risk

● NORTH AMERICA MERGERS & ACQUISITIONS

Sale underway for Midwest cogen asset

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and sale agreement by September 30. The oil and gas company has not retained a financial adviser for the sale process, which is codenamed Project Christopher.

The WCE plant has been online since April 2002, when it was owned by **Primary Energy**. It is fitted with two **General Electric** 7FA combined-cycle cogen turbines and is capable of delivering about 1,100 kpph of steam.

BP Alternative Energy bought the plant from **NiSource** for \$210 million in 2008 (*PFR*, 7/3/08).

Estimated adjusted Ebitda for 2020 is \$11.5 million and capex is pegged at \$50,000,

according to a confidential information memorandum seen by *PFR*.

BP's Whiting refinery – which produces gasoline, diesel, jet fuel and asphalt – will be the long-term offtaker for 100% of the project's steam and a portion of its power following the sale.

The Whiting refinery is BP's largest in the world and is also the largest owned by any company in the Midwest, processing about 43,000 barrels of crude oil everyday. It first opened its gates in 1889 as part of **John D. Rockefeller's Standard Oil Company**.

BP sells excess energy and capacity from the WCE project into **MISO**. Following the sale, the

Whiting refinery will purchase power capacity at MISO auction prices, and the buyer will be able to sell the plant's excess capacity.

The proposed 20-year PPA would be priced at \$5/MWh with the option to renew for a further 10 years.

The plant is connected to MISO Zone 6 via two transmission lines owned and operated by **Nipsco**. Since the plant is also adjacent to a line that feeds **PJM Interconnection's** ComEd system, there is the potential to connect the plant to the PJM market, subject to grid operator approvals. Capacity cleared in MISO Zone 6 at \$2.99/ MW-day in the 2019/20 auction. ■

Details emerge on 150 MW solar portfolio sale

Details have emerged on a sale process that is underway for a roughly 150 MW portfolio of five contracted solar projects in North Carolina, the largest of which includes a battery storage system.

Developer **Ecoplexus** is working with **CCA Capital** on the sale of the five projects, with first round bids due on June 8, as pre-

viously reported (*PFR*, 3/29).

Ecoplexus aims to sell cash equity in the portfolio by the projects' final notice-to-proceed (FNTF) date, while retaining an active or passive minority stake. Second round bids are due in late July and Ecoplexus is aiming to wrap a deal by October.

The names and other details pertaining to the projects are

described in a confidential information memorandum circulated to potential investors under the codename Project Sage and seen by *PFR*.

Ecoplexus is in the process of arranging tax equity and debt for the most advanced project, the 16 MW Boykin project in Cumberland County, which is expected to reach financial close by July. The project is expected to be structured as a 25-year inverted lease with 15-year back-levered debt.

Tax equity and debt for the

remaining four projects is expected to close in October under a partnership flip structure with a debt tenor of 16.58 years.

The largest project in the portfolio, the 75 MW Westminster asset, has a 50 MWh battery storage component, allowing the project to achieve a higher effective PPA rate from higher capacity revenue and peak versus off-peak arbitrage, according to the CIM.

The projects have unit contingent "take or pay" busbar power purchase agreements with **Duke Energy** and **Dominion Energy** with a weighted contract life of 16 years.

"Economic growth and planned retirements of fossil fuel generation is expected to result in upward pressure on energy prices and favorable capacity pricing," reads the CIM, pointing to Duke's retirement schedule, which will create a need for new capacity starting in 2024. ■

Project Sage portfolio

Project	Location	Capacity	Storage capacity	FNTF*	COD*	Offtaker	PPA length
Boykin	Cumberland County	16 MW	0 MWh	Jul, 2020	Dec, 2020	Duke Energy	12 years
High Shoals	Gaston County	16 MW	0 MWh	Oct, 2020	Jun, 2021	Duke Energy	10 years
Pleasant Hill	Northampton County	20 MW	0 MWh	Nov, 2020	Jun, 2021	Dominion Energy	10 years
Westminster	Rutherford County	75 MW	50 MWh	Nov, 2020	Aug, 2021	Duke Energy	20 years
East Nash PV2	Nash County	23 MW	0 MWh	Jan, 2021	Nov, 2021	Duke Energy	12 years

*expected, Source: CIM

Pattern adds to Southwest wind pipeline

Pattern Energy Group has acquired a development-stage wind portfolio in New Mexico from **Orion Renewable Energy Group** and **MAP Energy**.

The Clines Corners assets have the poten-

tial for the development of up to 1,000 MW of wind generation.

Pattern will add the 325 MW southernmost portion of the assets to its Western Spirit wind portfolio, on which it plans to start construc-

tion later this year along with the 140 mile (225 km) Western Spirit Transmission Line (*PFR*, 4/2/19).

The remaining Clines Corners assets, totaling 650 MW, are intended to supply Pattern's 520 mile (836 km) SunZia Transmission line (*PFR*, 7/31/18) ■

NORTH AMERICA PROJECT FINANCE ●

Three Rivers debt relaunched into bank market

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at 300 bp for the first three years with step-ups (PFR, 3/12).

CPV had pushed back the proposed closing date of the financing from April to mid-June due to worries over the impact of Covid-19 (PFR, 3/23), and recently revised expectations further, due in part to lender concerns over the credit quality of the counterparties under the project's proposed hedging arrangements (PFR, 4/30).

The project has a gas netback deal of up to 10 years with a handful of Canadian natural gas producers, whose credit quality is said to have taken a double hit due to the coronavirus pandemic and oil price war between Saudi Arabia and Russia.

Credit supports are understood to be in place to mitigate the counterparty risk, however.

"The original group of CLAs is largely still intact," says a source close to the process, adding that the sponsor is still assigning coordinating lead and joint lead arranger duties.

CPV initially took financing proposals from prospective lenders in March 2019 (PFR, 3/27/19), with the aim of closing a deal before last year's PJM capacity auction, originally scheduled for May. Since then, the capacity auction has been delayed indefinitely and has still not taken place (PFR, 1/9, 8/1, 7/26).

The coordinating lead arrangers appointed a year ago were:

- ◆ BNP Paribas
 - ◆ CIT Bank
 - ◆ Crédit Agricole
 - ◆ Industrial and Commercial Bank of China
 - ◆ ING Capital
 - ◆ Mizuho
 - ◆ MUFG
 - ◆ Starwood Property Trust
- Milbank and Saul Ewing Arnstein Lehr are providing legal counsel to the lenders.

