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INSIDE FERC

August 13, 2018

White House expected to tap DOE's McNamee to fill key FERC seat

The White House is expected to tap DOE official Bernard McNamee to fill the soon-to-be-vacant FERC seat, according to various Washington sources.

Filling the post quickly would lower chances some midstream natural gas infrastructure will be caught in a 2-2 split at the commission, given recent dissents on some projects. On the other hand, McNamee's backing of DOE initiatives to keep coal and nuclear power plants afloat could stoke gas industry fears of erosion to their edge in wholesale power markets.

Commissioner Robert Powelson, an outspoken critic of such market interventions, left FERC Friday to become president of the National Association of Water Companies.

(continued on page 11)

FERC waives New York water review, freeing Northern Access 2016 project

In a decision that stands to free the 99-mile, 490 MMcf/d Northern Access 2016 natural gas pipeline project from an obstacle in New York, FERC has waived the state's water quality review on the grounds of delay.

The producer-backed project may increase production in Pennsylvania and raise US exports to Canada at Niagara by up to 350 MMcf/d, according to S&P Global Platts Analytics. It would run from McKean County, Pennsylvania, through Allegheny, Cattaraugus and Erie counties in New York, delivering an incremental 490 MMcf/d out of Pennsylvania.

The project has FERC approval but was sidelined in April 2017 when

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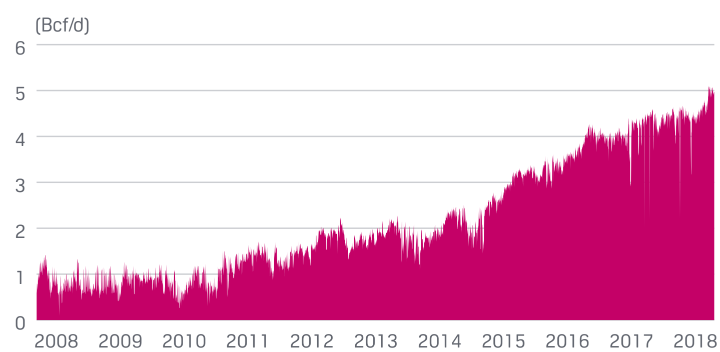
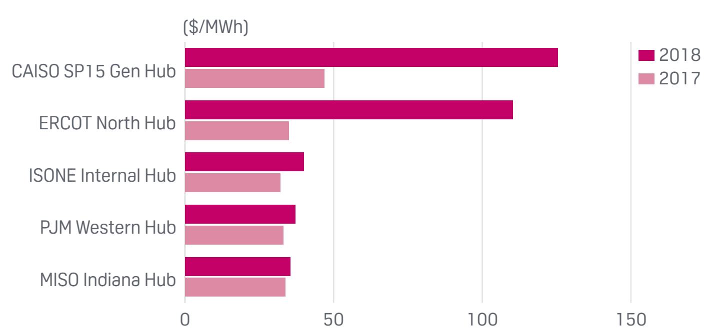
US NATURAL GAS EXPORTS TO MEXICO



Source: S&P Global Platts Analytics

TRAILING 30-DAY AVERAGE ON-PEAK POWER PRICES



Source: California ISO, Electric Reliability Council of Texas, ISO New England, Midcontinent ISO, and PJM Interconnection

Planned 50% tariffs on steel from Turkey could impact Gulf Coast Express

President Donald Trump's plan to double tariffs on steel imported from Turkey to 50% could place additional financial pressure on Kinder Morgan's proposed 1.98 Bcf/d Gulf Coast Express Pipeline and dampen prospects for future US natural gas projects.

The escalating trade headwinds for domestic pipeline operators comes at a time when transportation constraints in the prolific Permian Basin shale play have increased demand for new takeaway capacity to deliver supplies to market for use in exports and to serve power-hungry Mexico.

Houston-based Kinder Morgan, which moves more than a third of the gas consumed in the US, is sourcing approximately 144,000 mt of steel pipe from Turkish producer Borusan Mannesmann to be used for Gulf Coast Express. Welspun Tubular is set to produce about 175,000 mt for the pipeline at its Little Rock, Arkansas, mill.

"We continue to be concerned that these sorts of trade actions threaten important energy infrastructure projects, and ultimately hurt American consumers and businesses," the Interstate Natural Gas Association of America said in a statement.

The trade group for the industry said "companies that made purchasing agreements months or years ago, before the announcement of Section 232 tariffs, are now being unfairly punished for participating in international trade."

A Kinder Morgan spokeswoman, Sara Hughes, declined to say whether Trump's latest decision involving tariffs on steel imports from Turkey would delay or imperil Gulf Coast Express. She noted that the company has a pending request to the Commerce Department for an exclusion from Trump's previous 25% tariffs on steel imports from Turkey. Kinder Morgan's partners on Gulf Coast Express, DCP Midstream and Targa Resources, did not respond to requests for comment.

Gulf Coast Express is currently first in queue among a handful of pipeline expansions designed to alleviate Permian transportation constraints.

In February, Kinder Morgan launched an open season for the remaining capacity on Gulf Coast Express, which it said it was upsizing because of increased market demand. The $1.75 billion project, for which a positive final investment decision has already been made, is currently scheduled to start up in October 2019.

A second Kinder Morgan project targeting the same supply region, Permian Highway Pipeline, is expected to cost $2 billion and is designed to transport up to 2 Bcf/d of natural gas through 430 miles of 42-inch diameter pipeline from the Waha, Texas, area to the US Gulf Coast and Mexico markets. That project is expected to be in service in late 2020.

Hughes would not say whether Kinder Morgan is interested in sourcing some of the steel for PHP from Turkey, nor how doing so would impact the project's viability. She noted that a final investment decision on PHP has not yet been made.

Elsewhere, Trump's trade war with allies and adversaries alike also is impacting US pipeline projects.

Cheniere Energy has requested a tariff exclusion for its Midship Pipeline Project. The pipeline is set to stretch from the Anadarko Basin in Oklahoma to existing pipelines that will allow up to 1.44 Bcf/d to be sent to the US Gulf Coast. It is sourcing pipe for that project from a Canadian supplier.

A similar exclusion request by Plains All American Pipeline for over 155,000 mt of steel for its Cactus II crude pipeline was rejected by the Commerce Department. The operator also is sourcing steel for its pipeline from a Greek manufacturer.

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Even if Kinder Morgan and Cheniere are granted product exclusions for steel needs, they could still face a rise in steel-related production costs. Much of the imported steel used for pipeline projects is also under antidumping and countervailing duty investigations by the US.

Whether and to what extent US pipeline operators can pass the extra costs from tariffs off to their customers through rate adjustments remains unclear. Kinder Morgan CEO Steve Kean was asked that question during a July 18 conference call with investors.

"It is a competitive market, though, and so there is some limit on the ability to try to negotiate a pass-through arrangement with shippers," Kean said.

— Harry Weber, Michael Fitzgerald

US nuclear units shut as low power prices threaten more retirements

When Exelon's Oyster Creek nuclear unit disconnects from the grid at the end of September and permanently shuts, it will mark the start of a busy period of US nuclear power plant closures driven by low power prices that are placing dozens more units at risk.

As utilities threaten to shut nuclear units, a patchwork of state subsidies has emerged, and DOE and the FERC are mulling separate actions to prevent reactors from closing. The result is a confusing amalgam of measures that could benefit nuclear units in some locations but not others.

"We're seeing these plants close, and the next question seems to be 'Is anyone going to step in and stop it,'" said Tim Fox, a vice president at ClearView Energy Partners, in an interview Friday.

In 2012, the US had 104 nuclear units with total gross capacity of 107.6 GW. A series of retirements for technical and economic reasons shuttered 6 units with 4.7 GW of capacity by 2016.

But in recent years, continued low power prices and the competition from subsidized renewable energy and lower-cost natural gas-fired generation has accelerated the pace of nuclear plant retirement announcements. Thirteen additional units with combined capacity of 12.1 GW will shut permanently between September and 2025. The bulk of the announced retirements will be coming in 2019 (2 units), 2020 (3 units) and 2021 (4 units).

An estimated 12.4 GW in nuclear capacity is at high risk of retiring before its operating authorization ends, said Manan Ahuja, senior director of North American power analytics for S&P Global Platts Analytics. As many as half of all US nuclear units are at some risk of premature retirement, Platts Analytics said in an annual report on the topic in January.

"The biggest issue is plant economics," Ahuja said in an interview Friday. Factors such as the existence of power purchase agreements, which can provide higher revenue for plant operators, plant-specific costs and the prices in capacity markets are important in determining the risks, he noted.

The figures for early retirements would be higher had states not enacted subsidy programs, known as zero-emission credits, aimed at keeping nuclear units from shutting.

DOE and FERC are separately considering whether and how to compensate nuclear and coal plants for the benefits they provide to the grid.

The program in New York provides payments to three Exelon-owned upstate nuclear plants for 12 years. ZECs paid to generators increase from $17.48/MWh in the first of six two-year periods to $29.15/MWh in the final period through March 2029.

In Illinois, Exelon's Quad Cities and Clinton nuclear plants, totaling nearly 3,000 MW, are receiving ZECs. The program could provide $235 million annually to the plant owners.

Power producers separately challenged the Illinois and New Jersey ZEC programs in federal court, saying they violate federal authority to regulate wholesale power markets. After courts ruled in favor of the states, power producers appealed those decisions.

A ZEC-like program was approved by New Jersey lawmakers this year. Plants that are approved for payments could receive 0.4 cent/kWh from retail customers.

In Connecticut, the two-unit 2,113-MW Millstone nuclear plant has been declared eligible to participate in a competitive solicitation for power payments to zero-carbon generating units for the first time. Ohio and Pennsylvania have debated supporting nuclear units, but no action has been taken by lawmakers.

DOE's effort to consider using its authority to enact emergency measures relating to the power grid to support coal and nuclear plants remains underway and is expected to result in action, although the scope is unknown, said Christine Tezak, managing director at ClearView Energy. "It doesn't seem imminent today, but it certainly hasn't fallen off the radar screen," she said Friday.

Helping save several dozen nuclear units could cost billions of dollars, according to a study by the Brattle Group last month. If all coal and nuclear plants were to receive an out-of-market annual payment of $50 per kilowatt of capacity, roughly the average operating shortfall for plants with a deficit, the cost would be $16.7 billion a year, or about $34 billion over two years. The amount would be somewhat lower if only plants in financial trouble received the support, Brattle said.

While all nuclear plants face competitive pressure, the units that are shutting for economic reasons are almost exclusively in deregulated electricity markets. Those in regulated states face fewer challenges because state rate-setting commissions have generally allowed them to recover their costs.

The Nuclear Energy Institute, a trade association of nuclear vendors and operators, has directed an effort to cut industry costs, and says those costs peaked in 2012 and have fallen 19% to $33.61/MWh. NEI says nuclear plants are not being compensated for the benefits they provide in terms of availability of fuel, high capacity factors and zero carbon emissions.

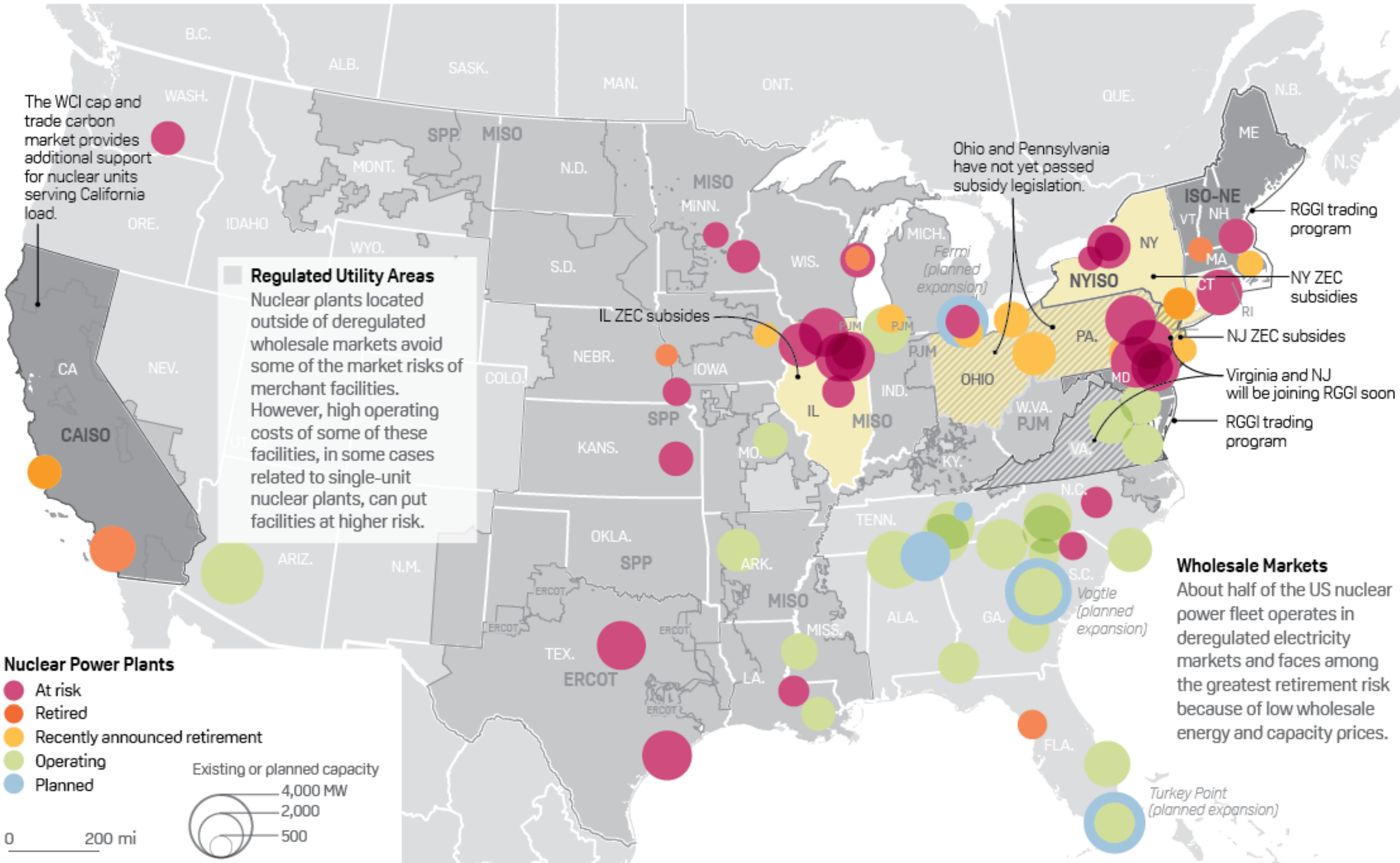
Market participants and the owners of natural gas-fired generating units have said markets are doing a good job of providing a steady flow of electricity at the lowest cost to consumers, and subsidies will distort those markets and raise customer costs.

