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Power Finance & Risk

Exclusive Insight on Power M&A and Project Financing

MERGERS & ACQUISITIONS

Texas battery project hits auction block

Able Grid Energy Solutions has launched the auction of a 200 MW battery storage project.

Page 5

PROJECT FINANCE

Sponsor pair finances Michigan solar portfolio

Pine Gate Renewables and **Kayne Anderson Capital Advisors** have financed a 40 MW solar portfolio.

Page 6

PEOPLE & FIRMS

Energy project finance MD exits CoBank

Michael Gee has left CoBank's project finance team as part of a restructuring of the firm's energy business.

Page 19

Iron Mountain supes up vPPAs with extra hedges

Taryana Odayar

Data management company **Iron Mountain** has layered additional hedge contracts onto virtual power purchase agreements that it signed with two wind farms in 2016 and 2017 as it seeks to mitigate various risks associated with the popular renewable energy contracts.

Virtual PPAs have become increasingly common in recent years as corporations have sought to buy renewable energy to achieve their ESG targets, but the agreements have the often unwanted side-effect of exposing energy buyers to weather, commodity price and project performance risks.

Iron Mountain teamed up with **Birch Infrastructure** – a start-up established in 2019 by former **sPower** executive **Jim Howell** and **Microsoft Corp**'s former energy innovation chief **Kenneth Davies** – to PAGE 15 »

The future of renewable energy procurement – it's not science fiction

Eolus lands buyer for wind repowering project

Taryana Odayar

Eolus North America has found a buyer for a repowering project at the site of a 35-year-old wind farm in California, following an auction.

Cubico Sustainable Investments has emerged as the winning bidder for the 46.5 MW Wind Wall 1 project, which is located in Kern County, about seven miles east of the City of Tehachapi.

As part of the agreement, Eolus will provide technical, operational, and administrative services for the wind farm to maximize outcome and production. The developer has also arranged construction financing.

"This is an important milestone for Eolus in California and in the United States, and PAGE 5 »

TerraForm refis Arcadia acquisition debt

Sophie Mellor, Richard Metcalf

TerraForm Power has refinanced a portion of the debt it raised last year to acquire the 320 MW Arcadia portfolio of distributed solar and fuel cell assets from **AltaGas**.

The former yield company, which is now wholly owned by **Brookfield Renewable Partners**, raised $296 million through the senior secured note issuance, which was priced PAGE 6 »

Sponsor trio proves Mexico solar loans still doable

Carmen Arroyo

Despite a hostile policy environment in Mexico for private investment in renewables, **Canadian Solar**, **Korea Electric Power Corp** (Kepco), and **Sprott Korea** have reached financial close on their jointly-owned 100 MW Tastiota solar project in the state of Sonora.

Sumitomo Mitsui Banking Corp provided the $93 million non-recourse financing for the project.

The package PAGE 17 »

IN THIS ISSUE

THE BUZZ

Settle for nothing less: Big data gets smarter on vPPAs

In the world of project finance, power purchase agreements are usually considered from the point of view of the project owner or lender. But in the last few years, more attention has started to be paid to the other end of the contract.

When commercial and industrial PPAs first began to take off, they were rightly recognized as a huge opportunity for developers. Not only was it a fast-growing source of contracts, but – for some project sponsors at least – it appears to have been a chance to offload thorny risks – such as hub-to-node basis risk – onto their new, less canny customers.

Paying a low, fixed price for renewables for 15 years sounds like a great idea to a corporation with a whopping energy bill – until they realize they are buying a variable amount of energy in one place and have to settle a derivative contract somewhere else, where the spot price may be quite different.

"Watching those first transactions begin to perform, we were delighted by the contribution they made to our sustainability goals but were frustrated by the financial volatility of the settlement payments and the limited ability we had to predict or manage that volatility," wrote **Kenneth Davies** in a white paper in 2018, when he was director of energy portfolio management at **Microsoft Corp** (PFR, 10/18/18).

Microsoft was one of the first whales of the corporate PPA market and, unsurprisingly, one of the first to push back on terms that proved disadvantageous.

Working with insurer **Allianz** and analytics firm **REsurety** – who have form solving similar issues for project owners – Davies came up with solutions including the proxy generation PPA, the volume firming agreement and the settlement guarantee agreement.

Davies is no longer with Microsoft but is still banging the same drum at his new company, **Birch Infrastructure**, whose mission seems to be to spread the gospel to other data center operators. And they appear to be receptive, as shown by the recent contracts signed by **Iron Mountain** (see story, page 1). Can **Amazon**, **Google** and the rest be far behind? ■

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
Able Grid Energy Solutions	Madero Grid (200 MW Storage)	Texas	Guggenheim	The sponsor has launched the auction (see story, page 5).
Amasa Advisory Services	Portfolio (180 MW Solar)	Arizona		Portfolio in market (PFR, 8/17).
American Electric Power	Portfolio (70 MW Hydro)	US	Scotiabank	Sale expected to conclude by late 2020 (PFR, 8/24).
AltaGas	Blythe (507 MW Gas)	California	Scotiabank	The sale has been relaunched (PFR, 8/24).
Avenue Capital, others	Coso (270 MW Geothermal)	California	Cantor, Houlihan	Auction underway (PFR, 8/31).
Blackstone Group	Onyx Renewable Partners	US	BNP Paribas	Platform sale launched (PFR, 8/3).
Brookfield Infrastructure	Enwave Energy (District energy)	US, Canada	Scotia, TD	Auction to be launched this year (PFR, 8/10).
CarVal Investors	Portfolio (129.4 MW Solar)	US	Marathon Capital	The fund manager has launched the sale (PFR, 9/28).
CleanCapital	Portfolio (129 MW Solar)	US	Javelin Capital	The sponsor is looking for an equity investor (PFR, 9/28).
Colbún	Colbún Transmisión	Chile	BTG Pactual, JP Morgan	Colbún launched the process on September 8 (PFR, 9/28).
Colombian government	Electricaribe	Colombia		The reprivatization has closed (see story, page 16).
Delaware River Solar	Portfolio (59.5 MW [DC] Solar)	New York	Fifth Third	First round bids due the week of October 12 (PFR, 10/5).
	Sky High Solar (20 MW Solar)	New York	Rhynland	The developer began to market the asset in August (PFR, 9/28).
DIF Capital Partners	Lone Valley (30 MW Solar, 49%)	San Bernardino County, CA	Fifth Third	Sale process initiated by end July (PFR, 8/10).
Energy Capital Partners	Alpine Portfolio (507 MW Cogen)	Canada	Credit Suisse	CIM sent to bidders in mid-July (PFR, 8/10).
First Solar	US Development Platform	US	BofA, CohnReznick	Bids were due August (PFR, 8/10).
LS Power	Portfolio (316 MW Solar)	US	Citi, BMO Capital Markets	Capital Dynamics has agreed to acquire the assets (PFR, 10/5).
Macquarie Capital	Candela Renewables	US	Nomura Greentech	The sponsor has launched the sale process (PFR, 7/20).
Marathon Energy	Marathon Energy	New York		The auction process has been launched (PFR, 9/14).
NextEra Energy Resources	Project Gila (115 MW Solar)	Texas	Marathon Capital	The sale processes were launched in June (PFR, 7/13).
	Project Rocket City (150 MW Solar)	Alabama		
New Energy Solar	Portfolio (281.1 MW Solar)	US	RBC Capital Markets	New Energy has begun a strategic review of the portfolio (PFR, 9/14).
Petrobras	Portfolio (578 MW Thermal)	Brazil	Goldman Sachs	Sale has entered binding phase (PFR, 8/31).
Point Reyes Energy	Jade Meadow (20 MW Solar)	Maryland	LevelTen	First round bids due Sept 25 (PFR, 8/31).
Recurrent Energy	Slate (440.25 MW Solar, Battery Storage)	California		Goldman Sachs Renewable Power is the buyer (see story, page 5).
Renova Energia	Alto Sertão III B (305 MW Wind)	Brazil		Prisma Capital made an offer (PFR, 8/17).
Solar Landscape	Portfolio (20 MW [DC] Solar)	New Jersey		Bids due September (PFR, 8/17).
SunRun	Vivint Solar	US	Credit Suisse, Morgan Stanley, BofA	The companies are moving forward with the merger (PFR, 9/28).
Swift Current Energy	Portfolio (2.2 GW Solar)	US	Lazard, KeyBanc	The company has launched the auction (PFR, 10/5).
Voltalia	VSM3 (152 MW Wind, 33%).	Brazil		STOA is the buyer (see story, page 16).

