Power Finance & Risk

The weekly issue from Power Intelligence

www.powerintelligence.com

Exelon Hawks CCGT Pair Separately

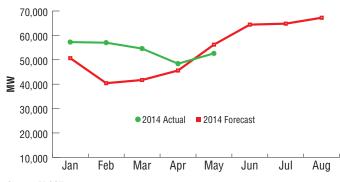
Exelon Corp. is out to sell two of its gas-fired facilities totaling 1.2 GW. The company is selling the 726 MW Fore River combined cycle and the 488 MW Quail Run CCGT in separate auctions.

The sale of Fore River in North Weymouth, Mass., was launched by **Citigroup** in May, say observers who have seen the teaser. The facility has always been a part of **Boston Generating** and became a part of **Exelon Generation** via Exelon's acquisition of **Constellation Energy Group**. Fore River was merchant when Constellation closed the acquisition in early 2011.

Morgan Stanley launched the sale of Quail Run in Odessa, Texas, in May as well, note deal watchers. The facility went online in phases in 2007 and 2008 and was also part of the Constellation deal.

(continued on page 12)

Actual And Forecast Peak Demand In ERCOT - 2014



Source: ERCOT

BlackRock Hires Balchandani As U.S. Infra Team Grows

Jeetu Balchandani, formerly **MetLife**'s head of lease, tax, infrastructure equity and tax credit investments, has joined BlackRock's U.S. infrastructure debt team as the firm looks to boost its presence in the North America infrastructure space.

Balchandani started in his new role as director in New York this week and reports to **Erik Savi**, managing director and head of the U.S. infrastructure debt team. Savi was hired last August to build-out BlackRock's U.S. infrastructure debt team (PI, 8/7).

The U.S. infrastructure debt team is looking to make senior level debt investments as well as subordinate debt, including mezzanine. The team will be looking at all types of infrastructure with an emphasis on contracted and concession-protected assets, says an observer. The team will occasionally invest in term loans B or other vehicles that have higher yield to account (continued on page 7)

Plastina Joins New AlG-Backed Outfit

Renato Plastina has joined newly established asset manager Varagon Capital Partners as head of energy. Varagon, which has garnered a \$1.5 billion commitment from American International Group, launched June 11 and will focus on lending to middle market companies in several sectors.

"It's truly a wellhead-to-wall socket mandate. We'll look to work with sponsors



that are active across the entire energy supply chain, although midstream is our primary focus. We can support the sponsors making a corporate strategy play, such as the buy-out of a supplier or service provider, as well as those with project finance (continued on page 12)

Celebrate Good Deals

PFR is hosting its debut celebratory dinner recognizing the winners of the 11th Annual Deals & Firms of the Year Awards.

For more information, see page 11

LS Keeps Lenders Busy

LS Power is working with commercial banks on a series of three project finance deals to a \$1.57 billion acquisition from Calpine Corp.

See story, page 5

Generation Sale __ DATABASE

Check out the latest asset trades in *PI's* weekly calendar, compiled from our exclusive Generation Sale Database.

See calendar, page 3

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THE BUZZ



Dozens of financiers, investors and finance professionals packed the offices of **Orrick Herrington & Sutcliffe** on Wednesday evening, to enjoy a casual discussion, cocktails and some seriously tasty fare.

Mark Voccola, partner of Energy Investors Funds, Andrew Ellenbogen, senior v.p. at EIG Global Energy Partners and Tim Short, director at Capital Dynamics participated in a panel on private equity trends in the power industry.

Concerns regarding the large amounts of capital flowing in to the sector and the continued downward pressure on pricing was a major topic of discussion, which was moderated by Orrick attorneys **Christopher Gladbach** and **Kyle Drefke**. The emergence of pension fund-type shops as direct investors in power and midstream assets highlight the phenomena, panelists said, though they noted that many

Attendees enjoyed refreshments after the panel and nibbled on lamb chops, sashimi, buffalo chicken bites, spanakopita and duck rolls. Financiers from Ares Management, Babson Capital, BBVA, BNP Paribas, Credit Suisse, GE Energy Financial Services and Investec made appearances, as did representatives from the freshly launched Varagon Capital Partners (see story, page 1). The asset manager began operating with a \$1.5 billion injection from American International Group and will focus on lending to middle market companies.

Check out @power_intel on Twitter for some live tidbits from the event and stay tuned for a transcript of the discussion and details for the next round of #PowerDrinks.

TELL US WHAT YOU THINK!

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 **Holly Fletcher**, managing editor, at (212) 224-3293 or hfletcher@iiintelligence.com.

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Generation Sale = DATABASE

I GENERATION AUCTION & SALE CALENDAR

These are the current live generation asset sales and auctions, according to *Power Intelligence*'s database. A full listing of completed sales for the last 10 years is available at www.powerintelligence.com/AuctionSalesData.html