The project is expected to be online in the first quarter of 2023.

It has secured gas supply from Canada via the Alliance pipeline. ■

Finnish developer closes Texas wind deal

Finnish renewables developer **Taaleri Energia** has closed construction debt, tax equity and cash equity financing for its 336 MW Truscott Gilliland East Wind project, also known as Escalade, in Knox County, Texas.

NordLB, Mizuho, Santander and **Société Générale** are providing the construction loan and **BHE Renewables** has committed the tax equity.

The \$450 million project is due to be online by December 2021, according to Ercot's interconnec-

tion queue.

Taaleri has also sold 93% of the cash equity in the project to:

- ◆ Danish pension fund manager **AIP**
 - ◆ French developer **Akuo Energy**
 - ◆ Finnish pension fund manager **Ilmarinen Mutual Pension Insurance Company**
 - ◆ **Taaleri Energia Funds Management**'s fifth renewables fund – Taaleri SolarWind II
- Taaleri reached second close on SolarWind II (known in Finn-

ish as Taaleri Aurinkotuuli II) at €275 million (\$303 million) in March.

"The Ercot market for electricity in Texas is very similar in structure and operation to the Nord Pool electricity market in the Nordic countries, a market that we are very familiar with," said Taaleri Energia's managing director **Kai Rintala**.

The project's output is hedged with a proxy revenue swap provided by **Allianz** and **Nephila Capital**.

Taaleri acquired the project from original developers **NorthRenew Energy** and **Cher-mac Energy Corp** in 2018 (PFR,

2/8/18).

At the time, construction was expected to begin in February 2019 and to have been completed by February 2020, contingent upon favorable economics for the project, according to July 2018 filings with the **Texas Comptroller of Public Accounts**.

Senvion initially won a contract to provide the turbines for the project – then at the smaller size of 278 MW – in August 2018.

However, **Vestas** announced on June 16 that it would be providing the turbines for the upsized project. Turbine delivery will begin the second quarter of 2021. ■

Solar Frontier closes Colorado deal

Solar Frontier Americas has wrapped debt financing for its 110 MW Pioneer solar project in Adams County, Colorado, which is set to be the second largest in the state.

CIT and **CoBank** provided the \$79.61 million debt package on May 21.

It comprises:

- ◆ \$38.64 million seven-year construction-to-term loan
- ◆ \$38.86 million tax equity bridge loan
- ◆ \$790,000 revolving credit facility

- ◆ \$1.32 million debt service reserve facility

Pricing on the debt starts at 125 bp over Libor.

The project will sell its output to **Intermountain Rural Electric Association** under an initial 10-year power purchase agreement, with three optional five-year extensions.

The identity of the tax equity investor could not immediately be learned.

Morgan Stanley recently committed to provide the tax equity for another Solar Fron-

tier solar asset – the 150 MW Mustang 2 project in Kings County, California (PFR, 12/18/19).

Solar Frontier bought the Pioneer project from **GCL New Energy** last year, after a months-long sale process run by **CohnReznick Capital** (PFR, 8/20/19).

In Colorado, it will be second in size only to **Novatus Energy**'s 120 MW Comanche solar plant in Pueblo County (PFR, 3/13/17).

Solar Frontier closed another solar project financing last month, when it secured debt from **KeyBank** for its 40 MW Central 40 project in Stanislaus County, California (PFR, 6/10). ■

● CASE STUDY

Case Study: MPT Finco, Ontario

Evolugen (formerly **Brookfield Renewable Canada**) tested the limits of Canadian investors' appetite for delayed-draw private placements in November 2019, when it issued a dual-tranche project bond to refinance a 488 MW hydro portfolio in Ontario.

With interest rates at historic lows, the company saw an opportunity to lock in cheap debt while leveraging up the portfolio, which it has owned since 2003. But the portfolio's existing opco and holdco private placement debt was not set to mature until the following year, November 2020.

Not wanting to miss the low-rate window, Evolgen raised enough debt to almost double the portfolio's leverage, but applied a one-year delayed-draw feature to about half of the issuance, to avoid being subject to prepayment penalties on the existing debt.

"Around this time last year, we were looking at historically low rates in the fixed rate bond market and incredible demand for product, so we executed this fairly innovative, dual-tranche issue," says **Paul Hemsing**, a vice president in Evolgen's capital markets team. "The Series A was drawn on a spot-basis, and the Series B was issued to refi a pending maturity by getting commitments and pricing it in advance on a delayed draw-basis."

While delayed draws have become increasingly common in the US, with delays of as much as three months being offered by investors with no premium, the one-year delay in Evolgen's deal pushed the limits in the Canadian market.

MISSISSAGI POWER TRUST

The portfolio holding company,

Mississagi Power Trust (MPT), owns four plants on the Mississagi River, about 68 miles (110 km) northeast of Sault Ste. Marie.

- ◆ Wells – 239 MW
- ◆ Aubrey Falls – 162 MW
- ◆ Rayner – 46 MW
- ◆ Red Rock – 41 MW

They were built between 1950 and 1970.

The existing first mortgage bonds (FMBs) date back to 2003, when they were issued in a private placement to finance **Brookfield Asset Management's** – then called **Brascan Corp** – acquisition of the cascading hydro plants from **Ontario Power Generation** for C\$340 million. The C\$175 million interest-only deal was priced at 6.917%.

In March 2016, Brookfield added a layer of holdco financing in the form of a C\$150 million private placement. **Sun Life Financial**, **Canada Life Assurance** and **Manulife** were the underwriters of the 2016 deal.

PUSHING THE LIMITS

The November 2019 deal was designed to replace the FMBs and the holdco bonds with a new larger amount of debt, all of which would eventually rank *pari passu*. But to get to this straightforward end point, some creative structuring would be required in the meantime.

The C\$628.3 million (\$462 million) 10-year project bond was split between:

- ◆ Series A – C\$303.3 million in incremental debt, which was spot settled in December 2019
- ◆ Series B – C\$325 million to refinance the existing opco and holdco debt, which will settle in November 2020

The Series A notes are structurally subordinated to the existing

holdco and opco debt until this matures in November 2020 and is replaced by the Series B debt. Brookfield ensured there was an overlap between the Series A, B and existing noteholders.

A source familiar with the deal says the A notes were priced "in line" with other BBB deals and that the delayed draw notes carry a slight premium.