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
AP Solar Holdings, J-Power USA	Red-Tailed Hawk (350 MW Solar)	Wharton County, Texas	CohnReznick Capital	Tax equity	$150M		The sponsors are looking for a tax equity investor (PFR, 9/28).
Argo Infrastructure Partners	Portfolio (1,643 MW Gas)	US	MUFG	Private placement	$750M		The sponsor has mandated banks (PFR, 10/5).
● Arroyo Energy	Pemcorp (131 MW Gas)	Mexico	SMBC, ING, Natixis	Refinancing	$170M	7-yr	The financing has closed (see story, page 17).
	Portfolio (219 MW Solar, Wind)	Chile	SMBC, Credit Agricole	Term Loan	$140M	7-yr	Financial close is penciled for October (PFR, 10/5).
Cypress Creek	Operating portfolio (1.6 GW Solar)	US	Investec	Holdco debt	$200M	7-yr	Deal launching after Labor Day (PFR, 8/31).
Duke Energy	Portfolio (360 MW Solar)	US	SMBC	Private placement			The deal has been launched (PFR, 9/21).
● DE Shaw Renewables	Portfolio (70 MW Solar)	Louisiana	SocGen, CIBC, Truist Bank	Term loan	$89.5M	C+6yr	The deal has closed (see story, page 6).
				Tax equity	$50M		
				Ancillary Facilities	$18M		
EDF Renewables	Milligan 1 (300 MW Solar)	Nebraska	Bank of America	Tax equity			The sponsor has secured the tax equity (PFR, 10/5).
	Gunaa Sicarú (252 MW Wind)	Oaxaca, Mexico		Term loan			Term sheets received from banks (PFR, 7/13).
GenOn Energy	Portfolio (1,570 MW Gas)	California	CIT Bank, Investec, SocGen	Refinancing	$265M		The sponsor has mandated banks (PFR, 8/24).
Invenergy	Portfolio (1,485 MW Wind)	Oklahoma	Rabobank, NordLB	Construction loan			The sponsor has received debt proposals (PFR, 9/28).
● Canadian Solar, Korea Electric Power Co, Sprott Korea	Tastiota (100 MW Solar)	Mexico	SMBC	Term loan	$67M	7-yr	The financing has closed (see story, page 17).
				Ancillary Facilities	$27M		
	El Mayo (99 MW Solar)		SMBC	Term loan	$60M	7-yr	Financial close is penciled for November (see story, page 17).
Key Capture Energy	Portfolio (1.5 GW Storage)	US		Capital Raise	$400M-$600M		The sponsor is in talks with investment banks (PFR, 5/4).
NextEra Energy	Portfolio (639.1 MW Wind)	US					Financing expected by year-end (PFR, 8/24).
OPDEnergy	Portfolio (154.3 MW Solar, Wind)	Chile	Banco Security	Ancillary Facilities	$9.1M		The loan has been disbursed (PFR, 10/5).
			SMBC	Term loan	$103M	7-yr	
● Pine Gate Renewables, Kayne Anderson Advisors	Portfolio (40 MW Solar)	Michigan	Keybank, US Bank, Barings				The financing has closed (see story, page 6).
Renova Energia	Alto Sertão III phase A (438 MW Wind)	Brazil	Quadra Gestão de Recursos	DIP facility			Renova has received the offer (PFR, 9/8)
Solarpack, Ardian	Portfolio (43.4 MW Solar)	Peru	SMBC, BNP Paribas	Refinancing			Sponsors have mandated banks (PFR, 8/24).
Summit Ridge Energy	Portfolio (23 MW [DC] Solar)	Illinois	1st Source	Construction debt, tax equity			The sponsor has secured debt (PFR, 9/14).
SunPower Corp	Residential Solar Business	US	BofA	Debt, tax equity			The sponsor has secured debt (PFR, 10/5).
SunRun	Portfolio (30 MW Solar)	US	Chanel	Tax equity	$35M		The deal has been announced (PFR, 10/5).
● TerraForm Power	Portfolio (320 MW Solar, Gas)	US	Natixis, RBC Capital Markets	Private placement	$296M	23yr	The refinancing was priced in September (see story, page 6).
WattBridge Energy	Braes Bayou (288 MW Gas)	Fort Bend County, Texas		Construction, term loan	$83.6M	C+4yr	The sponsor has begun reaching out to lenders (PFR, 9/28).
				Ancillary Facilities	$64.2M		

● **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 Shravan Bhat at (212) 224-3260 or e-mail shravan.bhat@powerfinancerisk.com

GSRP to buy solar-plus-storage asset in California

Goldman Sachs Renewable Power (GSRP) has signed a deal to acquire a 300 MW solar project in California that will come with a 140.25 MW battery storage system.

Canadian Solar subsidiary **Recurrent Energy** is the seller of the project, which is called Slate and located in Kings County, according to a US **Federal Energy Regulatory Commission** filing dated October 2.

The parties have requested regulatory approval for the sale by November 13, so as to close the transaction before the end of the year.

Slate's entire output is committed to five separate offtakers via long-term power purchase agreements.

The offtakers are:
- **Silicon Valley Clean Energy**
- **Central Coast Community Energy** (3CE, formerly known as **Monterey Bay Community Power**)
- **Stanford University Power**
- **San Francisco Bay Area Rapid Transit District** (BART)
- **Power and Water Resources Pooling Authority** (PWRPA)

The PPAs are not all the same length. Stanford, for instance, will buy 63 MW of solar generation for 25 years and 50 MW of battery storage capacity for 20 years.

BART's contract, which was amended in January 2020, covers 50.5 MW of generation for 20 years, while PWRPA will buy 10 MW, also for 20 years.

The deals with the two community choice aggregators – SVCE and 3CE – are for 17 years, having been amended in February (they were previously 15-year contracts – PFR, 10/30/18).

It will not be the first project sold by Recurrent to GSRP. The developer sold the 100 MW Mustang solar project to the same buyer last year after a previous deal with **Shenzhen Energy Group Co** did not obtain approval from the **Committee on Foreign Investment in the US** (PFR, 3/4/19). ■

Auction launched for Texas battery storage project

A battery storage company based in Boulder, Colorado, has launched the auction of a utility-scale project it is developing in Texas.

Able Grid Energy Solutions is looking for a buyer for its 200 MW Madero Grid project in the Lower Rio Grande Valley near McAllen.

The company has retained **Guggenheim Securities** as its financial adviser for the sale process, which was launched last week.

"This is a shovel-ready project that is fully permitted," a source close to the situation recently told *PFR* (PFR, 9/25). The project is due to be online in 2021.

Able Grid was co-founded by **SunEdison** alumni **Barnaby Olson** and **David Cieminis**, who serve as CEO and chief commercial officer, respectively. Former **MAP Energy** staffer **Eric Stoutenburg** is the company's chief development officer. ■

Eolus lands buyer for wind repowering project

« FROM PAGE 1

without our team and continued support from our partners, such as **Vestas**, **Signal** and **Swedbank**, it would not be possible to make this a reality," said **Hans-Christian Schulze**, Eolus North America country manager.

Paragon Energy Capital ran the auction as Eolus' financial adviser, as previously reported (PFR, 4/15).

The Wind Wall 1 repowering was the first US wind project developed, financed and built by Eolus, whose parent company, **Eolus Vind**, is based in Sweden.

It is slated to come online this year and will sell its output to **Amazon Web Services** under a 15-year power purchase agreement secured last year (PFR, 4/9/19). The PPA is backed by a limited guarantee from parent company **Amazon.com**.

The project involves the replacement of some 400 Vestas turbines originally installed in 1985 at the Tehachapi Pass wind farm with 13 V126 turbines from the same manufacturer. Vestas will service and maintain the project under a 10-year contract.

The repowering is expected to triple the project's annual generation to between 135 GWh and 145 GWh.

Full notice to proceed under the balance of plant agreement was issued on November 20, 2019. The BOP contractor is Signal Energy.

The project is in the final stages of construction, and is targeted to be online this fall.

Eolus North America acquired its 60% stake in **Wind Wall Development**, which owns the rights to the Wind Wall I project, in December 2016. It is qualified for the full production tax credit. ■

Oil & gas investor floats energy transition SPAC

Carnelian Energy Capital Management, a Texan private equity fund manager focusing on oil and gas, has raised $300 million for a blank check company targeting clean transportation and other alternative energy sub-sectors.

The initial public offering for **Peridot Acquisition Corp**, as Carnelian's special purpose acquisition company (SPAC) is known, closed on September 24.

UBS Securities and **Barclays Capital** were joint bookrunners and **Tudor, Pickering, Holt & Co Securities** was co-manager on the offering, which was priced at $10 a unit.

Peridot is led by **Alan Levande** as chairman and CEO, with **Markus Specks** as CFO and senior vice president of corporate development.

Levande is a former **Salomon Brothers** and **Goldman Sachs** investment banker who went on to co-found **Tenaska Capital Management** in 2002. Since 2013, he has been running oil and gas E&P company **Covey Park Energy** as co-CEO.

Specks, meanwhile, joins Peridot from distressed debt specialist **Värde Partners**, where he was managing director and head of the Houston office, covering energy credit. ■

NORTH AMERICA PROJECT FINANCE

Sponsor pair finances Michigan solar portfolio

Pine Gate Renewables and **Kayne Anderson Capital Advisors** have financed a portfolio of 14 solar projects totaling 40 MW in Michigan.

Pine Gate co-developed the projects with **Birch Creek Development**.

The financing was provided by **KeyBank**, **Barings** and **US Bank**.

"Becoming a leader in solar energy in Michigan has been an important focus of Kayne Anderson over the last several years," said **Jon Levinson**, co-head of renewables at Kayne Anderson. "We are very pleased to have brought this initial wave of projects into construction with our partners at Pine Gate, and we are very excited about the continued build-out of our solar footprint in Michigan over the next several years."

The 14 solar projects are part of a larger initiative to bring more than 500 MW of renewable generation to Michigan through 20-year power purchase agreements.

Construction is underway in Branch, Calhoun, Genesee, Hillsdale, Lenawee, Missaukee, Montcalm and Saginaw counties. They are due online in the fourth quarter of this year.

Traditionally an upstream and midstream energy investor, Kayne recently embarked on a new strategy targeting renewables. The firm recently launched a mutual fund called Kayne Anderson Renewable Infrastructure Fund (KARIX) which will target companies that own, operate and develop renewable energy assets (PFR, 8/3).

Over the summer, Kayne also participated in the $126.3 million financing of Pine Gate's 78.7 MW Trent River Solar project in North Carolina (PFR, 7/8), and reached financial close on its first solar project as a sponsor, namely the 112 MW Harts Mill project that it is constructing with Pine Gate and **Birch Creek Development** in North Carolina (PFR, 7/7). ■

Details emerge on Louisiana solar financing

DE Shaw Renewable Investments has broken ground on a pair of solar projects in Louisiana, having put in place a financing structure involving tax equity and back leverage.

The assets are the 50 MW Iris Solar and 20 MW St James Solar projects, both of which will sell their output to **Entergy New Orleans** under 20-year power purchase agreements (PFR, 8/13/19).

The financing comprises:

- $89.5 million construction-plus-six-year term loan
- $50 million tax equity bridge loan
- $15 million letter of credit facility
- $3 million revolving credit facility

The projects are expected to be online by December.

The bookrunners on the debt financing were:

- **Société Générale** (left)
- **CIBC**
- **Truist Bank** (formerly **SunTrust Bank**)

The legal advisers were:

- **King & Spalding** – borrower's counsel
- **Norton Rose Fulbright** – lenders' counsel

The identity of the tax equity investor could not be ascertained, but a person close to the deal said the tax equity investment had a "unique structure." ■

Wisconsin regulator okays 20 MW solar build-transfer

The **Public Service Commission of Wisconsin** has approved a 20 MW solar project in the state that is subject to a build-transfer agreement between **EDF Renewables** and **Madison Gas and Electric**.

The utility company will use the $32 million O'Brien Solar Fields project in Fitchburg, Dane County, to serve customers that sign up for its Renewable Energy Rider program.

