The PIOGA press

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PA One Call bill signed into law

Most conventional gathering lines continue to be exempt

A long-running debate over mandatory participation in the PA One Call System by oil and gas gathering line operators was put to rest on October 30 when Governor Wolf signed Senate Bill 242.

The compromise measure ends the exclusion for production and gathering lines serving unconventional wells in Class 1 rural areas, but continues to exempt most lines operated by conventional producers.

The new law transfers authority over One Call enforcement from the Department of Labor and Industry to the Pennsylvania Public Utility Commission (PUC). It also establishes a Damage Prevention Committee to review alleged violations and prepare reports on damage prevention data as a way to improve pipeline safety in the Commonwealth.

Many of PIOGA's conventional operators object to mandatory One Call participation due to the exorbitant costs of participating in the program. Unconventional operators on the whole did not oppose mandatory participation. PIOGA worked closely with lawmakers to forge a compromise as SB 242 moved forward this year, and we were also able to include a provisions securing a pair of seats for the oil and gas industry on PA One Call's board of directors. This should provide a more effective forum for addressing the cost concerns expressed by members.

PIOGA spent much of last year fighting efforts to end the exemption, pressured by a December 31, 2016, sunset provision to the PA One Call Law. Late in the year, lawmakers approved a simple one-year extension to the law, providing some breathing room to efforts to come up with a solution all parties could live with.

SB 242 as originally sponsored by Senator Lisa Baker (R-Luzerne) transferred One Call authority to the PUC, but also ended the exemption for all gathering lines. The bill was later amended to exclude certain pipelines serving conventional "stripper wells," defined as oil and gas wells with a maximum daily average production that does not exceed 15 barrels or 90,000 cubic feet of natural gas during any 12-month consecutive time period. Exempt "stripper well lines" must have a nominal inside diameter of eight inches or less and carry oil or natural gas produced exclusively by one or more stripper wells and not be regulated by federal pipeline safety laws.

The bill passed the Senate by a 50-0 vote on June 21. In the House, PIOGA worked with Consumer Affairs Chairman Robert Godshall (R-Montgomery) to secure an amendment that provides two seats on the One Call System Board of Directors—one representing the conventional oil and gas industry and one for the unconventional industry. SB 242 was approved by the House by

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Severance tax legislation will 'get its day in court,' House leader says

The following article was published on October 31 by Pennsylvania Legislative Services (PLS). It is reprinted here with permission.

Talked about more this budget cycle than in recent memory, a tax on Pennsylvania's natural gas extracts has been a divisive issue for many different camps in the state's General Assembly.

While a number of proposals have been seen as the lead concept that would apply revenue from a severance tax on a more universal statewide basis than under the current impact fee, no stand-alone proposal has progressed as far as Representative Gene DiGirolamo's (R-Bucks) House Bill 1401.

That legislation, which advanced from the House Finance Committee for consid-

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a vote of 188-1 on October 18. The Senate concurred unanimously with the House amendments on October 23 and sent the bill on to the governor.

The new law is known as Act 50 of 2017. Most provisions take effect 180 days after the governor's approval.

The PA One Call System alerts utilities and other participants within an intended digging area and prompts them to mark where their facilities are located on that property. State law requires contractors and residents to contact PA One Call at least three business days prior to excavation.

PIOGA's perspective

"While we believe that there are important reforms needed to the system, such as ensuring that the fees charged by Pennsylvania One Call reflect the costs of services being provided to each excavator and facility owner, especially providing to all excavators and facility owners the cost benefits of the system's Member Mapping Program, and many other reforms, we also recognize the current legislative realities and the need to reauthorize the law at this time," said PIOGA President & Executive Director Dan Weaver. "We appreciate the commitment that has been made to continue this reform dialogue and for the voice that PIOGA will have in those discussions."

PIOGA also recognizes that concerns have been raised about retaining the connection between Pennsylvania law and the federal pipeline laws and regulations regarding the treatment of oil and natural gas production and gathering lines. This new law reflects a compromise among various stakeholders, including PIOGA and other representatives of the oil and gas industry, the Public Utility Commission, and the Pennsylvania One Call System. These provisions are intended to clarify the types of lines that are mandated to report to the Pennsylvania One Call System and reduce the scope of the lines not required under existing law to participate by requiring the larger diameter and higher pressure lines of the unconventional natural gas industry to report with the Pennsylvania One Call System and the larger diameter lines associated with the conventional oil and gas industry to also report to the One Call System.

These changes are consistent with, and responsive to, the concerns underlying the federal government's current rulemaking addressing additional safety regulation of oil and natural gas lines. However, and more importantly, Act 50 retains the vital connection between the Pennsylvania law and the federal laws and regulations pertaining to pipeline safety standards—a connection that exists in the Gas and Hazardous Liquids Pipeline Act (Act 127 of 2011) and the Public Utility Code. Therefore, should the federal government make changes in the future—presumably to expand the scope of the federal standards—these changes will automatically be reflected in the Pennsylvania law without a need for further amendments, as is the case with Act 127 and the Public Utility Code.

