

Out-of-market contracts challenge NY market

ANALYSIS It turns out that regulated utilities do not have a monopoly on the death spiral, at least not in New York State.

The Independent Power Producers of New York in a recent letter urging the Federal Energy Regulatory Commission to take action on filings made more than a year ago warned that merchant generators and the state's capacity market are facing a "death spiral."

The "death spiral," of course, entered the power industry lexicon to describe a scenario in which distributed generation reduces demand for electricity, prompting utilities to raise rates. Higher rates make DG more attractive and spur more rooftop solar and DG installations, begetting a downward spiral for utilities.

IPPNY sees the potential for a similar spiral in New York, where some generators are seeking and winning out-of-market *(continued on page 16)*

PJM board defers selection of project

TRANSMISSION Although staff at the PJM Interconnection recommended that Public Service Electric and Gas build a new 500-kV transmission line to address reliability concerns at Artificial Island in southern New Jersey, the grid operator's board of managers deferred selection of the project, according to a Wednesday letter.

In April 2013, PJM began soliciting proposals to address the needs of the transmission system and nuclear plants in an area of southern New Jersey known as Artificial Island. Artificial Island is located in the Delaware Bay and is home to PSE&G and Exelon's 2,365-MW Salem nuclear power plant and PSE&G's 1,178-MW Hope Creek nuclear power plant.

The Artificial Island competitive solicitation marked the first *(continued on page 17)*

Gas-fired generation could hit 62%, says IHS

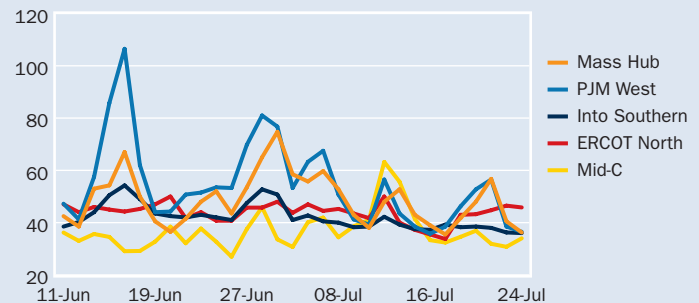
GENERATION The share of US power generation fueled by natural gas could rise to nearly 62%, or more than double its share in 2013, in the coming decades, according to a report released Thursday by consulting firm IHS.

The report finds that a combination of factors – including "chronically depressed" wholesale power prices, proposed environmental regulations and a focus on renewables and natural gas over coal, oil, nuclear and hydroelectric power plants — is moving the US toward a significant reduction in power supply diversity.

"The critical importance of diversity to stability in power supplies and prices is the 'missing factor' in much discussion on electricity," Lawrence Makovich, IHS Energy vice president and the author of the report, said in a statement.

The rise of gas-fired generation has been underway for decades, *(continued on page 18)*

Price trends at key trading points (\$/MWh)



Source: Platts

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

	On-peak low	On-peak high	Off-peak low	Off-peak high
ISONE	35.30	36.43	22.30	24.98
NYISO	32.86	46.21	21.26	26.36
PJM	33.58	41.96	20.60	26.16
MISO	33.79	39.09	15.97	28.81
ERCOT	42.92	57.92	25.05	26.70
SPP	43.07	43.13	18.08	24.82
CAISO	52.50	55.77	37.86	38.92

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

Day-ahead bilateral indexes and spark spreads for Jul 25

	Index	Marginal heat rate	Spark spreads				
			@7k	@8k	@10k	@12k	@15k
Northeast							
Mass Hub	36.25	12686	16.25	13.39	7.68	1.96	-6.61
N.Y. Zone-A	37.00	12486	16.26	13.29	7.37	1.44	-7.45
PJM/MISO							
PJM West	36.50	12822	16.57	13.73	8.03	2.34	-6.20
Indiana Hub	34.50	8961	7.55	3.70	-4.00	-11.70	-23.25
Southeast & Central							
Southern, Into	36.00	9486	9.44	5.64	-1.95	-9.54	-20.93
ERCOT, North	45.82	12443	20.04	16.36	9.00	1.63	-9.42
West							
Mid-C	34.01	9130	7.94	4.21	-3.24	-10.69	-21.87
SP15	54.00	12996	24.92	20.76	12.45	4.14	-8.33

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.

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commercial customer load is provided by non-utility suppliers, according to the most recent figures from the state.

The plan eliminates the use of three-month and 48-month full requirements contracts for the residential customers of FirstEnergy's Pennsylvania utilities.

The utilities will conduct descending clock auctions for 24-month contracts in October 2014, January 2015 and April 2015 for residential and commercial customers. They will procure 12-month contracts for residential and commercial customers in three separate auctions in October, January and April. The utilities will seek full-requirements, load following energy and energy related products for default service customers.