| Seller | Assets | Location | Advisor | Status/Comment | |
|--|--|-------------------------|------------------------------------|---|--|
| AES Corp. | Stakes (DPL Energy Coal, Gas, Oil) | Various | Barclays | Binding bids due after PJM capacity results (PI, 5/26). | |
| Acciona | Portfolio (Wind, Solar) | Various | Lazard | First rounds bids submitted (PI, 3/31). | |
| Advanced Power Systems | Cricket Valley (1 GW CCGT) | Dutchess County, N.Y. | Whitehall & Co. | TIAA-CREF has taken a stake (PI, 4/28). | |
| ArcLight Capital Partners | Juniper Generation (Cogen portfolio) | Various, California | McManus & Miles | Sale relaunched after several PPAs were extended (PI, 3/17). | |
| ArcLight Capital Partners | Peakers (2 GW Gas) | Various, Georgia | TBA | Carved peakers out of Southeast PowerGen to sell (PI, 3/24). | |
| ArcLight Capital Partners | Victoria (330 MW CCGT) | Victoria, Texas | UBS | Sale is near launch (PI, 4/7). | |
| ArcLight Capital Partners | Sun Peak (222 MW Gas) | Las Vegas, Nev. | | Nevada Power is buying them (PI, 5/12). | |
| Atlantic Power Corp. | Fleet (2.1 GW) | Various | Goldman Sachs, Greenhill | Tapped two advisors to run strategic evaluation (PI, 5/12). | |
| Calpine | Portfolio (3.5 GW Gas) | Various | | Financing purchase with series commercial bank deals (see story, page 5). | |
| Corona Power | Stake (Sunbury, 900 MW Repowering) | Shamokin Dam, Pa. | Perella Weinberg | First round offers due April 14 (PI, 3/31). | |
| Duke Energy | Portfolio (6.6 GW Coal, Gas, Oil) | Various | Citi, Morgan Stanley | First round bids due around 5/30 (PI, 5/26). | |
| Entegra Power Group | 550 MW Stake (2.2 GW Union Station CCGT) | Arkansas | Bank of America | Gearing up to sell the unit that has a tolling agreement (PI, 3/31). | |
| Essar Group | Algoma (85 MW CCGT) | Algoma, Ontario | Barclays | Teasers are on the market (PI, 1/13). | |
| Exelon Corp. | Stake (417 MW Safe Harbor Hydro) | Conestoga, Pa | None | Brookfield is buying the stake (PI, 5/26). | |
| | Quail Run (488 MW) | Odessa, Texas | Morgan Stanley | Process launched recently (see story, page 1). | |
| | Fore River (726 MW CCGT) | North Weymouth, Mass. | Citigroup | Process launched recently (see story, page 1). | |
| FGE Power | FGE Texas (726 MW CCGT) | Westbrook, Texas | Fieldstone | Fieldstone is advising on equity hunt in tandem to debt raise with Goldman. | |
| GE Capital | Stake (250 MW Wind) | Finney, Kansas | | Enel is buying out the rest of the farm (PI, 5/19). | |
| Hess Corp. | Stake (50% Bayonne 512 MW Gas) | Bayonne, N.J. | Goldman Sachs | ArcLight buying out Hess' stake, up for refi. | |
| Invenergy | Parc des Moulins (135.7 MW Wind) | Kinnear's Mills, Quebec | | La Caisse has bought a minority stake (PI, 5/5). | |
| MACH Gen | Portfolio | Various | | Second lien creditors have taken it over via Ch. 11 deal (PI, 5/19). | |
| Meridian Energy | CalRENEW-1 (5 MW Solar) | Mendota, Calif. | | SunEdison bought the asset (PI, 5/26). | |
| NRG Energy | Various (Gas, Solar) | Various | None | Dropdowns to NRG Yield (PI 4/14). | |
| NextEra Energy Resources | Pheasant Run II (75 MW Wind) | Huron County, Mich. | None | DTE Electric is considering buying the farm via a PPA option (PI, 3/3 | |
| Norvento USA | Bloom (180 MW Wind) | Dodge City, Kan. | TBA | Capital Power bought the project (PI, 3/24). | |
| Ontario Teachers Pension Plan Board | Stake (Northern Star Generation) | Various | Citigroup | CalPERS, Harbert emerge as frontrunners (PI, 4/28). | |
| Optim Energy | Portfolio (1.4 GW Coal, Gas) | Texas | Barclays | Mulling a sale via bankruptcy filing (PI, 3/10). | |
| PPL Corp. | Portfolio (10 GW Various) | Various | Bank of America, Morgan Stanley | Spinning off PPL Generation into a new company in deal with Riverstone (see story, page 5). | |
| Pattern Development | Panhandle 1 (218 MW Wind) | Carson County, Texas | None | Pattern Energy Group, tax equity investors are buying it (PI, 5/12). | |
| Power Resources Cooperative | Stake (605 MW Boardman Coal) | Boardman, Ore. | | Portland General is upping its stake as retirement, refueling loom (PI, 4/28). | |
| Project Resources Corp. | Rock Aetna (21 MW Wind | Minnesota | Alyra Renewable Energy Finance | Looking for a buyer with access to turbines to qualify for PTC (PI, 1/13) | |
| Rainy Rivers Nations | Stake (25 MW Solar) | Pinewood, Ontario | | Two infrastructure investors stook stakes (PI, 5/26). | |
| Riverstone Holdings | Portfolio (5.3 GW Various) | Various | JPMorgan | Putting generation into a new company in deal with PPL (see story, page 5). | |
| Southwest Generation | LV Cogen 1, 2 (274 MW Gas) | Las Vegas, Nev. | | Nevada Power is buying them (PI, 5/12). | |
| Starwood Energy Group | Neptune (25% Stake Transmission) | New York | | Northwestern Mutual is buying Starwood's stake (PI, 5/19). | |
| Terra-Gen Power | Alta (947 MW Wind) | California | Citigroup, Morgan Stanley | NRG Yield is buying the wind assets. | |
| We Energies | Presque Isle (425 MW Coal) | Marquette, Wis. | None | No buyers submitted proposals in RFP (PI, 3/10). | |
| | | | | | |

New or updated listing

The accuracy of the information, which is derived from many sources, is deemed reliable but cannot be guaranteed. To report updates or provide additional information on the status of financings, please call Managing editor Holly Fletcher at (212) 224-3293 or e-mail hfletcher@iiintelligence.com.