In fact, the trend to provide support to nuclear, and potentially, coal units will keep generators online that would otherwise retire, and does nothing to curb the market's biggest issue, that of overcapacity, Tezak said. It is hard to see wholesale power prices rising if more generators are encouraged by out-of-market subsidies to remain online, she said.

— William Freebairn

MULTIPLE US NUCLEAR PLANTS FACE RISING RISK OF EARLY RETIREMENT

Low US power prices, driven by low natural gas prices, gas-fired and renewable generation growth, and slow load growth in many areas, have led to multiple nuclear power plant retirements and expectations that many others could retire before the expiration of their operating licenses. A dozen plants with capacity totaling nearly 12 GW recently have announced early retirement and nearly 30 others, totaling nearly 45 GW, face significant risks in the coming years, according to recent forecasts from S&P Global Platts Analytics. The Trump administration is considering options to provide financial support for nuclear and coal-fired power facilities, many of which also have retired. Several states have passed laws or regulations to subsidize nuclear plants. Federal regulators are also considering options to address market and grid reliability needs.



At Risk Nuclear Plants
In addition to the 12 operating nuclear units that have announced retirement plans, S&P Global Platts Analytics has put 28 other units at a high or moderate risk of early retirement (see the PIRA North American Electricity Special Report on Early Retirement Risk for U.S. Nuclear Generation).

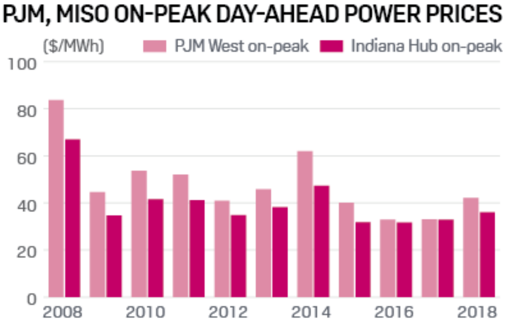
Regional Initiatives
The Regional Greenhouse Gas Initiative is a regional cap and trade program covering power plants in nine—soon to be 11—Northeast states. The carbon price helps support non-emitting nuclear units. The Western Climate Initiative carbon market improves pricing for nuclear units serving load in California.

State Actions
Illinois, New York, New Jersey and Connecticut have passed laws or issued regulations designed to financially support a number of at-risk nuclear plants. Ohio legislation failed in 2017, and Pennsylvania passed a resolution in October 2017 urging FERC to act on the DOE NOPR proposal.

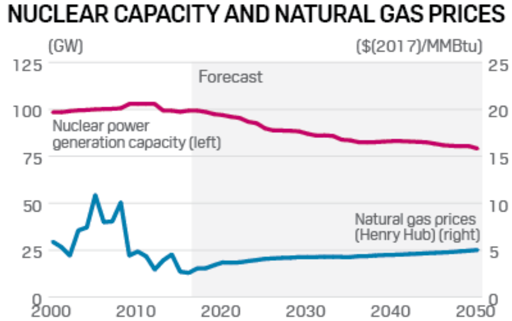
Prices and Generation Capacity
Wholesale power prices in most major markets remain low relative to longer-term averages. PJM West and Indiana Hub remain down 14% and 10%, respectively, relative to 10-year averages.

The EIA reference case in its Annual Energy Outlook indicates 12.4 GW of nuclear capacity could retire by 2030, even considering a $1.25 natural gas price increase in its reference case over that period.

PJM, MISO ON-PEAK DAY-AHEAD POWER PRICES



NUCLEAR CAPACITY AND NATURAL GAS PRICES



For questions about nuclear units labeled "at risk" please contact naelectricity.pira@spglobal.com. For all other questions, please contact Electricity_Platts@spglobal.com.
Source: S&P Global Platts Analytics, S&P Global Market Intelligence, Energy Information Administration's Annual Energy Outlook

ELECTRIC POWER

Footprint rejects FERC staff allegations of misleading ISO-NE on fuel supply

Footprint Power is fighting back against allegations that it submitted false and misleading supply offers to ISO-New England in June and July 2013, arguing the grid operator always knew the limitations of its Salem, Massachusetts, power plant.

"The commission should reject enforcement's proposal to proceed to court to impose excessive sanctions for alleged violations that did not occur, that lack any motive, that caused no harm, and that are so distant in time that they are now out of reach under the statute of limitations," Footprint said in a filing last week.

The Footprint proceeding (IN18-7) features the first show-cause order in an enforcement case issued by the commission since Chairman Kevin McIntyre took the gavel in December. The fuel-security issue at play in this case may be closely watched by market players, regulators, policy makers and others against the backdrop of Trump administration efforts to bolster at-risk nuclear and coal-fired power generation in the name of grid resilience.

In June, FERC ordered Footprint to prove why it should not disgorge $2 million in capacity payments and pay $4.2 million in civil penalties for allegedly submitting false and misleading supply offers to ISO-NE when it lacked the fuel to operate Salem Harbor Unit 4, a 437 MW oil-fired unit.

By June 26, Salem Harbor had less than a day's worth of fuel and Footprint didn't receive additional fuel until the end of July, FERC staff alleged. In the midst of mid-July heat wave, the plant could only run for a few hours before asking the ISO to reduce its capacity, FERC staff alleged.

Footprint is now bluntly rejecting staff's claims. "Enforcement's allegations are false and misleading; Footprint's offers were not," the company said in its response to the show-cause order.

First, enforcement overstated ISO-NE's operational expectations, Footprint said, arguing ISO-NE knew it was operationally and legally impossible for the plant to run for 24 hours at maximum output because of start-up and air emissions limitations. "Those restrictions were fully appreciated by ISO-NE and, on most of the days at issue, worked as binding constraints before fuel levels ever came into play," Footprint said.

Second, enforcement understates the amount of fuel available, which was pivotal for the last nine days when fuel levels were running low. Salem Harbor 4 was "an aging, lumbering machine," but the operators knew the plant like the backs of their hands and were able to adjust the oil tank to keep pulling out oil until more fuel was extracted than enforcement said was possible, Footprint said.

But enforcement staff never talked to the operators about start-up limitations, emissions limits or estimates of available fuel, and never asked ISO-NE whether the grid operator was actually misled, the company said. "It is incongruous, if not ironic in the classical sense, for enforcement to allege that Footprint did not perform due diligence about fuel-supply calculations when enforcement failed to perform its own due diligence before making that allegation (among others) in the first place."

Enforcement's allegations are also time-barred, because it exceeded the five-year statute of limitations, Footprint said, adding that enforcement never claimed that the alleged conduct harmed reliability or changed prices.

Enforcement seems to be saying that a generator can only offer output in amounts that are empirically demonstrated to be feasible, a policy approach that could boost prices and encourage behavior that could be seen as physical withholding, the company said. And enforcement seems to say that Footprint should have been aware that losing capacity payments could be a sanction in an investigation, even though that is not in the tariff, Footprint argued.

"If that is indeed enforcement's position, then Kafka is in control and compliance is a crapshoot," Footprint said. "Enforcement becomes a prosecutor of non-existent laws, retroactively imposing whatever rules suit its imagination, even if those imaginary rules contradict the rules actually in place," the company said.

— *Kate Winston*

Stakeholders want to address regulation market flaw identified by PJM

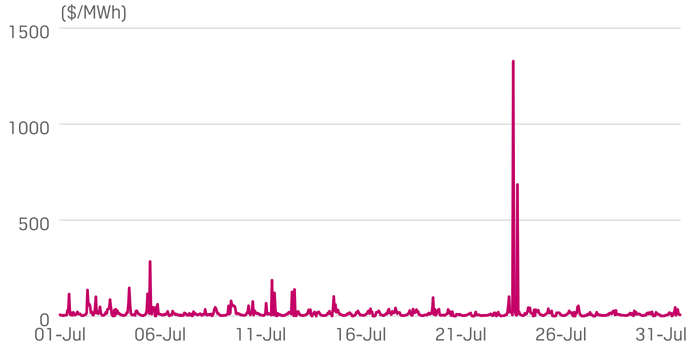
If PJM Interconnection stakeholders did not have enough on their plate, they may be adding a regulation market flaw that has recently spiked prices into the $1,000s/MWh to the list of issues that require attention, according to a presentation last week.

In the past six-to-eight weeks, regulation market clearing price spikes have occurred in about 75 five-minute intervals, "so it doesn't happen often but when it does it can have dramatic consequences," Adam Keech, PJM's executive director of market operations, said during a webcast Markets Implementation Committee meeting.

On July 23, the PJM regulation market capability clearing price reached $1,327.97/MWh, while the average price for the month was $17.53/MWh. The RMCCP is one component of the regulation market and regulation market clearing price spikes can impact the whole regulation market, Keech said.

One stakeholder pointed out that these recent pricing events have occurred during otherwise normal pricing conditions, but it is possible that during a winter scenario when there is increased natural gas basis risk, fast-start pricing and possibly scarcity pricing, regulation market

PJM REGULATION MARKET CAPABILITY CLEARING PRICES



Source: PJM

clearing prices could spike much higher.

Keech agreed, saying PJM has modeled scenarios in which regulation market clearing prices could reach $6,000/MWh to $7,000/MWh, but they could go even higher.

However, the regulation market which represents a portion of the ancillary services market is a "really small pot" in the wider context of PJM's markets, Keech said in a phone call. The regulation market typically accounts for less than 1% of energy billing in PJM and the recent price spikes only happened in less than half a percentage of the total recent pricing intervals, he said.

Nevertheless, "it's something we caught and wanted to bring to the attention of our members," he said.

A stakeholder representing power consumers said the concern is this regulation market flaw could put "customers on the hook to pay unjust and unreasonable rates" and would surely "not want to pay for something that is not warranted."

Regulation is an ancillary services product that provides market-based compensation to resources that can adjust output or consumption in response to an automated signal which helps match generation and demand to keep the power grid functioning normally, according to PJM.

The recent regulation market clearing price spikes appear to be related to the way the prices are calculated. Specifically, any offer or lost opportunity cost "will increase drastically" if certain variables have very low values, according to Keech's presentation.

For example, even with a $0 offer, a difference of $5 in lost opportunity cost can create a $6,250 clearing price. Keech stressed that PJM is doing the calculations as stipulated in the appropriate tariff and the recent price spikes appear to be an unintended consequence of the way the calculations are structured.

"Overall the impact of this anomaly is mostly limited to the regulation market itself; the issue stems from a factor included in the denominator of the regulation price calculation," Kieran Kemmerer, power sector analyst with S&P Global Platts Analytics, said in an email. "Theoretically generators might increase regulation offers in an attempt to capture these spikes in pricing, but the effects of increasing regulation offers on the energy market are minimal," he said.

The point of the MIC presentation was to raise the issue with stakeholders and gauge whether they wanted to tackle fixing it over the short term given the other pressing issues in front of them.

These market-related issues include the quadrennial review which considers potential capacity market changes that could be made prior to the next auction, comments due to federal regulators by the end of the month regarding how subsidized generation units are handled in the capacity market and a recent default in the financial transmission rights market that will be discussed at a Friday special MIC meeting.

Energy market price formation changes that have been working through the stakeholder process since last year constitute another pressing issue, along with a FERC proceeding on grid resilience (AD18-7), though the latter is a longer-term process.

Despite this logjam of priorities, several stakeholders said they wanted to address the regulation market issue. The next step is for PJM to issue a statement outlining the problem and possibly offer a short-term solution.

— *Jared Anderson*

FERC OKs SPP resource adequacy requirement tariff revision effective July 1

Southwest Power Pool can implement a resource adequacy requirement program for its footprint, effectively requiring loads with insufficient resources to participate in bilateral capacity markets, FERC ruled last week.

When SPP implemented its integrated marketplace — a centralized market for day-ahead and real-time energy, operating reserves and financial transmission rights — in March 2014, SPP also assumed the balancing authority function for the whole SPP region.

"SPP asserts that its current mechanisms provided in its Planning Criteria are inadequate to provide an appropriate level of assurance that capacity will be available as needed to serve load in the SPP Balancing Authority Area," FERC said in its August 7 order (ER18-1268). "SPP explains that existing assurance options under the SPP Planning Criteria are only applicable to SPP's load-serving members and therefore do not cover all load in the SPP Balancing Authority Area."

Loads in the balancing area that are not also load-serving members include "non-member load-serving entities, … network and point-to-point transmission service customers and other entities with grandfathered agreements," according to SPP spokesman Derek Wingfield.