PIOGA thanks Senator Baker and Representative Godshall for their willingness to work with all stakeholders to achieve a solution.

Other reactions

"This bill is a substantial improvement in prevention and protection, building upon a solid and proven system," Senator Baker said after the bill cleared the General Assembly. "We are extending a sound law and expanding its reach to further provide community and worker protection."

In a news release, the PUC said it plans to use a dedicated enforcement team and damage prevention program modeled after other successful state efforts, to target a 50 percent reduction in hits within the next five years.

"We thank Senator Baker for her prime sponsorship of this important legislation and the General Assembly for addressing this key safety issue," said PUC Chairman Gladys M. Brown. "This is a step forward for utility, contractor and consumer safety in Pennsylvania and we will now turn our attention to implementing these improvements."

The PUC said it has been a strong advocate for changes in the PA One Call program aimed at addressing key concerns, such as:

- Facility owners who do not join PA One Call;
- Excavators who do not call before digging;
- Entities who do not respond when alerted of a project;
- Structural damages that are not reported; and
- Violations that are not enforced.

Legislative Budget and Finance Committee report

A joint House-Senate committee released a staff report the same day that the Senate passed SB 242 looking into a variety of aspects of the PA One Call System, to assess its financial condition, governance and management policies and to compare Pennsylvania's system with call-before-excavating laws and programs in other states. The Legislative Budget and Finance Committee's report came to these conclusions:

- PA One Call has carried out all the material aspects of Pennsylvania's One Call Law and the system meets the best practices standards developed by the Common Ground Alliance.
- States vary greatly in how they structure One Call Systems. None of the 17 states that were reviewed contracts out the functions to a private entity. Six of these states have a Damage Prevention Committee, which is included in SB 242. Of all the 50 state programs, Pennsylvania is unique in that its law contains a sunset provision.
- States vary greatly in assigning the agency that oversees the law. By reviewing programs in all 50 states, 29 rely upon a public utility type of agency to oversee the law. Again, transfer of authority to the Pennsylvania PUC was a key feature of SB 242.
- Pennsylvania is one of only five states that exclude Class 1 production and gathering lines. This occurs through a reference to federal pipeline safety laws and regulation, which Congress has asked the Pipeline and Hazardous Materials Safety Administration (PHMSA) to review. To date no final regulation has been proposed to change the program *(see article on page 4)*.
- While convoluted, the PA One Call rate structure appears to be reasonable and the costs are pertinent to operating the system and appear to be reasonable based upon the system's bylaws.
- PA One Call System top executives have the highest compensation of any similar system. Only the CEO of the Texas system has a higher compensation level. Further, the top executives are family members who would be prohibited under Pennsylvania state employee policies dealing with nepotism, and generally violate acceptable human resources policies.

The 97-page report and a summary can be found at lbfc.legis.state.pa.us/Reports.cfm?ReportID=302. ■

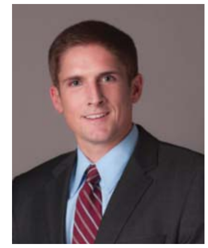
New PHMSA administrator confronts outstanding pipeline safety rulemaking proceedings

Howard R. Elliott was officially sworn in on October 30 as the new administrator of the Pipeline and Hazardous Materials Safety Administration (PHMSA). Administrator Elliott, who spent four decades in the freight rail industry and received a lifetime achievement award from the Association of American Railroads for hazardous materials transportation safety, is well positioned to lead the federal agency that administers the nation's hazardous materials transportation safety program. However, his tenure is likely to be defined, at least in the near term, by how he handles two significant pipeline safety rulemaking proceedings that PHMSA initiated during the previous administration.

Pipeline Safety: Safety of Hazardous Liquid Pipelines, PHMSA-2010-0229

In October 2015, PHMSA issued notice of proposed rulemaking (NPRM) that contained significant changes to the hazardous liquid pipeline safety regulations in 49 C.F.R. Part 195. The proposed changes included requiring operators of gravity lines and unregulated rural gathering lines to submit certain reports; requiring inspections of pipelines in areas affected by extreme weather, natural disasters and other similar events; requiring periodic assessment of pipelines not already subject to the integrity management (IM) program regulations; requiring operators to have leak detection systems on non-IM pipelines; establishing more stringent pipeline repair criteria; and requiring operators to make pipelines in high consequence areas (HCAs) capable of accommodating inline inspection tools within 20 years, unless the pipeline's construction would not permit that accommodation.

Author:



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Babst Calland
Attorneys at Law

PHMSA received more than 100 comments on the NPRM, including from several pipeline industry trade organizations and companies. These industry commenters expressed significant concerns with many aspects of the NPRM. The American Petroleum Institute (API) also submitted a third-party cost-benefit analysis of the proposals, which indicated that the total annualized costs would exceed $600 million, more than 25 times the $22.4 million estimate that PHMSA provided in its preliminary regulator impact analysis.

