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Changes portend higher capacity prices in PJM

ANALYSIS

While generators have been harping about low prices in PJM Interconnection capacity auctions, a combination of factors are brewing at PJM that could lead to higher capacity prices in PJM's next capacity auction.

Chief among those factors are major changes that PJM proposed in response to the generation outages it experienced last winter.

In August, PJM proposed a new capacity performance product that imposes tighter operational requirements on generators, such as guarantees about availability of fuel supplies. Earlier this month, in response to a flood of comments, PJM revised its proposal, among other things mollifying the guarantee and changing the penalty from a multiple of locational marginal prices to a multiple of net cost of new entry, or CONE. It also

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Court ruling impact on plant shutdowns eyed

REGULATION

Opinions were mixed Friday on the possible impact of a new implementation of the Cross State Air Pollution Rule, with some market watchers saying it could accelerate power plant shutdowns, while others said it's too soon to tell.

Tom Hewson, a principal with Energy Ventures Analysis, an Arlington, Virginia-based energy consulting firm, said that if the Environmental Protection Agency launches the CSAPR program January 1, as it has requested in court motions, it could force some utilities to prematurely shut down those coal-fired plants that had already been targeted for closure in the spring to comply with EPA's Mercury and Air Toxics Standards rule, which takes effect April 15.

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Citi buying Deutsche Bank trading books

TRADING

Citigroup's commodity trading unit has been the winning bidder on three Deutsche Bank trading books, but Citi is not exactly bucking a trend of other banks scaling back their trading operations, a Citi executive said in an interview.

Citi purchased Deutsche Bank's North American power trading book in early July, its base metals book in late August, and, on October 20, its oil trading book, all at undisclosed prices.

There is a market perception that while some US and European banks are exiting the commodity trading business, Citi is expanding, but both are misperceptions, according to Stuart Staley, Citi's global head of commodities.

The acquisition of the three trading books will add slightly to the scope and scale of Citi's trading operations. However, Staley said in an

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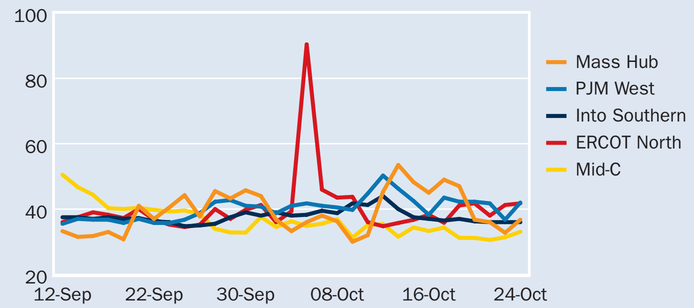
Price trends at key trading points ($/MWh)



Source: Platts

Low and high average day-ahead LMP for Oct 25 ($/MWh)

	On-peak low	On-peak high	Off-peak low	Off-peak high
ISONE	26.71	27.87	20.29	21.14
NYISO	19.16	34.04	14.55	23.19
PJM	26.64	44.19	17.67	39.67
MISO	31.70	43.54	20.88	27.52
ERCOT	37.20	97.03	22.12	23.25
SPP	33.80	36.08	17.45	21.36
CAISO	40.84	41.79	37.67	38.23

Note: Lows and highs for each ISO are for various hubs and zones. A full listing of average LMPs are availible for the hubs and zones inside this issue.

Day-ahead bilateral indexes and spark spreads for Oct 27

	Index	Marginal heat rate	Spark spreads @7k	@8k	@10k	@12k	@15k
Northeast							
Mass Hub	36.75	15739	20.41	18.07	13.40	8.73	1.73
N.Y. Zone-A	38.25	15698	21.19	18.76	13.88	9.01	1.70
PJM/MISO							
PJM West	42.00	17784	25.47	23.11	18.38	13.66	6.58
Indiana Hub	40.25	11650	16.07	12.61	5.70	-1.21	-11.58
Southeast & Central							
Southern, Into	36.00	10286	11.50	8.00	1.00	-6.00	-16.50
ERCOT, North	41.75	12352	18.09	14.71	7.95	1.19	-8.95
West							
Mid-C	33.06	10283	10.56	7.34	0.91	-5.52	-15.17
SP15	45.75	13416	21.88	18.47	11.65	4.83	-5.40

Note: All indexes are on-peak. Spark spreads are reported in ($) and Marginal heat rates in (Btu/kWh). A full listing of bilateral indexes and marginal heat rates are inside this issue.

Inside this Issue

Commission member said Thursday.

The deals approved Thursday continue Georgia's addition of solar power, at a time when prices are coming down and utility customers will not see higher costs, said Commissioner Bubba McDonald.

He said Georgia took a more cost-effective approach to adding large amounts of solar power than states that implemented renewable portfolio standards. "We waited until the proper time," when solar panel prices had dropped to levels that enabled utility-scale solar capacity to be added at prices lower than utility avoided costs, McDonald said.

