Energy Risk Report

Procurement recommendations for commercial, industrial and institutional electricity users

SEPTEMBER 2019

PJM

EBW Analytics Group
Andrew D. Weissman, Editor in Chief

EBWAnalytics.com

PJM capacity market reform highly likely to cost end users several billion dollars per year.

OUR PROJECTIONS AND RECOMMENDATIONS

Time Period	EBW* Recommendation	Price ($/MWh)				
		09/26/2019	Trend Past Month	Trend Since January	12-Month Range	Year-Ago Actual Price
Bal. Cal 2019	Buy	$33.00	$2.25	-$3.31	$30.37-$37.85	$39.59
Cal 2020	Portfolio	$34.05	$1.72	-$3.94	$30.85-$39.47	—
Cal 2021	Portfolio	$32.43	$0.94	-$3.92	$29.91-$37.48	—

** See Glossary on last page*

PJM Futures Historically Cheap Despite Price Gains

PJM futures climbed sharply higher since late August on hot weather, elevated loads, rising natural gas prices, and increasing regulatory uncertainty. Balance of Cal 2019 futures gained $2.16/MWh (7.0%), Cal 2020 increased $1.62/MWh (4.5%), and Cal 2021 rose $0.85/MWh (2.5%).

Record late-season heat and greater natural gas fuel costs played a key role in boosting near-term contracts, while prospects for tighter fuel supplies have led to rising winter risk premiums.

Longer term, rising concerns over administrative changes to PJM's capacity market have contributed to a bullish backdrop for prices.

Natural gas futures at Dominion South rose in September—but displayed dampened increases relative to national benchmark Henry Hub. While near-term futures at Dominion South have soared 15¢/MMBtu (7.6%) and Cal 2020 ticked higher 4¢/MMBtu (1.6%), gains have been only 50-70% of increases at Henry Hub.

A combination of maintenance at Dominion's Cove Point LNG station—reducing in-basin demand by 0.9 Bcf/d—and rising supplies has weighed on local prices. Further, record regional gas export volumes to the Midwest has reduced Midwestern prices—forcing still further price reductions in Appalachia to keep gas flowing out of the region.

While financial repositioning and an major short squeeze have lifted national prices and carried Dominion South forwards higher, bearish local fundamentals have mitigated increases and positioned Appalachian gas market for further declines this autumn.

PJM's capacity market reformation proposal has been in the spotlight, with Grid Strategies estimating additional costs of $5.7 billion/year. 1 PJM's capacity market has been lingering in uncertainty for over a year, with the ISO's independent market monitor suggesting that changes—depending on FERC action—could cost $1.6-$8.4 billion/year. A new report from Grid Strategies, headed by a former FERC advisor, pegs the likely cost increase at $5.7 billion/year.

By comparison, a PJM spokeswoman recently declared that PJM's competitive markets save end users $3.2-4.0 billion/year.

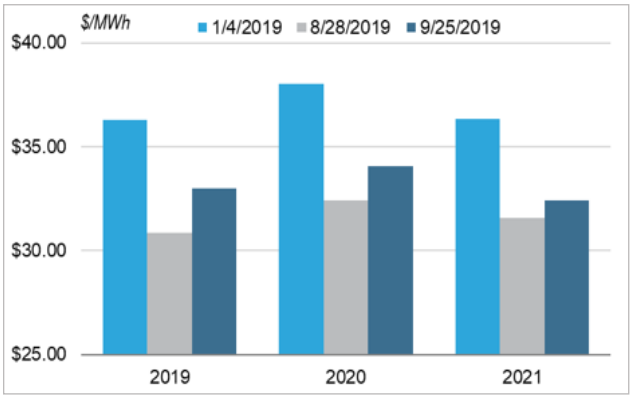
Key Takeaways

1 New study suggests PJM capacity market reform may cost $5.7 billion annually.
Commissioner Glick's recusal likely delays FERC decision until December, prolonging uncertainty.

