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NATURAL GAS WEEK®

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Key Weekly Spot Prices*

Flow Dates: 10/15 - 10/21

	$/MMBtu	Chg.	High	Low
Henry Hub	2.16	0.02	2.27	2.07
Transco Z6-NY	1.76	0.42	2.03	1.60
Algonquin	1.85	0.37	2.36	1.63
Dominion South	1.62	0.49	1.85	1.45
Chicago Citygate	1.88	0.14	2.15	1.71
Ventura	1.87	0.18	2.08	1.65
Waha	0.94	0.28	1.50	0.60
Katy	2.01	-0.14	2.25	1.85
SoCal Border	2.14	-0.40	3.15	1.20
NW Rockies	1.71	-0.03	2.09	1.40
NW Sumas	3.44	-0.75	4.40	2.08
AECO	1.64	0.21	1.89	1.43

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Northeast Pipeline Capacity Hits New Regulatory Roadblocks

Major Northeast gas pipeline projects suffered new setbacks last week, challenging utilities' supply reliability and prompting one company to intervene with a "virtual pipeline" of LNG.

In New Jersey, the Department of Environmental Protection (DEP) denied a water quality certificate to the proposed $1.1 billion PennEast Pipeline that would carry 1.1 billion cubic feet per day from the Marcellus Shale in Pennsylvania to near Trenton (NGW May6'19).

Officials said they based their denial on a recent 3rd US Circuit Court of Appeals ruling that PennEast could not use eminent domain to acquire property owned by the state and preserved for farmland and open space. In addition, Gov. Phil Murphy (D) said the state is "committed to transitioning New Jersey to 100% clean energy by 2050," indicating that a new influx of gas is not needed.

PennEast spokeswoman Patricia Kornick said the company expects to ultimately win the legal argument over eminent domain. Because DEP denied the application without prejudice, PennEast can submit a new application, she said, adding that an in-service date for the pipeline is uncertain.

The Pennsylvania DEP granted permits in 2017 for that state's portion of PennEast. The project is sponsored by NJR Pipeline Co., PSEG Power, SJI Midstream, Southern Co. Gas, Spectra Energy Partners, and UGI Energy Services.

Meanwhile, New York regulators, with the support of Gov. Andrew Cuomo (D), ordered utility National Grid to begin delivering gas to 1,157 customers stranded without service in a dispute over Williams' Northeast Supply Enhancement (NESE) project (NGW Sep.2'19).

The move may be another nail in the coffin for NESE, which has been approved by the Federal Energy Regulatory Commission but denied permits in both New York and New Jersey. Williams has been told it can resubmit its applications in both states, however (NGW Jun.10'19).

While continuing to accept applications, National Grid had refused to fill the new orders, saying it could not safely do so without the 24-mile NESE that would have added about 400 million cubic feet per day of additional gas to National Grid's system for customers in Brooklyn, Queens and Long Island.

National Grid said it will obey the orders of state regulators and began processing new applications last week.

Critics argue that Cuomo wants it both ways. He came out publicly against NESE while Climate Strike activities were under way in New York last month, then ordered National

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Roadblocks >> continued from page 1

Grid to find gas for the utility says it needs from NESE.

The governor and some antifossil fuel activists assert that National Grid can buy the gas it needs on the spot market. But the utility insists it cannot count on those supplies being available during peak demand periods and that it was safer to have a dedicated supply source (NGW Sep.9'19).

In a statement last week, Cuomo said it is "the fundamental responsibility of our utilities to provide reliable service. National Grid has acted in bad faith throughout this process — first by denying over 1,100 eligible customers with service and now by failing to fulfill its core responsibility."

In a note to Energy Intelligence, the Stop the Williams Pipeline Coalition said New York State's "investigations into National Grid's gas moratorium are revealing what we've known all along: that there is no gas shortage, and that the refusal to connect customers to gas is nothing more than a reprehensible political ploy."