Therefore, SPP applied in March to revise its open access transmission tariff to include a new Attachment AA (Resource Adequacy), with "all the terms and conditions relevant to the establishment, compliance and enforcement of the requirement that each [load responsible entity] in the SPP Balancing Authority Area maintain sufficient capacity and planning reserves to serve its forecasted load."

An LRE is "an asset owner with registered load in the Integrated Marketplace," the filing states.

As a first step, the filing requires a planning reserve margin of 12% of an LRE's "net peak demand," except the reserve margin would be 9.89% for an LRE with a resource mix of at least 75% hydropower.

The FERC order notes that SPP plans to recalculate the planning reserve margin every two years "based on a probabilistic analysis using a loss of load expectation study."

SPP defined "net peak demand" as forecast peak demand, minus the projected impact of demand response and behind-the-meter generation that are dispatchable but not registered in the integrated marketplace as a resource and minus the amount of megawatts included in a firm power purchase contract.

The RAR planning reserve requirement would be applicable for the period of June 1 through September 30 of each year, and failing to maintain that minimum level of reserves would entail a "deficiency payment" equal to the amount of megawatts that a LRE is deficient times a calculated cost-of-new entry (initially $85.61/kW-year) times a "CONE factor."

The CONE factor varies according to the percentage by which the SPP Balancing Authority's planning reserve exceeds the required planning reserve margin. If the SPP Balancing Authority's overall planning reserves exceed the required margin by 3% or less, the CONE factor is 200%, for example. If the SPP Balancing Authority's overall planning reserves exceed the required margin by 8% or more, the

CONE factor is just 125%. When the excess is between 3% and 8%, the CONE factor is 150%.

The new tariff attachment also establishes a "winter season obligation" with equivalent planning reserve margin requirements for December 1 through March 31 of the subsequent year, but the tariff does not require a deficiency payment. Instead, failing to meet the obligation constitutes a tariff violation reportable to FERC, which may decide to take an enforcement action.

While the order was made retroactively effective as of this July 1, no deficiency payments would be applied until the summer of 2019.

Firm power contracts executed before July 1 can qualify as complying with RAR and winter obligation rules, "if the contract does not include terms that allow for interruption of deliveries for reasons other than *force majeure* or uncured defaults," the order states.

SPP maintains "that an event of *force majeure* means 'any curtailment order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities,'" the order states.

— Mark Watson

FERC rejects SPP plan to mandate reliability equipment amid renewable growth

FERC has rejected a plan by Southwest Power Pool to allow transmission owners to elect to pay for certain reliability equipment, saying it could unfairly make it cheaper for the transmission owners' affiliates to connect to the power grid.

But FERC left the door open for SPP to file a new plan, which could end up raising interconnection costs for new generators such as wind and solar facilities. The wind industry — which had raised concern about SPP's plan — has hit record penetration levels in the region, exceeding 60% of total load at times this spring.

In March, SPP proposed (ER18-1078) to require so-called phasor measuring units (PMU) at interconnections for new generators at or above 50 MW of capacity. The PMU would be installed on the transmission owner's side of the interconnection and would be funded by the interconnection customer. The transmission owner also could decide to fund PMU installation at their discretion, the plan said.

SPP chose the 50-MW threshold to capture a greater percentage of new wind and solar resources. In the last decade, wind has grown from 1% of the generation mix to about 20% of SPP capacity today, spokesman Derek Wingfield said. Solar is poised to follow a similar trend: today it represents less than 1% of capacity but more than 16 GW of solar projects are in the interconnection queue, Wingfield said.

The PMU proposal was intended to improve system reliability, SPP said. PMU measurements provide more frequent and precise views into the behavior of the grid, allowing grid operators to better address problems.

In the future, the technology may reveal more transmission capacity to be available than models show, which may enable more delivery of wind energy, SPP said in a document on synchrophasors. And PMUs would enhance insight into the behavior of solar farm inverters, which control output and conversion from direct to alternating current, Wingfield said.

But the American Wind Energy Association raised several concerns about the proposal, including that it could allow transmission owners to exercise market power and force the interconnection customer to fund the installation before signing an interconnection agreement.

FERC on August 6 decided that giving transmission owners the option to fund the installation could be unfair. "A transmission owner's decision to exercise its discretion to fund PMU installations only when its affiliate is the interconnection customer could result in affiliated interconnection customers having lower costs than non-affiliated interconnection customers, which could give the affiliates an undue competitive advantage," the commission said.

SPP has not explained how the cost of PMU installations would be treated in transmission owners' rates, FERC said, raising concern that unaffiliated customers could end up paying for transmission owner's affiliates' installations through transmission rates. SPP's plan also does not include key details about the costs of PMUs and who bears the costs of ongoing PMU communication, operation and maintenance, FERC said.

However, SPP could refile its proposal after removing the language allowing transmission owners to fund PMU installations at their discretion, FERC said. Any revised plan should also address how transmission owners will treat PMU installation costs, explain responsibility for ongoing PMU costs and clarify if a customer can use existing equipment on the generator side of the interconnection, the commission said.

SPP anticipates refiling the proposal, and the FERC order will inform the grid operators' next steps, Wingfield said.

— Kate Winston

CPV working to address denial of New York natural gas plant air permit

Competitive Power Ventures is working to sort out the denial of an air quality permit for its 680 MW CPV Valley natural gas plant in New York, the latest snag the company has faced in bringing the plant online.

"We remain committed to operating within all applicable operating permit requirements and look forward to working with the [Department of Environmental Conservation] to address any concerns they may have," CPV spokesman Tom Rumsey said last week.

It appears this will unfold in court, with CPV seeking permission to keep the plant running while applying for a Title V permit and DEC arguing against it.

The state regulator informed CPV August 1 that renewal of its Air State Facility permit required to operate the dual-fueled power plant had been denied. The DEC explained in a letter that due to regulatory changes a Title V Clean Air Act permit is required to run the plant and CPV's ASF permit expired July 31.

"As a result of this denial and the lack of a Title V permit, CPV may not lawfully operate the facility," the letter said.

"DEC denied this request because the current permit does not meet current regulatory requirements," spokeswoman Erica Ringewald said in an email August 6. "Specifically, revisions of the applicable regulations now require a Clean Air Act Title V permit to operate this

THE DOCKET

Pipeline projects

CP15-93	Rover Pipeline; 711 mile, 3.25 Bcf/d project; partail service; OK to bring Mainline B, supply segment in service, pending request for laterals
CP15-554	Atlantic Coast Pipeline; about 600 mile, 1.5 Bcf/d pipeline; partial construction underway
CP16-10	Mountain Valley Pipeline; 301-mile, 2 Bcf/d through West Virginia and VA; halt ordered by FERC after court ruling
CP16-357	Mountaineer XPress; 170 mile, 2.7 Bcf/d expansion, with 228,300 hp of compression; construction underway, extended work hours granted
CP15-558	PennEast Pipeline Project; 118 mile, 1.1 Bcf/d expansion; FERC certificate issued
CP16-38	WB XPress Project; 1.3 Bcf/d expansion with 186,383 hp of compression; FERC certificate issued, construction underway
CP15-115	Northern Access 2016; 99-mile, 490 MMcf/d project; certificate approved, FERC granted waiver for NY water permit
CP17-478	Midship Pipeline, 1.4 Bcf/d, 199.4 mile project in Oklahoma, final EIS issued June 21
CP17-101	Northeast Supply Enhancement Project; 400 MMcf/d expansion to serve NYC area; draft EIS March 23, NY water application refiled; NJ deficiency letter expected
CP17-40	Spire STL Pipeline, 400 MMcf/d, 66 miles; FERC certificate order August 3
CP15-17	Southeast Market Pipelines, 685 miles through Georgia, Florida and Alabama; FERC order reinstating pipeline certificates
CP18-102	Cheyenne Hub Enhancement Project, REX compression project to add 1 Bcf/d hub service capacity near western end of system
CP18-103	Cheyenne Connector, 70-mile, 600,000 Dt/d pipeline to connect REX's Cheyenne hub to production in Weld County, Colorado
CP18-186	Southeastern Trail project, 7.7-mile, 296,000 Dt/d project in Virginia, environmental assessment planned
CP18-46	Adelphia Gateway project, 775 MMcf/d project in Pennsylvania and Delaware
CP18-89	Empire North Project, 205 MMcf/d compression project in Pennylvania and New York
CP18-137	Buckeye XPress Project, 66-mile pipeline replacement project in Ohio and West Virginia to add 275,000 Dt/d

LNG

CP15-490	Delfin LNG, onshore portion of Gulf of Mexico project designed to export 13 million mt/year; MARAD approved, FERC approved
CP15-521	Gulf LNG Liquefaction project, two trains planned to export 1.5 Bcf/d in Mississippi
CP15-550	Venture Global Calcasieu Pass LNG project proposed with capacity to export 1.33 Bcf/d; draft EIS issued
CP16-116	Texas LNG Brownsville, small-scale LNG project to be built in two, 309 MMcf/d phases
CP16-454	Rio Grande LNG, 3.6 Bcf/d facility proposed for Brownsville, Texas
CP16-480	Annova LNG Brownsville, 0.9 Bcf/d facility planned in Brownsville, Texas
CP17-117	Driftwood LNG project with liquefaction capacity of 3.33 Bcf/d in Calcasieu Parish, Louisiana;
CP17-178	Alaska LNG proposal to develop a 3.3 Bcf/d gas treatment plant, 800-mile pipeline; and 2.56 Bcf/d LNG terminal, EIS due December 2019
CP17-20	Port Arthur LNG, 1.86 Bcf/d export facility proposed for Port Arthur, Texas
CP17-66	Plaquemines LNG and Gator Express Pipeline Project; export facility with 20 million mt/year capacity; two short laterals
CP17-470	Freeport LNG Train 4 expansion to add about 0.72 Bcf/d of capacity to Quintana Island, Texas, facility
CP17-495	Jordan Cove LNG export facility at Port of Coos Bay, Oregon; paired with 229-mile Pacific Connector Pipeline (CP17-494)
PF15-26	Corpus Christi Stage 3 Project to add two liquefaction trains of 0.7 Bcf/d each to ongoing project in Texas

Gas policy

PL18-1	Notice of inquiry on natural gas certificate policy

Tax policy

PL17-1	FERC order on key tax allowance policy for pipelines set up as partnerships following court remand
IS08-390	Order on remand stemming from United Airlines case on MLP tax allowance policy, request for rehearing and abeyance
IS09-437	Orders tied to SFPP rates stemming from case on MLP tax allowances; request for rehearing and abeyance by SFPP; petition filed
RM18-12	Broad NOI for comment from the electric, gas and oil sectors on effect of tax reforms on FERC-jurisdictional rates
RM18-11	Rulemaking for pipelines to submit one-time filings on tax reform impacts and take action on rates
EL18-62, EL18-72	Show-cause orders to 48 utilities on rate impacts in light of new federal corporate income tax rate

Electricity

AD16-16	Initiative weighing the need and potential scope of reforms to the implementation of PURPA
AD16-18	Effort considering possible improvements to Order 1000 to better spur investment in new transmission
AD16-25	Initiative seeking input on how electric storage could be used as transmission assets in wholesale markets
AD17-11	Initiative weighing possible paths forward for reconciling the competitive market framework with states' actions
AD18-10, RM18-9	Initiative to lift barriers to market participation of distributed energy resource aggregations
AD18-7	Proceeding to evaluate resilience of bulk power system in RTOs and ISOs
RM16-17	Market surveillance rule that proposes new reporting regime to improve detection of power market manipulation
RM16-21	NOI seeking ways to harmonize market power analyses conducted during mergers and to grant MBR authority
RM17-2	FERC directs more transparency in uplift; order concludes broader price formation initiative
RM17-8	Final rule to reform interconnection processes for large generators with capacity greater than 20 MW

type of facility and this facility has not submitted an application for, nor has been granted, this type of permit," she said.

CPV's Rumsey said the company is working through the various considerations associated with the permit denial, like whether the plant can run while sorting out the permit situation and whether it can receive capacity market payments.

"Facilities of this size and nature must be subject to the most rigorous air pollution controls to ensure the public is protected, and Title V permits provide for greater transparency and community input prior to authorization," Ringewald said.

Millennium Pipeline completed construction and testing of a 7.8-mile gas lateral, which will supply 127,000 Dt/d to the combined-cycle plant in Orange County, on July 8. After multiple legal battles FERC signed off on the pipeline lateral July 9 and S&P Global Platts Analytics data shows the plant received its first 1,000 Mcf gas shipment on July 12.

The plant would boost gas generation in New York Independent System Operator territory by around 5% relative to June 2017, or between 4% and 7% on an average hourly basis based on maximum and minimum gas generation for all of 2017, assuming it operated at a 50% capacity factor, according to Platts Analytics data.

"Although it is impossible to predict an exact date of completion, we are planning to complete all testing by mid-August," Rumsey told Platts in July. Since completing commissioning of the power plant in May using oil, which is its back-up fuel, the facility has been "providing reliability benefits" in NYISO by being available to operate in times of stress to the grid, he said. "During the last heat wave, the facility was put on standby by New York's grid operator to meet the soaring demand. To date, we haven't been dispatched on oil."

The roughly 2,000 MW Indian Point nuclear power plant owned by Entergy and located about 20 miles north of New York City is scheduled to close the plant's two operational reactors — units 2 and 3 — in 2020-21. That plant supplies about 25% of the power consumed by the city and Westchester County.

CPV Valley and another nearby gas-fired plant currently under construction would have a combined nameplate capacity of 1,780 MW or 89% of the nuclear plant's capacity. The other gas plant, known as the Cricket Valley Energy Center, is an 1,100 MW facility under construction in Dover, New York.