The offering closed on December 2, 2019. Between December and January, renewable energy project bonds with triple-B ratings were being priced well inside 4% on an all-in basis (*PFR*, 1/31, 3/27, 5/14).

DBRS Morningstar rated both of the two series BBB (stable) and **S&P Global Ratings** gave the notes an E1 green bond evaluation.

DBRS pointed out several mitigants to the risk of the Series B investors' potential inability to fund their portion of the deal at the second closing, including the high-quality investor list, the short duration of the risk exposure and Brookfield's own ability to plug the funding gap if required.

Investors also had to get comfortable with refinancing risk around the C\$350 million balloon repayment at maturity in 2029. At 55% of the total debt, it was a hefty sum, but it was sized to a conservative – rather than base case – future price scenario.

In addition, market consultant reports pointed out the great difficulty and cost of replacing the large, zero-carbon MPT peakers like-for-like.

"The MPT Portfolio appears to be well positioned for re-contracting with the IESO (rated A (high) with a stable trend) at debt maturity because of its significant storage capacity as an emissions-free peaker, which is of great importance to Northern Ontario's grid

stability," wrote DBRS analysts in a December 2019 rating report.

In a cascading configuration, hydro assets can store water and dispatch power on demand, acting as peakers. This means the portfolio participates in many ancillary energy revenue markets. Rayner, for instance, is one of the only three sites in Ontario that can be used to provide black start capabilities.

BACK-TO-BACK PPA

The addition of the extra debt was supported by MPT's strong but complicated offtake structure.

Brookfield Energy Marketing (BEM) buys all of the portfolio's generation under a 20-year, inflation-indexed, fixed-price master power purchase and sale agreement through 2029. In reality, however, and for legacy reasons, MPT has a back-to-back power purchase agreement with A-rated **Independent Electricity System Operator**.

The PPA with BEM was amended in October 2018 to require BEM to buy the power at an average price of C\$127/MWh subject to a 3% annual inflation adjustment until 2029, according **Brookfield Renewable Partners'** 2019 annual report.

The placement agents on the deal were:

◆ Scotiabank

◆ National Bank Financial

Advisers included:

◆ Torys – borrower's counsel – led by partner **Rose Bailey** and senior associate **Yinka Olusoga**

◆ McCarthy Tétrault – lenders' counsel

◆ Hatch – independent engineer

◆ London Economics International – market consultant

Evolugen, which went through its most recent rebrand in July 2019, manages 33 hydro facilities and three wind farms, totaling 1,770 MW. ■

NORTH AMERICA PROJECT FINANCE ●

DESRI seals second western solar deal

D.E. Shaw Renewable Investments (DESRI) has financed an 80 MW solar project in Utah, the second of two projects in the state that it has acquired in quick succession.

HSBC, Société Générale, and City National Bank are providing the construction and term debt for the project, which is called Sigurd and located in Sevier County. **M&T Bank** has committed tax equity.

"The COVID-19 crisis made this a particularly challenging environment to close an acquisition, financing, and tax equity investment," said **David Zwillinger**, CEO of DESRI, in an announcement on June 15.

The Sigurd project has been under construction since late last year and is due to be online in the first half of 2021.

"HSBC was delighted to lead the financing for the Sigurd solar project, which closed during a particularly challenging market

backdrop," said **James Wright**, managing director at HSBC.

HSBC also provided the debt for the 100 MW Hunter project in Emery County, Utah,

"The COVID-19 crisis made this a particularly challenging environment to close an acquisition, financing, and tax equity investment"

which DESRI financed very recently (PFR, 6/2).

Community Energy developed both of the projects, securing 25-year power purchase agreements for them from **PacifiCorp** in June 2018. The projects' renewable energy certificates will be allocated to a **Facebook**

data center.

Although both projects were developed by Community Energy, DESRI acquired the Sigurd project from engineering, procurement and construction contractor **Oakwood Construction Services**. The reason why Oakwood was the seller and not Community Energy could not immediately be established.

Oakwood will stay on as EPC contractor for the Sigurd project, while **SOLV** will provide operations and maintenance services.

DESRI now owns three out of the six projects that were awarded PPAs in PacifiCorp's 2018 procurement. The third is the 180 MW Cove Mountain facility in Iron County, which was developed by **First Solar** (PFR, 11/5/19).

The levelized prices for the energy and capacity across all six projects is less than \$26/MWh, according to PacifiCorp's 2019 Integrated Resource Plan. ■

PPA PULSE ●

PPA Pulse: Vectren plans clean energy push

Indiana utility Vectren has proposed a renewable energy and gas-fired power procurement to offset generation from coal plant retirements as part of its Integrated Resource Plan.

The **CenterPoint Energy** subsidiary intends to retire or exit agreements involving coal-fired generation totaling 730 MW and plans to procure:

- ◆ 700 MW to 1,000 MW of solar – in some cases coupled with battery storage
- ◆ 300 MW of wind
- ◆ 460 MW of gas-fired generation

"Over the next several months, we will finalize our generation plan, taking into consideration cost, COVID-19 impacts, efficiency and reliability while recognizing the need for flexibility given ever-advancing technology in a rapidly evolving industry," said

Lynnae Wilson, chief business officer for Vectren's electric utility operations in Indiana, on June 15.

Vectren issued a 700 MW all-source request for proposals a year ago, with binding agreements set for signature this year (PFR, 6/21/19).

Here is a round-up of the rest of this week's PPA news:

CABIN FEVER

Clënara Renewable Energy has signed a PPA for its 150 MW Cabin Creek solar project in southeastern Montana. **Basin Electric Power Cooperative** is the offtaker under the 15-year contract.

Cabin Creek will consist of two 75 MW sites located five miles west of Baker, in Fallon County. It is expected to be online by late 2023.

CHEMICAL ROMANCE

First Solar has signed a power purchase agreement with chemical maker **Dow** for its 200 MW Horizon solar project in Frio County, Texas.

Dow will use 75% of the project's output to power its Gulf Coast petrochemical operations under the 15-year contract.

SENSE OF COMMUNITY

8minute Solar Energy has executed its first power purchase agreements with community choice aggregators, covering the output of its 200 MW Aratina Solar Center in California.

Silicon Valley Clean Energy and **Monterey Bay Community Power** will buy the output of the project over 20 years under the contracts.

The project also includes a 50

MW/150 MWh battery storage unit.

The expected construction start date is November 1, 2022 and the delivery term begins on June 30, 2023.

SVCE has been allocated 80 MW of solar and 20 MW/60MWh of storage capacity, with a \$174 million cap on the value of the contract.