In February 2016, PHMSA presented the NPRM to the Liquid Pipeline Advisory Committee (LPAC), the federal advisory committee that reviews PHMSA's rulemaking proposals for hazardous liquid pipelines. The LPAC recommended that PHMSA make certain changes to the NPRM's proposals. Following the LPAC meeting, PHMSA received additional input from the Office of Management and Budget (OMB) about the lack of supporting data and potential economic impacts of the NPRM.

On January 13, one week before the inauguration of President Donald J. Trump, PHMSA released the pre-publication version of the final rule, which was not yet legally effective. PHMSA did not include all of the NPRM's proposals in the pre-publication version of the final rule. For example, PHMSA did not require operators of regulated rural gathering lines to conduct periodic pipeline assessments or install leak detection systems, and did not impose more stringent repair criteria and remediation deadlines for non-IM pipelines. PHMSA made these and other changes to address concerns raised by LPAC, OMB and commenters.

On January 20, shortly after President Trump's inauguration, the White House issued a memo imposing a temporary moratorium on most regulatory actions. The memo indicated that any final rules awaiting publication by the Office of Federal Register (OFR) should be withdrawn and returned to the originating agency for further review. PHMSA's Part 195 final rule, which had not yet been published by the OFR, was returned to the agency for further review under the terms of that memo.

According to the Department of Transportation's latest significant rulemaking report, PHMSA expects to resubmit the Part 195 final rule to the secretary of transportation for approval this December. The secretary's office is expected to complete its review and resubmit the final rule to OMB for approval in January 2018. If these projections hold, publication of the final rule in the *Federal Register* is expected to occur in late April.

Pipeline Safety: Safety of Gas Transmission and Gathering Pipelines, PHMSA-2011-0023

In April 2016, PHMSA issued an NPRM that proposed extensive changes to the safety standards for gas transmission and gathering lines in 49 C.F.R. Part 192 and the federal reporting requirements in 49 C.F.R. Part 191. To address certain mandates in the 2011 reauthorization of the Pipeline Safety Act and related National Transportation Safety Board safety recommendations, PHMSA proposed new requirements for verifying the maximum allowable operating pressure and materials used in onshore steel gas transmission lines. PHMSA also proposed new requirements for conducting integrity assessments of certain transmission lines in moderate consequence areas; new corrosion control, pipeline repair and recordkeeping requirements; and changes to the integrity management requirements for gas transmission lines in high consequence areas.

In addition to the proposals for gas transmission lines, PHMSA proposed significant changes to the regulations for onshore gas gathering lines as well, primarily to address the growth of new pipeline infrastructure in the nation's shale plays. The proposed changes included new definitions for determining what qualifies as an onshore gas gathering line, new safety standards for regulated onshore gas gathering lines, which would apply to certain historically exempt onshore gas gathering lines in rural locations, and new reporting requirements for all gas gathering lines, whether regulated or not.

PHMSA received more than 400 comments on the NPRM, including from numerous pipeline industry trade organization and companies. As part of its comments, API submitted a third-party cost-benefit analysis of the proposed rules. The analysis found that PHMSA made numerous errors in developing the preliminary regulatory impact analysis for the NPRM, and that the agency overestimated the benefits of the proposed rules by approximately $2.9 billion to $3.1 billion and underestimated the costs by approximately $32.8 billion.

In January, PHMSA held an initial meeting of the Gas Pipeline Advisory Committee (GPAC), the federal advisory committee that reviews its gas pipeline rulemaking proposals, to begin considering the NPRM. PHMSA held another GPAC meeting to continue reviewing the NPRM's gas transmission line proposals in June and has scheduled a follow-up meeting for December. While not yet announced, PHMSA has indicated that the agency will hold additional GPAC meetings in 2018 to consider the gas gathering proposals and other aspects of the NPRM. According to the Department of Transportation's latest significant rulemaking report, PHMSA expects to issue a final rule in August 2018. That schedule assumes that PHMSA will present the final rule to the secretary's office for consideration in March, a timeline that seems very unlikely given the current pace of the GPAC's review of the NPRM. ■

2017 Annual Oil & Gas Tax and Accounting Seminar

Hosted by:
PIOGA's Tax Committee & Arnett Carbis Toothman

Thursday, November 30, 2017

Hyatt Place Pittsburgh South Meadows Racetrack & Casino
212 Racetrack Road, Washington, PA 15301

8:30 AM - Registration & Continental Breakfast
9:00 AM to 4:30 PM Tax & Accounting Seminar

"Nothing is certain except death and taxes" - Benjamin Franklin

The PIOGA Tax Committee is pleased to partner again with Arnett Carbis Toothman (ACT), to host a special oil and gas tax and accounting seminar.