PROJECT FINANCE DEAL BOOK I

Deal Book is a matrix of energy project finance deals that Power Intelligence is tracking in the energy sector. A full listing of deals for the last several years is available at http://www.powerintelligence.com/projectfinancedeal.html

Live Deals: Americas

| Sponsor | Project | Location | Lead(s) | Loan | Loan Amount | Tenor | Notes |
|------------------------------|---|--------------------------------|-----------------------------------|-------------------------------------|----------------|-------|---|
| Alterra, Fierra Axium | Jimmie Creek (62 MW Hydro) | British Columbia, Canada | TBA | TBA | TBA | TBA | Sponsor will likely tap LifeCos for the detb (PI, 5/5). |
| Cameron LNG | LNG Export Facility | Hackberry, La. | TBA | TBA | ~\$4B | TBA | Sponsor is shooting for pricing of L+175 bps (PI, 3/10) |
| Cape Wind Associates | Cape Wind (420 MW Wind) | Nantucket Sound, Mass. | BTMU, Natixis, Rabo | TBA | TBA | TBA | Sponsor adds Natixis and Rabo as leads with BTMU (PI, 3/31). |
| Cheniere Energy | Sabine Pass Trains 3 & 4 (LNG Export Facilities) | Sabine Pass, La. | TBA | TBA | \$4.4B | TBA | Company issues \$2B in notes to refi debt and fund construction (PI, 5/19). |
| Competitive Power Ventures | St. Charles | Charles County, Md. | GE EFS | TBA | ~\$600M | TBA | Sponsor is aiming for L+350 bps (PI, 6/2). |
| Dalkia/Fengate | Merrit (40 MW Biomass) | Merrit, B.C. | BTMU | TBA | \$168M | TBA | Sponsor aims to wrap the financing early next year (PI, 12/2). |
| EDP Renewables North America | Headwaters (200 MW Wind) | Randolph County, Ind | TBA | Tax Equity | \$350-400 | TBA | The sponsor is looking to secure both equity and tax equity investment (PI, 6/24). |
| Energy Investors Funds | Newark Energy Center (655 MW Gas) | Newark, N.J. | GE EFS | | ~\$500M | TBA | Price talk is swirling at L+350 bps (see story, page 7). |
| Exmar NV | Floating Liquefaction Project | Colombia | TBA | B Loan | \$170M | TBA | Sponsor looking to land a B loan for the debt on the project (PI, 5/5). |
| FGE Power | FGE Texas (726 MW Gas) | Westbrook, Texas | Goldman Sachs | TBA | TBA | TBA | The sponsor is close to lining up equity and will tap Goldman Sachs to launch a B loan (PI, 1/27). |
| Freeport LNG | Freeport (LNG Export Terminal | Freeport, Texas | Credit Suisse, Macquarie | TBA | ~\$4B | TBA | More than 20 lenders are eyeing the deal, with some offering tickets of \$600M (PI, 2/10). |
| Invenergy | Marsh Hill (16 MW Wind) | Jasper, N.Y. | Rabo | TBA | TBA | TBA | Rabo is the only arranger on the loan (PI, 6/2). |
| KSPC, Samsung | Kelar (517 MW Gas) | Chile | Natixis | TBA | TBA | TBA | The JV appoints Natixis as lead on the deal (PI, 1/13). |
| LS Power | Portfolio (Gas) | Various | BNP Paribas, Union Bank | | TBA | | Will finance via a series of three transactions (see story page 5). |
| Lake Charles Exports | Lake Charles (LNG Export Facility) | Lake Charles, La. | TBA | TBA | TBA | TBA | Sponsor begins preliminary financing search for the potentially \$11B project (PI, 8/26) . |
| Magnolia LNG | Magnolia LNG (LNG Export Facility) | Lake Charles, La. | BNP, Macquarie | TBA | \$1.54B | TBA | Sponsor issues shares to bridge to closing of the debt (PI, $5/12$). |
| NextEra Energy Resources | Bluewater (60 MW Wind) | Lake Huron, Ontario | TBA | TBA | TBA | TBA | Sponsor is talking to lenders in the U.S. to finance the project (PI, 5/19). |
| New Generation Power | NGP Texas (400 MW Wind) | Haskell County, Texas | TBA | Construction/ Term/Tax Equity | ~\$700M | TBA | This is the sponsor's largest deal to date (PI, 4/14). |
| NTE Energy | Multiple (Gas) | U.S. | Whitehall | TBA | TBA | TBA | Sponsor is looking to line up equity investors and then debt backing three projects in the U.S. (PI, 3/10). |
| OCI Solar Power | Alamo 4 (39.6 MW Solar) | Kinney County, Texas | North America Development Bank | Construction | \$40M | TBA | This finances the fourth phase of a 400 MW project (se story, page 7). |
| Pattern Energy | Armow (180 MW Wind) | Kincardine, Ontario | TBA | TBA | TBA | TBA | Sponsor is looking for tighter pricing than its K2 financing (PI, 5/26). |
| Radback Energy | Oakley (586 MW Gas) | Contra Costa County, Calif. | BTMU | Term | \$990M | 4-yr | Deal is temporarily put on hold following an appellate court decision (PI, 11/11). |
| Sempra U.S. Gas & Power | Energía Sierra Juárez (156 MW Wind) | Baja California, Mexico | BTMU | TBA | ~\$250M | TBA | On track to close within two weeks (PI, 6/2). |
| SolarReserve | Rice (150 MW Solar Thermal) | Blythe, Calif. | Morgan Stanley | TBA | \$450M | TBA | Sponsor taps Morgan Stanley to secure debt, tax equit and equity (PI, 8/26). |
| Tenaska | Imperial Solar Energy Center West (150 MW CPV) | Imperial County, Calif. | BTMU, Union | TBA | TBA | TBA | The company has launched the deal at a bank meeting (PI, 5/19). |
| Transmission Developers | Champlain Hudson Transmission Line | New York | RBC | TBA | ~\$1.6B | TBA | Sponsor is aiming to line up the debt by year-end (PI, 3/3). |
| | | | | | | | |

New or updated listing

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■ MERGERS & ACQUISITIONS

LS Blueprints Bank Deals To Finance **Calpine Acquisition**

LS Power has begun talking with commercial banks about how it will finance its acquisition of a 3.5 GW portfolio of gas-fired plants in the Southeast from Calpine Corp.

The New York-based shop is in the market to finance the purchase in a series of three transactions, says a deal watcher. Financiers say the assets will be split up in a manner a similar to how LS separately financed portions of a \$1.05 billion gas-fired portfolio it bought from NextEra Energy Resources in 2011. In that deal, LS split out two of the combined cycles and financed them separately (PI, 10/27/11).