MBCP will buy 120 MW of solar and 30 MW/90 MWh of storage capacity with a \$261 million cap.

The PPAs are a result of a request for proposals launched jointly by the two CCAs in April 2019. The RFP closed in May 2019 with 187 offers submitted for 54 different projects.

Other winners in the RFP include **Avenue Capital**, **First Solar**, **NextEra Energy** and **Ormat**. ■

● PROJECT FINANCE

Maxim commissions gas-fired plant in Alberta

Maxim Power Corp has commissioned its 204 MW M2 gas-fired plant in Alberta, having partly refinanced a loan provided by the company's own management with senior debt from **ATB Financial**.

Located near Grande Cache, the plant was commissioned on May 8, demonstrating its maximum generating capacity and environmental compliance during the final phase of construction.

Maxim is touting the project as the largest simple-cycle gas-fired power plant in the province. It replaces Maxim's 150 MW Milner coal-fired unit, called M1.

The company has the option of increasing the plant's output to about 300 MW and investing in heat recovery technology

which would enable the facility to operate in combined-cycle mode.

Construction took just 16 months and required an investment of \$147 million, not including borrowing costs.

Maxim originally tapped its own management last September for a \$75 million revolving convertible loan to finance construction (*PFR*, 9/12).

This facility, which bears interest at 12%, was provided by two entities:

◆ **Alpine Capital Corp**, which is owned by Maxim CEO **Bruce Chernoff**

◆ **Prairie Merchant Corp**, which is controlled by vice chairman **Brett Wilson**

In December 2019, this loan was partly refinanced with a \$44 million senior debt

financing from ATB Financial, which is owned by the province of Alberta.

The package from ATB comprises:

- ◆ \$30 million 35-month construction loan, amortizing over 10 years from the completion of construction
- ◆ \$10 million revolving credit facility
- ◆ \$4 million revolving credit facility for short-term working capital requirements post-construction

In addition to the senior debt, ATB provided an \$8 million cash collateralized letter of credit facility.

Alpine Capital and Prairie Merchant agreed to subordinate their convertible loan to the new senior debt. Maxim was expected to use \$20 million of the senior debt to repay borrowings under the convertible loan. ■

● CORPORATE FINANCE

Sunrun launches term loan, reveals virtual power plant

◀ FROM PAGE 1

As of May 6, Sunrun's pre-arranged financings – considering only closed tax equity and debt capital commitments – provide funds for about 220 MW of leased projects beyond its deployments through the end of the first quarter of 2020, according to the company's most recent investor presentation.

"Our current capital runway takes us out multiple quarters," reads the presentation. "If financing costs increase, we could adjust our pricing or operational footprint over 6 to 12 months to mitigate or offset impacts to our business."

BRIGHT IDEA

Sunrun also announced on June

16 that it has teamed up with **Southern California Edison** (SoCalEd) to launch one of the first residential energy storage virtual power plants in the US.

Starting this month and continuing through mid-2021, Sunrun and SoCalEd will network up to 300 of Sunrun's Brightbox home solar and battery systems across Southern California to

provide peaking capacity.

Homeowners receive an incentive for participating in the program, while Sunrun generates revenue by managing and dispatching the energy to the grid when SoCalEd calls for it.

Sunrun's finance team is led by **Tom vonReichbauer**, who joined the company as CFO in April from **Google** (*PFR*, 4/23). ■

Fuel cell developer tops up debt

FuelCell Energy has obtained a \$35 million three-month loan from existing lender **Orion Energy Partners** to ease the company's liquidity issues in light of the Covid-19 crisis.

The company needed the funds "to alleviate substantial doubt about the company's ability to continue as a going concern," according to its second quarter earnings report, released on June 12.

The expansion was the fifth amendment of FuelCell's \$200 million credit line from Orion since it was first signed in October 2019 (*PFR*, 11/7/19).

The amendment was signed on June 8 and comes with several strings attached.

The interest rate on the loan is 9.9% in cash and 2.05% in payment-in-kind, due quarterly.

FuelCell will pay the lender an option premium of \$1 million on the earlier of September 14 and the date of full repayment of the add-on loan, whether the company draws on the facility or not.

Additionally, for each draw down, FuelCell must pay the lender an initial draw discount of 5% of the amount drawn. If the drawn amounts are not repaid in full within six months, the

discount increases by an additional 10%. If it is not repaid within nine months, the discount goes up by a further 20%.

FuelCell is also providing additional collateral to the lenders through a pledge of the company's intellectual property.

The company had 32.6 MW of operating plants in its portfolio as of April 30. ■

FAST FACT

9.9%

The interest rate on the new three-month \$35 million loan, not including a 2.05% in payment-in-kind due quarterly.

CORPORATE FINANCE ●

PG&E raises almost \$9 billion with FMB offering

Pacific Gas & Electric priced part of its huge bankruptcy exit financing package on June 16, raising \$8.925 billion in investment grade debt just days after receiving court approval for the transaction.

The previous day, June 15, the company had launched \$4.75 billion of sub-investment grade debt into the high yield and term loan B markets. Judge **Dennis Montali** had issued an order on June 11 allowing the company to approach the capital markets.

These bonds and loans represent less than half of the \$38 billion debt pile with which the company expects to exit Chapter 11. The rest is largely made up of pre-bankruptcy debt that is either being reinstated or exchanged for new notes.

Acting as bookrunners on the investment grade and sub-investment grade offerings are a group of five banks that have provided several term loans and revolving credit facilities to the California utility ahead of

its exit from bankruptcy. The banks are:

- ◆ **JP Morgan**
- ◆ **BofA Securities**
- ◆ **Barclays**
- ◆ **Citi**
- ◆ **Goldman Sachs**

The lines of credit the banks are providing include a \$3.5 billion revolving credit facility at the utility level and a \$500 million revolver at the holdco level. Both of these facilities have three-year tenors with two one-year extension options.

The investment grade debt offerings – structured as senior secured first mortgage bonds – were split into six tranches with tenors ranging from two to 30 years. The shortest tenor – two years – was available in fixed-rate and floating-rate format.

The trade is said to have attracted \$54 billion in orders across all six tranches, allowing PG&E to bring in pricing considerably from initial price thoughts while still rais-

ing far more than the originally expected total of \$5.925 billion.

For example, initial price talk on the bonds with the longest tenor of 30 years was in the area of 262.5 bp over Treasuries, but the final pricing on the \$1.925 billion tranche was just 200 bp.