EDF will develop, build and operate the project and MGE will take ownership when the facility reaches commercial operations. Construction is due to begin this year and the project is scheduled to be online in 2021.

"The O'Brien Solar Fields is another demonstration of MGE's commitment to diversifying its energy supply mix through renewable resources," said **Jamie Resor**, CEO of **EDF Renewables Distributed Solutions**.

MGE is working toward carbon reductions of at least 40% by 2030, with the goal of achieving net-zero carbon electricity by 2050.

Customers that have signed up for its RER program include:

- **City of Fitchburg**
- **Placon**
- **Promega Corp**
- **Tribe 9 Foods**
- **University of Wisconsin-Madison**
- **Willy Street Co-op**
- **Wisconsin Department of Administration** ■

TerraForm refis Arcadia acquisition debt

« FROM PAGE 1 in September.

Natixis and **RBC Capital Markets** were the joint placement agents on the project bond, which was issued through TerraForm Phoenix I.

The notes were priced at 275 bp over Treasurys, producing a 3.38% coupon.

The debt has a tenor of 23 years and four months and a weighted average life of 9.6 years.

TerraForm paid Altagas $720 million for the 320 MW Arcadia distributed energy portfolio in 2019, financing it with a $475 million bridge loan and cash drawn under its existing revolving credit facility (PFR, 7/22/19).

At the time, TerraForm said it intended to refinance the one-year bridge loan and repay the revolver borrowings with about $475 million in project finance debt and $245 million from the sale of minority stakes in North American wind farms.

The acquisition, which made TerraForm Power one of the largest distributed generation businesses in the US, was recently awarded *PFR*'s M&A Deal of the Year Award for 2019. ■

PFR Power Finance & Risk

PFR Latin America Roundtable 2020

The big story this year in Latin America, as elsewhere in the world, has been the Covid-19 pandemic. And as far as power and renewable energy projects are concerned, the main worry has shifted away from immediate supply chain issues to the problem of short-term demand destruction.

But there is more going on in Latin America than just coronavirus. In Brazil, for instance, where power purchase agreements have typically been denominated in local currency, and projects, therefore, have been financed by local institutions, there are efforts in some corners of the private sector to introduce dollar-denominated contracts that could attract capital from overseas.

Meanwhile, many countries across Latin America have developed and continue to build out large renewable energy fleets. While this has lessened an overreliance on hydro that has historically led to wild swings in power prices from year to year, it also brings its own intermittency issues, as market participants have seen as they look north to California.

But every new energy challenge brings new opportunities, and Latin American dealmakers are already looking ahead to the technologies that will be needed to plug the gap – battery storage and possibly green hydrogen.

On the financing side, development finance institutions continue to be the mainstay for projects located in much of Latin America, with commercial banks carefully picking their spots in more developed economies like Mexico, Chile, Peru and Colombia.

Lending to power and renewable energy projects in each of these countries still bears its own risks, however. In Chile, some lenders were chastened by the experience of financing merchant solar projects in the in the past decade, while in both Chile and Mexico the prospects of political instability and regulatory uncertainty remain top of mind. In Peru, on the other hand, the problem is a lack of projects in the first place, as the political class grapples with the fall-out of the Odebrecht scandal.

It is no secret that investing in Latin American infrastructure can be highly rewarding – but it pays to do your homework first. So, to bring you up-to-date on the latest developments, PFR brought together a panel of officials from three leading developers in the region along with representatives from lenders MUFG and IDB Invest.

Richard Metcalf
Editor

PFR LATIN AMERICA ROUNDTABLE 2020

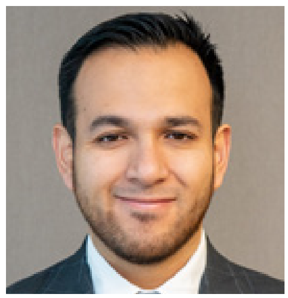
PARTICIPANTS

Ralph Scholtz, Managing Director, **MUFG**

Helmut Kantner, Managing Director, **Austrian Solar**

Rafael Matas, Lead Investment Officer, **IDB Invest**

Aurelio Bustilho, CFO, **Enel Americas**



Elie Villeda, Business Development Manager, **First Solar**

Carmen Arroyo, Reporter (moderator), *Power Finance & Risk*

PFR: This year has been very different because of the Covid-19 pandemic, which has impacted power markets in the region. What will the effects of the pandemic be in the long term?

Helmut Kantner, Austrian Solar: There certainly has been an impact on the reduction in power consumption, which we have seen in most parts of the world, if not all. Even so, I think renewable energies will have a strong comeback, because there is more and more liquidity available in the world from pension funds and other cash deposits that require to be invested.

If I look back, we have financed our projects with international commercial banks, a lot of the time from Asian countries. More and more, we can see European entities eager to finance those, and not only to finance. As I said, there are even pension funds going into projects, full equity, because they're flooded with cash. And these investments are going to renewables.

So I think this will have a very positive impact on renewables, particularly in those regions which are politically and economically stable. In my opinion, Chile is one of the leading ones in Latin America.

Rafael Matas, IDB Invest: From the IDB Invest side, being as we are counter-cyclical, we're experiencing more requests for financing in the region. The projects in which we are mandated have been moving forward normally. As a general trend in renewable energy, we are seeing the need for liquidity in the long term, versus enhancements like guarantees or wraps.

And as Helmut said, we need to find a way to bring institutional investors and infrastructure funds to the region. At IDB Invest, we are trying to use several structures in order to bring them in. Obviously, the A/B bond is one of them, and we have other products available, like the thematic bonds, such as the green bonds. We have just launched the green transmission line certificate and we have liquidity lines available as well.

We'll need to see the impact of the pandemic on the public energy utilities, because people are consuming less, and there have been certain targeted energy bill reliefs.

Ralph Scholtz, MUFG: Looking forward, there are at least three countries that are on negative watch. A downgrade could affect the appetite from the lender community and from a commercial bank perspective. So we're on the opposite side from the IDB, in that sense.

During the early stages of the Covid pandemic, due diligence was delayed because of having to assess what the impact of Covid would be on the construction schedule, delivery of equipment and so on. Those issues are now sort of in the past, because every assessment now includes a Covid-like delay. And I think the manufacturers have also had contingency plans for deliveries.

Finally, the first part of the crisis was very liquidity-intensive, and the sovereign spreads widened tremendously, which really created uncertainty as to what the lending spreads could be from the markets. But those are now in some cases lower than they were pre-Covid. So projects have access to good rates, there is appetite, and as long as countries are able to reactivate their economies and not face downgrades, there shouldn't be an ongoing lasting impact from Covid.

Aurelio Bustilho, Enel Americas: We have a distribution business, so that's different. We saw the impact of a strong demand reduction with lockdowns, and despite this, we maintained our ESG [environmental, social and governance] focus.

The first thing we looked at was the cash flow, after taking care of our employees and customers. Our activities are very correlated with the economic cycle, so we maintained our suppliers and our workforce. We didn't dismiss or destroy them by having a short-term approach. Our focus is to maintain our business in a sustainable way, taking care of all stakeholders.

In terms of renewables, of course, we did have some normal delays considering the situation. But we didn't change our strategies due to Covid. We saw Covid accelerate our vision for the future that climate change and governance are important. Our goal was to maintain our ESG focus, not destroying this concept of sustainability and the value that we add to our suppliers, to our employees, to our communities, to climate change.

For example, we maintained the projects in renewables in the region and the capex deployment. In our vision, the strategy in the long term will not change.

We still believe that people will stay in the cities. That's why we are developing distributed generation, developing services to our customer base, like financial services related to energy and consumption, public lighting, demand response, e-mobility. What happened actually was an acceleration of the transformation in the industry.

PFR: How are both sponsors and banks managing to mitigate currency risk?

Bustilho, Enel Americas: In our case, most of our revenues are in local currency. In Brazil, Colombia, Peru, Argentina, also in Chile. So we can do nothing about translation effects because we report in US dollars. But we give preference to local financing, especially in Brazil, with **Banco Nordeste**, **BNDES**, and also local bond issuances.

We also use inter-company loans from Enel in order to use the sources from our global program of SDG [sustainable development goals]-linked-bonds to finance projects in South America. In any case, we always try to balance revenues and debt in local currency.

Matas, IDB Invest: From our side, we have local currency in Brazil, Colombia and Mexico. And we are also trying to channel existing liquidity in dollars through the countries that need local currency. As such we are working on the possibility of benefiting from a guarantee with bilateral institutions, such as [French development finance institution] **Proparco**, that would allow us to fund a larger amount in local currency. In Colombia, they [Proparco] provide us with a guarantee so we can fund more in Colombian pesos. We also have the possibility of funding in local currency through swaps, whenever it makes economic sense.

Scholtz, MUFG: I hate to state the obvious, but in structured finance, in order to achieve high leverage, the structures can't face a lot of currency risk. So we try to match the revenues of the project to the financing currencies in order to not have that risk.

Villeda, First Solar: Development banks in these countries have the benefit of providing even lower interest rates. But the FX swaps offered by development banks, such as **Exim Bank**, could become a little bit more attractive in the long term. So it could be competitive as well.

PFR: In Brazil, local currency is key as PPAs are not in US dollars. Could this change in the future?

Elie Villeda, First Solar: From our side, we're seeing that there is an appetite for US dollar-denominated PPAs, and that's something that we have seen in a specific part of Brazil. It's not a generality, but this is growing in the long term. These may be issues that have to do with the volatility of the real.

Matas, IDB Invest: Yes, actually, we're following a couple of PPAs in dollars with strong developers and offtakers. This is a good solution to bring more liquidity to the Brazilian market to fund renewable energy projects, based on having solid and creditworthy counterparties.

Bustilho, Enel Americas: If I may add, it depends on the industry. We see this, for example, with some clients from mining businesses or exporters in Brazil. They are requiring some kind of indexation to US dollars. The market is afraid of foreign currency volatility. On the other hand, it can be more attractive to some industries in which it makes sense with their production and selling prices.

Let me tell you that Brazil is moving through a very intense liberalization of the energy market, so there is room to have this kind of alternative of exchange of US dollar prices. The market needs to develop more alternatives in terms of financing, and international financing; surely, having contracts in dollars can leverage those alternatives of funding.