The course will offer 6.0 CLE credits for attorneys licensed in Pennsylvania and West Virginia (pending approval of CLE Board) as well as 7.2 hours of CPE for accountants. The fee for this one-day seminar, which includes all handout materials, meals, and beverages, is $250 per person for PIOGA members and $350 for non-members. The overall coverage of such a variety of technical topics for the oil and gas industry is not found in any other single location and definitely not in a one-day event such as this.

What will be covered in the seminar?

As your company tries to navigate the current accounting and tax environment, this seminar by Arnett Carbis Toothman associates will present ideas on how to plan for 2017 and 2018 taxes and learn the latest news in accounting and tax.

ACT has adjusted its presentation this year to include not only changes in various federal, state and local taxes, but to approach each area to explain how oil and gas investors, operators, royalty owners, service companies and professionals should maximize tax and economic benefits. Planning for current and future opportunities and challenges will be emphasized.

Each participant will receive a detailed outline and course materials and an extensive resource section with copies of industry definitions, geological data, and data from federal, state and local tax authorities. This interactive seminar will provide ample opportunity to for attendees to network, offer your insights about oil and gas, and ask questions. Multiple ACT presenters will utilize their years of experience in the oil and gas industry to explain key tax benefits such as the **Marginal Well Credit** as well as standard tax issues that everyone in the oil and gas industry should be aware of and should plan for. They will also cover current proposals for federal and state tax law changes.

Please plan to attend this seminar! The topics will be very beneficial, timely and exciting for participants regardless of their experience in the oil and gas industry.

Who should attend?

Accountants, attorneys, bankers, insurance agents, royalty owners and investors will get value out of this seminar.

Location Information:

Hyatt Place Pittsburgh South Meadows Racetrack & Casino
212 Racetrack Road
Washington, PA 15301

A room block with a discounted rate of $119 plus tax has been secured at the Hyatt Place. To make a reservation call 724-222-7777 and reference PIOGA Tax Seminar. Deadline for the discounted rate is November 9.

Register by November 23 at pioga.org/events

Meet your newest board member: Steve Williams, Summit Petroleum, Inc.

Steve Williams is approaching his 29th year in the Appalachian oil and gas industry. Steve attended Kent State University for geology and began his career with The East Ohio Gas Company in 1989. During his 18 years with East Ohio, now Dominion Energy, Steve held various operations positions in gas measurement and regulation, gas control, gas transmission and storage, and production gathering.

After leaving Dominion, Steve was involved with the acquisition and operation of 350-plus miles of gathering pipeline from The Columbia Pipeline Group in Ohio and helped create and operate the newly formed Cobra Pipeline Company.

Currently, Steve is the Vice President of Summit Petroleum, located in Twinsburg, Ohio. Summit Petroleum was formed in 1984 and has drilled wells in Ohio, West Virginia, Pennsylvania and New York. Summit currently owns and operates just shy of 200 Clinton Sandstone wells in Ohio.

"Upon Joining Summit, William Kinney (Summit's President) and I saw the need in the Point Pleasant and Marcellus shales for operations experience and decided to expand Summit, focusing on operations in both basins," he explains.

In addition to PIOGA, Steve is a member of the Ohio Oil and Gas Association, Southeastern Ohio Oil and Gas Association, and West Virginia Oil and Gas Association.

"The early part of my career was in the downstream arena," Steve says. "This is where I learned about gas transmission, gas gathering, measurement, compression and government regulations. All of the knowledge that I gained in the utility environment has allowed me the understanding of what all of us as producers deal with on a daily basis—from increased regulations to pipeline restraints, measurement issues, landowner issues and soft pricing.

He continues: "As the shale plays grew in our respective states, and conventional production became subdued, it clearly showed that our industry was in for changes many of us had never experienced. I have made efforts to allow our company and industry to achieve a sustainable and profitable future and to uphold the traditions and hard work ethics that were instilled upon me from past years and past experiences. Our industry and area has changed since the shale revolution, but the great minds are still prevalent. I am truly excited about the opportunity to serve on the PIOGA board and continue to help with current and future efforts."

Steve and his wife, Georgia, reside in Independence, Ohio, and have a 10-year-old daughter, Bianca. Steve is an avid outdoorsman and enjoys hunting and fishing, along with wading in warm ocean water anywhere! ■

"You can see I have been around production and pipeline operations since being in the sixth grade," Steve says of this photo. "My father was also involved in the oil and gas industry in Ohio. I enjoyed it so much from an early age that I could never think of doing anything else!" Steve is pictured on the right on a 1978-79 Dowell frac job in Portage County, Ohio. Steve's late father, Jim, is shown in the middle.

Steve Williams and Ben Wallace of Penneco Oil Company, Inc. were elected as new members of the PIOGA Board of Directors in October, each serving a three-year term. Watch for a profile of Ben next issue.