For full pricing details, see table.

The FMBs have Baa3 and BBB- ratings from **Moody's Investors Service** and **S&P Global Ratings**.

Meanwhile, the high yield debt that is in the market has ratings of B1 from Moody's and BB- from S&P.

PG&E also intends to raise as much as \$6 billion by securitizing wildfire claims.

On the same day as the FMBs were priced, PG&E's CEO **Bill Johnson** pleaded guilty on behalf of the company to 84 felony counts of involuntary manslaughter in connection with the Camp Fire in Butte County in 2018. ■

PG&E first mortgage bond offering

Tenor	2-year non-call 1 (fixed-rate)	2-year non-call 1 (floating rate)	7-year	10.5-year	20-year	30-year
Size:	\$2.5 billion	\$500 million	\$1 billion	\$2 billion	\$1 billion	\$1.925 billion
Initial price talk	T+200 bp area	Libor equivalent	T+225 bp area	T+237.5bp area	T+250 bp area	T +262.5 bp area
Guidance	T+155 bp	Libor equivalent	T+155 bp	T+175 bp	T+180 bp	T+200 bp
Launch	T+155 bp	L+148 bp	T+155 bp	T+175 bp	T+180 bp	T+200 bp

Source: Power Finance & Risk.

● ONE YEAR AGO



NextEra Energy Partners launched a tender offer for project bonds secured on its 250 MW Genesis solar thermal project in California, which has a **Pacific Gas & Electric** power purchase agreement, and issued unsecured corporate debt as a replacement (PFR, 6/18/19, 6/24).

In its most recent quarterly report, the yieldco said that \$51 million in cash distributions from its Shafter and Desert Sunlight projects had not been distributed as a result of project finance defaults caused by PG&E's Chapter 11 filing. Meanwhile, owners of projects with PG&E offtakes are considering their options for leveraging back up (see the Buzz, page 2).

PROJECT FINANCE ●

Details emerge on LC for 8minute

Additional details have surfaced regarding a \$225 million letter of credit facility arranged by a group of five banks for **8minute Solar Energy** at the end of last month.

The LC facility has a tenor of two-and-a-half years and was priced at 400 bp over Libor.

8minute also secured a \$36 million revolving credit facility of the same tenor and pricing at 350 bp.

CIT, HSBC, KeyBank, Nomura and **Rabobank** provided the loans on May 29 (PFR, 6/1).

8minute will use the funds for deposits for power purchase agreements and interconnections as well as other development-related securities for its pipeline of solar and storage assets across California, Texas and the Southwestern US. ■

● LATIN AMERICA MERGERS & ACQUISITIONS

Petrobras starts binding phase of wind sale

Petrobras and **Wobben Wind-power** have entered the binding phase of the sale process of two jointly-owned wind assets in Brazil.

The assets for sale are:

- ◆ 26 MW Mangue Seco III
- ◆ 26 MW Mangue Seco IV

Petrobras owns 49% of the wind farms, while Wobben has 51%. The transaction announced in March includes the sale of 100% of both special purpose vehicles (*PFR*, 3/16).

State-controlled Petrobras did not release a deadline for interested parties to present offers.

Crédit Agricole and **DNB Markets** are financial advisers to Petrobras and Wobben respectively.

Both assets have long-term financing contracts with **Banco do Nordeste** maturing 2031.

The wind farms hold 20-year power purchase agreements with the **Chamber of Electric Energy Commercialization**, with 12 years remaining on the contracts.

The PPAs are priced at R\$259.18/MWh (\$49.45/MWh), which is adjustable annually to local inflation. They also have a 35-year power generation authorization through 2045.

Located in the Brazilian state of Rio Grande do Norte, at the municipality of Guamare, both assets have been operational since 2011. They are connected to the grid by a 138 kV transmission line to Polo Guamare substation, which is owned by Petrobras.

Wobben supplied the turbines.

The wind farms are part of a complex of four wind farms with a total capacity of 104 MW.

Petrobras has also started the binding phase for the sale of its shares at the other two 26 MW wind farms that are part of the same cluster, Mangue Seco I and Mangue Seco II. In those cases, Petrobras will sell its interests, but the partners – **Alubar Energia** and **Eletrobras**, respectively – may hold their share. ■

BNDES looks to offload AES Tietê stake

BNDESPar, the private investment arm of Brazilian development bank **BNDES**, has hired a financial adviser to assist with the sale of its stake in **AES Tietê Energia**.

AES Tietê's stock is split into two classes – ordinary and preferred – of which BNDESPar owns 14.38% and 37.4%, respectively.

BNDESPar is working with independent investment bank

BR Partners to find buyers for its shares.

The announcement comes shortly after merger negotiations between AES Tietê and **Eneva** failed (*PFR*, 4/24). BNDES would have had an opportunity to sell its participation in the company as part of the proposed merger.

AES Tietê's controlling shareholder, **AES Corp**, holds 61.55% of the ordinary and none of the preferred shares. ■

Polaris to enter Panama

Canada's **Polaris Infrastructure** is looking to enter the Panamanian power market with the acquisition of a 10 MW hydro plant from **Navitas Holdings**.

The companies signed a memorandum of understanding (MoU) under which Polaris can buy 100% of the project's equity and invest \$15 million to \$20 million to complete the project.

Construction for the Chuspa run-of-river hydro unit, in the Chiriqui province, has not finished yet, but all permits have been secured, and down payments have been made to turbine providers.

The Chusca facility is expected to be brought online between June and September of next year.

The sponsor has also secured power purchase agreements for 40% to 50% of the project's output at \$85/MWh.

Polaris expects to close the

acquisition in the next few months.

"[The MoU] is structured in a way that enables Polaris to ensure that we are confident that key risks associated with Covid-19 can be managed before we commence construction of the project and close the acquisition," said Polaris' CEO, **Marc Murnaghan**, in a statement on June 16.

The previous week, Polaris announced the closing of a \$27 million debt package from **Brookfield Asset Management** for a portfolio of hydro projects in Peru, having bought the assets two years earlier (*PFR*, 6/8).

The sponsor expects the Panama acquisition to be comparable to the Peru purchase. "We are also leveraging the experience gained recently in Peru, as the transactions have many similarities," added Murnaghan. ■

● LATIN AMERICA PROJECT FINANCE

BNDES funds Engie transmission project

French energy company **Engie** has closed a R\$2.51 billion (\$485 million) loan with Brazilian development bank **BNDES** to finance the construction of its Novo Estado transmission line project.