BNP Paribas and Union Bank are among the group of lenders that are expected to be among the lender group.

The U.S. Federal Energy Regulatory Commission approved LS' acquisition of the Calpine facilities for \$1.57 billion on June 10. LS affiliate NATGEN Southeast Power, LLC, will own the assets when the deal is finalized (PI, 4/21). The portfolio includes:

- -1,134 MW Oneta facility in Coweta, Okla.;
- -501 MW Carville cogeneration facility in St. Gabriel, La.;
- -795 MW Decatur facility in Decatur, Ala.;
- -237 MW Hog Bayou facility in Mobile, Ala.;
- -225 MW Santa Rosa facility in Pace, Fla.; and the
- -606 MW Columbia cogeneration facility in Calhoun County, S.C.

There has been chatter that West Deptford, the 738 MW combined cycle project that LS is building in West Deptford Township, N.J., would be included in one of the three transactions but an official close to the commercial lending plans says that is unlikely. The private equity shop is expected to refinance that facility on a standalone transaction when it hits COD this summer, says the observer. West Deptford was financed with about \$300 million in non-recourse debt in 2011 (PI, 12/7/11).

The amount of debt that is sought on the Southeast acquisition could not be learned. An LS official declined to comment while spokeswomen for the banks could not immediately comment.

Oaktree To Buy Highstar

Investment manager Oaktree Capital Management has agreed to buy Highstar Capital.

Oaktree, based in Los Angeles, is buying Highstar as a platform, bringing on board its staff and existing portfolio. The negotiations are still in the works, says an Oaktree spokeswoman, noting that it has not been decided whether Highstar will continue to use its name after the deal is closed or whether it will take on Oaktree nomenclature.

Oaktree will become the manager of the Highstar Fund IV—a private equity fund with \$2.3 billion of assets under management

(continued on page 6)

PPL, Riverstone To Merge **Unregulated Fleets**

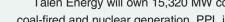
PPL Corp. and Riverstone Holdings have agreed to combine

their respective unregulated generation portfolios into a single, publicly listed entity.

PPL will spin off its PPL Energy Supply, LLC, the unregulated parent company of PPL Generation, that owns nearly 10 GW, and PPL EnergyPlus. The companies will then be combined with Riverstone's fleet in the newly established Talen Energy Corp.

Talen Energy will not list on the **New York** Stock Exchange until after the deal has received all necessary regulatory approvals from state and federal agencies, including the U.S. Federal Energy Regulatory Commission, Department of Justice, Nuclear Regulatory Commission. The deal is expected to close in nine to 12 months. It has not publicly filed with the U.S. Securities and Exchange Commission.

Shareholders in PPL will own 65% of Talen Energy upon completion of the deal.



Corp., will be ceo of Talen Energy.

Talen Energy will own 15,320 MW comprised of gas-fired, coal-fired and nuclear generation. PPL is contributing 9,995 MW

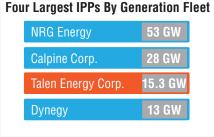
Riverstone will own 35%. Paul Farr, executive v.p. and cfo at PPL

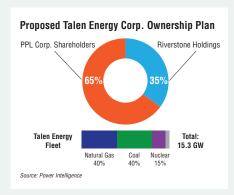
to the portfolio with Riverstone contributing 5,325 MW. The new independent power producer will own generation in Maryland, Massachusetts, Montana, New Jersey, Pennsylvania and Texas.

Upon completion of the deal, Talen Energy will be the third largest, investor-owned IPP in the country when ranked by generating capacity. It is on track to have about \$3.95 billion in debt--\$2.7 billion associated with PPL Energy Supply and \$1.25 billion on the Riverstone fleet.

Citigroup and Morgan Stanley advised PPL while Riverstone worked with JPMorgan.

Details on the planned initial public offering have not been released and Riverstone officials declined further comment via a spokesman. A PPL spokeswoman was not immediately available for further comment.





I MERGERS & ACQUISITIONS I

(continued from page 5)

as of the end of 2013. **Ian Schapiro**, who heads Oaktree's power opportunities team, will oversee Highstar and its integration. The deal is set to close in the third quarter.

Highstar has been an acquisitive player in the power space over the last couple of years. It has focused its attention on gasfired assets in the West and formed its portfolio company **Star West Generation**. Highstar's power fleet consists of assets purchased from **LS Power**, **GWF Energy** and **GE Energy Financial Services**.

Highstar's power portfolio is comprised of:

- -572 MW Griffith combined cycle plant in Kingman, Ariz.;
- -579 MW Arlington Valley near Phoenix;
- -95 MW Hanford peaker in Kings County, Calif.;
- -97 MW Henrietta peaker in Kings County, Calif.;
- -314 MW Tracy CCGT in Stockton, Calif.
- -A 50% stake in the 800 MW Linden cogeneration facility in Linden, N.J., alongside GE EFS.

Oaktree's spokeswoman declined to comment on the financial terms of the transaction. A Highstar spokesman was traveling and could not immediately comment.

Funds Pair On Nautilus Ontario Solar Portfolio

North Sky CleanTech Alliance Fund and NewWorld Infrastructure have teamed up to take an equity stake in an Ontario solar portfolio developed by Nautilus Solar Energy Canada.

The investor pair will buy into a portfolio of 28 projects that totals about 9.2 MW although the total portfolio is expected to be expanded to 24 MW. The projects will be primarily developed under the **Ontario Power Authority**'s rooftop feed-in-tariff program, according to a Nautilus spokesman. Rooftop solar developer **Moose Power**, based in Toronto, is a co-developer of the projects alongside Nautilus.

The spokesman declined to comment on the amount of the investment or the size of the equity stake.