Westchester County Republican state Senator Terrence Murphy is calling for New York's Indian Point Closure Task Force to immediately convene as a result of CPV's air permit denial.

"The task force has scheduled meetings, but Senator Murphy is asking them to forego that schedule and immediately meet to address the situation," said spokesman Michael Jefferson.

— *Jared Anderson*

FERC waives New York water review, freeing Northern Access 2016 gas project ... from page 1

the New York State Department of Environmental Conservation denied a Section 401 water quality certification, saying the application failed to avoid adverse impacts to wetlands, streams and fish and other wildlife habitat.

FERC August 6 found the New York review waived because the state failed to act within one year after the application was filed by National Fuel Gas Supply and Empire Pipeline. The commission was not convinced the Clean Water Act deadline was overtaken by the agreement between New York and the developer on a negotiated receipt date from which the one-year period would commence.

National Fuel spokeswoman Karen Merkel said the decision "removes a major barrier for an important project that will provide consumers with increased access to abundant energy supplies, while also improving reliability and resiliency of the energy grid." The company remains committed to the project and is developing a revised timeline, she said.

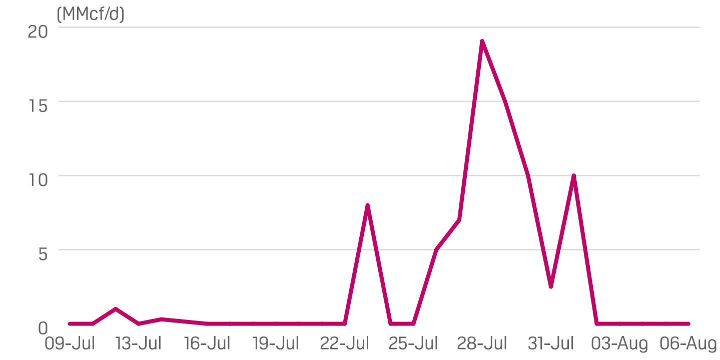
Don Santa, president of the Interstate Natural Gas Association of America, said FERC's ruling makes clear that, even with the consent of the applicant, a state agency cannot extend the deadline specified in statute by Congress.

NYSDEC is already planning an appeal.

"DEC disagrees with FERC's decision that sides with the fossil fuel industry over protecting our environment," the agency said. "DEC will appeal this decision by seeking rehearing and a stay from FERC. If FERC fails to reverse its misguided decision, DEC will appeal to the 2nd Circuit and seek a stay of any construction and continue to vigorously use every legal avenue to protect our state's resources."

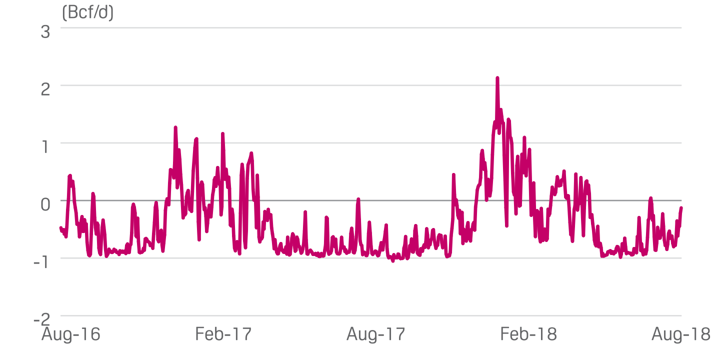
Rob Rains of Washington Analysis suggested that provided the US

NATURAL GAS DELIVERIES TO CPV VALLEY PLANT



Source: S&P Global Platts Analytics

US NORTHEAST REGION NET GAS EXPORTS TO CANADA

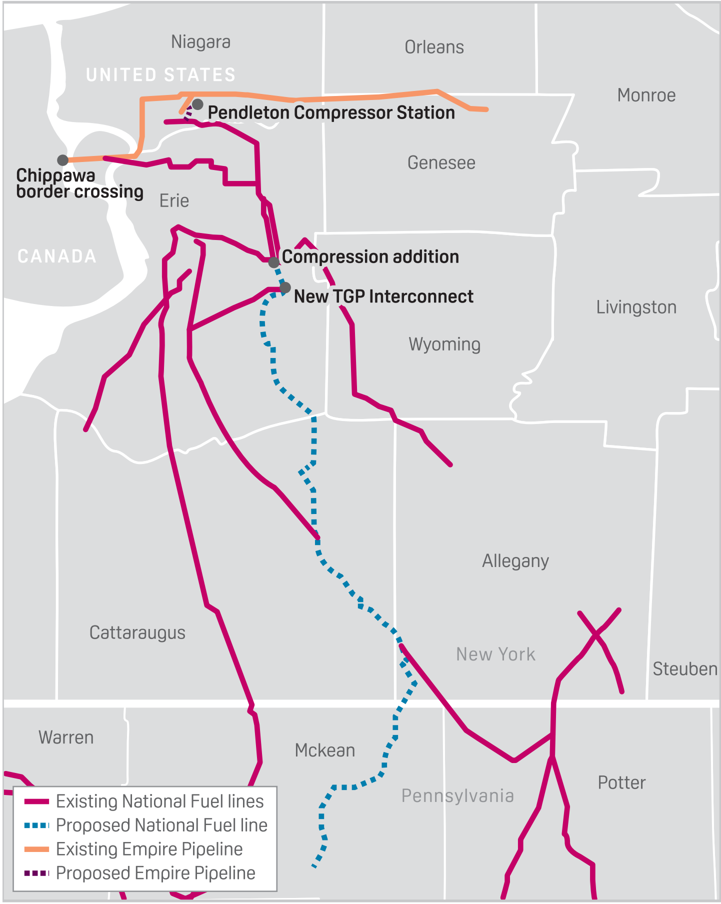


Source: S&P Global Platts Analytics

THE COURTS – TOP PENDING NATURAL GAS CASES

Docket	Court	Parties	Description	Date Filed	Latest Action
17-1164	2nd Circuit	National Fuel Gas Supply v. New York State Department of Environmental Conservation	Lawsuit challenging NYSDEC denial of Clean Water Act Section 401 permit for Northern Access 2016 pipeline	4/21/16	Oral argument held November 16, 2017; NYSDEC letter August 9 stating FERC's August 6 ruling that the NYSDEC waived its right to deny a clean-water certification by exceeding the one-year time limit is subject to challenge.
17-3895	2nd Circuit	Delaware Riverkeeper Network, et al v. NSYDEC	Petition for review of state stormwater permit for Millennium's Eastern System Upgrade	12/1/17	Motion to dismiss denied July 17; petitioner brief due August 24
17-2399	4th Circuit	Sierra Club v. US Forest Service	Suit challenging USFS and BLM decisions allowing for Mountain Valley Pipeline to traverse national forest	12/6/17	Court on July 27 vacated and remanded the USFS and BLM decision that allowed the pipeline to cross though national forest land
17-2406	4th Circuit	Sierra Club v. State Water Control Board	Petition for review of state Section 401 water quality certification for Mountain Valley Pipeline	12/8/17	Petition denied August 1
18-1042	4th Circuit	Orus Berkley v. Mountain Valley Pipeline	Constitutional challenge related to delegation of powers of eminent domain	1/9/18	Court on July 25 affirmed district court decision to dismiss case for lack of subject-matter jurisdiction on the grounds that the claim should have been brought through the FERC review process laid out in the Natural Gas Act
18-1173	4th Circuit	Sierra Club v. US Army Corps of Engineers	Petition for review of Army Corps Nationwide 12 permit for Mountain Valley Pipeline	2/13/18	Case calendared for oral argument September 28. Court order June 21 granted motion to stay Corps' verification of NWP 12, pending review; motion to lift stay pending appeal filed by Corps July 11; Corps letter to court arguing FERC stop-work order supports Corps' motion to lift existing stay
18-1077	4th Circuit	Appalachian Voices v. State Water Control Board	Challenge to Virginia State Water Control Board and Virginia Department of Environmental Quality Board decision on water quality permit for Atlantic Coast Pipeline	1/19/18	Case calendared for oral argument for September 28. Court denied petitioners' motion for stay August 7
18-1082, 18-1083	4th Circuit	Sierra Club v. Department of Interior	Challenge to right-of-way permit issued by National Park Service to Atlantic Coast Pipeline to cross Blue Ridge Parkway; consolidated with Defenders of Wildlife case challenging Fish and Wildlife Service's biological opinion and incidental take statement	1/19/18	May 15 court order vacating the Fish and Wildlife Service's incidental take statement; Opinion on August 6 vacating the right-of-way permit that NPS issued to ACP and explaining reasoning of May 15 action
18-1144	4th Circuit	Cowpasture River Preservation v. U.S. Forest Service	Challenge to Forest Service record of decision and permit for Atlantic Coast Pipeline to cross national forest	2/5/18	Case calendared for oral argument September 28. Opening brief by petitioners filed on August 7, response filed August 8
15-1323	DC Circuit	El Paso Natural Gas v. FERC	Lawsuit over rate issues following FERC order and administrative law judge ruling	9/11/15	FERC denied rehearing in the disputed docket May 3; unopposed motion by FERC granted June 20 to hold the case in abeyance pending the filing of any new petitions for review; docketing statement, underlying decision in case, certificate as to parties, rulings and related cases filed by El Paso August 6; motion to govern future proceedings filed by El Paso August 6
16-1081	DC Circuit	City of Boston Delegation, et al v. FERC	Challenges FERC order authorizing Algonquin Incremental Market natural gas pipeline project	3/3/16	Court order July 27 dismissing City of Boston delegation's petition for lack of jurisdiction and denying remaining petitions for review
16-1242	DC Circuit	State of North Dakota v. EPA	Lawsuit challenging EPA rules on methane emissions for new and modified oil and gas sector sources	7/15/16	July 24 status report from EPA recommends continuing to hold case in abeyance while agency review and reconsideration of New Source Performance Standards are ongoing
17-1098	DC Circuit	Allegheny Defense Project, et al v. FERC	Petition challenging Atlantic Sunrise project certificate order	3/23/17	FERC July 24 letter stating that opinion in 17-5084 (Delaware Riverkeeper FERC bias case) supports the commision's brief; response to FERC's letter filed by petitioners July 31
17-1220	DC Circuit	Town of Weymouth, Mass. v. FERC	Lawsuit over FERC's August 21 order on rehearing, denying town's request for review of tolling order related to Atlantic Bridge project	10/18/17	Brief by Weymouth, other appellants filed March 14; FERC brief filed May 29; petitioner's reply brief filed July 19, and final briefs due August 13
17-1271	DC Circuit	Appalachian Voices, et al v. FERC	Suit challenging FERC order approving Mountain Valley Pipeline	12/22/17	Motion for injunction filed July 20; petitioner briefs due August 21, FERC's brief November 5, respondent-intervenors' brief November 19; reply brief due December 3, final briefs due December 10; letter advising of additional authorities filed by FERC August 3; case consolidated with 18-1002, 18-1175, 18-1177, 18-1186, 18-1216
17-5084	DC Circuit	Delaware Riverkeeper Network, et al v. FERC	Lawsuit accusing FERC funding model of being unconstitutional and producing biased outcomes	4/24/17	Court judgment affirming district court's decision July 10
1:17-cv-01822	US District Court for the District of Columbia	Bold Alliance et al v. FERC	Suit challenging use of eminent domain for Mountain Valley, Atlantic Coast Pipeline projects	9/5/17	March 1 order denying motion to expedite request and denying motion for hearing on whether to dismiss complaint; notice of supplemental authority filed on July 30 by FERC stating opinions in 17-2084, 18-1042, and 17-3163 support commision's motion to dismiss for lack of subject matter jurisdiction
3:17-cv-11991	US District Court for the District of New Jersey	New Jersey Conservation Foundation v. FERC	Suit contending FERC is acting unconstitutionally by not ensuring lands seized by eminent domain are being put to a public use	11/22/17	Motion hearing held July 25 on motion to dismiss for lack of jurisdiction

NATIONAL FUEL NORTHERN ACCESS 2016 PROJECT



Source: National Fuel Gas Supply and Empire Pipeline

Army Corp of Engineers signs off on a pending CWA Section 404 erosion and sedimentation permit, the pipeline may be able to start work later this year and, barring a successful legal challenge, enter service in fall 2019.

Policy analysts at ClearView Energy Partners noted there are other state permits pending that are the subject of litigation.

The waiver decision came in an order (CP15-115) that also denied rehearing of the FERC certificate. FERC tread carefully on a request to clarify that developers need not obtain state permits from New York, for instance on stream crossings, water withdrawals, wetlands or air emissions. State agencies retain authority to grant permits for those resources, FERC said. "Unless a state or local agency, either through action or inaction, interferes with the timely development of the project, the question of preemption does not arise."

Moneen Nasmith of EarthJustice suggested FERC could also face litigation over the need for the project. Commissioner Richard Glick in a dissent faulted the majority for relying "exclusively on the existence of an affiliate precedent agreement to make its determination."

Nasmith criticized FERC on the 401 waiver for "elevating form over substance," arguing the agreement on a new date was functionally equivalent to withdrawing and resubmitting an application. "FERC is getting incredibly nitpicky" and overturning a decision in which the state found water quality could be impacted in a "very negative way," she said.

— Maya Weber, Eric Brooks

White House expected to tap DOE's McNamee to fill key FERC seat ... from page 1

Currently serving as executive director of DOE's Office of Policy, McNamee's background also includes a brief stop this year at conservative think tank Texas Public Policy Foundation, which says its mission is to defend liberty and has actively opposed wind power. He has also served as DOE deputy general counsel, represented energy and utility clients at McGuireWoods, worked as a policy advisor for Senator Ted Cruz, Republican-Texas, and been chief of staff for the Texas attorney general.