A similar scenario is playing out in Westchester County, New York, where Consolidated Edison has declared a moratorium on new gas applications because of insufficient incoming pipeline capacity (NGW Jun.10'19).

Virtual Pipeline a Short-Term Fix

Faced with this shield wall stopping pipeline development, one utility has inked a contract with a company to provide LNG to its system via what it calls a virtual pipeline. The gas will be liquefied at one location and then trucked to generating units, where it is regasified and used for electricity generation.

Thigpen Solutions CEO Sam Thigpen told Energy Intelligence that his company has signed a multiyear contract with National Grid to supply LNG to the utility during peak demand periods. He said the contract calls for his company to supply up to two trucks an hour for eight hours a day that will be used for customers in the Hamptons and Long Island.

National Grid CEO John Bruckner has said the utility has supplied trucks carrying compressed natural gas for several years now, and that this virtual pipeline accounts for only about 2% of peak demand.

While good for his company, Thigpen questioned how effective it will be for the market in an interview with Energy Intelligence on the sidelines of the Gulf Coast Energy Forum in New Orleans last week. A supporter of renewable power, he said the idea of making the transition from fossil fuels to wind or solar "is a nice thing to hope for. But hope isn't a strategy."

The virtual pipeline approach "is OK for a short-term basis, but for the long term it is not sustainable," Thigpen said. "It's not a real solution, it's just pushing the problem down the road a little."

"It is a growth opportunity for us," he said. "But the simple fact is that you cannot build an infrastructure with trucks rolling through Manhattan. Wouldn't it be safer for everyone — including the environment — to allow a pipeline to be built instead of me rolling dozens of trucks through the streets? There is a big disconnect here."

Thigpen said his trucks can be halted by weather "just like everyone else. If the state closes a highway, then our trucks are stopped and that means that LNG is not going to make it to that site where it is needed. No gas means someone is not going to be able to heat their home."

John Sullivan, New Orleans

POLICY

Federal Leasing Ban Would Put 9 Bcf/d of Gas Off Limits

More than 9 billion cubic feet per day of gas production is at risk if the next US president bans energy leasing and hydraulic fracturing on federal lands — as at least one leading Democrat pledges to do — making already frustrated E&P shareholders even more skittish.

In the weeks since US Sen. Elizabeth Warren (D-Massachusetts) vowed via Twitter to halt new offshore and federal land drilling and to "ban fracking — everywhere," companies with the most exposure to those locations have lost capital market traction, according to William Featherston at Credit Suisse. Other Democratic presidential contenders have also suggested variations of fracking and leasing bans.

Untenable as some industry observers may believe an outright ban to be, it's rattling the market (NGW Jul.8'19). As a group, producers leveraged to federal drilling have underperformed the XOP, which tracks upstream companies listed on the S&P 500, by some 300 basis points. That suggests "nearly half the worst-case risk has already been priced into these stocks," Featherston said.

About 8% of US gas output would be placed off limits under a federal leasing ban, according to RBC Capital Markets, which said that includes all of the US gas produced by Royal Dutch Shell and Total. Ultra Petroleum and Talos Energy have 94% and 93%, respectively, at stake, according to the investment bank. Such a ban could take 23% of domestic oil production out of play, it said.

Which companies would have the most risk under a Warren administration? The list is long and distinguished. Plays with say they want to see a push by governing bodies, producers and consumers in the US and elsewhere working together to advance the transition toward a lower-carbon economy. Such sentiments were widespread at Energy Intelligence's Oil & Money conference in London this month, where industry leaders gathered to consider strategies for the coming transition.

Van Beurden and Dudley both favor active government guidance in order to achieve the net-zero emissions economy envisaged by the Paris climate accord, and they say to get there in future decades requires the right steps to be taken now.