A PSC order in Georgia Power's 2007 integrated resource plan required that any renewable power added to the utility's grid be priced at or below its avoided costs. Georgia Power spokesman John Kraft said the utility initially sought to develop biomass-fired capacity, but for economic and other reasons decided against proceeding with those plans. He said that as solar prices declined, solar became an increasingly cost-effective option.

The PSC on Thursday approved Georgia Power's plan to build and own 30-MW solar facilities at the US Army's Fort Benning near Columbus, Fort Stewart near Savannah and Fort Gordon near Augusta, said Commissioner Bubba McDonald. The electricity generated by the facilities generally will flow into Georgia Power's system and the utility will supply power to the three Army bases for 35 years. In emergency situations, however, the bases could use the solar power directly to meet their needs.

Georgia Power also is in talks with the US Navy on a similar deal under which the utility would build a 30-MW solar facility at the Naval Submarine Base Kings Bay in southeast Georgia, also by the end of 2016, said McDonald and Kraft. The details of that agreement still need to be worked out, and the deal will need to be approved by the PSC.

McDonald, who has been the PSC's leading advocate for expanded use of solar power, said that while he cannot say how much per-kWh the electricity from the solar facilities will cost, "it will be less than Georgia Power's avoided cost and will put no upward pressure on the utility's rates."

He expects the costs will be similar to those associated with 10 solar power purchase agreements totaling 515 MW that Georgia Power recently entered into to conclude its April solicitation for up to 495 MW of solar power. In announcing the solar PPAs earlier this month, Georgia Power said the solar power costs in the agreements averaged less than 6.5 cents/kWh.

McDonald noted that the solar facilities planned for the three Army bases—and the facility planned for the Navy's Kings Bay—will help the military branches meet Department of Defense goals for adding renewable energy. The military will keep the renewable energy credits associated with the facilities, he said.

The PSC still needs to review and approve the 10 PPAs totaling 515 MW that Georgia Power recently reached with solar developers as a result of the utility's April request for proposals. Those projects range in size from 18 MW to 101 MW. Some are scheduled to begin commercial operation in 2015 and others are scheduled for 2016.

— Housley Carr

Changes portend higher capacity prices ...from page 1

proposed to classify demand response as a demand-side resource and not a supply-side resource in its forward capacity auctions.

Those proposed changes, along with others PJM is preparing, could result in a doubling of the $120/MW-day clearing price of last year's base residual auction, Julien Dumoulin-Smith of UBS Securities, said in an interview.

In an report earlier this month, Barclays analyst Dan Ford estimated that the new capacity performance product would drive prices to $184/MW-day for the 2018-2019 delivery year.

Several other analysts expect the capacity performance product to drive prices higher, but they have not given public estimates.

PJM itself, in a report prepared with Monitoring Analytics, the grid operator's independent market monitor, said capacity prices would increase, but much of the increase would be offset by lower energy prices and by "greatly reduced" out-of-market payments.

In various forums, generators have said that capacity prices from the last several auctions are not supporting generation resources in PJM.

PJM's proposed capacity performance product represents a "fundamental revision" of PJM's capacity market, Dumoulin-Smith said, with the biggest potential price impact coming from changes in how PJM handles demand response.

A court decision that vacated the Federal Energy Regulatory Commission's rule on compensating DR resources in energy markets could threaten how PJM pays for DR in the capacity market. In an effort to address the uncertainty that the court decisions brings to the capacity market, PJM proposed moving DR to become a demand-side resource outside of FERC's authority.

If FERC approves PJM's plan, as much as 30% of existing DR resources could drop out of the auction because it would be ineligible under state regulatory authority, resulting in as much as a $60/MW-day lift for capacity prices, said Dumoulin-Smith, executive director of equity research for utilities and IPPs at UBS.

PJM's new capacity performance product would also eliminate the capacity holdback provision. In every base residual auction, PJM holds back 2.5% of its estimated demand, setting it aside for the incremental auctions that take place in the intervening years between an auction and the start of the delivery year for that auction. Eliminating the holdback could add $30/MW-day to the clearing price, Dumoulin-Smith said.

PJM also has proposed changes to the shape of the variable resource requirement, or VRR, curve that is used to determine the auction clearing price. That could add another $10/MW-day to the auction clearing price, Dumoulin-Smith said.

The proposed changes are still just that — proposals, and they could change before the base residual auction in May. But even if PJM's changes are approved by FERC intact, there is still one variable that remains unknown.

As it stands now, the new capacity performance product would bring major changes to how supply resources are mitigated in the auction. For one, bidders would not have to justify bids until they surpass net CONE, but estimating the effect of that change is difficult because it involves bidding strategies.