Engie Transmissao de Energia, which owns the project, will provide a corporate guarantee to BNDES.

The 1,800 km project is located in the states of Pará and Tocantins and includes the construction of one new substation and

the expansion of three existing ones.

Engie acquired the Novo Estado project from India's **Sterlite** for R\$410 million earlier this year. The project was awarded as Lot 3 in Brazil's second transmission line auction of 2017 (*PFR*, 1/23).

Engie has recently closed other loans with BNDES totaling R\$2.7 billion to finance the construction of Phase 2 of its Campo Largo wind complex and the Gralha Azul transmission line (*PFR*, 5/21). ■

LATIN AMERICA PROJECT FINANCE ●

Chile reforms boost private auction

Zona Energía's private auction in Chile will benefit from a reform that bans Chile's power distribution companies from selling power to large consumers known as *clientes libres* or free clients.

Zona, which is owned by construction and real estate conglomerate **Grupo Ebc**, has been structuring a private power auction for over a year. It is expected to be held over the summer.

The procurement process matches generators with free clients – electric customers with loads of 5 MW or more.

Chilean law does not regulate power prices for these offtakers, unlike *clientes regulados* (regulated clients), because free clients are

believed to have sufficient leverage to negotiate supply contracts themselves.

However, free clients were buying power

“The free clients that have supply agreements with distributors and participate in our auction will see a price drop of 20% to 40%”

from distribution firms at higher prices instead of negotiating terms with generators, as a way to ensure the quality of the supply.

That situation came to an end after Chile's

National Energy Commission published a reform that bans distributors from selling power to free clients, to ensure the market's competitiveness.

The change will benefit the private power auction, says **Daniel Walker**, project manager at Zona Energía. “The free clients that have supply agreements with distributors and participate in our auction will see a price drop of 20% to 40%.”

Zona Energía is expecting to award contracts totaling 1,000 GWh/year to existing assets – no new projects will be built for the auction. So far, 40 companies have expressed an interest in the process (PFR, 1/8, 3/23).

Generators will also present their projects – solar and wind – and bid for five-year power purchase agreements starting either in 2021 or 2022. ■

Natixis finances latest solar PMGD portfolio for Sonnedix

Independent power producer **Sonnedix** has closed a project finance loan from **Natixis** to finance an up-to-100 MW (DC) portfolio of small-scale solar assets.

The French bank was sole arranger on the \$87 million debt package for the portfolio, which consists of projects that qualify under Chile's PMGD (*Pequeños Medios de Generación Distribuida*) distributed generation scheme.

The structure is based on an initial four projects totaling 25 MW (DC) to which the sponsor can add over time.

Legal advisors included **Milbank, Mayer Brown, Morales & Besa** and **Guerrero Olivos**.

The deal is Natixis' fourth PMGD financing in the past twelve months.

The other three were a \$69.1 million debt financing for an up-to-70 MW portfolio for **Arroyo Energy Partners** (PFR, 8/1/19), a \$96.4 million package for **Reden Solar** (PFR, 10/10/19) and a loan for **Cap Vert Energy** (PFR, 12/12/19).

“These transactions further consolidate Natixis' leadership amongst financial institutions in the PMGD space,” said **Aitor Alava**, head of Latin America infrastructure finance at Natixis in New York.

The benefits available under the PMGD scheme are expected to change this year, after the administration proposed reforms such as calculating the price according to the time of the day (PFR, 3/23). ■

BNDES funds Copel transmission lines

Brazilian state-controlled **Companhia Paranaense de Energia** (Copel) has signed a R\$432.1 million (\$87.94 million) loan to finance a portfolio of operational and under-construction transmission lines.

The financing was provided by Brazilian development bank BNDES. The loan has a 23.5-year tenor and bears interest at inflation (IPCA) plus 4.82%.

Copel won the transmission projects in an auction held by the government in 2015. All but two of the projects had commercial operations dates in 2019. The projects are:

- Substations:
- ◆ SE 230/138kV Curitiba Centro – commercial operations August 2019
 - ◆ SE 230/138kV Medianeira – commercial operations September 2019
 - ◆ SE 130/138kV Andira

Leste – commercial operations March 2021

Transmission Lines:

- ◆ LT 525kV Curitiba Leste – Blumenau – commercial operations March 2021
- ◆ LT 230kV Curitiba Centro – Uberaba – commercial operations August 2019
- ◆ LT 230kV Baixo Iguacu – Realeza Sul – commercial operations June 2019

The BNDES loan represents around 77% of the total Capex of the portfolio and will be used to conclude the unfinished works and reimburse costs incurred during the construction of the operational projects.

Between 2016 and March 2020, Copel invested R\$424.4 million in the projects. A further R\$135.8 million is expected to be invested to complete construction. ■

Shell plans to build more solar in Brazil

Oil and gas company Shell is increasing its efforts to build solar projects in Brazil, registering a 10-project complex called Barnard Solar with a total capacity of 467 MW.

Located in the municipality of Várzea da Palma in the Brazilian state of Minas Gerais, the individual

projects – named Barnard Solar 1-10 – range in size from 46 MW to 49 MW.

Shell has already received approval to build 130 MW of solar in Minas Gerais. The Aquarii 1-3 projects were the first solar projects Shell developed in Brazil. ■

● PEOPLE & FIRMS

IFC reshuffle in Caribbean, Central America

The **International Finance Corporation** (IFC) has appointed new regional managers for the Caribbean and Central America after **Luc Grillet**, who previously oversaw both regions, was promoted to a more senior position.

Grillet had been in the role for five years and was based in Panama before relocating to IFC's Washington, DC headquarters in April as chief operating officer for Latin America. He has been with the development financial institution since 2003, after a two-year stint at the **Inter-American Development Bank**.

During his time as regional manager, the

bank arranged a debt package for **Akuo Energy's** 50 MW Pecasa wind farm in the Dominican Republic. IFC provided an \$18.5 million portion of the total \$80 million financing (*PFR*, 1/16/18).

Taking over his responsibilities for the English-speaking Caribbean, the Dominican Republic and Haiti is **Judith Green**, who will be based in Santo Domingo, DR. Before joining IFC in 2016, she had worked with Jamaica's **Ministry of Finance and Planning**, **RBC Bank Jamaica** and **Citibank Jamaica**.

"IFC's role in the Caribbean is important now

more than ever and I look forward to working with our long-term partners and forging new relationships to support the development of the region," said Green in a statement on June 16.