Enthusiasm for greater government intervention, which is gaining traction in Europe, is far from uniform across the industry, however. In the US, where the shale revolution radically changed the oil and gas industry, many large companies remain unwelcoming to heavier regulations.

That is particularly important as the Trump administration rolls back existing industry regulations aimed to curb rampant leaks of methane, a potent greenhouse gas, even as some of the larger producers caution against it (NGW Sep.2'19).

Dudley said methane leaks and gas flaring are the "Achilles' heel of natural gas," and must be tackled head on. Before long "there will be nowhere to hide" for producers that ignore leaks or refuse to reduce gas flaring, which is rampant in the Permian Basin and Bakken Shale due to a lack of adequate takeaway pipeline capacity.

Dudley noted that the use of drones, satellites and aircraft now make detection more precise, but current detection technology is not widespread enough to make the message resonate (NGW Aug.26'19). When the National Oceanic and Atmospheric Administration released satellite data that tracked flaring in major shale plays between 2012 and 2015, the numbers were double producers' previous self-reported figures.

"We do need regulation, and that includes direct regulation of methane emissions across the value chain," Dudley said at Oil &Money. But bringing about such change won't be easy, particularly in the US, where regulations and their enforcement are strikingly inconsistent and can vary from state to state.

Texas regulators turn a blind eye and declines to rein in the flaring of gas, according to a recent investigation by Energy Intelligence (NGW Aug.12'19) But the governor of neighboring New Mexico this year increased environmental oversight of the industry while state legislators attempt to outlaw hydraulic fracturing altogether.

Shell's van Beurden suggests that executives must initiate meetings with consumers, suppliers and manufacturers to map out a plan to meet the Paris agreement's guidelines. But such coalition-building can only go so far.

For an industry-led transition to happen it will require "supportive or even compelling regulations" and incentives, van Beurden said. Governments need to be encouraged to act, instead of fretting about how the industry will respond to intervention. "We have to, first of all, help them over the hump and ask for it," he said.

Pressure from protesters such as the Extinction Rebellion in Europe and Climate Strike and the US, "and hopefully broader society," should encourage governments to work with different groups — even those with very different political agendas — to develop climate solutions, van Buerden added. That is in marked contrast to President Donald Trump's resistance to rein in emissions.

Van Beurden declined to comment on Trump administration policies, but he did note that Shell and others — including BP and Exxon Mobil — have been vocal in their support for the regulations on methane emissions that are now under threat. Rolling them back "is not the right way to go," van Beurden said.

He insists Shell and its peers don't want to be part of an industry that is "tarnished by some of the lowest standards," and he has no sympathy for those companies supporting rollbacks: "That's not in the interest of the industry, and it's definitely not in the interests of society."

Deon Daugherty, London

LNG

Budding US LNG Export Sector Faces Host of 'Challenges'

Despite the billions of dollars invested already, the US LNG export industry is still in its infancy and faces a host of external challenges as it matures, according to its chief lobbyist.

"We are just in the end of the first inning or the top of the second," Center for LNG Executive Director Charlie Riedl said last week at the Gulf Coast Energy Forum in New Orleans.

Riedl told Energy Intelligence on the conference sidelines that it's important to put the data in perspective when talking about the development of the domestic LNG sector. He noted that LNG export facilities are currently consuming only about 8% of total US gas production.

"Granted, these are exciting times for the industry," Riedl said. "But we must temper that with the reality that this industry is still growing — growing fast, but still growing. We are facing very interesting times and even more interesting challenges."

In the positive column, the industry next year will see a raft of export units coming on line: Corpus Christi LNG Train 3; Cameron LNG Trains 2 and 3; Freeport LNG Trains 2 and 4; and more capacity at Elba Island LNG (NGW Sep.30'19).

And new markets for that home-grown gas are opening up (NGW Sep.23'19). During one of the panel discussions at the conference, Venture Global LNG Chief Commercial Officer Tom Earl said that 50 countries are now buying LNG on the global market, and countries such as Gibraltar, Panama, Bahrain, Taiwan, Thailand and Vietnam are among those looking at turning to gas for power generation.