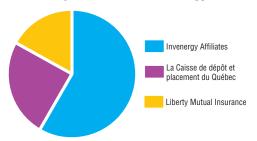
Nautilus is the distributed generation portfolio company of **Starwood Energy**, which has been trying to bring a co-investor on board via a process run by **Royal Bank of Canada** (PI, 5/7/2013). Starwood invested in Nautilus in 2009 through the **Starwood Energy Infrastructure Fund I**.

La Caisse, Liberty To Increase Invenergy Wind Equity

Invenergy has reached deals with both La Caisse de dépôt et placement du Québec and Liberty Mutual Insurance for affiliates to take a minority stake in a portfolio wind farms in the U.S.

The deal will give La Caisse, a Montreal-based fund manager, a 24.73% stake in a portfolio of 26 wind farms totaling more than of 2.8 GW owned by Invenergy Wind, according to a recent filing with the U.S. **Federal Energy Regulatory Commission**.

Ownership Structure of Invenergy Wind



Source: U.S. Federal Energy Regulatory Commission

Liberty Mutual Insurance is increasing its equity investment in the portfolio in a parallel deal, According to an Invenergy statement. The size of Liberty's equity stake will only increase marginally. Liberty Mutual owns 16.5% of the portfolio and will own 16.64% following the additional investment, according to FERC. Both the deals are subject to approval by FERC.

Both Caisse and Liberty Mutual have long-standing relationships with Invenergy. Liberty Mutual has been a debt investor with the developer since 2007 and had \$361 million invested in Invenergy as the end of 2012. It converted its debt investment to an equity holding last year (PI, 5/28/13). La Caisse has inked a couple of equity deals with Invenergy for stakes in wind farms in the U.S. and Canada (PI, 4/28).

Spokespeople for La Caisse and Liberty Mutual could not immediately comment.

STRATEGIES

Mich. City Issues Solar RFP

The **Board of Water & Light** in Lansing, Mich., has issued a request for proposals for 5 MW of solar.

The municipal utility will accept proposals for a variety of project structures including, a single large array, a distributed solar program, community-based solar project or "another format that they choose." However, the Lansing area "has shown interest in a community solar program and we hope to be able to provide that as well," according to **Peter Lark**, general manager of BWL.

The utility will host a pre-bid meeting on June 19 that allows prospective bidders to dial-in remotely. Formal bids will be due on Monday, Aug. 11. **Tony De Luca**, buyer in the purchasing and warehousing department, is the contact person for the initial stages.

BWL will sign a power purchase agreement with the winning bid. Projects should be able to be online by the summer of 2016. The project will be the largest solar facility in Michigan, where the largest existing facility is roughly 1 MW, according to the utility.

■ PROJECT FINANCE I

Developer Ropes NADB As Lender To Texas Solar

The **North American Development Bank** has finance a portion of series of solar projects totaling 400 MW that **OCI Solar Power** is developing in Texas.

The NADB has committed to \$40 million to the 39.6 MW Alamo 4 solar project in Kinney County, Texas, that is currently in construction with an expected start date in October.

The project is one in a series of OCI Solar's projects around San Antonio that have power purchase agreements with **CPS Energy**.

OCI Solar Power completed the 41 MW Alamo 1 project last year and began construction on the 4.4 MW Alamo 2. The 400 MW portfolio is expected to be fully online in 2016.

Spokespeople for OCI Solar and NADB were not immediately available for further comment.

Details Surface On EIF's Newark Gas-Fired Deal

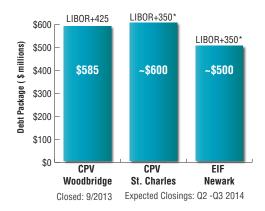
Energy Investors Funds' \$500 million deal backing its 655 MW Newark Energy Center is moving along, as lenders ink commitments and pricing. **GE Energy Financial Services** is anchor lender.

Price talk is around LIBOR plus 350 basis points and ING, Credit Agricole, Natixis and Union Bank are participating. GE EFS has reportedly taken a ticket size of at least \$150 million. "This deal is pre-baked. It's a club and it's been vetted by every bank around the table," notes a project financier familiar with the transaction, adding that the transaction is modeled off of Competitive Power Venture's Woodbridge financing (PI, 9/23). The deal is set

to close before the end of the quarter.

The Needham, Mass.-based sponsor had been working with **Hess Corp**. on the project, but is in the process of buying Hess out of the Newark project. Newark Energy Center cleared PJM's base residual auction for capacity to meet demand in the June 1, 2015, to May 31, 2016, delivery year (PI, 4/4).

PJM Quasi Merchant Deals



Source: Power Intelligence

*Price talk

The project finance market is flush with capital but a light deal pipeline, creating a competitive environment in which lenders are feeling a pinch to make commitments. Pricing is coming down on all types of projects. **Pattern Energy** is looking to take the market to a post-crisis record low with its Armow wind financing in Canada—a deal that it is asking lenders to do at L+162.5 bps (PI, 5/23).

EIF officials declined to comment through a spokesman. A banker at CreditAg confirmed the lender's participation. Bankers and spokespeople at GE EFS, Natixis, ING and Union Bank either declined to comment or did not respond to calls.

■ PEOPLE & FIRMS I

(continued from page 1)

for the risk, depending on the client's appetite for risk, says the observer.

BlackRock will be making its investments via separately managed accounts. The team already has some mandates to invest, says an observer. It is currently evaluating transactions in the financing pipeline.

The U.S. infrastructure team is complementary to a team in Europe that looks at opportunities in select parts of Europe. The U.S. team is reportedly on the prowl to grow and is in the market to bring other financiers on board, says another observer.

Savi and Balchandani worked together at MetLife until Savi joined **WestLB**; Balchandani left the firm in March (PI, 3/27).

Balchandani was not available to comment. A BlackRock spokeswoman could not immediately comment.

Treasury's Kelley To Rejoin IRS

Christopher Kelley, counsel from the office of the tax legislative at the U.S. **Department of Treasury**, will leave his post for a job at the U.S. **Internal Revenue Service**.