2 Virginia executive order to boost renewables to 30% by 2030.
State efforts may help PJM catch up to higher price-reducing renewable penetration in other ISOs.

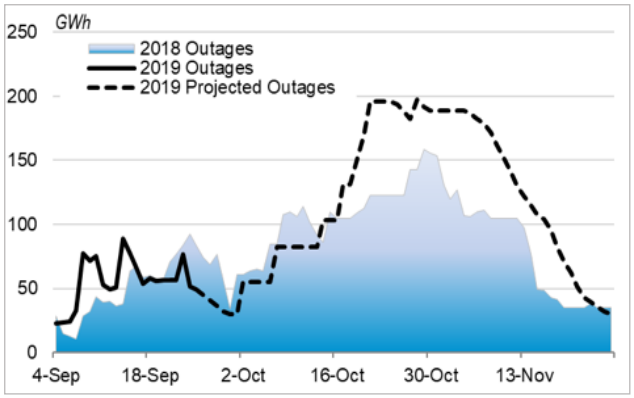
3 End users are advised to secure outstanding winter 2019-20 requirements.
Futures to become more weather-dependent—and more difficult to predict—with the onset of winter.

PJM Western Peak Futures, 2019, 2020 and 2021 ($/MWh)



Source: EBW AnalyticsGroup, Bloomberg

Lost Daily Generation (GWh) from Nuclear Outages in PJM, 2019 vs 2018



Source: EBW AnalyticsGroup, Bloomberg

FERC has been struggling to define the correct balance between state authority over the generating supply and interstate electricity markets that fall under its jurisdiction.

At a high level, electricity generators have charged that state subsidies—including for nuclear and renewables—have unfairly depressed capacity market prices.

Many analysts believe FERC is likely to extend the minimum offer price rule (MOPR), setting a floor price for capacity. With the state subsidies still in place and new PJM capacity price floors likely, FERC action could lead to consumers paying several billion per year for unnecessary, surplus fossil fuel capacity.

A FERC decision, however, is unlikely until at least November 29th due to a mix-up over Commissioner Richard Glick's recusal. Changing guidelines from FERC's ethics counsel led to an extension of Glick's recusal from the matter due to his prior work at Avangrid.

With FERC currently consisting of only three Commissioners—the minimum needed for a quorum—his recusal postpones any potential action on the PJM capacity market. As a result, the market is likely to continue in limbo for at least the next two months—likely resulting in delayed investment in PJM.

In Virginia, 2 a new executive order directs 30% renewables by 2030 and 100% carbon-free electricity by 2050—accelerating the clean energy transition in PJM and increasing downward pressure on energy-only prices. An order by Governor Ralph Northam calls for 30% renewables by 2030, a sharp increase from the current 6.8% of generation. As low marginal cost renewable output increases, a downward effect on energy-only prices—similar to that witnessed in other ISOs—is likely.

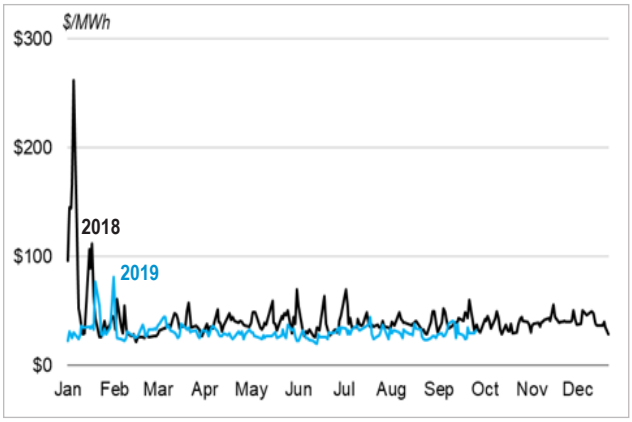
Longer term, Dominion Energy announced a 2.6 GW offshore wind project, with the first 880 MW due online in 2024. The move mirrors similar offshore wind development efforts further north along the Atlantic Seaboard.