His outspoken support for fossil fuels and association with contentious DOE grid resilience initiatives suggest the confirmation process could be rocky.

McNamee wrote an Earth Day op-ed in *The Hill* this year to counter the narrative that fossil fuels are "wrecking the environment and our health."

"The facts are that life expectancy, population and economic growth all began to increase dramatically when fossil fuels were harnessed — and have continued to do so for the 200 years since the beginning of the Industrial Revolution," he wrote.

He has defended DOE's grid resilience initiatives against criticism that they would distort markets. The president and energy secretary's concern "is that a lot of the organized markets have distortions in them that aren't representative of an actual free-serving market," he told the Senate Energy and Natural Resources Committee at a hearing in July. "The thought ... is that you need to remove some of those distortions and get some more parity," he added.

The committee's ranking Democrat, Maria Cantwell of Washington, expressed concern that the administration was considering using emergency authorities under the Federal Power Act and Defense Production Act to address baseload retirements and fuel security issues.

"So the notion that the president wants to make electricity more expensive for many parts of America is just crazy," Cantwell said at the hearing, suggesting such a plan could raise rates "30-40% on big swaths of the economy."

Some groups are already opposing McNamee's potential nomination as a move by the White House to add a supportive vote at FERC for such a plan. Sierra Club and Public Citizen made critical statements Thursday. "His strong support for fossil fuels at the expense of other [resources] flies in the face of what FERC is supposed to do," said Tyson Slocum of Public Citizen, calling McNamee unqualified because of his role in the "radical bailout" proposal.

William Scherman, a partner at Gibson Dunn & Crutcher and a former FERC general counsel, by contrast said McNamee "is eminently qualified with great expertise to be a FERC commissioner; and if the Senate is properly doing advise and consent, he should be confirmed immediately." Scherman has represented FirstEnergy, a proponent of the administration's grid security efforts.

Timing of Senate confirmation may depend on the willingness of Senate Majority Leader Mitch McConnell to use scarce Senate floor time before the mid-term elections. Some Democratic objections to advancing to a vote on confirmation are seen as likely.

— Maya Weber

SUPPLY & DEMAND

EIA lowers expected Q4 gas marketed production by 0.21 Bcf/d to 89.62 Bcf/d

The Energy Information Administration continued to project that record production will keep prices in check in 2018, even as it tempered estimates for natural gas production and demand.

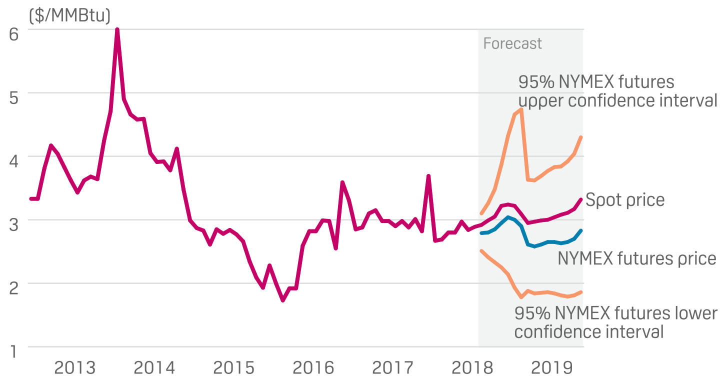
"With US natural gas production rising to record levels this year, prices will likely be lower than they would be otherwise, against a backdrop of low inventory levels and increased demand from the power sector," said EIA Administrator Linda Capuano.

The agency's August Short-Term Energy Outlook, released last week, estimated dry gas production will average a record high of 81.1 Bcf/d in 2018, up 7.5 Bcf/d from the prior year.

EIA lowered its forecast for Q3 Henry Hub natural gas spot prices by 11 cents to $2.88/MMBtu. The Q4 forecast also dropped 3 cents from July to $3.08/MMBtu. Henry Hub gas prices are forecast to average $2.96/MMBtu for full-year 2018 and $3.10/MMBtu in 2019, EIA said.

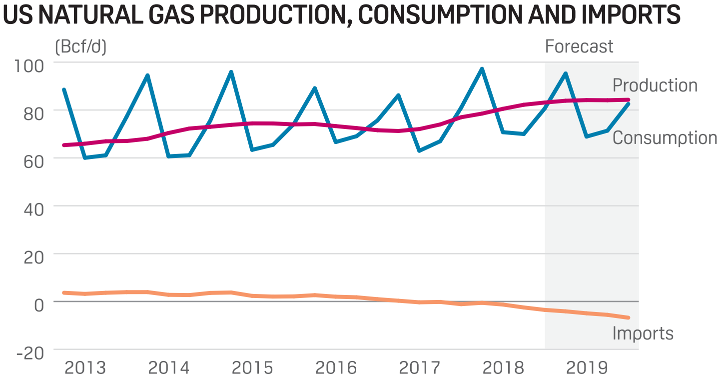
Turning to production, the agency lowered by 0.21 Bcf/d to 88.56/ Bcf/d its gas marketed production estimate for the US in Q3 and lowered its Q4 estimate by the same amount to 0.21 Bcf/d to 89.62 Bcf/d. For the full-year 2018, it projected production would average 87.3 Bcf/d, and for 2019 it estimated 90.8 Bcf/d.

US HENRY HUB PRICE HISTORY & FORECAST



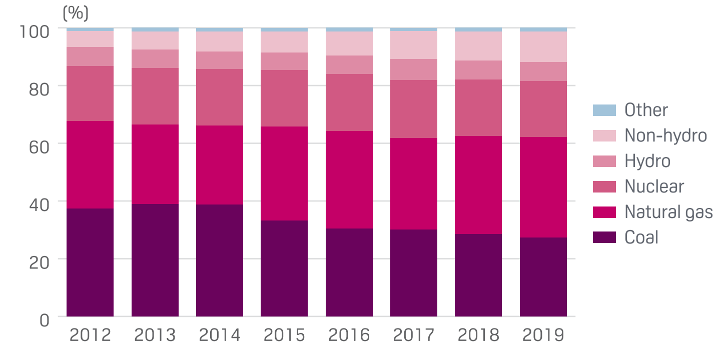
Source: Energy Information Administration Short-Term Energy Outlook

US NATURAL GAS PRODUCTION, CONSUMPTION AND IMPORTS



Source: Energy Information Administration Short-Term Energy Outlook

US POWER GENERATION BY FUEL SOURCE



Source: Energy Information Administration Short-Term Energy Outlook

The agency also pared back natural gas consumption estimates by 0.43 Bcf/d to 80.63 Bcf/d in Q4, but raised estimates by 0.08 Bcf/d to 69.98 Bcf/d for Q3. Consumption is seen averaging 79.57 Bcf/d for full-year 2018, down 0.08 Bcf/d from the prior month's estimate, and 79.47 Bcf/d in 2019, down 0.10 Bcf/d from the month-ago estimate.

Export growth is seen continuing.

"US natural gas exports are poised to reach record levels in 2018 and 2019," Capauno said. "EIA's August forecast expects new pipelines to Mexico will help push pipeline exports in 2018 to nearly 7 Bcf/d, before topping 8 Bcf/d in 2019."

EIA also estimates that LNG exports will grow from 1.9 Bcf/d in 2017 to 3.0 Bcf/d in 2018 and to 5.1 Bcf/d in 2019.

Amid hotter-than-normal weather this July, EIA estimated that natural gas consumption for power generation reached a record high. "The high demand likely slowed the pace of inventory injections," the agency said, noting inventories remained 565 Bcf lower than the five-year average for the week ending July 27.

The share of generation from coal is seen declining from 30% in 2017 to 28% in 2018 and then 27% in 2019, while the share from gas-fired power plants over the same period is estimated to rise from 32% in 2017 to 34% in 2018 and to 35% in 2019.

Capuano noted that solar generation is forecast to rise by nearly 23% this year, and by close to 12% in 2019.

Wind power is forecast to rise by 7% to 746,000 MWh/d in 2018 and by 5% in to 782,000 MWh/d in 2019.

— *Maya Weber*

LIQUEFIED NATURAL GAS

Chinese LNG buyers scramble for alternatives amid threat of tariffs on US imports

Chinese buyers that have secured US LNG for delivery this winter are mulling contingency plans for rerouting shipments if Beijing imposes 25% tariffs on US cargoes, traders that have been contacted by the companies told S&P Global Platts.

The discussions are a sign of anxiety in the global marketplace due to escalating trade tensions between the two countries.

It comes as Cheniere Energy, the biggest US exporter of LNG produced from shale gas, said August 9 that if the tariff threat becomes reality that may affect talks with the Chinese about future contracts. The company doesn't expect any economic impact relating to its existing long-term contract with PetroChina.

"There are lots of credible competitors in the world, and you should fully expect them to go into Beijing offices and say, 'Hey, we don't have this issue,'" Chief Commercial Officer Anatol Feygin said during an investor conference call.

Cheniere significantly narrowed its second-quarter loss on the strength of increased volumes from its Sabine Pass export terminal in Louisiana. Since export service began there in February 2016, Cheniere has shipped more than 400 cargoes to 28 countries, S&P Global trade flow software cFlow shows. China has received the third-largest number at 54, behind only South Korea and Mexico, the data shows.

China, which is expected to soon surpass Japan as the world's biggest LNG importer, is still the most important market for US export terminal developers. Cheniere has tied its growth plans in part to forecasts for increasing Chinese demand.

President Donald Trump recently said he would explore the possibility of expanding tariffs he has already imposed on US imports of Chinese goods with a 25% tariff on $200 billion worth of Chinese products. That prompted China on August 3 to announce that it has added US LNG to its list of products liable to a potential 25% import tariff if the US follows through.

LNG traders said this week they are being contacted by all the Chinese companies that have taken recent deliveries from the US asking where the buyers could take future American volumes besides China if necessary. One option would be Japan, which could then divert other non-US sourced volumes to China, but that would come at a price, the traders said.

Another option, the traders said, would be for China to source some LNG supply from Qatar, which has flexible volumes. That might cause some US volumes to stay in the Atlantic basin at lower prices, pressuring margins.

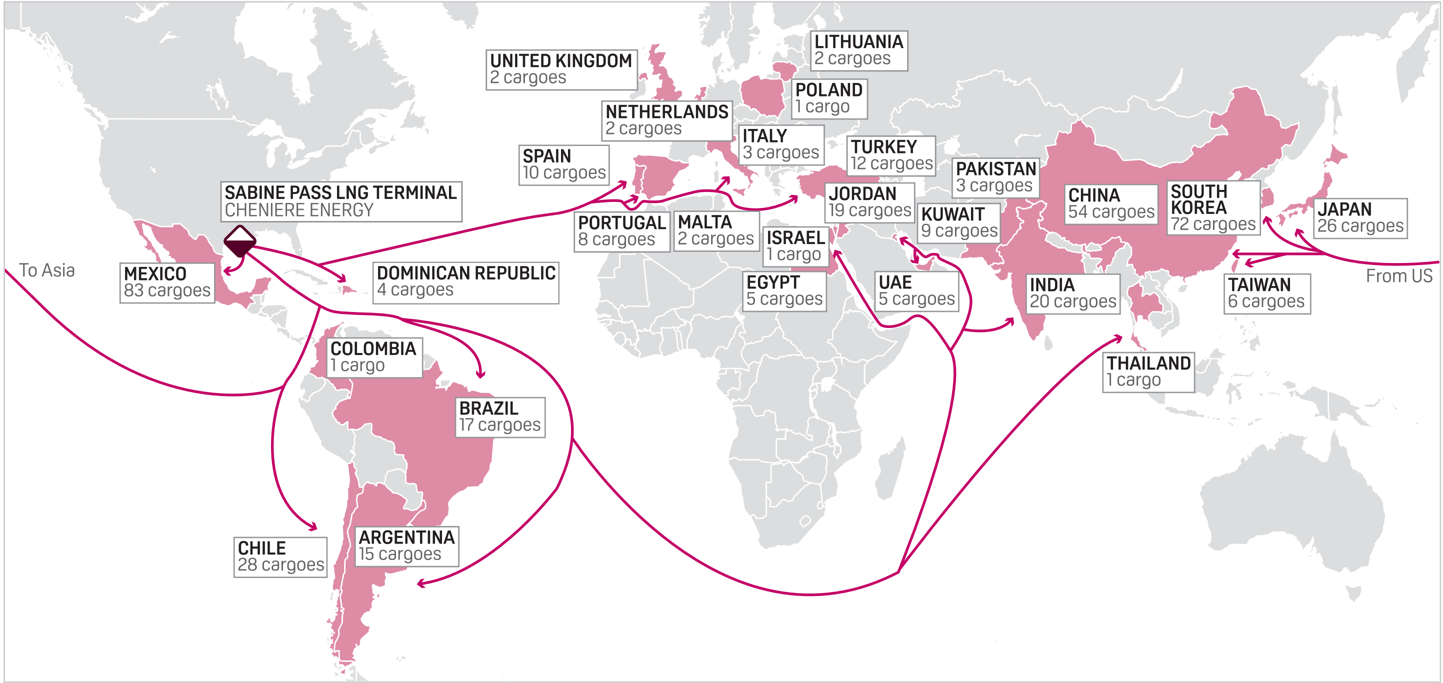
While the traders aren't seeing August and September US Gulf Coast spot price effects from tariff discussions, they expect prices in the US Gulf to come under pressure by October and November while China winter prices drift up.

Perhaps the biggest losers from Chinese tariffs on US LNG would be the American developers of second wave projects that are banking on Chinese foundation customers to finance construction of their terminals.

Cheniere's growth plans include commercializing a sixth liquefaction train at Sabine Pass and adding midscale liquefaction at its Corpus Christi, Texas, facility. In the near-term, Cheniere will be commissioning its first train at Corpus Christi and its fifth train at Sabine Pass, with both expected to begin producing LNG before the end of the year.