Another valuable PIOGATech training held on air quality compliance

On October 12, the Environmental Committee hosted its third PIOGATech training of the year focusing on air quality compliance. As air emissions continue to be a major focus for federal and state regulators, this training provided a comprehensive overview of air emissions matters as they relate to oil and gas operations.

More than 60 people attended the five-hour training that concentrated on air quality regulations, demonstrating compliance with 40 CFR Part 60, Subpart OOOO and OOOOa, optical gas imaging, RICE compliance requirements, the intricacies of VOC measurement, 40 CFR Part 98, Subpart W reporting thresholds and emissions estimating, LDAR tools of the trade, a fenceline monitoring demo, and next-generation air monitoring technology.

Roy Rakiewicz from ALL4 Inc. reviews federal air quality regulations.

Thank you to ALL4 Inc. and CleanAir Engineering for putting together a very relevant program and for providing their expertise on this important topic for our members. And special thanks to CONSOL Energy for hosting this training at their headquarters in Canonsburg.

Come join us on December 14 for the next PIOGATech—Compliance Management & Assurance: Perception vs. Reality at The Chadwick in Wexford. Complete information and registration should be available by the time you read this. ■

Demonstration project update:

Emission reduction conversion of a marine vessel to natural gas

The Environmental Protection Agency (EPA) instituted new air emissions requirements for marine vessels operating in the United States. Owners of our nation's aging inland waterway fleets must now make the financial decision to retrofit, convert or retire their diesel-powered vessels to meet the new EPA guidelines.

In response, the Pittsburgh Region Clean Cities (PRCC), a nonprofit organization, developed Clean Fuels/Clean Rivers, a nonprofit consortium initiative focused on building an innovative natural gas marine corridor that extends from the Morgantown, West Virginia, area through Pennsylvania and down the Ohio River.

The consortium's ultimate goal is to expand the use of natural gas as a replacement/supplement for diesel fuel for the inland waterway system, a river system that encompasses nearly 12,000 miles of navigable waters. Natural gas offers marine operators a cleaner-burning alternative with significant reductions in particulate matter and greenhouse gas emissions. This natural gas use expansion not only benefits the environment, it also spurs on economic development in the Appalachian region by increasing the use of gas produced in the Marcellus/Utica play.

The PRCC team is capitalizing on the opportunity to launch a demonstration project funded via a U.S. Department of Transportation Maritime Administration (MARAD) cooperative agreement that provides $730,000 in matching funds to form a team to convert a towboat engine from diesel to dual fuel diesel/liquefied natural gas (LNG) operation. The project's focus is to educate and encourage marine operators to be innovative and convert/retrofit their vessels, which in turn allows them to meet the new EPA emission requirements while also reducing environmental impact to our inland waterways.

There is already a global movement toward conversion of ferries and similar vessels to compressed natural gas (CNG) and LNG, particularly for vessels operating in environmentally sensitive areas. We believe the PRCC initiative in the Appalachian region is the first inland waterway effort in the United States.

The demonstration project could not have come at a better time. Over a 12-month period ending in 2015, the Port of Pittsburgh completed a study on the feasibility of a regional natural gas marine highway. One of the study results revealed there are more than 500 inland towing vessels operating in the region; these include both regional and non-regional towboat operators. There are 261 regional towboats operating in the Pittsburgh area, and almost 65 percent (169) are in the harbor vessels category with less than 1,200 horsepower.

While there are larger, midrange and long-range line haul towboats also operating on the waterways, it is obvious that to make a significant difference, the key is to develop a cost-effective method of converting the smaller harbor towboats to natural gas. There are design challenges associated with converting the smaller harbor towboats that abound in the Appalachian region. This demonstration will help innovate and develop scaled technology solutions for smaller vessel operations to benefit our regional operators, all within regulatory requirements. It will also help to answer key operational questions essential for natural gas conversion, especially for small-scale development.

The vessel to be converted is the M/V Principio. It is a twin screw 65-foot by 24-foot towboat built in 1940 by Sturgeon Bay Shipbuilding & Dry Dock Co. It is owned and operated by Gulf Materials LLC. Located in Braddock, it operates predominantly on the Monongahela and Ohio rivers in Allegheny County. It currently is powered by two engines, a Caterpillar D343 and a Cummins KTM-1150-M, each rated at 400 horsepower.

PRCC has selected and is working with a natural gas system provider. The PRCC team has chosen a "fumigation" type system, one separately for each main propulsion engine on the M/V Principio. This system will allow the engine(s) to burn diesel and/or LNG efficiently and automatically. Fumigation is defined as the supply of natural gas in the form of LNG converted to gas and delivered as gas to the engines combustion air inlet system.