Matas, IDB Invest: In Brazil, there's scarce long-term liquidity, so it's important to co-finance with the local development banks and try to find a way to develop more capital markets. There is a very vibrant debenture market. We need to set structures so that renewable energy projects can be co-financed together with the issuance of debentures in the long term.

In the past, we provided guarantees to debenture issuances to enhance the ratings, so there was more liquidity, more tenor and better pricing. But at this juncture I believe the market is asking more for liquidity in the long-term, than enhancements; although structures such as the total credit guarantees could be successfully provided on a case by case basis.

Scholtz, MUFG: I think for a commercial bank, we've been quite active, financing dollar contracts, whether in pipelines or offshore, FPSOs, that have mainly Petrobras as offtaker and other dollar generators. In a country with a credit rating like Brazil's, it's important that the offtakers have the ability to withstand devaluation and currency fluctuations. Particularly, if they're signing long-term dollar contracts, they should have access to some dollar revenue streams in their business.

PFR: There have also been more bilateral contracts with corporate offtakers.

PFR LATIN AMERICA ROUNDTABLE 2020

Scholtz, MUFG: Correct, and those would be of great interest to us.

PFR: Brazil has been dominated by hydro power. What do you see as the future of solar and wind in the country?

Villeda, First Solar: This was a strange year for Brazil, and maybe my colleagues from Brazil can add more. It wasn't forecasted that it would be a rainy year and because of that, hydropower has taken priority again in the Brazilian government. It's easier because they can control it with the prices and it's good for the overall market.

But it's still forecasted that we will have dry seasons in the following years, so I think there is a business case for integrating more solar and wind into the energy matrix. A similar story is happening in Mexico, where they also want to add more hydro, because the government is the main developer of hydro in the country.

So there are similarities between Brazil and Mexico, that they want to have a baseline and a baseload of hydro power. But the business case for solar and wind is still there and it's still strong.

Bustilho, Enel Americas: Totally agree. Last year, for example, the solar and wind generation, especially in the Northeast of Brazil, saved Brazil from rationing. Nobody says that, but it shows the importance of what Brazil did during the last 10 years in terms of incentivizing renewables, especially solar and wind. So of course, we are in a different situation this year, but I do not think that the government will change in that regard.

On the other hand, the government wants to push the gas market. They are approving the gas law in order to open this market. They are discussing adding these to the baseload of generation. It is not decided yet, but anyway I think it is more complementary to the matrix. The government's plan is to increase renewables. It is a consensus, there is no doubt about it. It's different, maybe, to other countries in the region, but I think Brazil will keep on moving faster on this direction through renewables.

Matas, IDB Invest: Yes, I agree. Brazil's dependence on hydro power makes pricing prone to volatility and seasonality, as it depends on natural phenomena. It's similar to what happened in Uruguay, where the matrix was 35% or 40% hydro. Now it's approximately 50% renewable, and that was not the case in 2011. The main goal is just to avoid all these fluctuations. But I fully agree, I think there are huge prospects for renewables in Brazil still, definitely.

Scholtz, MUFG: What comes to mind is what's happening in California, where they've pushed renewables tremendously, and now there's instability in the grid, which is causing blackouts, and the state is pushing a battery project now in order to fill a void of how to manage the demand-supply fluctuation. In other countries, maybe they'll use gas, but you need power to be there when the supply is low, and all the renewables rely on natural forces that are outside the control of the parties.

Kantner, Austrian Solar: Today. In the future, this may be green hydrogen.

PFR: Let's talk about Chile. In the past few months, multiple debt packages and private placements have closed to finance both solar and wind assets. Is the Chilean market overcrowded or is there financing still available for projects?

Kantner, Austrian Solar: We as Austrian-Solar underestimated the volume of PMGD [Pequeño Medio de Generación Distribuida, or small distributed generation] projects. Recently, as I'm sure you are aware, there have been some legal changes to that, so I think there's a slight drawback for the future. There are also big projects needed to compensate for the coal power which is being taken out of the system step by step. So big power plants from people like Enel – which we have here – or some of their competitors, coming online within the next two to three years.

These, together with – and here I refer to what we have seen in California – some kind of batteries or, maybe, in the near future, hydrogen, which is renewable energy available on demand, will come in.

In terms of financing, we can see more and more new sponsors getting into the market and people are less scared to invest in merchant-based projects. In 2013, 2014, 2015, there were a couple of projects being financed on a merchant basis, but they got into difficulties, so they had to be refinanced in order not to get into default. The banks closed to merchant projects fairly completely. If you didn't have a certain percentage of PPA coverage, they didn't look at these projects to be financed.

Right now, they're open again. So, all in all, financing is available, also for new actors in the market. From 2016 to 2018, we saw financing coming out from the US and Asia, with some few exceptions from Europe. Recently, we've seen more and more appetite from European commercial banks who want to participate in these financings in one way or the other.

Villeda, First Solar: I do think that there is a little oversupply in the Chilean market, but it's because of this economic crisis. The demand destruction that's happened because of coronavirus is contributing to this oversupply. But still you have fundamentals in the market that are driving towards even a lack of projects in the long term. You have the decarbonization plan of the Chilean market, which could drive even further the demand for projects. It all depends on Chile's economic recovery. But I do think that this oversupply will be a short-term issue.

Bustilho, Enel Americas: Just to add that Chile is passing through a very big transformation. What we saw last year, I mean the big riots paralyzing the country due to its inequality, was something never seen before. We have to take into consideration the big transformation that the country's passing through right now. In October, we have a big referendum regarding constitutional changes, which makes it very important for the government to have a clear path.

On the energy industry, we see a very big effort from the government and companies to accelerate the decarbonization process. In our case, we're closing our coal plants.

Financing, I agree with Helmut, is not a problem considering the alternatives in local and foreign market. The issue is how we can assure these long-term PPAs with price volatility.

On our side, we are deploying our solar and wind projects. We are also analyzing green hydrogen processes generated with renewable sources. The country has a very good and stable market and regulation – that won't change.

Matas, IDB Invest: In Chile, being investment grade, there's more liquidity in the market, and actually I think commercial banks can be more aggressive, which is fine for us because we need to be where are needed. We're just doing a portfolio of wind and solar, a large portfolio. One very good feature of Chile is the presence of institutional investors. Being investment grade, it is a country that fits better their appetite for more creditworthy investments.

Scholtz, MUFG: Chile's been a mainstay for our bank in terms of project finance for the past 10 years. We continue to view the country favorably, despite the riots that occurred and the deferral mechanism that was implemented. We recently closed a deal, actually, with IDB Invest for a renewable portfolio, so we continue to be active and are looking forward to considering more financing there.

PFR: We mentioned commercial banks financing merchant-based projects but prices in the spot market have dropped. Are those financings still a possibility?

Matas, IDB Invest: We can take some limited spot price risk. I'm not sure if in Chile that would be the case. We have done it in Brazil, which has a legal floor on the spot price, which helps in terms of the sizing. We've taken some limited tail of spot in Mexico as well but complemented by cash sweeps and higher reserve accounts. In Chile, we would take a more conservative approach drawing on precedents.

But in any case, there was a major drop in the price, so we would take limited spot risk. I'm talking like 20% of the tail, something like that. But probably we would need to take a view in Chile. I am interested, Ralph, to see what's your position on spot in Chile.

Scholtz, MUFG: What we've done today is mainly contracted. Our bank is very active in the merchant power space in the US, and we take limited amounts of merchant profile-type projects. But in the US, financial markets are much more developed, and there's a segmentation of players who want to take more risk for a higher price, for example.

I think in Latin America the challenge is that there's a much more limited sub-investment grade appetite. So the market's limited to development banks, who sometimes take that risk, and commercial banks, who don't like to take the risk. Then you have export credit agencies or national development banks that are supporting their home team by supporting projects or the local markets.

In Chile, local banks financed some of the merchant deals a few years ago, but the prices in Chile were very high, and they dropped significantly, and a lot of those financings were challenged and restructured, or some entered bankruptcy.

So I would say if you're looking to finance a pure merchant deal, don't come to MUFG. However, every project has some merchant unknown price component to it, and we have to take those into consideration. For example, in Chile, the PPA start dates are not tied to the project. They are more of a financial obligation, so you have to start delivering power on a certain date, and the project may not be ready. You need to have either a backup PPA or take some merchant risk for a few months, for example. Or if you're producing less than what your PPA obligation is, you may have to buy power, so you have some merchant components there. We can evaluate that type of merchant risk on a case-by-case basis.

PFR: I also wanted to ask you about the PMGD projects that are being developed in Chile. There are a lot of players getting into this space. Is this trend likely to continue?

Villeda, First Solar: When it started, the PMGD projects were really good, for example, for wind companies. It's a mechanism that is still growing in Chile as something that could help the country alleviate issues of transmission. Since it doesn't have too many risks, the project could be successful and could be easier.

Companies are still learning the issues of PMGDs day-by-day, finding those niches where they can even make more money. Maybe they will be a little bit suffocated by the big projects because of this carbon-efficient trend, but as well, it will help Chile to secure those goals that they are setting themselves. So it's part of the strategy, and I think that, definitely, we will be hearing about it in the medium term as well.

Busilho, Enel Americas: Yes, growing PMGDs is also our focus in the region, and we believe it's the part of the solution, especially for cities, to have generation injected nearby the consumption. Not only in Chile, but also in Brazil and Colombia. We are developing lots of projects at a national level of distributed generation. I believe that Chile will also move this way. There is no turning back.

PFR: Let's talk about Mexico. After the administration cancelled the fourth auction, many developers turned to corporate offtakers. How do sponsors and banks deal with non-investment grade offtakers in Mexico?

Villeda, First Solar: The cancellation of the auction led to more private PPAs. The companies that are involved in those PPAs don't have investment grade. But what we are seeing is that they put it in a pool, so that banks could see it as a whole. One example could be for the hotels in the Yucatan Peninsula or the Baja California Peninsula.

These projects go through a type of virtual PPA, where they don't subscribe to the PPA directly with the hotel companies, but rather they do a virtual PPA with the main project developer. It's kind of a merchant scheme so that the project is not affected by the main PPA contractors.

These types of pools and schemes are growing in Mexico. It's kind of complicated because the regulation in Mexico doesn't allow you to trade energy directly, so the only way to trade energy and do this type of bilateral contract is through the grid operator.

PFR: Mexico's government has put forth several measures to limit renewables starting in the spring. I was wondering if project financings will be able to close in this scenario, or if there's too much risk involved.