There is sure to be an interesting dynamic between whether resource owners decide to bid a resource as base capacity — the new name for capacity that does not meet capacity performance requirements — or as performance capacity.

Pricing for the new capacity performance product will almost certainly be higher than for base capacity, but so will the penalties. Under PJM's revised proposal, penalties for failure to perform are limited to 1.5 times net CONE, which is significant. With rare exceptions, PJM's capacity market has never cleared at a price close to net CONE. The penalties could keep some bidders out of the capacity performance market.

"The wild card in the next capacity auction is going to bidding strategy," said Dumoulin-Smith.

A power plant owner could decide to forego the investment needed to make a plant eligible as a capacity performance asset, deciding not to secure a long-term gas supply contract, for instance, and instead bid the asset into the auction as base capacity. That asset could clear the market at the capacity performance price and make more money because it would not have the higher investment cost to cover.

Another factor likely to add to the gamesmanship of the upcoming auction is calculating how much new generation is likely to be drawn into the market by the prospects of higher capacity prices. The next couple of years could see the highest level yet of coal plant retirements as the Environmental Protection Agency's Mercury and Air Toxic Standards rule takes effect. That could draw more new entrants into the auction, which could lead to lower capacity prices.

That would seem to favor a bearish outlook for prices, but that scenario does not hold up for Credit Suisse analyst Dan Eggers.

That scenario is based on the argument that prices are generally set at heat rate times price plus operating and maintenance costs, but that assumes that those plants do not need to make money selling power, Eggers said at a recent conference in New York. Even with higher capacity prices, a new-build plant still needs to see healthy spark spreads, and over time there have been healthy spark spreads in PJM forward prices for extended periods, Eggers said.

To think that generators would "destroy the market with new plants is a little unrealistic," he said.

The one sure bet seems to be that PJM's capacity auction is likely to be as unpredictable and as it ever has.

— Peter Maloney

Court ruling impact on plant shutdowns ...from page 1

"It's our belief that some of the retirements will be moved up to the beginning of the year instead of April, and that [CSAPR] prices are probably going to spike because of the liquidity problem in the market," said Hewson.

Asked for details Friday, EPA spokeswoman Enesta Jones wrote in an email that "the agency is currently reviewing the court's order to determine whether any further guidance or administrative action is necessary to begin implementation of CSAPR."

In a follow-up email, Jones said the agency was meeting Friday with the Department of Justice as part of its review.

Hewson said it seems likely that, should the EPA distribute CSAPR allowances as originally planned, power producers will hold onto them, leaving noncompliant generators scrambling to find a seller.

"If you have a surplus [of allowances], you would like to retain them for operational flexibility, and especially at the beginning of the year when you're not sure how much you are going to truly emit," said Hewson. "You are trying to establish a strategic bank so people who have allowances won't necessarily trade."

Hewson said it also seems unlikely the EPA has enough time to implement the program by January 1.

Daniel Simmons, a vice president for policy at the Washington-based Institute for Energy Research, said Friday that CSAPR was always going to lead to more plant closures. He said that, along with MATS and the EPA's Existing Source Performance Standards, the three initiatives could shut as much as 72 GW of coal-fired power by 2030.

He agreed CSAPR could speed up planned shutdowns, and that a CSAPR market would likely be an illiquid one, due to "basic human psychology."

"As people try to understand what their needs are ... it's very difficult to give away an initial endowment given the massive uncertainty," said Simmons.

Melissa McHenry, a spokeswoman for American Electric Power, one of the nation's largest coal-burning utilities, said Friday that the utility does not believe CSAPR will drive any further shutdowns within its fleet.

An emissions broker, who spoke on condition of anonymity, said that while more details are needed, he doesn't think it is impossible to have the program launch January 1.

He noted that because the EPA has previously said it would change the start date to 2015 from 2012, and that the existing allowances would be converted as well, it would not be much of a hurdle logistically.

As for prices, the broker guessed Group 1 SO2 allowances would likely cost "several hundred bucks, but not several thousands."

A broker sheet Friday listed CSAPR Group 1 SO2 allowances with a bid price of $50/st and an offer price of $500/st. CSAPR Group 2 allowances, as well as seasonal and annual NOx allowances, were listed identically.

Platts lists CSAPR allowances at their last assessed price in 2012, when trading was stopped. Group 1 SO2 is assessed at $20/st, Group 2 SO2 is assessed at $50/st, and both annual and seasonal NOx allowances are assessed at $55/st.

Each CSAPR SO2 allowance authorizes 2,000 pounds of SO2 emissions, while each CSAPR NOx allowance authorizes 2,000 pounds of NOx emissions.

Prices were unchanged Friday in the Clean Air Interstate Rule market, which CSAPR is likely to replace. Platts assessed the spot price for a vintage 2014 SO2 allowance at 74 cents, while the spot price for the vintage 2015 SO2 allowance was assessed at 58 cents.

— Andrew Moore