The PRCC team has developed basis for design and risk analysis documents for the proposed natural gas modification, including the LNG bunkering, storage, fumigation system and automated control system. The documents are currently under review and negotiation with the U.S. Coast Guard (USCG) to enable the final design to be completed. The PRCC team is currently working with vendors for fire suppression, ventilation, gas detection and other safety systems. Conversion is anticipated to commence soon, after the USCG has approved the final drawings and design details. The vessel will be operated for a one-

Support for the towboat conversion project

The accompanying article was provided by Dr. Lutitia Clipper of Clipper Enterprises LLC, manager of the towboat demonstration project and an active member of PIOGA's Pipeline and Gas Development Committee. PIOGA encourages members to join with the association as a supporter of the project. Contributions will assist in the cost-sharing aspect of the MARAD cooperative agreement and also will help raise the visibility of companies who become partners in the project. Contact Dr. Clipper at 412-721-4742 or lutitiaclipper@comcast.net. For additional information and project updates, visit www.pgh-cleancities.org/marad.

year period to demonstrate the use of natural gas and to record exhaust emission measurements and performance.

Results from this demonstration project will help expand the development and availability of natural gas conversion technology for smaller-scale tug, tow and harbor vessels. LNG will be the chosen method of on-board fuel storage. The approach allows the team to monitor, evaluate, and compare the performance of the diesel and LNG powered engines on the same vessel. All necessary fueling infrastructures will be in place and applicable regulations followed.

Throughout the project, conversion performance and evaluation points will be publicized, periodic comparisons released, and educational outreach to vessel operators and other key stakeholders will take place. Finally, at the end of the demonstration, the team will publish a detailed report that will assist marine operators with making decisions necessary to meet the EPA emissions mandates as well as economic decisions as to conversion of other existing towboats. The entire demonstration project from acquisition of permits to physical retrofit and vessel operation will be conducted over a minimum of approximately 24 months.

In addition to meeting EPA emissions standards and providing a cost-effective fuel alternative to marine operators, we anticipate the demonstration project will create economic development opportunities in the region. The siting of LNG production and refueling infrastructure along the riverfronts opens new markets for the growing supply of shale gas. Along with job creation, potential economic benefits include such things as conversions of adjacent diesel-powered dray equipment (cranes, conveyors, etc.) and over-the-road vehicles; expansion of rail lines that serve the docks and multimodal systems; power generation along the waterways including dual fuel at existing coal-fired plants and utilization of LNG for peak shaving periods; LNG reinjection and re-vaporization into rural distribution systems by utilities for heat/power at 100 percent pure methane versus 95 percent methane on most pipeline quality gas; conversions of natural gas to clean diesel (gas to liquids, or GTL) that does not require retrofit of existing engines and new refueling infrastructure; cracker plants that make ethylene pellets from ethane in wet gas production for numerous chemicals, plastics (PVC), and downstream applications that are half the cost and much cleaner than conventional refineries processing crude oil as the feedstock; and converting drilling rigs, earth moving equipment, mobile water treatment and "yellow iron" equipment can all take place.

However, conversion from diesel to natural gas is not a straightforward process and requires the collaboration of multiple entities such as natural gas producers, fuel distributors and retailers, engine manufacturers, fuel storage vessels, motor-generator sets, and vessel owners and operators. Conversions also require close coordination with and adherence to local, state and federal regulatory and USCG requirements and significant investment on the part of all the participants. However, the return on investment could be swift, especially with projected fuel cost savings of 50 percent or more for vessel operators. ■

EPA announces new policy regarding 'sue and settle'

By Thomas A. Lorenzen and Tyler A. O'Connor
Crowell & Moring, LLP

Administrator Scott Pruitt announced a significant shift in U.S. Environmental Protection Agency (EPA) policy in late October, making clear with his "Directive Promoting Transparency and Public Participation in Consent Decrees and Settlement Agreements" that the agency is no longer amenable to setting enforceable deadlines for EPA action through the settlement process or committing to undertake discretionary actions that are not required by statute.

"Sue and Settle," as the practice has pejoratively come to be known, occurs when a third party sues EPA over the agency's purported failure to issue a regulation by the date required in the underlying statute or in a manner consistent with law. Traditionally, EPA and the third-party could negotiate a settlement that requires the agency to issue a new regulation or alter an existing rule. (Longstanding Department of Justice policy prohibits EPA and other agencies from agreeing in a settlement or consent decree to a specific rulemaking outcome.)

Administrator Pruitt released a memorandum criticizing "sue and settle" and explaining the shift in policy. According to memorandum, the settlement process too often excludes the views of relevant stakeholders who may be impacted by resolution of the case, and EPA has used the settlement process as an end-run around the Administrative Procedure Act's procedural safeguards. To that end, Administrator Pruitt's directive lists the following procedures the agency must now follow in negotiating settlements:

1. EPA will post online any notice of intent to sue EPA within 15 days of receipt from the potential litigant.

2. EPA will publish any complaint or petition for review of a rule in which the agency is a defendant within 15 days of receiving service.