Kelley, who worked at the IRS as special counsel, is set to leave the Treasury around the end of the month, say observers. Kelley joined the Treasury in July 2012.

Kelley has pushed for the additional guidance on qualification for the production tax credit to be released by the time he departs, notes one observer. The guidance is tentatively on track to be made public by month-end.

A Treasury spokeswoman confirmed that more guidance will be released but declined further comment on timeline or Kelley. An IRS spokesperson could not immediately comment.

INDUSTRY CURRENT

Micro-Grids: Using Distributed Energy Resources for an Economic and More Resilient Power Infrastructure

THIS WEEK'S INDUSTRY CURRENT was written by **Jon Mostel**, partner in **Stroock's energy and project finance practice** in New York, looks at how regulation will impact growth of micro-grids, which is the modern name for the old idea of decentralized power.



Jon R. Mostel

New Name - Old Idea

Micro-grids connecting distributed energy resources with the utility power grid are new forms of an old solution: decentralized power generation that, through advances in controls and power electronics, are now able to interact efficiently with the utility grid and "island" from it when necessary.

Early in the development of the electric industry, generating energy locally was not unusual. In fact, it was common for large campuses – like universities, hospitals and resorts – to have their own power systems. The July 16, 1909 edition of *The Ostego Farmer*, reporting on the opening in Cooperstown, N.Y., of the "palatial [Otesaga] Summer Hotel," describes a power house located 300 feet from the main building, with boilers, a 100 kW and a 50 kW generator directly connected to the hotel to furnish light for the building and all the electric motors for elevators and pumps, to maintain a temperature of 70 degrees year round. Columbia University for many years operated its own power house in the middle of its Manhattan campus.

But often these distributed power facilities were abandoned over time, as economies of scale and scope favored connection with centralized power generation and the capital cost to replace the old stand-alone plants became prohibitive. Now, micro-grids – a modern take on the small power systems that were common in factories, hospitals and university campuses at the inception of the electric industry in the 1870s – may be poised for a renaissance.

The renewed interest in micro-grids is due in part to the frequent occurrence of extreme weather events, like the widespread flooding and downed power lines following Hurricane Sandy, or a series of early snowstorms that weighed down tree limbs in the Northeast resulting in widespread power outages. These events highlighted the fragile nature of our aboveground electric transmission and distribution infrastructure and focused attention on micro-grids and back-up power systems for the sake of resilience. In addition, building codes increasingly require buildings of public assembly, hospitals, police stations and other government buildings to install expensive back-up power systems that go unused most of the time.

Potential Benefits of Distributed Energy Resources in a Micro-grid

Targeted use of distributed energy resources, or planned development that incorporates distributed energy resources in new projects, could improve the resilience of electricity supplied to essential services and can produce economic benefits for both the customer-generator as well as utilities and their customers — purchasing from the grid or selling to the grid when it is economic. The micro-grid concept is an extension of traditional distributed energy applications that, in some contexts, may be capable of yielding lower energy costs for the customer-generator than energy available from the centralized grid.

Distributed energy resources in a micro-grid may also offer the grid, and its remaining customers, relief from high peaking power costs – shedding internal load and selling excess power to the grid in response to appropriate price signals. Advances in controls and power electronics can allow a micro-grid to interact with or "island" from the larger power grid in response to a grid interruption. When the grid is interrupted during a storm the micro-grid may be able to disconnect from the grid and "island" to continue operating and serve critical needs customers like hospitals, police stations and other government buildings. When electricity is in short supply on the larger power grid, the micro-grid may also find it economic to adjust its internal load and sell excess power to grid.

Integrating Distributed Resources with Complementary Technologies

Generally, the economic and environmental quality benefits associated with distributed energy resources will involve the use of cogeneration applications that recover waste heat to displace natural gas combustion for space heating and cooling and water heating. A cogeneration facility, sometimes called a combined heat and power plant, is a generating facility that sequentially produces electricity and another form of useful thermal energy (such as heat or steam) in a way that is more efficient than the separate production of both forms of energy.

The local provision of high reliability power will depend on the integration of the distributed energy resource with energy management systems and complementary technologies such as

INDUSTRY CURRENT

uninterruptible power supplies and automated controls. A typical micro-grid uses cogeneration to efficiently provide electricity, heat and/or cooling to multiple customers, with complimentary power, heating and cooling loads, and is connected to a local utility network from which it purchases supplemental and back-up energy or to which it provides wholesale power when the price on the grid, or power interruptions, provide an appropriate price signal. Micro-grid applications may also incorporate renewable energy resources, such as wind or solar generation.

The cost-effectiveness of a proposed micro-grid will depend on the size and type of the installation. Economies of scale of distributed energy resources are dependent on a number of factors: reduction in installed equipment costs, increased operating efficiency of generating equipment, the load factor of the end-use customers, energy storage opportunities and improved asset utilization from predictable load-demand profiles. Yet, despite the potential economic benefits of a micro-grid, the development of new distributed energy resources and integration of micro-grids with the traditional utility grid face an uncertain regulatory environment that impedes investment.

Overlapping Regulation of Micro-grid Applications

Capturing the full range of benefits that a micro-grid can provide will

depend on its design and implementation - and on regulatory considerations. A careful review of project economics and legal structure is necessary.

The generation, transmission and distribution of electricity are subject to a comprehensive scheme of federal and state regulation. The generation, sale and transmission of electricity in interstate commerce is subject to the exclusive jurisdiction of the U.S.

Federal Energy Regulatory Commission pursuant to the Federal Power Act. States, not FERC, have jurisdiction over retail electric service. Micro-grids may be subject to potentially overlapping federal and state jurisdiction. If the micro-grid intends to sell electricity in the wholesale power market it would be subject to FERC's jurisdiction. Serving the electricity requirements of consuming facilities ("end-users") could also create exposure to state regulation as an electric utility.