PFR LATIN AMERICA ROUNDTABLE 2020

Scholtz, MUFG: We have tried to parse the risks. One of the risks is the interconnection of the projects. So if they're in the construction period, it's an issue if there's a risk that the government can take an action, which prevents the project from economically interconnecting efficiently and using the grid.

But if the project is in operation, the government to date has not challenged projects that are already interconnected, so we've kind of looked at the world from that perspective.

But it is an issue. The government has taken several actions against renewables and private sector projects, and that's certainly concerning to banks because any regulatory change that could affect the cash flow is going to be of primary concern to any lenders.

Villeda, First Solar: I was going to add, maybe to give a little bit more confidence to the financial institutions, that companies in Mexico are relying on the rule of law. Those changes that the government has proposed haven't even taken effect, really, and have been stopped because they were anti-market, anti-competitive. The rule of law has to stand. This sense of judicial strength is helping the confidence of investors here in Mexico.

PFR: What about transmission? How could private companies and banks get into that space?

Villeda, First Solar: In Mexico, the only one that could develop a transmission line and could benefit and get revenue from the transmission lines is the Mexican government. They have confirmed that it is a good investment because they even have some financial bonds that are linked to the transmission lines in Mexico and to the utilities of the transmission lines. But they don't let anyone else jump into it.

But since the government will not have any money to develop any more transmission lines, and they won't have any support or budget to develop it, I think that they will need to go to a private-public association to try to develop these kinds of projects. They are limiting themselves in this situation.

Scholtz, MUFG: From a bank perspective, if Mexico allowed transmission lines to be owned by the private sector, we would be an active player. We just closed a transmission line deal in Colombia, we closed a couple in Chile in the last years, and previously in Peru. It's a very attractive sector because it's very predictable with steady revenues. And that's what project finance practitioners look for.

PFR: Given the situation in Mexico, are you delaying the development of your own projects or considering looking for mandates in other countries?

Villeda, First Solar: It all depends on 2021. Everyone asks if this situation is going to be a short-term or a long-term thing. To be honest, there is a risk to have a counter-energy reform in Mexico, which could mess up all those previous engagements that were happening in Mexico.

Developers are seeing it, and are going towards Central America, since we have some influence in Central America, the Caribbean, and Colombia.

If, in 2021, the party of the president wins the mid-term election, then we definitely could see some even deeper challenges and changes in the Mexican market. But it all depends on the mid-term elections.

Scholtz, MUFG: We're currently working on mandates and approaching our credit committees and trying to close deals in 2020, so we're still open for Mexico. And despite the noise that the government has made, the laws have withstood the test of government challenges. But it's never good to have the sovereign trying to implement rules that are against the fundamentals of a project.

PFR: A few months ago, CFE, the offtaker for many projects, was downgraded. Is that a concern?

Scholtz, MUFG: Well, the rating of the offtaker on any project is a fundamental building block of a good project. So to the extent that the rating is lower, that's not a favorable development. But we have to recognize, too, that CFE is an integral part of the Mexican state. It's a key company, and as long as it's so tied to the Mexican government, the rating of CFE is likely to be similar to the Mexican state.

And Mexico may have challenged some of the contracts in the power sector, but overall it's still a strong country with a very big private sector and a very attractive market for a lot of industries.

Villeda, First Solar: I would say that there are two issues to watch in 2021. One is the mid-term elections, the second is the investment grade rating of Mexico. There is a risk that Mexico could lose its investment grade status in 2021. CFE and payments are tied to the sovereign credit rating, so there could be an issue going on if this happens. The economy could be severely affected.

But I remain confident because the fundamentals of the market are still strong, private companies are still demanding PPAs, and they're still demanding renewable energy.

It still depends on how deep the crisis of Covid is and how this economic crisis impacts the Mexican market. But in 2023, 2024, the demand is still going to grow at 3%. This is going to be driven by the USMCA [United States-Mexico-Canada Agreement] Treaty. A lot of companies are seeing Mexico as a way out to even foster manufacturing facilities in Mexico. So this will drive the power demand.

Even if there is a counter-energy reform, and CFE becomes the main player again in the market, they will be the ones demanding even more finance, and even more solar modules for their own projects. If these changes happen, other avenues for demand and power demand could be opened in Mexico as well.

Matas, IDB Invest: From our side, we're actually structuring a couple of deals in renewables, solar or solar and wind, with A/B bonds.

PFR: Another market that we've mentioned is Colombia. Colombia held its first renewable auction in October of last year, with longer PPAs than expected. But still the market is largely dominated by local lenders, given that everything is in local currency. How are commercial international banks trying to finance projects there?

Matas, IDB Invest: Yes, this is one of the jurisdictions in which local currency is key, in terms of liquidity and in terms of structures that allow other institutions to participate. We do have pesos and we are acting with guarantee structures to increase our firepower.

So in that sense, we would like to be active, not only on solar and wind but also in green transmission. In Colombia, it goes hand-in-hand. We are talking with the key players to develop [projects] as well as transmission.

Our approach in Colombia has been two-fold. There's a need for local currency in the long term, but also, due to Covid, we see liquidity in the shorter-term also being scarce, which we are looking to provide. As per structures to finance infrastructure projects, it's either a long-term or a mini-perm structure that I think is setting in.

Scholtz, MUFG: We've financed a couple of toll roads which had two currencies, dollars and pesos. Interestingly, the financing in one case was 100% in dollars with derivatives to cover the peso risk on a mini-perm structure. And then, more recently, we did 100% dollar financing for a transmission line, and there, all the revenues are in dollars, so during the construction you could argue that there are some FX risks. A lot of the expenditures of any construction project in another country are usually in local currency. So through derivatives or cross-border dollar loans or synthetic loans, we are able to offer pesos and dollars in Colombia or in the other markets.

Matas, IDB Invest: On the swap – it has to be competitive or you wouldn't have closed – but vis-à-vis the local financing, is it due to the fact that you see that there's scarcity of liquidity in the long term, or is it basically because you somewhat won the other pitches that were in pesos?

Scholtz, MUFG: Well, I hate to call it an oligopoly, but there's only four banks in Colombia that are large local banks, so there's not a lot of competition if you look beyond the four banks.

And in the road sector, with some of the problems that occurred related to Odebrecht, some of the lenders decided not to participate. So you lost some of the four lenders.

But maybe in the power sector, you don't have the same dynamics, and maybe rates would be more competitive. We have certainly been approached on PPAs awarded in the auctions. But the auction had other issues, right? You didn't know who your offtaker was going to be, etc.

But you know, our clients are present, international companies. As I mentioned, we just closed a transmission line deal, and that was dollar financing, but we would consider peso financing and whether you're competitive or not is very dependent on the market.

Rafael, you know, today's swap spread or dollar spread is different from tomorrow's. So if you ask us today, we might be competitive, but tomorrow we might not.

Matas, IDB Invest: That's interesting because in some markets, for example, Brazil, if you are going for swaps and you just have Libor, that's very tough. But it's true that in transportation in Colombia, there are those options, and it's more of a deal-by-deal basis. You are right.

PFR: The last market that I wanted to talk about briefly is Peru. Gas and hydro projects have been very present in the market, to the detriment, up to a point, of solar and wind. We haven't heard about much activity in Peru in the last 12 months in the power sector, and especially in solar and wind. Is this likely to change? Is there going to be more interest in the market there?

Scholtz, MUFG: Fundamentally, Peru is a triple-B rated country, so it's a highly desirable market for financial institutions. The issue is that the projects and the project development have not materialized, and that's a consequence of political – I don't know how you want to say it. Let's say that they have an interim president and not a lot of decisions have been made to advance projects for a variety of reasons.

And one of the main reasons is because the aftermath of the corruption scandal not only affected the government but three past presidents. Odebrecht was the largest foreign investor in the country, with many projects. So just the aftermath of that has resulted in a lack of political will to advance projects. We would have an appetite for a properly structured project, but there aren't a lot of projects that have materialized.

Matas, IDB Invest: Yes, I mean, there were the Marcona and Tres Hermanas [wind assets]. It was a long time ago. The thing is that there's like 40% gas and it's highly competitive. [The development of renewable assets] is a strategic decision that has to come from the top down, but at this moment, we don't see that happening in the short term. Again, as I've said, we've seen this in transmission.

I talk a lot about transmission because we're just giving it the spin. For us, it's a change of paradigm, which is getting green transmission as part of the green/sustainable realm. Again, transmission is a very good asset, stable and attractive to mobilize institutional investors.

For us, it's been challenging entering that subsector. It's obviously good in terms of commercial banks and the institutional investors have the real liquidity there, so we are less needed.

But again, as Ralph said, we would be thrilled to get more into the subsector of transmission. I don't see it happening that much in 2020, 2021. I don't expect it, or not in a structured fashion, as we see biddings in other countries.

PFR: Another question is about construction risk. We have mentioned there have been many delays, and maybe interconnection problems. I was wondering if that is now taken into account when sponsors approach banks.

Matas, IDB Invest: Yes, for sure. First of all, it's been a contractual shift. With force majeure, these contractual provisions have been revisited to incorporate the current events. We shifted towards seeing if our projects were going to have liquidity constraints at certain points, generated by the situation, and we offered liquidity facilities in the short term, taking into consideration that the projects on which we're working are solid in structure, and it's just this short-term issue.

But, yes. I've seen fewer [deals] being delayed. Some with more urgency because the sponsors had these deals lined up. These companies need to move in terms of capex, in terms of their investments. Now liquidity is more scarce, so it was more urgent to close the deals that were already mandated.

And in terms of due diligence, we had to be a little bit more creative. Physical site visits, due to Covid, were not possible anymore. We had to be creative and adapt.

Scholtz, MUFG: The projects that were under construction did get impacted because equipment deliveries were possibly delayed or workers were not allowed to go to work due to government regulations or permits. We've had projects where we were expecting permits to be issued, but the government office is closed and despite operating virtually, they're not operating very quickly.

We don't take a lot of permitting risk as a senior lender, so we need the permits to be issued. Maybe we're not taking any incremental risk, but the project's not happening because the permit is not being issued, is one example.

We have one example where we haven't been able to register a security interest in a project because the local notary office is not open. Things of that nature that you wouldn't think would be impacted, but they are.

PFR: To wrap up, we can talk a little bit about what market trends we expect to see in the region in terms of what sources are going to be more developed?