Sanna Abouzaid, meanwhile, will take charge of the Central American region from Panama City. Abouzaid has been with the IFC since 2003, after graduating from **The George Washington University** with an MBA.

The IFC disclosed in April that it is arranging a \$50 million loan for solar projects in Panama (*PFR*, 4/17). ■

Ørsted's Poulsen resigns

Henrik Poulsen is set to step down as CEO of Ørsted after eight transformative years with the company.

Poulsen is to leave Ørsted by January 2021 at the latest, and a search for his replacement has already started.

"We regret his decision to resign as CEO of Ørsted, but

we, of course, respect his wish to free up more time for other activities," said **Thomas Thune Andersen**, the company's chairman.

Poulsen has accepted a nomination to Ørsted's board pending election at the company's next annual general meeting.

Poulsen oversaw Ørsted's

transformation from a national oil and natural gas producer and distributor – formerly known as DONG Energy – into one of the world's largest offshore wind developers.

As part of its repositioning, the company acquired two wind developers in the US in 2018 – onshore specialist **Lincoln Clean Energy** and offshore pioneer **Deepwater Wind** (*PFR*, 8/9/18, 10/8/18).

"We've transformed a Danish utility predominantly based on fossil fuels into a global leader in green energy, which was ranked as the world's most sustainable company earlier this year," said the outgoing CEO.

Prior to Ørsted, Poulsen was CEO of **TDC Group** for almost four years. He has also held executive roles at **KKR Capstone**, **The Lego Group** and **McKinsey & Co.** ■

● FUND NEWS

CIP reaches first close on fourth vintage at €1.5bn

Copenhagen Infrastructure Partners (CIP) has reached first close on its fourth vintage fund with commitments totaling €1.5 billion (\$1.69 billion).

Copenhagen Infrastructure IV has a target size of €5.5 billion and is touted as the largest fund globally for renewable energy investments.

The list of investors at first close features pension funds, insurance companies and large family offices from Europe, North America, Israel and Asia. The LPs include:

- ◆ **AP Pension**
- ◆ **KLP**
- ◆ **PensionDanmark**

The fund will resume the strategy of its predecessors, Copenhagen Infrastructure I, II, and III, in investing in greenfield solar, wind, energy storage and waste-to-energy projects

in OECD countries in Western Europe, North America, and Asia Pacific.

The firm's investments in North America have ranged from offshore wind in Massachusetts to merchant solar in Texas and Alberta.

Final close on Fund IV is expected in the next nine months.

The fund's advisers are:

- ◆ **Bruun & Hjejle** – legal
- ◆ **Clifford Chance** – legal
- ◆ **Fried Frank** – legal
- ◆ **CFJC** – placement agent
- ◆ **Eaton Partners** – placement agent
- ◆ **Selinus** – placement agent ■

CalPERS commits to Harbert fund

The **California Public Employees' Retirement System** (CalPERS) has made a commitment to **Harbert Management Corp's** latest infrastructure fund, cementing a long-standing relationship.

The public sector pension manager – which has more than \$400 billion under

management – has committed \$100 million to Harbert Infrastructure Fund VI.

CalPERS is the anchor investor in Harbert's Gulf Pacific Power vehicle, which recently acquired an 80% stake in the 812 MW Gulf Plains wind portfolio from **Enel Green Power** and **GE Energy Finance Services** (*PFR*, 2/6). ■

PEOPLE & FIRMS ●

Avangrid names successor to Torgerson as CEO

Avangrid has named **Sempra Energy** stalwart **Dennis Arriola** as the successor to its outgoing CEO **James Torgerson**, who steps down on June 23, the day after the company's annual shareholder meeting.

During his tenure as CEO, Torgerson oversaw the expansion of Avangrid from regional electric utility to diversified energy company and one of the largest wind generators in the US. He announced his retirement in March (PFR, 3/19).

Arriola – who is Sempra's group president and chief sustainability officer – will assume the Avangrid CEO position about a month later, on July 20.

"AVANGRID is an extraordinary company and I am very excited and honored to lead this organization as it moves into its next phase of growth," said Arriola. "The energy sector is at a transformational point and AVANGRID is well positioned to deliver clean energy solu-

tions to its customers and help develop the infrastructure necessary to meet our future climate goals."

Arriola has served in a variety of leadership positions over the last 25 years, including chairman, president and CEO of **Southern California Gas Co** (SoCalGas), executive vice president and CFO of **SunPower Corp**, and senior vice president and CFO of both **San Diego Gas & Electric** and SoCalGas. SoCalGas and SDGE are both subsidiaries of Sempra.

"Dennis' substantial experience in the energy sector, including utilities and renewables, as well as his deep strategic, financial and operating background make him a natural choice to lead AVANGRID and execute our long-term strategy to become a leading sustainable energy company," said **Ignacio Galan**, chairman of Avangrid.

Several senior figures have left Avangrid's

renewable energy subsidiary, **Avangrid Renewables**, this year.

Laura Beane, former president and CEO of Avangrid Renewables, joined **Engie North America** as chief renewables officer in April (PFR, 2/26).

Diana Scholtes, vice president, renewables strategy and origination at Avangrid Renewables, joined **Macquarie Capital**-backed solar and energy storage developer **Savion** as chief commercial officer (PFR, 5/4).

Kevin Helmich, managing director of origination at Avangrid Renewables, joined **Amazon Web Services'** renewables procurement team (PFR, 4/21).

Rany Raviv, vice president of offshore wind at Avangrid Renewables, is leaving in order to focus on his family office, **The R-Group**, as well as the **Oregon Venture Fund** (see story, below left). ■

M&A veteran departs Avangrid

Rany Raviv is leaving **Avangrid Renewables**, where he was vice president of offshore wind, after 13 years.

He joined the company – which was known as **Iberdrola** at the time – in 2007 as vice president of business development and M&A, leading acquisition activity across the US and Canada, before leading the firm's entry into the US offshore wind business.

Raviv is leaving at the end of the

month to focus on his family office, **The R-Group**, which makes angel and venture capital-style investments in technology companies, as well as the **Oregon Venture Fund**.

Raviv was previously part of geothermal developer **Ormat Technologies'** business development team from 1997 to 2007 and worked on both project finance and M&A deals (PFR, 10/15/04, 8/1/08). ■

Atwell hires two in North America

Engineering firm **Atwell** has recently added two experienced staffers to its power and energy division in North America.