Spot market purchases will be eliminated for commercial customers under a settlement reached in March. Beginning in April, the utilities will hold four auctions a year for three-month products for commercial customers.

Under current law, the default service prices must be based on a prudent mix procurement strategy that will produce the least cost to customers over time.

The only item left to be resolved in the FirstEnergy proceeding is whether the utilities should assume responsibility for Network Integration Transmission Service charges for shopping and non-shopping customers.

— Mary Powers

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contracts for their power output.

Each contract that is signed puts greater pressure on other resources that do not have out-of-market contracts, increasing the risk that those resources will become uneconomic and exit the market too, unless they receive an out-of-market contract, Gavin Donohue, IPPNY president and CEO, wrote in the letter.

IPPNY's letter included an attachment of a petition by Constellation Energy Nuclear Group and its corporate parent, Exelon, urging the New York Public Service Commission to order Rochester Gas & Electric to negotiate an "acceptable" reliability support services agreement that would run from January 2015 to at least October 1, 2018.

"Acceptable" in this instance will likely mean "better than before." In its filing, CENG noted that the 581-MW Ginna plant has suffered cumulative losses of nearly \$100 million in 2012 and 2013 and significantly more than \$100 million from 2011 through 2013. Those losses were incurred despite the fact that Ginna had a power purchase agreement with RG&E that expired on June 30, 2014.

Ginna is not alone among nuclear plants facing a tough operating environment in markets where low-priced natural gas often sets the price. In the PJM Interconnection's last capacity auction, Exelon said three of its nuclear plants failed to clear the market.

Exelon has one other nuclear plant in New York, the 1,900-MW Nine Mile Point. Entergy has two nuclear plants in New York, the 882-MW FitzPatrick and the 2,311-MW Indian Point, both of which have been mentioned by analysts as at risk of retirement.

CENG's petition is supported by a reliability study done by the New York ISO and commissioned by the PSC asserting that Ginna's capacity is needed for system reliability. CENG is trying to leverage that conclusion into an RSSA. Two other plants currently have RSSAs based on similar reliability assessments from NYISO.

The 312-MW Cayuga coal-fired plant in Lansing is now in its second RSSA, which began in January and ends June 30, 2017. Under the RSSA, Cayuga retains net energy and ancillary services revenues of up to \$5 million a year. Amounts in excess of that are shared equally with New York State Electric and Gas, the RSSA counter party. Capacity payments under the agreement are credited to NYSEG against its energy payments to Cayuga.

Cayuga was owned by a unit of AES until it went bankrupt in 2011 and ownership was transferred to a group of bondholders who formed Upstate New York Power Producers, which, as of year-end 2013, included Carlyle Group, J.P. Morgan, Marathon, and Standard General.

NRG Energy also has an RSSA, its second, for its plant in in Dunkirk. NRG said it planned to mothball the aging 520-MW coal plant, but NYISO said it was needed to relieve congestion. The 75-MW unit 2 of the plant now has an RSSA that runs from May 31, 2013, until June 1, 2015.

Meanwhile National Grid, Dunkirk's offtaker, was directed to analyze repowering alternatives for the power plant. In May 2013, National Grid said that transmission alternatives would be less risky and costly to ratepayers than NRG's repowering proposals. But in December, Governor Andrew Cuomo announced a framework agreement for the repowering of Dunkirk. The NY PSC approved the repowering plan in June.

Under the plan, units 2, 3, and 4 will be repowered to burn natural gas, adding 435 MW to the grid, and NRG will be paid \$20.41 million a year for 10 years for the output from the new units. The plan also calls for the sharing of capacity revenues with National Grid.

In its analysis, National Grid said repowering Dunkirk would reduce transmission constraints by between \$8.8 million and \$161 million in 2014 and suggested the plan would also result in "indirect" benefits for customers such as lower installed capacity costs and locational marginal prices.

Cayuga owners also have proposed to repower the plant to burn gas. NYSEG has recommended in favor of a transmission upgrade alternative, but it remains to be seen which alternative the PSC will pick.

As a developer close to the project said, "It depends how you do the analysis. With a narrow scope, transmission usually wins. With a broader scope, generation usually wins." He also noted that Cayuga has paid about \$100 million in local taxes.

That perspective was made very clear in the Dunkirk term sheet filing, in which NRG projected Dunkirk would contribute \$8 million in annual property taxes, and National Grid estimated that the closure of Dunkirk would reduce the city of Dunkirk's local budget by about 42% and the city school district's budget by 30%, requiring a property tax increase of \$1,000 for the average homeowner.

Transmission projects may be less costly but they do not contribute to local revenues.

Ginna is the largest tax revenue producer in Warren County, contributing more than \$10 million in state and local taxes in 2012. Ginna also prevents the release of 2 million tons of carbon dioxide a year, in a state where the power sector produces 30 million tons of CO₂ a year, which could be a factor as New York State begins to pull together its implementation plan in response to the Environmental Protection Agency's proposed rules restricting greenhouse gas emissions from existing power plants.