Kantner, Austrian Solar: Well, I think Chile will see a strong year 2020/2021. A strong end to 2020 and a good year in 2021, all due to the effect of the shut down of some of their coal power plants. The need for renewable energy is strong. It will continue being strong. Hopefully, infrastructure construction will go ahead as scheduled because if not, we may run into difficulties, as we have seen in 2014/2015, with curtailments.

All in all, whether wind will be stronger than solar is difficult to say. Right now, we see more big solar projects starting construction, but you are all aware of the big wind projects to come once they have the final permits. In the north, I think solar will dominate. However, on the southern end of Chile, some significant wind projects are in the negotiation phase.

PFR: And in terms of financing? Will it mostly come from commercial lenders, will it be DFIs?

Kantner, Austrian Solar: I think commercial lenders will lead the financing.

Scholtz, MUFG: To the extent projects are greenfield, they would likely look to commercial banks or development banks, but operating projects have an interesting possibility, particularly in countries like Chile or in high investment grade countries, to access the capital markets, private placements or 144As, because they certainly have a long-term appetite. They're able to monetize all the cash flows of a contract, and the rates are extremely attractive right now. You probably can get a project in Chile to access sub-4% debt with the right profile, which is very attractive.

Matas, IDB Invest: I believe, as well, there's more and more influence of institutional investors in the region. The challenge will be how to bring them in and how to make the projects attractive.

We mentioned sustainability, integrity, corporate governance – how you manage those risks embedded in the transaction. That is going to be key to bring institutional investors into the region, and that would represent a significant surge in needed liquidity.

Villeda, First Solar: It's not because I work in the solar industry, but I do think that more solar is going to be installed in the region. Not because it's beautiful, not because it's good, but because of the prices. And there is a drop in solar prices, so this will definitely move to all the region. This is a trend that is happening.

I do see, as a trend, and I'm kind of a pessimist, that 2020 and 2021 will be slow years for Latin America, so we have to be prepared for that.

I also think that Central America has the potential to grow in renewable energy. There is an appetite. We have an auction in Panama going on and it's happening soon, so these kinds of drivers will continue in the market. In Colombia, the same thing is happening with the storage. Storage is going to drive this demand.

Finally, I'm a big promoter of hydrogen, so Chile with hydrogen will definitely drive the demand for renewables in the region.

PFR: How far along is the development of green hydrogen?

Villeda, First Solar: I think that it is going to take a little while, but they have the base, and the base is the decarbonization of the sector as a whole in Chile. And that's, I think, the main driver of demand in hydrogen in Chile. So when you have considered the demand for those kinds of projects, then I think they're going to kick off in two or three years.

They're going to wait for the lessons learned in Europe, and how they are handling these types of issues and the financing.

Kantner, Austrian Solar: I don't know how many lessons we can learn from Europe, since the conditions in Europe for hydrogen are not as good. There's basically no week passing by where you don't have a conference, individual meetings between the one or the other European country, the UN, the European Union and the Chilean government and also private companies. We'll see when the first projects kick off, but certainly, there's huge interest in this technology, and as Elie has said, this will drive more renewable energies in Chile. ■

Iron Mountain supes up vPPAs with extra hedges

« FROM PAGE 1 manage the risks associated with its vPPAs with two US wind farms through the multi-faceted hedging strategy.

"Our aim with all of our clients is to reduce the risk and uncertainty that comes with renewables while providing clean energy reliably and cost-effectively," said Davies, whose title at Birch is chief strategy officer. "That's what we were able to do for Iron Mountain."

For each vPPA, Birch executed a volume firming agreement (VFA) and a settlement guarantee agreement (SGA) with **Allianz Global Corporate & Specialty**'s capital solutions unit, with input from **Nephila Climate**. **REsurety**, meanwhile, provided the valuation and risk analytics for the transactions, and will serve as calculation agent for tracking and settlement over the lives of the contracts.

Allianz, Nephila and REsurety are a familiar threesome, having worked together on the proxy revenue swap product that debuted in 2016, though in that case the risk mitigation device was aimed at project owners rather than energy buyers (PFR, 5/10/16).

HEDGING CONTRACTS

Iron Mountain's data centers have been powered with 100% renewable energy since 2017. However, while the data centers have a fixed load, consuming energy 24 hours a day, the wind generation supporting their vPPAs varies on an hour-to-hour and day-to-day basis.

"VPPAs are great tools for corporates to achieve their sustainability goals," says **Lee Taylor**, CEO of REsurety. "Unfortunately, on their own they can result in ineffective hedges on energy consumption costs or speculative exposure to commodity markets and weather."

The VFA and SGA contracts will help Iron Mountain limit its exposure to variable weather conditions and power market fluctuations.

VFAs, which have been used since 2018, fix the mismatch between intermittent, weather-based generation and the fixed-load profiles of commercial and industrial customers.

"The VFA locks in the difference of value between as-generated PPA settlements and the cost of a fixed quantity consumption profile," explains Taylor.

The SGA, on the other hand, exchanges variable future vPPA settlement payments for a fixed payment, reducing the energy buyer's financial exposure to both weather and commodity market-driven power price volatility.

The insurance provider, in this case Allianz, takes on and manages the risk as part of its portfolio of weather and commodity market-linked exposures. Allianz's partner Nephila assists with underwriting and arranging the transaction.

THE PROJECTS

Iron Mountain's vPPAs are with the 39.9 MW Ringer Hill project in Pennsylvania and the 253 MW Dermott wind farm in Texas, also known as Amazon Wind Farm Texas.

Skyline Renewables, a partnership between **Transatlantic Power Holdings** and Paris-based investment firm **Ardian**, has been Ringer Hill's owner since 2018 (PFR, 2/12/19).

Iron Mountain signed a 15-year PPA for 25 MW of the project's output in March 2016 with its then-owner **New Jersey Resources**. The project has been online since December 2016.

The Dermott project, meanwhile, is owned by **Ørsted**. Iron Mountain buys about 10% of its output under a 15-year PPA signed in 2016, while **Amazon** accounts for the rest (PFR, 10/3/16). The project has been online since 2017, having been christened by Amazon CEO **Jeff Bezos**. ■

Sunpin scores PPA in California

Sunpin Solar has signed a power purchase agreement for its 70 MW Titan Solar project in Imperial County, California.

The developer did not identify the offtaker when it announced the PPA on October 7, describing it only as an investment grade entity.

However, the developer had disclosed that the project's output was fully committed to **Exelon Generating Co** in a July filing with the US **Federal Energy Regulatory Commission**.

"The signing of the PPA along with the tax equity investment and energy hedge commitments has propelled Titan Solar 1 into a utility scale desert solar diamond project that Sunpin is proud to develop and complete with its business partners and local community," said Sunpin's CFO **Kelly Lloyd**.

The announcement also did not identify the tax equity investor or hedge counterparty. In January, *PFR* reported that the developer was in talks with **Morgan Stanley** to provide both (PFR, 1/24). **Troutman Pepper** was advising Sunpin on the tax equity raise.

The project is under construction and is due to be online by the end of the year.

FIRSTENERGY LOOKS FOR RECS IN OHIO

FirstEnergy Corp has issued a request for proposals to purchase renewable energy certificates for its Ohio utilities – **Ohio Edison**, **The Illuminating Company** and **Toledo Edison**.

The three companies plan to purchase 373,000 RECs, which can include solar RECs. The purchases will help them meet their 2020 renewable energy targets under Ohio's alternative energy law.

The RECs must be compliant with the companies' 2020 renewable energy obligations as per **Public Utilities Commission of Ohio** guidance, be deliverable through PJM's Generation Attribute Tracking System (GATS), and be generated between January 1, 2018, and December 31, 2020.

No energy or capacity will be purchased under the RFP.

Guidehouse is organizing the RFP process on behalf of FirstEnergy, and will conduct a webinar on October 8 to outline the process and the terms of the agreement. **Dan Bradley**, a partner at Guidehouse, is the RFP manager.

Potential bidders should submit their credit applications by November 2 and proposals are due on November 10. ■

● LATIN AMERICA MERGERS & ACQUISITIONS

Privatization of Electricaribe wraps, launching two new companies

The sale of Electricaribe by the Colombian government, involving its division into two separate companies, closed on October 1, following a privatization process that began in 2017.

Colombia's **Empresas Públicas de Medellín** (EPM) and the **Consorcio Energía de la Costa** consortium – led by Colombian businessman **Alberto Ríos** – emerged victorious in the privatization auction on March 20 and signed purchase agreements with power utility regulator **SuperServicios** ten days later.

The utility has been divided into two firms along geographic lines, with EPM taking over the operations of the Caribe Mar segment, which has now changed its name to **Afinia**.

Colombian investment bank **Inverlink** advised EPM on the transaction, which makes the municipally-owned firm the largest distribution company in Colombia, with a 35% market share. Its 1.51 million customers are located in the departments of Bolívar, Córdoba, Cesar, and Sucre.

The Ríos-led consortium – made up of the businessman's **Energía de Pereira** and **Latin American Corp** – will be in charge of the Caribe Sol region, having renamed their portion of the company as **Aire**. The company's territory spans the departments of Atlántico, Magdalena and La Guajira, and includes 1.21 million customers.

Under the terms of the privatization, the new owners must make improvements to grid infrastructure while also reducing losses. EPM is required to invest $3.2 billion in Afinia by 2025 and $5 billion by 2030, while Energía de la Costa will spend $2.6 billion on Aire in the next five years and $3.7 billion by 2030 (PFR, 3/23).

"Investments of this nature had never been guaranteed before," said President **Ivan Duque** in a press conference on September 29.

Electricaribe's services had deteriorated during the pandemic, leading to blackouts in the departments of Atlántico, Cesar, Magdalena, Bolívar, and La Guajira – mainly the regions now covered by Aire.

The change of ownership has put an end to a long-drawn-out process that began when the Colombian government seized Electricaribe from **Naturgy Energy Group** in 2017, claiming that the Spanish parent company was not investing in the company. Naturgy responded with an arbitration claim for its 85% stake before the **United Nations Commission on International Trade Law** (PFR, 8/7/18). ■

STOA reworks debut LatAm investment

French infrastructure investment manager STOA has signed a new agreement with **Voltalia** for the acquisition of a stake in a wind farm in Brazil, after changing its mind about a previous deal struck with the developer.