"We need ships if we are going to commission two trains at the same time, which we are," CEO Jack Fusco said during the earnings call. "So, we need access to shipping to get those molecules from the site around the world. We're working extremely closely with our Chinese customers and counterparties to just make sure that we

CHENIERE ENERGY'S EXPORTS FROM SABINE PASS TERMINAL



Note: Total cargoes delivered to date, including partial unloadings: 411
Cargoes currently en route to destinations: 13
Source: S&P Global Platts Analytics

continue to build on our relationship and we solidify that relationship. The early contracts of PetroChina are heavily weighted towards the winter. We're hopeful that the US and China can come to some resolution quickly."

In the long-run, Fusco said, Chinese tariffs "may slow down discussions with other Chinese counterparties for additional growth."

"From a high level, our business is a very long-term one, and it is well understood that China needs US LNG," he said.

Edward Chow, a senior fellow at the Center for Strategic and International Studies, said in an interview that the real question for the US LNG export industry is not whether China buys US LNG tomorrow, but whether the Chinese commit to additional long-term purchase contracts.

"Those are the kinds of deals that won't happen now," and are likely to delayed with the prospect of a 25% tariff, he said.

— Harry Weber, Scott Ickes, Maya Weber

Despite tariff threat, LNG 'important part' of China's future, says Sempra CEO

It is premature to forecast the impact of China placing tariffs on imported US LNG cargoes, Sempra Energy's CEO said last week. He asserted, however, that "LNG is an important part of China's future."

During an earnings call with financial analysts and others, Sempra's Jeffrey Martin was asked what he thought of reports that China was considering imposing 25% tariffs on US LNG exports in retaliation to tariff threats from the Trump administration. "We certainly see LNG as the key fuel to help [China] push coal off of their grid," he said. "And, frankly, the United States will always be one of the lowest-cost suppliers."

Asked what he thought of President Trump's comments last month about Germany having become "captive" to Russia and dependent on its natural gas supplies, Martin told said Trump was "spot on" with his comments.

Going back to 2014 and the European Union Charter, "there has been an emphasis on the entire EU community to diversify their fuel supply for their energy markets. So I think this is really an opportunity, which is why we have talked about the importance of Port Arthur and the ability of some of these facilities that we have in the Gulf to access the Western European market place."

"We continue to think that the drivers there are more around energy security and energy independence, which are somewhat different from the drivers that we have discussed at analyst conferences for Asia," Martin said.

"We certainly think that the political statements that the president has made, the work he has done with the EU, is actually quite constructive for the entire LNG industry here in the US."

Martin told analysts that each of Sempra's three LNG facilities are expected to provide what he called "their own marketing advantage." Sempra's three LNG trains at its Cameron facility in Hackberry, Louisiana, are expected to be producing in 2019. The trains will have combined capacity of about 12 million mt/year.

"Our focus is staying on Cameron trains 1, 2 and 3, but we have to begin discussions on what comes after that," he said.

Total, the French oil company, closed on its purchase of Engie's $1.49 billion stake in Cameron July 13, and Martin said Total has expressed particular interest in expansion at Cameron.

Cameron trains 4 and 5, which Sempra said will have combined projected capacity of about 10 million mt/year, have received FERC and DOE approval. A company spokesman said last week that no specific date for completion of the Cameron expansion had been set.

Martin described Total as having "an ambitious view of an integrated natural gas strategy," as it targets having about 40 million mt/year by 2020.

The company sees its Energia Costa Azul facility in Baja California, Mexico, 15 miles north of Ensenada, as eventually providing "destination flexibility," by which Martin means eventual access to Asian markets. He said this is why ECA has "drawn tremendous interest." The company has decided on a 2.5 million mt/year mid-scale, first-phase ECA project that would allow West Coast LNG to reach the market earlier, the company spokesman said.

On June 26, Port Arthur LNG entered into a preliminary 20-year agreement for the sale of 2 million mt/year of natural gas to the Polish national oil company, beginning in 2023, subject to reaching a definitive agreement.

The company told analysts that it views the Port Arthur, Texas, facility, which will be located near the Gulf of Mexico, as helping it eventually serve the European market.

— Jeffrey Ryser

Pembina anticipates FERC decision on Jordan Cove in 2019, possible service by 2024

Pembina Pipeline expects a decision in the second half of 2019 on its reapplication to FERC for construction of its Jordan Cove LNG export project.

With a positive ruling from the regulator, the project could be in service by 2024, President and CEO Mick Dilger said during an August 2 conference call. The Calgary, Alberta-based company is going "full steam ahead" in its pursuit of contracts to underpin the facility and is still receiving customer interest in it despite FERC's 2016 rejection of the project.

Pembina inherited the troubled project on the Oregon Coast in its 2017 acquisition of Veresen. The company has said it would not spend more than C$10 million per month on the facility. "We talked about spending C$10 million a month. We're well under that year to date," Dilger said. "There's not a chance we're going higher than that."

Pembina is trying to advance the Jordan Cove project. The company submitted a modified application for the facility, which has a conditional authorization from DOE to export as much as 0.8 Bcf/d of liquefied gas. Jordan Cove has sought to increase that authorization to 1.08 Bcf/d.

Dilger said differences in management philosophy led to Jordan Cove LNG CEO Elizabeth Spomer's departure in May.

"We're very intrusive owners, and that just wasn't a fit for Betsy," Dilger said.

Separately on August 2, Pembina reported second-quarter adjusted EBITDA of C$700 million, more than doubling the

C$297 million in the same quarter of 2017 following the Veresen acquisition. The S&P Global Market Intelligence consensus adjusted EBITDA estimate for the most recent quarter was C$650.8 million.

— Gene Laverty, S&P Global Market Intelligence

ENERGY PROJECTS

Commission halts work on full route of MVP project after court ruling

FERC has halted work on the full route of the 301-mile, 2 Bcf/d Mountain Valley Pipeline, in light of an appeals court ruling that struck the federal permits allowing the natural gas project to run through national forest land.

The decision marks another hurdle for a project that would move West Virginia production to downstream markets in Transcontinental Gas Pipe Line's Zone 5 near the Virginia-North Carolina border.

"Allowing continued construction poses the risk of expending substantial resources and substantially disturbing the environment by constructing facilities that ultimately might have to be relocated or abandoned," should federal resource agencies need to authorize alternative routes, FERC said in an August 3 letter order.

The order responded to a July 27 decision by the 4th US Circuit Court of Appeals vacating US Bureau of Land Management and US Forest Service rights-of-way and temporary use permits that allowed the project to traverse about 3.6 miles of the Jefferson National Forest.

There is no reason to assume the federal agencies would not be able to comply with the court's remand instructions and reissue the rights-of-way, the order said. "However, commission staff cannot predict when these agencies may act or whether these agencies will ultimately approve the same route," it added.

Among several problems, the court found BLM ran afoul of the Mineral Leasing Act requirement that it favor routes using existing rights-of-way unless those alternatives were impractical.

The court also found USFS failed to explain why it adopted findings in FERC's environmental impact statement even though USFS had previously disputed the percent efficacy of erosion barriers. Further, it found fault with changes to the forest management plan made to accommodate the right-of-way.

Natalie Cox, a spokeswoman for EQT, said the sponsor agreed with FERC that BLM and USFS will be able to satisfy the court's requirements, and suggested the agencies will be able to work quickly to supplement their initial findings. In addition, she said EQT believed BLM was correct about the impracticality of route alternatives. Given that MVP has halted work in the national forest, she said "we respectfully disagree with the breadth" of FERC's order temporarily halting work on the pipeline.

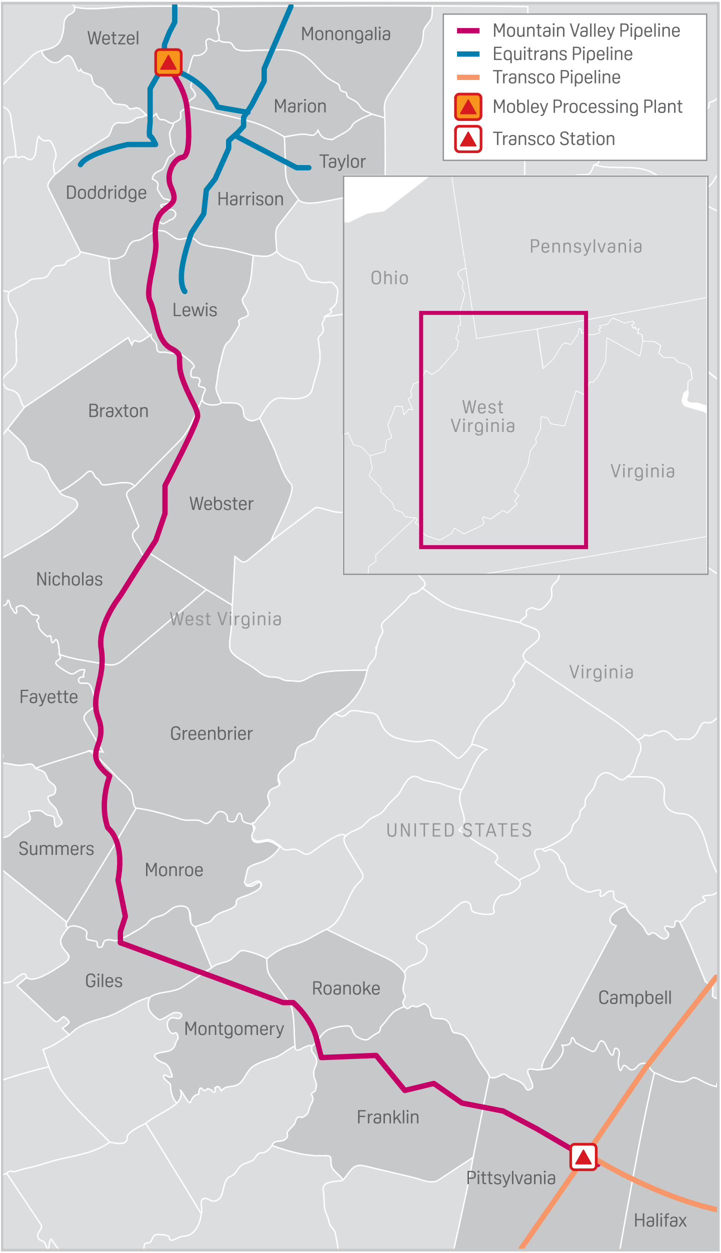
FERC's letter order allowed an exception for work deemed needed by the land management agencies or required to stabilize the right-of-way and work areas.

Permits for the project have faced multiple legal challenges from environmental groups. As a result of one such challenge, a US Army Corps of Engineers stream and wetlands crossing permit was stayed in June, pending litigation.

"We have said all along that we can't trust polluting corporations to protect our water and we're relieved to see construction temporarily halted along the entire route of the MVP," Sierra Club Senior Attorney Nathan Matthews said in a statement. The group will continue to fight natural gas pipelines until construction is stopped permanently, he added.

Lead sponsor EQT Midstream Partners has said pipeline startup would be delayed from a 2018 start until next year, and the order prompted some analysts to push their projections for a start further into 2019.

MOUNTAIN VALLEY PIPELINE



Source: Mountain Valley Pipeline

The latest construction status report shows that while tree clearing is near complete along the right-of-way, less than 10% of trenching is done. Status reports for the three compressor stations show some mechanical work has begun.

Gary Kruse of LawIQ said his group previously had not seen FERC order a complete stop to work on a project. Despite environmentalists' urgings, the commission previously declined to order such a halt after a court vacated a federal permit allowing incidental take of threatened species by the Atlantic Coast Pipeline.

— *Maya Weber*

MVP halt is 'surprising, but not fatal,' observers say, as analysts expect delay

Mountain Valley Pipeline planned to stick to an early 2019 in-service date after the federal government shut down construction on its 2 Bcf/d natural gas pipeline project over problems with right-of-way, but energy industry analysts said it is more likely to come online in the middle of 2019 at the earliest due to this delay and others.

In response to a FERC order to stop all construction on the approximately 300-mile pipeline project, the developer said it will still target a first-quarter 2019 service date. FERC ordered the halt after the 4th US Circuit Court of Appeals on July 27 vacated permissions from the US Forest Service and the US Bureau of Land Management for a 3.5-mile crossing of the Jefferson National Forest.

"We will continue to closely coordinate with all agencies to resolve these challenges as they work to have the right-of-way grants reissued," MVP said in an August 6 statement.

Some observers were skeptical of MVP's timeline. Height Capital Markets energy industry analyst Katie Bays, who even before the latest development said the project might not enter service until the fourth quarter of 2019, said in an August 6 analyst note with Josh Price that a late-2019 start date is probably more likely given "the extra layer of timing pressure coming from FERC."

The FERC certificate order for the project, issued in October 2017, required MVP to secure all federal, state and local permits. FERC can lift its order stopping construction once the federal permissions for the Jefferson National Forest are back in place, but the time required for the fix is uncertain.

Height Capital noted the analysis by the USFS and the BLM could alter the route, which would add time for review. "We have significant concerns about the court's remand of the [USFS] interpretation of the National Forest Management Plan as well, considering the court order requires [the USFS] to conduct a new analysis of certain amendments made to the Jefferson National Forest," it said.

In an August 1 interview, Bays said another thing that could delay the project is the chance that the 4th Circuit could refuse to reinstate a permit from the US Army Corps of Engineers that covers construction in West Virginia.

Washington Analysis energy analyst Rob Rains estimated the pipeline could enter service as early as late summer in 2019, a delay of four to six months. "FERC's decision to halt all construction is surprising, but not fatal," Rains said in a note.