We recommend consumers take advantage of autumn price declines to secure requirements through 1H2020—and become increasingly active in reducing exposure to 2H2020 and Cal 2021. 3 Near-term, winter weather uncertainty increases price risks as the market progresses deeper into the heating season—and risk-averse users may wish to take risk off the table at fair valuations.

Current futures at PJM West for Cal 2020 and Cal 2021 remain at historic lows—even as regulatory price risks continue to creep higher as PJM advances a number of price reform efforts.

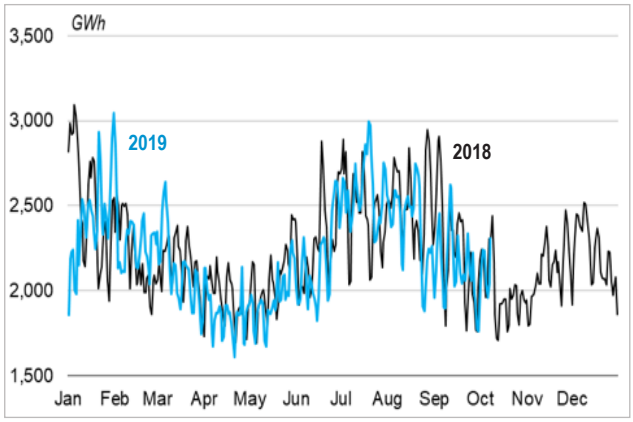
From a fundamental perspective, pricing may decline still further by mid-Cal 2020, but with PJM futures already at historic lows, a risk/reward perspective suggests reducing longer-term market exposure at favorable pricing. ■

PJM Western Hub Day-Ahead Peak Electricity Prices, 2019 vs 2018 ($/MWh)



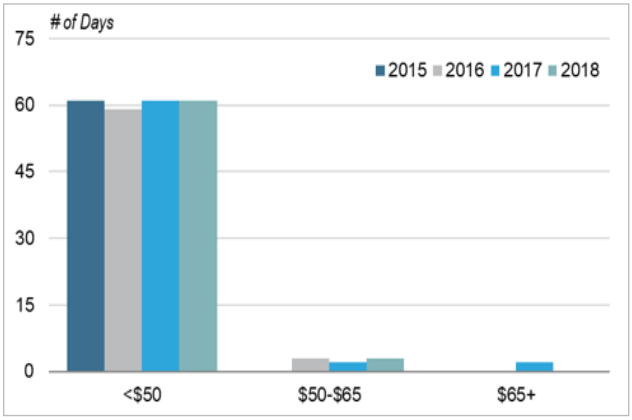
Source: Bloomberg

PJM Daily Generation (GWh), 2019 vs 2018



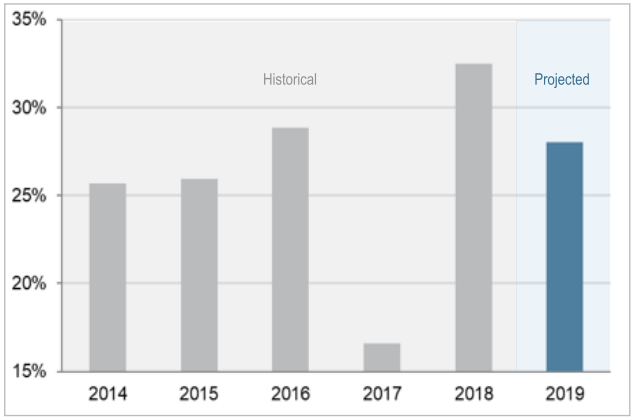
Source: EBW AnalyticsGroup

PJM Western Daily High and Scarcity Prices ($/MWh), Number of Days in October–December, 2015–2018