The new deal is for a 33% stake in the 152 MW Ventos Serra do Mel III (VSM 3) wind project in the state of Rio Grande do Norte. The asset is part of Voltalia's Serra Blanca wind and solar cluster, which, according to Voltalia, will be the largest renewable energy cluster in the world, with the potential to reach 2.4 GW of installed capacity.

Back in 2019, STOA had entered into an agreement with Voltalia to buy a 35% stake in the 163 MW Ventos da Serra do Mel 1 (VSM 1) and 128 MW Ventos da Serra do Mel 2 (VSM 2) portions of the same cluster, but this transaction did not take place.

"We decided with Voltalia to shift to VSM3 and other assets to better match with our investment policy towards greenfield projects and ready-to-build," said **Marie-Laure Mazaud**, deputy CEO of STOA.

VSM 1 was commissioned in June 2020 and VSM 2 is under construction, whereas the installation of the first wind turbines at VSM 3 is not due to take place until the fourth quarter of 2020.

It will be equipped with 3.5 MW **Siemens-Gamesa** turbines and is expected to be fully operational in the second quarter of 2021. It will sell its output under a 20-year power purchase agreement with state-owned power company **Cemig**.

After the acquisition, the owners of the VSM 3 project will be:

- Voltalia (57%)
- STOA (33%)
- **SR Energia** (10%) ■

● LATIN AMERICA PROJECT FINANCE

Chile to launch major transmission tender

Chile's **National Electric Coordinator** (NEC) is structuring a procurement process for a transmission project connecting the north and center of the country's grid.

The 932.05-mile (1,500 km) Kimal-Lo Aguirre HVDC transmission line will connect the Kimal substation in Antofagasta to the Lo Aguirre substation in Santiago's metropolitan region.

The NEC will launch the tender on October 26 with bids due during the first week of August 2021. The project will be awarded on October 29 of next year.

The transmission project will be the country's first direct-current system and will operate parallel to the alternating-current 467.89-mile (753 km) Kimal-Cardones-Polpaico line.

The Kimal-Lo Aguirre transmission project will ensure the stability of the grid as new solar and wind assets come online as part of the country's decarbonization strategy, said the NEC in a statement on October 5.

Chile's **Ministry of Energy** approved the project in September 2019. A year later, the Ministry instructed the Coordinator to prepare the project's launch. ■

Enel, Engie eye green hydrogen future in Chile

Italy's **Enel Green Power** and France's **Engie** have announced separate plans to develop the first green hydrogen production facilities in Chile.

Enel will partner with local power company **Andes Mining & Energy** to develop its pilot project, which will use wind energy to produce the fuel.

Located in Cabo Negro, in the region of Magallanes, the facility is expected to be the largest of its kind in Latin America, Enel said on October 2. The project is expected to be brought online in 2022, subject to regulatory approvals and the closing of its financial structure.

Chile's state-owned oil company **ENAP**, **Siemens Energy** and car manufacturer **Porsche** are also prospective partners for Enel's project.

"Green hydrogen can truly play a major role in the energy transition by supporting decarbonization of hard-to-abate sectors where electrification of end uses is not an easy solution," said Enel Green Power's CEO **Salvatore Bernabei**. "As we are doing in Chile, we will continue scouting for other countries worldwide where similar initiatives can be launched."

Engie, meanwhile, is plotting the development of a green hydrogen production facility known as HyEx in the north of the country. A pilot is expected to start operating in 2024, while the commercial operations date for the whole project is scheduled for 2030.

The hydrogen from the plant will be used to produce ammonia locally for explosives manufacturer **Enaex**, a subsidiary of holding firm **Sigdo Koppers**. ■

Financial close for Arroyo refi in Mexico

Arroyo Energy has reached financial close on the refinancing of a gas-fired project in Mexico, a deal that was arranged by three banks.

The debt package, which refinanced the 131 MW Pemcorp simple-cycle gas-fired project in Pesquería, Nuevo León, closed on September 18.

Sumitomo Mitsui Banking Corp, **Natixis** and **ING** arranged the financing, which is understood to be a roughly $170 million deal with a seven-year tenor.

Astris Finance is Arroyo's financial advisor on the deal.

The deal was previously expected to close in April, but Covid-19-related problems led to delays.

SMBC and Natixis also participated in the project's primary financing in 2018, alongside **Korea Development Bank**. The $126 million five-year debt package was priced "in the high 200s" over Libor (PFR, 8/29/18).

The Pemcorp plant, which was brought online in October 2018, has a 20-year power purchase agreement in place with South Korean carmaker **Kia Motors** and **Hyundai Engineering and Construction**.

Kia uses 55 MW of the plant's output and Hyundai 45 MW, but the deal is structured as a single PPA since both offtakers have the same parent company – **Hyundai Motor Co**. Hyundai has a 33.88% stake in Kia.

The Pemcorp facility connects directly to the Kia and Hyundai factories that use the generation. However, an interconnection to the national network is underway so that the plant can sell the remaining 30 MW of its output into the spot market.

Pemcorp's natural gas supply comes from across the border with the US through a **Kinder Morgan** pipeline.

Finnish technology company **Wärtsilä** built the project and is also responsible for operations and maintenance until 2021. ■

Sponsor trio proves solar loans still possible in Mexico

« FROM PAGE 1

comprised:

- $67 million senior term loan
- $15 million letter of credit
- $12 million VAT facility

The sponsors had mandated SMBC early this year, initially expecting to close the deal in the spring. But disruption as a result of the Covid-19 pandemic led to delays to financial close (PFR, 7/15).

"The closing of this non-recourse project finance during these extraordinary times is a strong sign of financial markets' confidence in Canadian Solar's vision and ability to deliver clean solar energy in Mexico and Latin America more broadly," said Canadian Solar's CEO **Shawn Qu** in a statement on October 6.

At the height of the pandemic crisis, the Mexican government put forth a slew of measures to limit renewable project development, causing some investors to consider selling their assets and leaving the country. "There's no space for us anymore," says an officer at a developer in Mexico City.

Lending banks are also said to have pulled back, though a handful are still open to deals in Mexico, with one deal watcher attributing this to their "long-term view of the country's renewable sector."

SMBC is now working on a second deal for a 99 MW solar asset owned by the same three sponsors as Tastiota and located in the same state. The financing will include a roughly $60 million seven-year term loan.

Like Tastiota, the El Mayo project has a 15-year power purchase agreement with Mexico's **National Center for Energy Control**, awarded in Mexico's third power auction in 2017.

Kepco and Sprott jointly acquired a 49% stake in the two projects from Canadian Solar in November 2019. They are expected to buy the remaining interests in the assets once they are brought online in early 2021.

At that point, the projects will be 30.5% owned by Kepco and 69.5% by a consortium of Korean investors through a fund managed by Sprott (PFR, 11/14/19). Canadian Solar will manage construction.

Marathon Capital advised Canadian Solar on the sale of the assets.

It is not the first time Kepco and Sprott have co-invested in Canadian Solar assets. In 2017, they acquired a portfolio of solar projects in California from Canadian Solar's US development subsidiary, **Recurrent Energy** (PFR, 9/27/2017). ■

PEOPLE & FIRMS

Siemens, Macquarie launch distributed energy JV

Siemens and **Macquarie** have formed a joint venture called **Calibrant Energy** to provide on-site energy services to corporations, municipalities, schools, hospitals and other customers.

The tie-up is intended to leverage the delivery and operational capabilities of Siemens' Smart Infrastructure Group and the financing expertise of Macquarie's Green Investment Group (GIG) through a platform designed to allow repeat financings.

Calibrant will deliver solar, storage, microgrids, combined-heat-and-power and centralized heating and cooling upgrades, as well as hybrid projects drawing on a range of technologies, packaged into an energy-as-a-service offering.

"These projects are quite hard to finance and deliver because they're relatively small and bespoke," says **Chris Archer**, head of Americas at GIG. "The traditional approach, raising financing project-by-project and structuring them on a standalone basis, was inefficient, so we have created a platform and set up the financing and legal structure to make it very repeatable."

Distributed energy has come to the fore in recent years, partly in response to concerns about sustainability and grid reliability, and partly as the cost of solar and storage technology has fallen.

Macquarie and Siemens had both already been developing a pipeline of distributed energy projects before embarking on the joint venture, and several are already in advanced stages and ready to be dropped into the new financing vehicle as they hit certain milestones.

"The traditional approach, raising financing project-by-project and structuring them on a standalone basis, was inefficient, so we have created a platform"

The collaboration, which has been in the works for about nine months, came about after Siemens' Smart Infrastructure business reached out to potential partners including Macquarie last year.

Siemens Financial Services is also involved, in the role of revolving credit facility lender to Calibrant.

The joint venture will source third-party tax equity for projects that qualify for tax credits as required.

Macquarie's GIG has previously worked with Siemens FS on the tax equity financing of its 210 MW Canadian Breaks wind project in Texas (PFR, 6/26/19). ■

EnBW's White heads to Avangrid

Avangrid Renewables has strengthened its North American offshore wind leadership team with the addition of **Bill White** from **EnBW North America**.

White will be Avangrid's head of US offshore wind in Boston, overseeing the company's almost 5 GW development pipeline, including projects in which the company has a joint venture stake such as Vineyard Wind and and Park City Wind, off the New England coast.

He was until recently president and CEO of EnBW North America, the US offshore wind subsidiary of German utility **EnBW**. Before that, he was senior director of offshore wind sector development for the **Massachusetts Clean Energy Center**.

He has also served in the **White House** as a special assistant to President **Bill Clinton** and as assistant secretary at the **Massachusetts Executive Office of Energy and Environmental Affairs**.

Besides the projects it is developing through Vineyard Wind, its joint venture with **Copenhagen Infrastructure Partners**, Avangrid is also developing a wholly-owned 2.5 GW project off the coast of Virginia and North Carolina called Kitty Hawk Offshore Wind.

Avangrid is also in the process of replacing **Alan Hannah** as deputy CEO of Vineyard Wind. **Saygin Oytan**, who was previously at engineering firm **Arup**, is taking his place (PFR, 9/22). ■

Mayflower Wind names new CFO

Mayflower Wind Energy, the offshore wind joint venture between **Shell New Energies US** and **EDPR Offshore North America**, has appointed a new CFO.

Justin Johns, who has been with **Shell** for more than a decade, takes over the position next month, *PFR* has learned.