Federal Regulation

At the federal level, independent power producers may be organized as exempt wholesale generators ("EWGs") or as a qualifying cogeneration or small power producing facility ("QFs"). EWGs are restricted to wholesale sales. They cannot take advantage of retail sales opportunities in state jurisdictions where direct retail sales to end-users may be permitted. While FERC may not authorize a QF to make any electricity sales for purposes other than resale, QFs are not restricted to wholesale sales. QFs may make retail sales to the extent

that such sales are allowed under state law. QFs are also exempt from most federal and state utility-type regulation of their rates and terms and conditions for service.

Whether a firm or group of customers has the legal right to build and operate a micro-grid for distribution to end-use customers depends primarily on one issue: whether the particular micro-grid application would be characterized as a public utility under state law subject to the jurisdiction of the state public utility commission. If a micro-grid is regulated as a public utility, it faces barriers to being permitted to operate, especially within the service territory of a hostile incumbent public utility. The administrative and financial burden of being treated as a public utility are likely to be prohibitive and a barrier to investment and financing as they impede the freedom and certainty to allocate risks among the owners and customers (some or all of which may be inter-related) by contract. However, if a proposed micro-grid can avoid public utility status, there are areas of the country where it has the right to operate.

State Regulation

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Not all micro-grid applications are created alike. Nor will they be viewed the same by state regulators under state law. Whether a particular micro-grid application is potentially subject to regulation will

> often turn on whether the producing or consuming elements are held by the same or separate ownership, or the extent to which they are located contiguous to or adjacent to each other.

Most states recognize the right of a commercial property owner to provide its own utility service within its own property or for a landlord to provide such services to its tenants. The potential for regulation emerges when a single micro-grid plant would serve the electricity and thermal requirements of customers owned by different entities or located on adjoining or adjacent properties. Here, differences in state statutes, or the decisions of a state's courts or state regulatory commission interpreting those statutes, will govern whether the micro-grid or its owners are characterized as, and would be regulated as, a public utility. The

statutory framework needs to be carefully reviewed and often it will be necessary to obtain a declaratory ruling regarding jurisdiction from the state public utility commission to establish sufficient certainty for parties to obtain or advance financing.

Key Factors for Regulators

The differences among micro-grids that matter most to regulators are defined by statute. They are not necessarily related to the technical details that may make the micro-grid installation an attractive proposition from a business sense, but rather in the details concerning ownership of the various elements making up the micro-

INDUSTRY CURRENT

grid installation—who owns the plant that produces electricity and thermal energy, who owns the real estate and the distribution lines that connect end-users to the plant.

For example, New York statutes permit a landlord to provide electricity to its tenants. They permit the owner of small cogeneration

FAST FACT

The risks, real or perceived, that different types of micro-grid systems may pose to legacy utilities and their customers will often govern the regulators perception of what is and what is not subject to their jurisdiction

facilities, with a power production capacity of less than 80 MW, to distribute electricity and steam to unrelated end-use customers free from regulation so long as those customers are "at or near" the plant site. Despite more than 20 years of experience with this statute, there is only limited clarity regarding what proximity qualifies as "at or near" and what is not. And, a customer of the cogeneration

facility may find itself subject to regulation if it owns the facilities for redistributing the electricity to any of its tenants or unaffiliated customers.

In New Jersey, an "on-site generator" would not be considered a public utility if it is located on the property or contiguous to the property of its end-use customer. It is unclear whether the "onsite generation facility" may distribute electricity to more than one customer and the extent to which the facility and its customer(s) are contiguous even if geographically located next to each other but may be otherwise separated from each other by easements, public roads or other rights-of-way.

The risks, real or perceived, that different types of micro-grid systems may pose to legacy utilities and their customers will often govern the regulators perception of what is and what is not subject to their jurisdiction. More favorable outcomes may be expected where the micro-grid may serve only a limited number of customers, is on or contiguous to the site where power is generated and the micro-grid owner/operator is the primary consumer of the electricity.

The potential for an adverse decision increases as any of these factors diverge, as may be necessary or economically beneficial to create a micro-grid that connects adjacent and complimentary loads, or as may be required for the separate financing of the adjacent consuming business entities.

Conclusion

Micro-grids are complex undertakings that face myriad challenges. Understanding those challenges allow developers and customers the opportunity to reap economic, environmental or reliability benefits. Early analysis of a proposed project's technical goals, economics and the appropriate legal structure are required for successful implementation.

IPOWER TWEETS

The #Power Tweets feature tracks trends in power project finance and M&A in the Americas on **Twitter**. For more news and coverage, follow @power_intel on Twitter, as well as Managing Editor @HollyFletcher and Editor @SaraReports.

@sarareports: We're seeing lots of opportunities in PA in pipes to get the #gas to market panelist#powerdrinks #natgas #shalegas

@WindLawyer: Yup. RT @SaraReports: We're seeing lots of opportunities in PA in pipes to get the #gas to market -panelist #powerdrinks #natgas #shalegas

@jordanbrianl: Not just Power-true in other infrastructure sectors MT @hollyfletcher Lot of \$ chasing not a lot of deals right now #power #MnA #powerdrinks

@ SaraReports: The trend is very very real -panelist on #pensionfunds looking to make direct power investments #powerdrinks #pensions

@GDFSUEZEnergy: Guest speaker @viridityenergy joins GDF SUEZ for a webinar on reducing commodity costs June 26. Sign up now http://bit.ly/1kzwk9r

@hollyfletcher: could be some "gems" in MISO + others in rubble of #carbon policy. Always an opp to invest if you're creative. #halffull #powerdrinks

@ hollyfletcher Gems= scrubbed, newer high efficiency coal plants #powerdrinks

@esappin: At @Orrick's #Powerdrinks. Good discussion on energy private equity especially the challenge of finding contracted projects w strong returns

@ EfficiencyMkts: Navy Seeks Bidder Info for New Military #Microgrid in San Diego http://tinyurl.com/ls8kdl3 #energy

@ ERCOT_ISO: The Hertz frequency measurement was named for Heinrich Hertz, the German physicist who proved the existence of electromagnetic waves.#tbt

Power Intelligence

11th ANNUAL DEALS & FIRMS OF THE YEAR AWARDS

TUESDAY, JUNE 24, 2014, NEW YORK

Power Finance & Risk is proud to present the winners of the 11th Deals & Firms of the Year Awards, a process that lauds excellence across the power industry in 2013.