ClearView Energy Partners also estimated delays from additional environmental reviews. It also pointed to a late July request from project opponents led by Appalachian Voices that asked the DC Circuit Court of Appeals to stay FERC's project authorization. "If the DC Circuit grants the stay request, the project could be on hold well into mid-2019, pending the court's decision on the appeal of the underlying certificate order, and [then] the ability to restart work could be constrained by the court's schedule, not the tempo of the re-issuance of the flawed federal permits," ClearView said.

The $3.5 billion to $3.7 billion project is a joint venture backed by EQT Midstream Partners, NextEra Energy, WGL Midstream, Con Edison Transmission and RGC Midstream. The pipeline will offer incremental takeaway capacity for Appalachian gas producers.

— *Ximena Mosqueda-Fernandez, S&P Global Market Intelligence*

Court vacates permit for Atlantic Coast gas pipeline to cross Blue Ridge Parkway

Presenting a further legal hurdle to the Atlantic Coast Pipeline natural gas project, the 4th US Circuit Court of Appeals August 6 vacated a permit the National Park Service issued that allowed the pipeline to cross under the scenic Blue Ridge Parkway.

The court also fleshed out reasoning for its May order vacating a Fish and Wildlife Service permit that authorized harm to threatened or endangered species from the construction.

The 600-mile, 1.5 Bcf/d pipeline project, stretching from Harrison County, West Virginia, to Virginia and North Carolina, is part of a batch of projects totaling 6.5 Bcf/d in capacity that would take Appalachian supply to downstream markets in the Mid-Atlantic region. S&P Global Platts Analytics is currently tracking over 10.5 GW of gas-fired generation in North Carolina, Virginia, and Maryland that is scheduled to come online by the start of 2025. Some 4 GW of gas-fired generation has already entered service in the three states since the beginning of 2017.

Like the neighboring Mountain Valley Pipeline, ACP's permits to cross forested, mountainous areas have been the target of legal challenges from environmentalists.

Considering the National Park Service right-of-way that allowed for the pipeline to pass under the Blue Ridge Parkway, the court found NPS invoked inapplicable laws to back its decisions. Moreover, it found NPS failed to assure the action was consistent with purposes of the scenic parkway and conservation goals of the national park system. It pointed to NPS' own studies about visual impacts on views from the parkway, and called the agency's lack of explanation on consistency issues "particularly troubling."

"We find it remarkable that counsel representing the National Park Service...would seem to take the litigation position that regards the premier conservation agency's role as no more than highway maintenance," said a footnote to the opinion, written by Chief Judge Roger Gregory.

Turning to the incidental take permit for species, the court found FWS failed to comply with requirements for when habitat can be used as a surrogate for setting a numeric limit on "take" of species.

It dismissed as "circular and unavailing" claims that some numeric limits were not possible because FWS lacked survey data or Atlantic Coast had not completed the surveys. "FWS cannot escape its statutory and regulatory obligations by not obtaining accurate scientific information," it said. While the agency said it lacked time, the court found FWS "incorrectly characterizes" the law in arguing it needed to complete its consultation within 90 days.

In some cases, such as for the Roanoke Logperch, a freshwater fish, the court noted that FWS had been able to set a numeric limit in another circumstance several years prior. In other instances, such as for the Indiana Bat, the court said FWS without explanation used about half the 3,400 acres of habitat it knew the pipeline would affect.

The decision came one business day after FERC halted work on the Mountain Valley Pipeline following a 4th Circuit ruling striking permits for national forest crossings for that project.

Given that action, "FERC should immediately halt all construction on the Atlantic Coast Pipeline," said Southern Environmental Law Center Senior Attorney Greg Buppert.

"This is an example of what happens when dangerous projects are pushed through based on politics rather than science," added SELC attorney DJ Gerken.

Aaron Ruby, a spokesman for Atlantic Coast, said the developers believed the court's concerns "can be promptly addressed through additional review by the agencies without causing unnecessary delay to the project." Atlantic Coast already has provided FWS with the information needed to issue a revised incidental take statement, he said. "We anticipate the agency will do so shortly."

As to the NPS permit, he said, "we believe the extensive public record and mitigation requirements already in place provide ample support for the agency to promptly reissue the permit."

— Maya Weber

PROPOSED ROUTE OF ATLANTIC COAST PIPELINE

Source: Dominion Energy

Environmentalists ask FERC to halt ACP work; Dominion says construction can continue

A day after the 4th US Circuit Court of Appeals struck down another permit for the Atlantic Coast Pipeline, environmentalists called on FERC to halt work on the natural gas project, and some analysts are also suggesting such a temporary halt is possible.

Southern Environmental Law Center, in a letter to FERC late August 6, said the court specifically acknowledged the vacated permits are mandatory authorizations required under federal law.

It quoted a footnote to the ruling that reads: "As noted previously, FERC's authorization for ACP to begin construction is conditioned on the existence of valid authorizations from both [the Fish and Wildlife Service and National Park Service]. Absent such authorizations, ACP, should it continue to proceed with construction, would violate FERC's certificate of public convenience and necessity."

The appeals court on August 6 vacated the NPS permit that allowed the pipeline to cross under the scenic Blue Ridge Parkway. It also fleshed out reasoning for its May order vacating an FWS permit that authorized harm to threatened or endangered species from the project.

In response to the ruling, Dominion Energy Transmission countered the environmentalists' view, saying "construction can continue as previously approved by FERC."

The opinion "has not changed anything with respect to implications of the vacatur of the [incidental take statement]," it wrote FERC August 7. Moreover, it said that only 0.1 mile of the route would cross under the Blue Ridge Parkway, that a comprehensive viewshed assessment has already been done, and that there is no reason to believe NPS will consider a change in the location of the crossing." Atlantic has not even yet requested a notice to proceed with work under the parkway which is wholly unrelated to the ongoing construction, it said.

"**Atlantic does not expect the NPS** to require any additional information or engage in any further public proceedings before taking action on remand," it said.

Analysts with Height Capital Markets, in a research note, said they believe the court ruling could have "ripple effects throughout ACP's regulatory landscape." In their interpretation, that raises the possibility FERC may halt construction, as it did last week with Mountain Valley Pipeline, "or the Virginia Department of Environmental Quality might cave to pressure to revoke needed permits for the project."

ClearView Energy Partners also saw the potential for FERC action. "We think this order could prompt FERC to issue a full work stoppage on ACP too, although it may take several more business days for this to occur," ClearView said in a note.

Similarly, Washington Analysis said the decision "likely adds some additional delay to ACP, and will likely require FERC to impose a temporary work stoppage order, like we recently saw for [MVP], despite the NPS [right-of-way] representing only one mile of ACP's route." It said the NPS permit would be the more difficult of the permits to restore, and may lead to either a stronger argument from NPS in several months or route modifications.

SELC has argued that allowing construction would foreclose new alternatives required as a result of the federal resource agencies' additional review.

— Maya Weber

Comments on New York prompt call for FERC chief of staff to resign

Public Citizen has called for the resignation of the commission's chief of staff, saying his public swings at New York for blocking natural gas infrastructure tar FERC's reputation as "an unbiased regulator."

The state's pattern in recent years of rejecting natural gas pipeline projects through its Clean Water Act authorities has frustrated developers of projects intended to give burgeoning Northeast supplies access to markets. It has also prompted some accusations that New York Governor Andrew Cuomo was driving politicized decision-making by state agencies.

It is relatively unusual, however, for FERC senior staff officials to wade into partisan politics.

Chief of Staff Anthony Pugliese first appeared to take on New York, and perhaps a few other states, in July.

In an interview with Breitbart radio, Pugliese faulted "parts of the country that are controlled by members of the Democratic party and others that are determined to ensure that no infrastructure goes through their state."

Last week, Pugliese reportedly repeated the criticism of New York during remarks before the American Nuclear Society.

Responding, Tyson Slocum, Public Citizen's energy program director, wrote Chairman Kevin McIntyre to ask on behalf of the group's 400,000 members for Pugliese's immediate resignation. He said the comment "belies FERC's mission and demonstrates hostility" to the state.

"Mr. Chairman, I do not need to tell you that a FERC chief of staff holding such animosity towards the nearly 20 million residents of a US state reflects poorly on the commission's mission and reputation of being an unbiased regulator," Slocum wrote.

Pugliese was appointed prior to McIntyre's confirmation, during the several months Commissioner Neil Chatterjee led the commission. He came over to FERC from the Department of Transportation where he "played a leadership role in the development and planning" of President Trump's infrastructure proposal, according to a FERC press release last August.

Among the natural gas pipeline projects blocked by New York are Williams' Constitution Pipeline, National Fuel Gas Supply and Empire Pipeline's Northern Access 2016, and Millennium's Valley Lateral Pipeline.

Both Northern Access and Valley Lateral were later freed from that obstacle when FERC found the state's CWA Section 401 water quality certification review waived on the grounds of delay.

New York's Department of Environmental Conservation has defended its actions as needed to protect the environment. It has pointed to prior water quality degradation from prior construction of pipelines with multiple stream crossings in the state.

On August 7, after FERC granted the waiver for Northern Access, the state slammed the decision as one that "sides with the fossil fuel industry over protecting our environment."

FERC had no immediate comment on Public Citizen's request or Pugliese's remarks about New York.

— Maya Weber

FERC's divide on need for Spire STL pipeline may signal future battles

Democrats on the commission said the Republican majority made the wrong call when it found a St. Louis-area natural gas pipeline to be in the public interest. The divide could preview court fights over the project and a battle at the commission, which is updating its policy for reviewing applications to build pipelines.

FERC on August 3 approved gas utility company Spire's 400,000 Dt/d Spire STL Pipeline gas pipeline, in a case where debate over public need was prominent but the majority found the pipeline was necessary.

"In virtually every pipeline order, the commission explains its obligation to balance the public benefits against residual adverse effects," Democratic Commissioner Cheryl LaFleur wrote in a dissent. "This is not simply a mantra to recite, but a standard that must be met to find a project in the public convenience and necessity. In light of the lack of demonstrated need, potential adverse economic and operational impacts, [unnecessary] use of eminent domain, and avoidable environmental impacts, I cannot make that finding in this case."

Democratic Commissioner Richard Glick dissented with a similar argument that the record failed to show that the project was needed. Project opponents also made such arguments in the review.

"The Spire project is the unusual case of a pipeline application that squarely fails the threshold economic test," applied by FERC under its 1999 certificate policy statement, LaFleur said.

The commissioner pointed to what she saw as flimsy evidence of need, a single agreement for transportation service with Spire STL's local distribution utility affiliate Spire Missouri. She said that while FERC has often used precedent agreements to show need, it can consider many other factors and should have done that in this case, in which the Missouri Public Service Commission raised concerns over the project's need and questioned its revenue requirements.

For example, the majority declined to require a market study that could have helped shed light on the potential cost savings of the new pipeline compared with existing pipelines, LaFleur said.

The majority said in the order that it is commission policy "to defer to the business decisions of shippers" if things seem to be appropriate. The majority found that the precedent agreement was enough evidence of need, and the fact that it was between affiliates does not mean it was "the result of unfair competition or affiliate abuse." Many pipelines are initiated by a single anchor shipper, and the Spire Missouri precedent agreement will be examined by the Missouri PSC, the majority said.

The majority was satisfied with Spire Missouri's explanation that it chose the Spire STL pipeline project not only because of access to abundant gas supply on Rockies Express Pipeline but because the Spire STL route avoided the New Madrid seismic zone.

"The commission is not persuaded by the protestors' argument that the aggregation of the facts in this case regarding the precedent agreement and the lack of a prior commission case on point in all respects renders unreasonable our reliance on existing precedent," the majority wrote.

In this case, all parties agreed that the precedent agreement of 350,000 Dth/d did not reflect an increase in gas demand around St. Louis, LaFleur said. "Rather, the precedent agreement reflects a desire to shift Spire Missouri's firm transportation capacity from an existing pipeline with [Enable Mississippi River Transmission, or MRT] to the Spire project," she said.

LaFleur said the record shows there will be financial harm and possible operational impacts to pipelines in the area and to their customers, including a potential 194% increase in rates for captive customers on MRT's East Line if Spire Missouri shifts its transportation capacity to the Spire project.

— *Sean Sullivan, S&P Global Market Intelligence*

Enbridge says Nexus and Line 3 Replacement projects progressing well

Enbridge said August 3 that its Nexus Gas Transmission pipeline project is nearing completion and remains on track to start up by the end of September, a welcome sign for Appalachian Basin producers eager for more takeaway capacity to downstream markets.

A 50-50 joint venture with DTE Energy, Nexus is expected to support up to 1.5 Bcf/d of incremental production in the US Northeast region, and will drive higher Northeast-to-Midwest region flows while expanding supplies in the Dawn Hub market in Ontario.

During a conference call with investors to discuss second-quarter financial results, Enbridge CEO Al Monaco said construction was going well in Michigan and Ohio, and the project was expected to be in service late in the third quarter, in line with the most recent guidance.

The company struggled with timelines after the six-month gap in a quorum at FERC delayed its certificate approval. The pipelines are key to moving more shale gas to market.

"We believe that North American energy fundamentals remain very strong," Monaco said.

Also August 3, Enbridge updated the progress of other gas and oil infrastructure projects. It said it doesn't see any further hurdles in its plans to start construction in Minnesota on the Line 3 Replacement project, with the state's public utilities commission due to issue a certificate in September.

"We're awaiting a written order and will work through the federal and state permits," Monaco said.

In late June, the Minnesota PUC approved a certificate of need and route permit for replacing the 380,000 b/d pipeline that ships Canadian heavy barrels from Edmonton to Superior, Wisconsin.