LNG Ltd.'s proposed Magnolia LNG export terminal in Lake Charles, Louisiana, has landed a contract to supply a power plant in Vietnam with 2 million tons of LNG annually for 20 years. Magnolia would produce up to 8 million tons/yr (1.1 billion cubic feet per day).

In the negative column are a raft of challenges that are "not of the industry's making," Riedl maintained. For example, he called the Trump administration's support of US LNG exports "full-throated, but the trade war has left us a casualty. We are the collateral damage from that war" (NGW May20'19).

Earlier this year, China raised retaliatory tariffs on US LNG to 25%, forcing Chinese buyers to "buy elsewhere. And there are other players in the global LNG market that they can buy from who will be very happy to take the place of US-produced gas."

Riedl said that in 2018 China received 28 US LNG cargoes, while this year's total so far is three. "They are still getting that gas, just not from US companies."

Riedl said project developers spend years laying the groundwork for LNG sales in a country like China, and with that market frozen out those firms are having to start from scratch to tap new markets — sometimes playing catch-up to rivals operating in countries not involved in trade wars.

At the same time, the gas industry is caught in a revolt by antifossil fuel forces here at home. "The fact that US LNG will introduce natural gas to countries that will help them cut their greenhouse gas emissions is just lost in all the shouting. Everyone is so focused on one small thing, they don't see the big picture," Riedl said.

"We want to be a partner in this movement to a future where renewables are the dominant part of the energy mix ... and I think it is unfair to call us a bridge fuel. Renewables are going to need natural gas. I think the term bridge fuel gives the impression that we will help someone get someone to a place, and then just vanish."

He stressed that the industry must re-evaluate how it responds to the green opposition (NGW Oct.7'19). "To be honest, we have a great message, but it is getting lost. We as an industry are not doing a good job and that has to change. We need to show the opposition that we actually want the same things that they want. We just aren't listening to each other."

Riedl's comments had a strong supporter in conference delegate Seong Oh, business development manager for Projects D&S Americas at Chart. "We have to stop trying to ridicule the other side," he told Energy Intelligence. "We need to work with them and not against them. We want the same things they want — but we need to get that message out and not one of confrontation."

John Sullivan, New Orleans

LNG

Venture Global Forgoes Spot Trading, Focuses Long-Term

Taking a distinctly different tack than its key rival, Venture Global LNG says it will continue selling the remaining uncontracted volumes from its recently sanctioned Calcasieu Pass export project on long-term offtake deals rather than trade them in the spot market.

"When you are the lowest-cost LNG producer, one thing you can be sure is the molecules are going to flow," Venture Global's chief commercial officer, Thomas Earl, told the recent Oil & Money conference organized by Energy Intelligence in London.

Venture Global is not considering trading the volumes, an approach taken by US LNG export pioneer Cheniere Energy, which has established subsidiary Cheniere Marketing for placing volumes in the spot and short-term market.

"Our model is finding the lowest-cost liquefaction and passing on the cost savings to our customers," Earl said. "It is not a struggle selling those volumes."

The developer in August announced a final investment decision (FID) for the 10 million ton per year (1.3 billion cubic feet per day) project in Louisiana with a commercial start date in 2022. The FID was achieved based on a combined 8 million tons/yr of binding long-term offtake deals signed with Royal Dutch Shell, BP, Edison, Galp, Repsol and PGNIG (NGW Jun.11'18).

Despite the lack of Asian customers among its lineup of offtakers, Earl is confident that Venture Global would be able to secure high-quality Asian buyers for its suite of projects. Apart from Calcasieu Pass, Venture Global is planning to build two larger LNG facilities at Plaquemines LNG and Delta LNG which would each have 20 million tons/yr (2.6 Bcf/d) of capacity.