The winners in the 16 award categories are advisors, investors, lenders, law firms, sponsors and transactions that have been singled-out as best in class by industry peers in a digital poll. We received a record amount of participation and PFR would like to thank all of our voters who took the time to reflect upon and commend distinction in the power industry in 2013.

Project Finance Borrower Of The Year

Best Project Finance Lender

For Renewables Generation

Non-Renewables Project
Finance Deal Of The Year

Best Buyer Of Power Assets

Best Non-Renewable Asset M&A Advisor

Best Tax
Equity Investor

Best Institutional Investor In Power

Project Finance Bond Arranger Of The Year

Project Finance Law Firm Of The Year

M&A Asset Deal Of The Year

Best Corporate M&A Advisor Best Project Finance Lender For Non-Renewables Generation

Renewables Project Finance
Deal Of The Year

Best Seller Of Power Assets

Best Renewable Asset M&A Advisor

Best Law Firm For Asset M&A

To attend the awards ceremony please contact our Publisher:

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Power Intelligence

Exelon Hawks (Continued from page 1)

Exelon opted to put the plants on the market after receiving unsolicited bids for both facilities.

The plants are in regions where there could be increases in power prices in the coming years and as a result have lured investor inter-

FAST FACT

The plants are in regions where there could be increases in power prices in the coming years and as a result have lured investor interest.

est. "We are strong believers in the value of our generation business, and see significant upside in power prices," an Exelon Generation spokesman wrote in a statement to PFR.

Emera bought three gas-fired facilities totaling 1,050 MW from Capital Power in New England for \$541 million

while a handful of facilities in Texas have traded over the last year. Most recently, Calpine Corp. bought the 1 GW Guadalupe CCGT from Wayzata Investment Partners for \$625 million (PI, 12/2). Energy Capital Partners and Global Infrastructure Partners also sold facilities in ERCOT in the fall, bringing a subsidiary of Koch Industries and Energy Investors Funds as buyers, respectively.

First round bid deadlines for the auctions could not be immediately learned. A Citi spokesman and Morgan Stanley spokeswoman declined to comment.

- Holly Fletcher

Plastina Joins (Continued from page 1)

needs," Plastina tells PFR.

The New York-based shop can look at project finance deals of up to \$500 million and leveraged finance deals of up to \$350 million. Varagon will execute first and second lien debt, as well as mezzanine financings for companies with EBITDA between \$10 million and \$75 million. Varagon has a typical hold size of \$20 million to \$100 million.

"It's the best of the traditional bank model — a strong sales force, strong direct origination—combined with a durable funding model. Very few have been able to fuse them together," says **Walter Owens**,

FAST FACT

The plants are in regions where there could be increases in power prices in the coming years and as a result have lured investor interest.

12

In the short-term, Plastina will focus on building up Varagon's deal pipeline in power and energy. The power and energy team will look mostly at midstream gas and conventional power, though it will consider renewables opportunistically.

ceo, of Varagon's structure.

Prior to Varagon, Plastina was managing director of energy, infrastructure and project finance at BNP Paribas (PFR, 3/31). He will report to Owens, who has held posts at **TD Bank**, **CIT Group** and **GE Capital**.

New York-based private equity shop **Oak Hill Capital Partners** is also backing Varagon. **Brett Shapiro**, partner and head of business and investor development at Varagon, previously worked in Oak Hill's business and financial services group.

Sara Rosnerr

ALTERNATING CURRENT

Solar Goals: World Cup Kicks Solar, Power Into Spotlight



istock Photo

ks Solar,

The U.S. is going all the way in the

World Cup. We're going to win it all.
Probably not—Team America faces
Germany and Portugal in its G Group.
Highly unlikely we'll still be in play in
the finals of the World Cup. In fact, the

U.S. might not advance beyond its June 16 game with Ghana, according to soccer buffs who sit around this reporter.

But no matter what team you cheer in this year's **Federation Internationale de Football Association** World Cup in Brazil, the power market can cheer this: four World Cup stadiums have solar installations totaling 5.4 MW, according to SolarLove.

When you're watching footie on screen be on the lookout for the stadiums that have solar panels. **Yingli Green Energy** and **Martifer Solar** are two of the developers behind the installations, which current consist of:

- -The Estadio Mineirão in Belo Horizonte with a 1.4 MW facility;
- -The Estádio Nacional Mané Garrincha in Brasilia with a 2.5 MW installation;
- -The Itaipava Arena in Pernambuco with a 1.4 MW installation;
- -The Maracana stadium—this year's soccer mothership in Rio de Janeiro has a 500 kW installation.

Brazil and FIFA are using the World Cup to highlight energy poverty, or the disparity of access to power around the world. The **International Energy Association** estimates that 1.3 billion humans lack access to power worldwide. And the **United Nations** is trying to address energy poverty—both the access to energy and access to clean sources—by 2030.

In case you're wondering the U.S. will play Ghana in Estádio das Dunas in Natal—a stadium that does not have solar panels.

QUOTE OF THE WEEK

"It's the best of the traditional bank model (a strong sales force, strong direct origination) combined with a durable funding model. Very few have been able to fuse them together."

 Walter Owens, ceo of Varagon Capital Partners in New York, on launching the asset manager this week (see story, page 1).

■ONE YEAR AGO■

Freeport LNG Development was looking for an equity investor for the second train of its liquefied natural gas export project on Quintana Island in Texas via Credit Suisse and Macquarie Capital. [IFM Investors invested roughly \$1.3 billion of equity into the train, which will sell all of its output to BP (PI, 2/5).]