But right now there is an expiration date on the taxes Ginna pays. The 2018 end date of the Ginna RSSA is tied, in part, to the service dates for RG&E's Rochester Area Reliability Project, or RARP, which calls for about 25 miles of new transmission lines, a new substation and the upgrade of several existing substations.

With Ginna, Exelon will not have a repowering option. It could be thrown back into the merchant market and forced to exist on energy and capacity payments upon the expiration of the RSSA in 2018.

A lot could change by then, but if generators keep seeking out-of-market contracts, the prospects of higher capacity prices are not good.

Meanwhile, NRG is working on converting its 600-MW Astoria plant in New York City to burn gas and increase its capacity to 1,040 MW, but only if it can sign a power contract. "We are not planning to repower Astoria on a merchant basis," NRG spokesman David Gaier said.

And Selkirk Cogen Partners earlier this winter informed the PSC of its intention to mothball the 446-MW plant just south of Albany by September 1. Reliability studies to assess the impact of the potential shutdown are underway.

Even New York's "zombie" plant, the 530-MW Danskammer that was damaged by Hurricane Sandy and sold for scrap by Dynegy and is now owned by privately owned trading house Mecuria, is now seeking to convert to gas and sign a power purchase agreement with Central Hudson Gas & Electric.

If retiring plants are now given RSSAs, that could raise capacity prices and attract new investment, but many developers seem to be pursuing both a market and a regulated path to bring new resources online.

NYISO spokesman David Flanagan says the ISO backs market-based solutions to reliability issues such as a notice of intent to mothball a plant. NYISO has otherwise remained impartial in the process, preferring that the issues be worked out through the stakeholder process.

That would be a difficult process, given that many stakeholders that would otherwise be allied, like generators, could be on opposite sides of the RSSA issue. Even individual stakeholders could be conflicted by having an out-of-market contract for one plant and not for another.

"New York has been walking a tight rope for some time about what direction it's been heading in terms of whether it was committed to a restructured market," UBS analyst Julien Dumoulin-Smith said. "What's notable is once a market tends towards PPAs and other out-of-market compensation to both maintain and attract new capacity, it's challenging to come back."

— Peter Maloney

PJM board defers selection of project ...from page 1

time PJM used the competitive transmission solicitation process mandated by the Federal Energy Regulatory Commission's Order 1000.

PJM staff in June announced that their recommendation that PSE&G build an 18-mile, 500-kV line from the Hope Creek substation on Artificial Island in Salem County, New Jersey to the Red Lion substation across the Delaware River in New Castle County, Delaware. However, PJM's board has decided to defer selection of a project for Artificial Island, according to a Wednesday letter from Steven Herling, PJM's vice president for planning.

"To ensure a thorough and fair review, given the complexities of the issues, the Board has determined that it will take the matter under advisement and defer a selection at this time. ... Order 1000, which guided our competitive bidding initiative on this project, has created entirely new process which are especially challenging when evaluating transmission solutions as complex as those required for the Artificial Island stability issues. For these reasons, the Board is outlining these additional steps to ensure that the most technically effective and cost-efficient proposal to solve the Artificial Island stability issues is selected," the letter said.

According to the letter, PJM staff will respond to issues raised in letters from stakeholders to the board, contact the Nuclear Regulatory Commission to discuss proposals that would impact nuclear switchyards and explore improvements to its competitive solicitation process.

The letter also cited LS Power's decision to modify its proposal by adding a fixed cap on project construction costs. In a July 8 letter, Northeast Transmission Development, a member of the LS Power Group, said it would cap construction costs for its proposed overhead or underwater "Southern Crossing" solution at \$171 million. LS Power said that cost cap would make its proposal less expensive than the PSE&G Hope Creek-Red Lion project, the costs for which were estimated by PJM to be between \$211 million and \$257 million.

The board decided that the other "finalist" bidders — PSE&G, Transource Energy and Dominion — should have a chance to update their proposals in light of that change, according to the letter.

PJM spokesman Ray Dotter said in a Thursday email that PJM does not yet have a set timeline for returning to the board with a second recommendation.

"The efforts will likely take a number of months, but the specific schedule will depend on the scope of work, which is still being discussed," Dotter said.

PSE&G spokesman Paul Rosengren said in a Thursday email that the company is "disappointed with the delay but of course we will comply with PJM's request for information to aid in their analysis."

"We continue to believe that PSE&G's proven track record of completing critical, large scale transmission projects in environmentally sensitive areas best [positions] us to complete this project," Rosengren said.

PJM received 26 proposals in response to the competitive solicitation from eight companies. The proposals ranged from an LS Power plan to build a new 5.5 mile 230-kV line along with a new transformer and switchyard by mid-2017 for \$116 to \$148