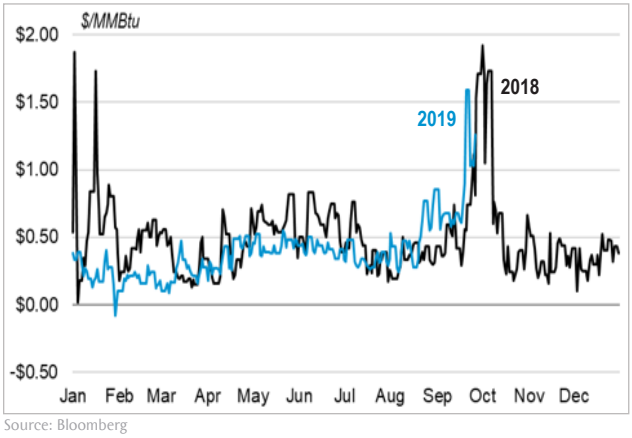
Source: EBW AnalyticsGroup, Bloomberg

PJM Historical and Projected Reserve Margins, 2014–2019



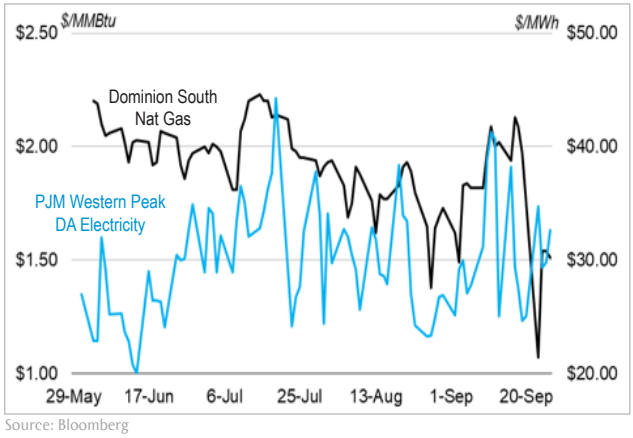
Source: PJM, NERC

Dominion South Natural Gas Hub Basis Differential, 2018 vs 2019 ($/MMBtu)



Source: Bloomberg

PJM Natural Gas and Electricity Prices



Source: Bloomberg

Energy Risk Report

EBW AnalyticsGroup

Andrew D. Weissman
CEO and Publisher

Eli Z. Rubin
Senior Energy Analyst

Andrew McCoy
Energy Analyst

Leara Kuffer
Executive Editor

EBW AnalyticsGroup provides independent expert analysis of U.S. natural gas and electricity markets.

Our research publications, webinars, energy price forecasting model, and consulting services identify and explain the trends that move today's energy markets. By monitoring the most important targets – including potential impact of weather, supply, core demand and other key drivers – with our proprietary models, we've been correctly assessing where the markets are likely to head next for more than a decade.

We provide solutions to many of the premier names from a diverse range of industries; our clients include large electricity and natural gas users, electricity purchasers, traders, power plant owners, natural gas producers, retail electrical suppliers, coal producers, electrical utilities, distressed debt investors and the general financial community.

To learn more about our products and services, please visit www.ebwanalytics.com

EBW**Analytics**Group

The leader in unbiased, cutting-edge energy market analysis since 2003.

1200 17th Street NW | Washington, DC 20036
1.202.663.9205 | info@ebwanalytics.com | www.ebwanalytics.com

Glossary: Our recommendations are made for a hypothetical commercial or industrial end user that consumes large amounts of electricity. With that in mind, end users must decide the timing to cover their electricity requirements.

"Wait" means that in our view prices are elevated and end users can get a better value by waiting for prices to fall.

"Buy" means that in our view prices are cheap relative to their true value, and end users are better served to buy now before prices rise.

"Portfolio" is more of a middle ground reflecting more balanced upside and downside risks. By taking a portfolio approach to procurement, end users cover a portion of requirements regularly to reduce upside risk exposure, but still retain downside potential should prices fall. In this light, a portfolio approach to procurement could be considered a cousin of dollar–cost averaging.