3. EPA will notify any state or regulated entity that may be impacted by a lawsuit within 15 days of receiving service of the complaint or petition for review. The agency will also work to engage the affected state and/or regulated entity in the settlement process and will seek its concurrence prior to entering a settlement agreement.

4. EPA will publish a searchable, categorized list of the consent decrees and settlement agreements the agency continues to abide by within 30 days of issuance of the directive, and the agency will continue to update the list regularly.

5. EPA is not permitted to enter into a consent decree with terms that the court would have lacked the legal authority to impose, nor may the agency enter into any consent decree or settlement agreement that turns a discretionary obligation of the agency into a mandatory duty.

6. EPA shall seek to exclude the payment of attorney's fees and settlement costs to any petitioner or plaintiff who settles with EPA.

7. If EPA enters into a settlement agreement or consent decree pursuant to which there is a deadline by which EPA must issue a final rule, the settlement must provide sufficient time for the agency to: (1) modify its proposed rule if necessary and undergo interagency review; (2) provide adequate notice and comment on the proposal; and (3) conduct meaningful consideration of comments on the proposal.

8. EPA will post online, for review and comment by the public, all proposed consent decrees lodged in federal court and settlement agreements resolving all claims against the agency.

The import of the directive remains unclear. Many statutes, such as the Clean Air Act, impose nondiscretionary deadlines by which EPA must issue regulations and vest citizens with the ability to bring lawsuits to enforce those obligations. The directive does not curtail the ability of citizens to bring suit but merely imposes additional procedural hurdles EPA must satisfy prior to settling such a lawsuit. Since 1986, a memorandum issued by then-Attorney General Edwin Meese has generally prohibited federal agencies from entering settlements or consent decrees that a court would lack authority to impose or that would turn discretionary duties into mandatory duties; in that respect, the new directive seems duplicative. Equally unclear is what defense EPA will assert in litigation where it has failed to comply with a clear statutory mandate. Thus, other than lengthening the settlement process, in practice, the directive may mostly be an indication that Administrator Pruitt's EPA will be less inclined than previous administrations to settle litigation regarding EPA's failure to meet statutory deadlines or comply with other statutory mandates.

Arguably the most notable shift in policy is EPA's position that it will seek to exclude the payment of the attorney's fees and costs of settling plaintiffs. Many environmental statutes permit courts to award attorney's fees and costs to a prevailing or substantially prevailing party when "appropriate," which courts have often interpreted to include parties who achieve the aims of their lawsuit through settlement. EPA appears ready to fight this general policy, which means we can expect EPA and plaintiffs to tangle more frequently over attorney's fees in the years ahead.

EPA's new policy provides an opportunity for regulated entities to participate in the settlement process. Although EPA has promised to contact entities that may be affected by proposed settlements, it is important for companies and industry groups to track pending lawsuits and ensure they participate in the deliberative process. ■

For more information, contact Thomas A. Lorenzen (202-624-2789 or tlorenzen@crowell.com) or Tyler A. O'Connor (202-624-2929 or toconnor@crowell.com) at Crowell & Moring, LLP in Washington, D.C.

Safety Committee Corner

Accepted practices for hydrogen sulfide training programs

The recently revised ANSI/ASSE Z390.1-2017 standard is intended to help organizations with potential hydrogen sulfide (H2S) exposure put training in place to protect workers.

This standard covers a variety of topics, including:

• Properties and characteristics of H2S.
• Areas where potential occupational exposure could exist.
• Detection methods for H2S.
• Engineering controls to mitigate exposure.
• Selection, use and care of personal protective equipment (PPE) appropriate for detected occupational H2S exposures above the OSHA permissible exposure limit (PEL).
• Recommended exercises, drills, rescue techniques and first aid procedures for victims of H_2S exposure.

The standard also discusses the characteristics and safe work practices for sulfur dioxide.

For an in-depth explanation of the specific revisions of the standard, go to www.rjrsafety.com/?p=2738 to read an article published by Wayne Vanderhoof, CSP of RJR Safety, PIOGA's Safety Committee chairman. ■

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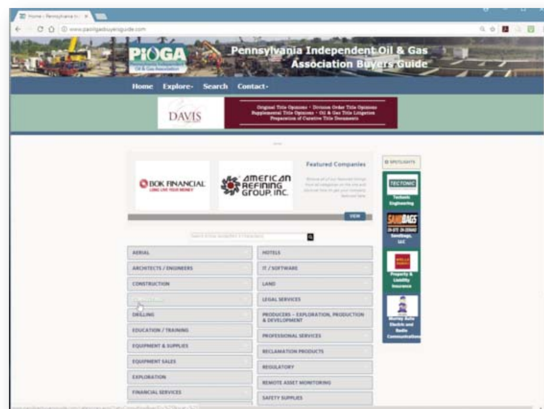

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SRBC report: No 'detected discernible impacts' from natural gas development

The Susquehanna River Basin Commission has released a report on potential impacts to water quality from unconventional natural gas drilling and other activities in the basin, saying that monitoring "has not detected discernible impacts on the basin's water resources, but continued vigilance is warranted."