The new starters – **Daniel Farmer** and **Tracey Dubuque** – have both been hired as vice presidents.

Farmer joined this month after two years as vice president for North America power generation at **Mott MacDonald**. His experience encompasses thermal energy, renewables

and biofuels.

He has worked at **OST Energy** (now **RINA Consulting**), **Black & Veatch**, **Jacobs Engineering** and **Fluor** over his 35-year career to date.

Dubuque, meanwhile, joined Atwell in April to lead the company's renewable energy operations across the US.

She joins from **Tetra Tech**, where she spent more than 20 years – 16 in renewables – most recently as vice president for onshore wind energy. ■

Generate Capital staffer founds waste-to-energy start-up

Janice Tran – until recently a director in Generate Capital's waste-to-energy investment team – has formed her own company focusing on the same sector.

The new company, **Kanin Energy**, aims to help industrial customers develop and finance waste-heat-to-power and district heating projects.

The company will provide third-party capital, technology, engineering and construction services to build independent power plants for customers in heavy industry.

Tran is the company's CEO and is joined by three co-founders, all of whom previously worked at Canadian waste heat

recovery company **Terra-pin Geothermics**:

◆ **Daniel Fipke** – managing director

◆ **Rod Fitzsimmons Frey** – president

◆ **Jake Bainbridge** – chief technology officer

Before joining Generate Capital, Tran previously held positions at **NRG Energy**, **ICF** and **EY**.

Waste heat-to-energy has proven attractive to sustainability-focused investors recently, as demonstrated by **Sustainable Development Capital's** recent acquisition of a 50% stake in **Primary Energy Recycling Corp's** 298 MW portfolio of behind-the-meter assets at steel mills in Indiana (PFR, 4/24). ■

● PEOPLE & FIRMS

Ex-SunPower staffer joins Greenskies

Greenskies Renewable Energy has hired a structured finance professional who previously worked at **SunPower Corp.**

Fahad Afolabi started at the commercial and industrial-scale solar developer last week as director of project funding, reporting to **Rob Martorano**, chief investment officer.

Afolabi was a structured finance principal at SunPower, where he worked for five years. Before that he had been with **PFM Asset Management**.

Greenskies recently sold a

200 MW portfolio of projects to **Goldman Sachs Renewable Power** and secured a corporate equity investment from **JLC Infrastructure** (PFR, 1/14, 3/18).

The C&I developer also has a new general counsel since April, when **John McDonald** took over as head of legal, replacing **Jason Maur**, who has taken the GC job at **Renewable Solar**.

McDonald joins from boutique investment bank **Tremont Street Partners**, where he was managing partner. ■

Ex-Whitehall banker joins private equity start-up

Former **Whitehall & Co** investment banker **Blaine Burke** has joined sustainability-focused private equity firm **Lieff** as a founding member.

Lieff's aim is to commercialize sustainable services, products and infrastructure by investing in businesses with proven technologies, positioning itself between venture capital and more mature private equity.

The firm was co-founded in 2019 by ex-**BlackRock** employees **Brad Gavin** and

Craig Sulzburgh.

Kavin spent six years in BlackRock's renewable power and energy infrastructure investment team and has also worked at **Cowen Sustainable Investments**, while Sulzburgh's career has included a stint trading quantitative investments at **Lehman Brothers Asset Management**.

Burke was at Whitehall from 2012 to 2018. Since then, he has worked as CFO of equipment and services provider **Alliance OGP**. ■

Plastina departs Investec

Distributed energy and clean tech-focused banker **Ren Plastina** has left Investec after three years with the firm.

"Sadly, the latest market disruptions have ended my run at Investec," he wrote on LinkedIn on June 15. "I wish them well and thank them for the opportunity to build new strategies and relationships in the energy

transition and infrastructure sectors."

Plastina joined Investec in late 2017 after three years with **AIG**-backed asset manager **Varagon Capital Partners** (PFR, 12/18/17).

He has previously held energy and infrastructure project finance positions at **BNP Paribas** and **CIT Bank** (PFR, 6/13/14). ■

● ALTERNATING CURRENT

Juneteenth: Infrastructure, finance and slavery



The anti-racism protests sparked by the death of **George Floyd** in Minneapolis have led, among other things, to increased recognition of Juneteenth, the anniversary of the emancipation of the last enslaved African Americans in the US.

So it seems appropriate on this day to confront the role of slavery in the development of US infrastructure and finance, and the inadequate response to racial injustice in the present day.

By the time General **Gordon Granger** declared enslaved people in Texas free on June 19, 1865, thousands had already been forced to build one of the most extensive railroad networks in the world.

In recent decades, the corporations that still own this infrastructure – companies like **CSX Corp**, **Canadian National**, **Norfolk Southern** and **Union Pacific** – have faced lawsuits and shareholder motions calling for reparations.

While the railroad companies undoubtedly benefited from the cheap labor, they did pay for the work done – but to businessmen who leased out enslaved people, rather than to the laborers themselves.

Black bodies were treated as liquid financial assets in every way, including as collateral for loans. If a borrower under such a mortgage defaulted, the act of foreclosure could and did separate enslaved family members from each other.

Slave traders would extend this type of credit to buyers in the form of purchase-money loans, but banks were also involved.

In 2005, **JP Morgan Chase** apologized for the role of two of its predecessor firms – **Citizens' Bank** and **Canal Bank in Louisiana** – which accepted about 13,000 humans as collateral between 1831 and 1865 and came to own 1,250 enslaved people as a result of defaults.

"We apologise to the African-American community, particularly those who are descendants of slaves, and to the rest of the American public for the role that Citizens' Bank and Canal Bank played," wrote **William Harrison**, the bank's then-CEO. "The slavery era was a tragic time in US history and in our company's history."

But the role of banks in perpetuating racial injustice did not end with slavery. Discriminatory practices such as redlining have continued up to the present day, with **Hudson City Savings Bank**, **Evans Bank** and **Associated Bank** among the institutions that have reached settlements in redlining cases since 2010.

Meanwhile, banks have struggled to improve diversity at senior levels. While JP Morgan managed to increase the number of black managing directors from 83 to 97 between 2017 and 2018, black people still only represent 4% of the company's executive or senior level employees in the US. The equivalent figure for **Citi** was just 1.8% in 2018.

As corporations start to offer employees time to observe Juneteenth, it would be a good idea to use this time to reflect on our own responses to racial injustice. How many of us can say that we have done enough? ■