The federal and state permits include approvals from the US Army Corps of Engineers, state agencies including the Minnesota Department of Natural Resources and the Minnesota Pollution Control Agency, to name a few, Enbridge said in its earnings statement.

The estimated C$9 billion ($7 billion) project will increase pipeline throughput to 760,000 b/d and is a critical piece of infrastructure that will provide land-locked Alberta's oil producers with further market access, Monaco said.

Enbridge is targeting to start on-site construction in the first quarter of 2019 and is targeting a start-up in the second half of the same year, he said.

In Canada, the first phase of pipeline construction is complete, with about 40% of the pipe now laid, and the remaining segments to advance construction later this year, Monaco said.

In the US, the pipeline replacement work in Wisconsin is now complete and has been placed into service, he said.

— *Harry Weber, Ashok Dutta*

PIPELINES

ETP enjoys revenue boost from Rover volumes, pursues corporate simplification

Energy Transfer Partners cited a revenue lift from increased volumes on its Rover natural gas pipeline as it reported its second-quarter profit more than doubled even as it faced downtime from an outage on its Mariner East NGL pipeline system.

The latest financial results released last week come as ETP moves forward with plans to be rolled up by the parent of its general partner as part of an industry-wide trend toward corporate simplification.

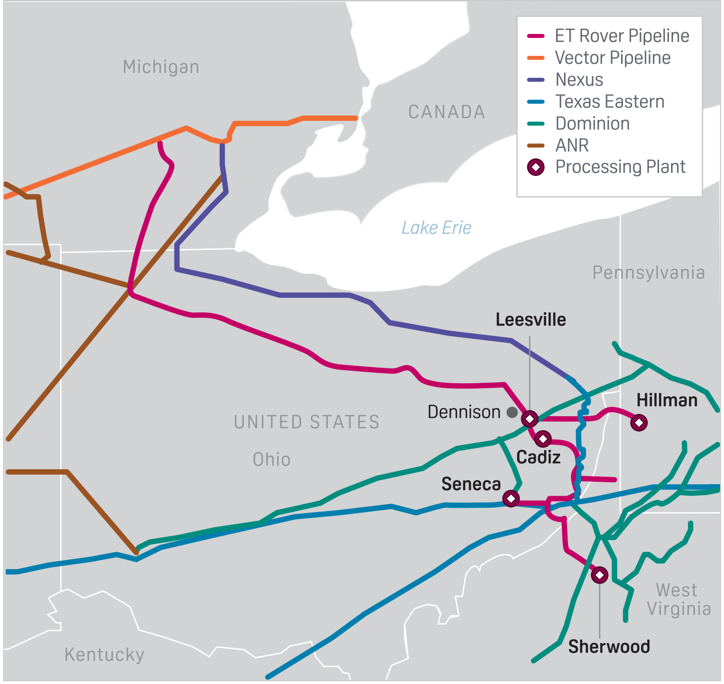
The midstream operator expects further strengthening as Rover ramps up to its capacity of 3.25 Bcf/d. In one advance, FERC granted certificate approval August 8 for Rover to construct a metering station that would receive up to 350 MMcf/d from an interconnect with gathering lines of Utica Gas Services.

The expansion, on Rover's Burgettstown Lateral in Jefferson County, Ohio, would give Appalachian Basin producer Range Resources a secondary receipt point into the supply area of Rover's system, FERC said in its order.

Flows on Rover have generally ranged between 2.1 Bcf/d and 2.3 Bcf/d since the beginning of June when it brought its interconnect with Vector pipeline into service, S&P Global Platts Analytics data showed. A further increase in flows along the pipeline and related production increase likely hinges on the start of service on two laterals, including Burgettstown. Rover still needs service authorization from FERC. A key issue is the pace of restoration after erosion problems.

For the April-June quarter, ETP reported net income attributable to its partners of $432 million, compared to profit of $202 million for the same period a year ago. Revenue surged 43% to $9.41 billion in the quarter, while total costs and expenses jumped 45% to $8.47 billion.

ROUTE OF ETP'S ROVER NATURAL GAS PIPELINE PROJECT



Source: Energy Transfer Partners, S&P Global Platts

Meanwhile, ETP is proceeding with a plan to be fully acquired by the owner of its general partner. The move is designed in part to make it less expensive to fund new pipeline projects.

The operator said it will merge with a wholly owned subsidiary of Energy Transfer Equity, which currently owns the general partner of ETP. The transaction calls for ETE's incentive distribution rights in ETP to be canceled.

Volatile commodity prices and rising interest rates have made companies organized as master limited partnerships less attractive in part because of IDRs, which affect how cash is divided between general and limited partners. The breakdown can increase cost of capital, making it more expensive for the operator to use equity to invest in new pipelines. A tax policy change by US regulators earlier this year also affected MLPs.

The ETP-ETE deal is expected to close in the fourth quarter subject to necessary approvals.

— *Harry Weber, Maya Weber*

Gas resilience proven during hurricanes, 'bomb cyclones,' says report

The natural gas system worked as designed when Hurricane Harvey flooded Houston, Hurricane Irma knocked out Florida's electricity and a strong winter storm pummeled the US Northeast, according to a gas industry group's report pushing back at the Trump administration's initiatives promoting coal and nuclear power.

The study, conducted by oil and gas market consultancy RBN Energy for the Natural Gas Council, rebutted a March report by the Department of Energy's National Energy Technical Laboratory that said coal and nuclear plants came to the rescue in the Northeast.

More coal- and oil-fired power was dispatched at the height of the bomb cyclone for economic reasons as prices for next-day gas soared, making coal and oil cheaper, the RBN study found. The gas system fulfilled all of its contracts for firm transportation, the study said; only gas users on "interruptible" contracts had to buy expensive gas in the next-day market. Commonly, local utilities contract for firm transportation to have guaranteed gas delivery for heating and power, while industrial users buy much cheaper gas on interruptible contracts.

Studies such as this are needed to provide ammunition to federal bureaucrats who are "the lone skeptic in the back room" on policy discussions, study author Rick Smead said in an interview.

American Gas Association COO Lori Traweek said "there is a frenzy to feed misinformation" about natural gas to the Trump administration.

Natural Gas Supply Association CEO Dena Wiggins said efforts like the new report seem to be changing minds in the administration. "The DOE is very willing to talk to us," Wiggins said. "We have not objected to a conversation about resiliency."

The DOE media office did not respond to queries about the administration's grid resilience stance. The department also could not provide an update to the status of a March request by nuclear operator FirstEnergy that it issue an emergency order requiring PJM Interconnection to pay the operating costs, bank debt and a fair profit to power plant operators with 25 days or more of fuel on site.

Emergency orders directly mandating power production and connections under Section 202(c) of the Federal Power Act have been issued only eight times since 2000, in response to catastrophic events such as the California energy crisis in 2000-01 and the great Northeast blackout of 2003.

As recently as May, memos leaked from DOE showed administrators considering the use of the national defense portions of the FPA to require power system operators to compensate coal and nuclear baseload power providers to ensure future grid resilience.

RBN's study echoed what industry trade groups have said since the Trump administration began using reliability as an argument for keeping coal plants from retirement: Natural gas has become more reliable as the shale gas revolution has shifted production out of the Gulf of Mexico's "hurricane alley" to onshore Texas, Oklahoma and Appalachia.

"**Shale gas has 'hurricane-proofed**' the industry for over a decade," a summary of RBN's report said, comparing the lack of any reaction on wholesale prices of gas at the benchmark Henry Hub to the 2017 hurricanes, a significant change from the experience during hurricanes Katrina and Rita in 2005, when Henry Hub prices skyrocketed as production from offshore the Gulf Coast was sidelined for weeks.

During Harvey, the gas system's problem was where to send surplus gas after petrochemical plants and refineries along the Gulf Coast were knocked out by the storm. "All the pipelines were being run from laptops by people at home [in Houston]," Smead said, illustrating the system's redundancy.

During Irma, the electric outages across Florida were caused by wind and storm damage to electrical wires, not a lack of gas for power generation, the study found.

— *Bill Holland, S&P Global Market Intelligence*

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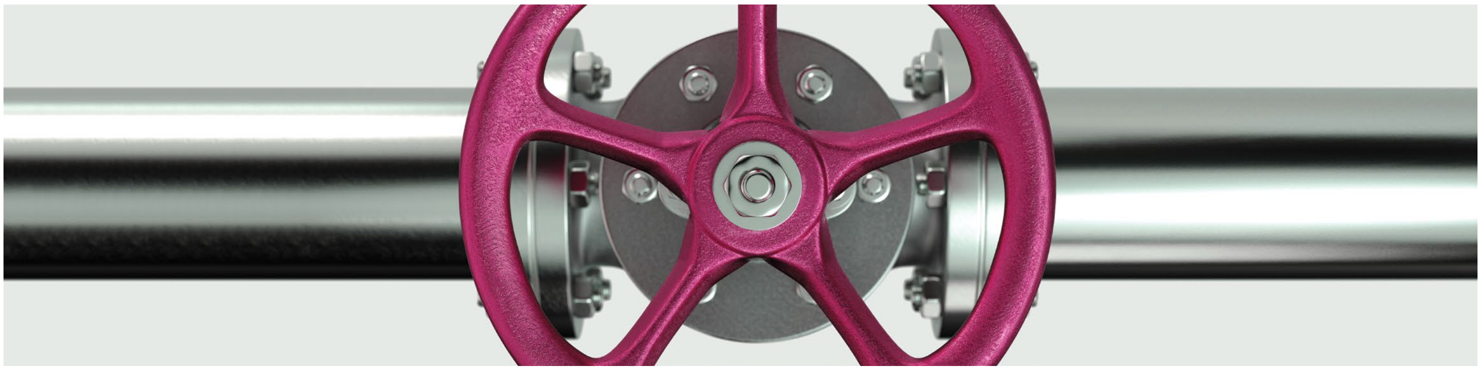

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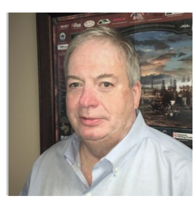

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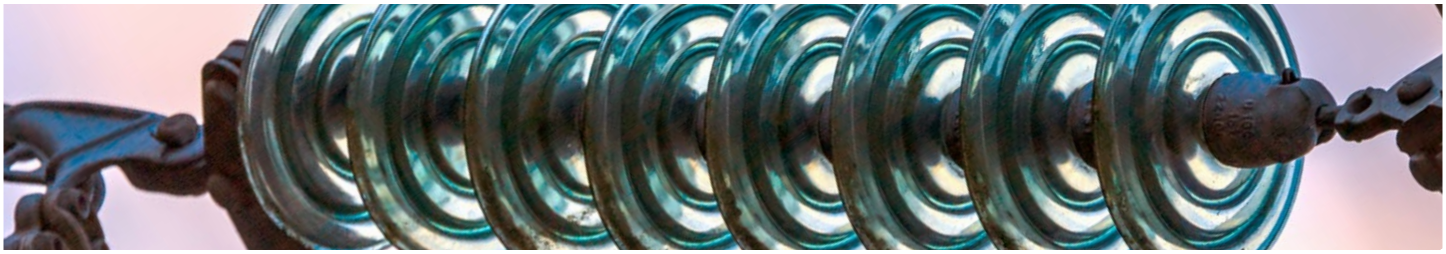

S&P Global Platts 11th Annual Nodal Trader Conference gathers traders, utilities, investors, regulators, and representatives from the ISOs and RTOs to examine essential market intelligence that will impact your trading business.

Hear from nodal market traders, regulators, and thought-leaders:

- Abram Klein, **Appian Way Energy Partners, LLC**
- Arun Eamani, **BioUrja Trading LLC**
- Joseph Bowring, **Monitoring Analytics**
- Pallas LeeVanSchaick and Beth Garza, **Potomac Economics**
- Adam Keech, **PJM**
- Fran Barrett, **PJM Connext**
- Dhiman Chatterjee, **MISO**
- Guillermo Bautista Alderete, **CAISO**
- Rana Mukerji, **NYISO**
- Jonas Tornquist, **EPEX Spot**
- Scott Miller, **Western Power Trading Forum**
- William W. Hogan, **Harvard University**
- Paul Cusenza and Michael Julian, **Nodal Exchange, LLC**
- Sean Collins, **FERC**
- Shahid Malik, **PSEG Power and Trading**
- Martin Ramirez, **Freepoint Commodities**
- Teoman Guler, **Roscommon Analytics LLC**
- Sergio Brignone, **Vitol B.V.**
- Mark Bulkeley, **DC Energy**
- David Applebaum, **Akin Gump Strauss Hauer & Feld LLP**
- Shaun D. Ledgerwood, **The Brattle Group**
- Ken Irvin, **Sidley Austin LLP**
- Ruta Skucas, **Pierce Atwood LLP**
- Eric Gray, **GE Power**
- Scott Holladay, **Yes Energy**

This years' can't-miss keynote addresses:

A View on the Health of US Power Markets
Shahid Malik
President
PSEG Power and Trading

The Value of FTRs and Electricity Market Design
William W. Hogan
Raymond Plank Professor of Global Energy Policy, JFK School of Government
Harvard University

2018 topic coverage includes:

- **Opening up a new nodal trading market in the West/ WECC**—Status of the PJM/Peak Reliability collaboration
- **Rulemakings of price formations** and how they impact the trading markets
- **ISO/RTO best practices** and Organized Nodal (LMP) updates across most active markets
- **Market manipulation**—A new era in FERC enforcement? Lessons learned from recent cases
- **Technological/data advancements**— Flexible generation technology's impact on renewable intermittency (LMP price design)
- **European power** spot market developments

Learn more:

Find further details, view the complete agenda, and request a brochure at: www.platts.com/nodaltrader

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