A lawyer by training, Johns was most recently renewable power finance manager for Shell New Energies. He has also held roles in Shell's gas, power and oil trading teams in Houston and London.

He is stepping into the shoes of **Michael Brown**, who has in turn been promoted to CEO following **John Hartnett**'s retirement at the end of September, as previously reported (PFR, 9/30).

Mayflower Wind is developing an 804 MW wind project off the coast of Massachusetts, having won a power purchase agreement in a request for proposals in 2019.

The three utility companies that will be the offtakers under the PPA – **Eversource Energy**, **National Grid** and **Unitil** – filed for Massachusetts **Department of Public Utilities** approval of the 20-year contract earlier this year (PFR, 2/14).

The 408 MW first phase of the project is due to be online by September 1, 2025, and the 396 MW second phase by December 15, 2025.

Mayflower beat two rival bidders in the race to secure the PPA, namely **Vineyard Wind**, the joint venture between **Avangrid Renewables** and **Copenhagen Infrastructure Partners**; and **BayState Wind**, a tie-up between **Ørsted** and **Eversource** (PFR, 10/30/19). ■

Silver to help Guggenheim shape ESG offering

Jonathan Silver, who ran the US **Department of Energy**'s loan program before setting up his own boutique financial advisory firm focused on tax equity, has joined **Guggenheim Securities** as a senior adviser.

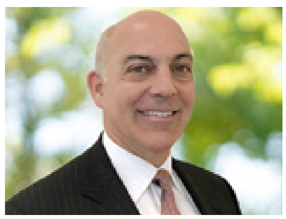
In his new role, Silver will assist the investment bank with the development of its offerings in the ESG and sustainability arena.

"I am thrilled to join the Guggenheim team," said Silver. "The firm has a deeply experienced sustainability team serving clients, a strong commitment to emerging leaders in the sector, and a long tradition of excellence in the space."

"Jonathan is a great addition to our clean economy effort," added **Jim Millstein**, co-chairman of Guggenheim Securities. "He brings leadership and deep experience in advancing adaptation strategies to the challenge that climate change represents to the growth of the economy."

Silver, who is based in Washington DC, has a long track record in renewable energy and sustainability in both the public and private sectors, having worked in the administrations of two US presidents.

In the 1990s, he worked on policy first in the **Department of Commerce** and then the **Department of the Interior** under President **Bill Clinton**.



Johnathan Silver

Then, after spending several years managing venture capital funds, he took another government job as executive director of the **Department of Energy**'s Loan Programs Office in 2009, under President **Barack Obama**.

Since leaving the DoE in 2011, he has advised numerous developers and investors on tax equity deals through his own firm, **Tax Equity Advisors**. ■

Colatrella lands at Fiera

Paul Colatrella, who departed from **Capital Dynamics** earlier this year, has secured a new job originating infrastructure debt investments at **Fiera Private Debt**.

He started as a managing director at Fiera in New York in October and brings with him his former colleague from Capital Dynamics, **Katherine McElroy**, as a director.

Colatrella left Capital Dynamics in April after spending about two years with the firm, which he had joined in 2018 with the aim of establishing a credit platform there (PFR, 4/29). As part of this push, he hired former **GE Energy Financial Services** originator McElroy (PFR, 6/4/18).

Before joining Capital Dynamics, Colatrella had worked for seven years at **Ares Management**. He has also worked at **Dai-Ichi Kangyo Bank**, **HypoVereinsbank** and **EIG Global Energy Partners**. ■

Energy project finance MD exits CoBank

A senior managing director recently left **CoBank**'s project finance team in Denver as part of a restructuring of the firm's energy business.

The senior banker, **Michael Gee**, had been with CoBank since 2014 and focused on power, renewable energy and midstream energy transactions.

He recently worked on the 14.5-year term loan financing of **ConnectGen**'s acquisition of a 50% stake in a 278 MW operational solar portfolio from **First Solar** (PFR, 5/19). CoBank and **NordLB** arranged the loan.

Gee's plans could not be immediately learned.

Before joining CoBank, Gee had worked in energy private equity for 15 years at firms including **Noble House Capital**, **Energy Investors Funds**, **American Capital** and **E3 Capital Management**.

Originally an engineer at **Northland Power** in Toronto, he moved into banking in the mid 1990s, working at **Scotia Capital** and **BancBoston Robertson Stephens**. ■

Orion promotes MDs to partnership

Orion Energy Partners has promoted a trio of managing directors to the position of investment partner in its New York and Houston offices.

The middle-market energy infrastructure debt investor has promoted **Chris Leary**, **Ethan Shoemaker** and **Rui Viana**. All three were among the founding group of professionals at Orion.

"We welcome Chris, Ethan, and Rui to the partnership and are confident that they will continue to make a very strong contribution to Orion Energy, and will bring about an even stronger and more successful partnership while delivering for our investors and other stakeholders," said the firm's CEO and co-managing partner **Nazar Massouh**.

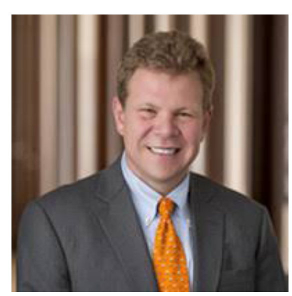
Shoemaker will head the Houston office, while Leary and Viana will be based in New York.

Shoemaker is also a member of the firm's ESG Committee, and co-manages the investment performance and optimization group together with Viana.

Viana is the head of risk and investment strategists, focusing on risk mitigation and customized hedging activities, and is a member of the firm's investment committee.

The third new partner, Leary, leads origination and structuring efforts and is a member of the firm's valuation committee.

Orion has more than $2 billion of assets under management. ■



Nazar Massouh

PEOPLE & FIRMS

Ex-Avangrid staffers set up wind developer with PE backing

A pair of former **Avangrid Renewables** employees have secured capital from two private equity firms and an energy trading company for their new wind development business, **Triple Oak Power**.

The company, led by co-founders **Jesse Gronner** and **Kenneth Labeja**, is backed by **EnCap Investments** – through its EnCap Energy Transition Fund – as well as **Yorktown Partners** and **Mercuria Energy**.

"We're excited about TOP's ability to develop wind projects that lead to cost-effective, high-capacity solutions that will complement the continued growth of solar and battery storage," said **Kellie Metcalf**, managing partner at EnCap Energy Transition.

"Initially we'll target markets with demonstrated momentum toward clean energy, including those supported by renewable energy standards or where economics are attractive to the expanding customer demand for a sustainable power supply," said Gronner. "We're also poised to efficiently take advantage of the growing shift away from older conventional power generation where, for example, retiring coal plants are creating transmission availability for cleaner energy capacity."

Gronner spent almost 20 years at Avangrid and its predecessor, **PPM Energy**, most recently as vice president of business development for US renewables. His business partner, Labeja, is a former **Credit Suisse** investment banker who went on to work in corporate development at **NRG Energy** before joining Avangrid in 2016, where he was director, renewables business development. ■

Recurrent project finance official heads to ArcLight

A senior project finance official has left solar developer **Recurrent Energy** for a new job at private equity fund manager **ArcLight Capital Partners**.

Matt Miller had been with Recurrent in San Francisco for more than 10 years, most recently as managing director. He joined ArcLight as a director in October.

Miller brings extensive experience of financing solar projects to a firm that has historically invested in almost every kind of generation except photovoltaics.

ArcLight's active and realized investments have included coal-fired and gas-fired power plants, wind farms, transmission lines, hydro facilities and biomass projects.

The firm recently floated a special purpose acquisition company, **ArcLight Clean Transition Corp**, raising $250 million to invest in a company in one of several potential sectors related to sustainability (PFR, 9/24). ■

True Green deals director departs

True Green Capital Management's director of deal development and execution, **Nicholas Minekime**, has taken up a senior position at **Altus Power America**.

Minekime has joined solar developer Altus as a managing director and will lead origination, business development and acquisitions.

The Greenwich, Connecticut-based company has developed or acquired more than 150 distributed generation solar facilities totaling over 200 MW since its inception in 2009.

Minekime had been with True Green for five years, with a particular focus on community solar assets, having built out an origination and servicing platform for more than 13,000 customers.

Prior to True Green, Minekime led solar asset investments at **Capricorn Investment Group**, where he oversaw investments in **Tesla Motors**, **DEPCOM Power** and **TerraForm Power**. He started his career in 2005 at **Morgan Stanley** in Hong Kong. ■

IN BRIEF

PEOPLE MOVES

ENGIE APPOINTS NEW CEO WITH OIL AND GAS BACKGROUND

Catherine MacGregor is set to take over as CEO of Engie in the new year, filling the gap left by the ouster of **Isabelle Kocher** in February. The succession plan means MacGregor will also take on the mantle of only female CEO of a major publicly-listed French company.

QUINBROOK APPOINTS SENIOR ESG SPECIALIST TO ADVISORY BOARD

Quinbrook Infrastructure Partners has appointed **Dawn Turner** to its investment manager advisory board to bring in an investor's view on environmental, social and governance considerations. Turner is the former CEO of the $38.75 billion pension scheme pool **Brunel Pension Partnership**.

NEW CEO AT BROOKFIELD RENEWABLE AS SHAH TAKES BAM ROLE

Brookfield Renewable Partners has promoted its chief investment officer **Connor Teskey** to CEO, replacing **Sachin Shah**, who will move to the company's financial sponsor **Brookfield Asset Management** as its chief investment officer.

LATIN AMERICA

AES GENER DELAYS CAPITAL RAISE

AES Gener has decided to postpone a $500 million capital increase, the proceeds of which it had planned to use to fund its 1.6 GW solar and wind pipeline in Chile and Colombia, having raised $833 million in cash by other means.

WALMART INKS RENEWABLES DEAL WITH CHILE'S COLBÚN

Chilean independent power producer **Colbún** has signed a six-year renewable power purchase agreement with **Walmart Chile** to supply the latter's operations in the country including distribution centers and supermarkets through the IPP's solar, wind and hydro portfolio.

CHILEAN DEVELOPER PREPS PMGD ASSET

Chile's **Grupo Energy Lancuyen** has begun the permitting process for a small-scale solar asset in the Chilean region of Maule. The 6 MW Lontué 2 project will require an investment of $10 million, according to Chile's **Environmental Evaluation Service**.

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