A water quality monitoring network with more than 50 stations was put into place in 2010 as the natural gas industry was rapidly growing in the basin. Most of the activity was located near headwater streams where water quality observations and data were scarce.

The full report and a summary report can be found at mdw.srbc.net/remotewaterquality/reports.htm.

"This report is not only a vindication of our industry's practices, but it should also send a clear message to the neighboring Delaware River Basin Commission that natural gas development can and does occur in an environmentally sensitive manner," said PIOGA President and Executive Director Dan Weaver.

The DRBC voted in September to begin developing regulations to impose a permanent prohibition on unconventional natural gas drilling and hydraulic fracturing. A de facto ban has been in place since 2010. The Delaware basin includes portions of the Marcellus Shale region at Pennsylvania's northeastern tip.

At least one observer has drawn attention to the irony between the actions of the two state-federal compact commissions: The majority of both commissions consists of the same parties, but their actions are wildly different.

As Tom Shepstone, publisher of the blog Natural Gas Now, explains, the DRBC is made up of representatives of the governors of Delaware, New Jersey, New York and Pennsylvania, plus the federal government represented by the Army Corps of Engineers. The SRBC, meanwhile, is composed of Maryland, New York, Pennsylvania and the federal government, again represented by the Army Corps. The same Pennsylvania and New York designees regularly attend and vote at both DRBC and SRBC meetings.

"What the SRBC knows, the DRBC knows and vice-versa," Shepstone wrote in recent post. "Moreover, they operate under virtually identical compacts. Both provide drinking water for millions. Yet, DRBC is pretending the threats to drinking water are so great that fracking must be banned, while the SRBC is admitting it is safe and has had no impact on water quality. Why is the DRBC lying?"

Shepstone encourages proponents of natural gas development to expose the hypocrisy by commenting on social media, including using the Twitter hashtag #NoMoreDRBCLies.

House passes resolution opposing DRBC moratorium

The Pennsylvania House of Representatives also has weighed in, approving a resolution on October 17 that urges the DRBC to end its drilling moratorium. House Resolution 515 states that the DRBC "should follow a similar regulatory path as the Susquehanna River Basin Commission and focus on its mission as a water management agency to assure the long-term balance between healthy ecosystems and economic vitality and... abandon any proposed plans to regulate natural gas drilling beyond the already established functions that focus on water quantity and water quality data collection and analysis."

Additionally, the House Republican Policy Committee held a hearing about the DRBC ban on October 31, taking testimony from a wide range of officials and residents who oppose the commission's action. ■

New PIOGA members — *welcome!*

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Plan to support coal, nuclear divides U.S. energy industry

Industries that rarely agree—gas drillers and renewable energy producers—urged a federal agency on October 23 to dump a government directive to prop up aging nuclear and coal plants, saying the electricity grid was already reliable.

The split in the energy industry showed that a Trump administration push to make the country energy "dominant" by boosting output from every part of the sector may face hurdles.

A group of 20 organizations including the Independent Petroleum Association of America and the Solar Energy Industries Association submitted comments to the Federal Energy Regulatory Commission as it considered a regulation proposed late last month by U.S. Secretary of Energy Rick Perry.

Perry's directive would reward certain nuclear and coal fired power plants that store 90 days of fuel on site for contributing to the reliability of the power grid. He wants the FERC to pass the rule before the winter season starts.

The groups said Perry's request "fails to provide substantial evidence" for its claim that competitive markets do not already value fuel security.

The proposed rule would "prop up uneconomic generation that is unable to compete … and that is not otherwise needed for reliability," the groups said.

The FERC rejected a request to extend the comment period on the directive that ended on Monday. But its three commissioners have hinted that they may not pass the rule, or that it could be changed, because they do not want to damage competitive markets. The FERC panel is supposed to be five members strong, but the U.S. Senate has not yet voted on two other FERC nominees.

Coal and nuclear interests insisted that many plants need the support in order to survive. Coal producer Murray Energy said in comments to FERC that it and other coal producers and related industries are "threatened with bankruptcy and significant economic harm" if plants and other operations are forced to shut by "unreasonable and unsupportable market pricing mechanisms."

Robert Murray, the head of the company, has urged the Trump administration to kill many environmental rules that affect coal producers and he stood by the president's side earlier in the year as he signed a law repealing limits on the dumping of coal waste into streams.

Maria Korsnick, head of the Nuclear Energy Institute, an industry group, said that the failure of power markets to value nuclear power's contribution of reliable power to the grid has led to early retirements of many nuclear reactors, which generate electricity almost free of emissions linked to climate change.

—Reuters

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Find out more: Contact Matt Benson at 814-778-2291 or matt@pioga.org

Severance tax legislation: *Continued from page 1*

eration by the full House in the mid-October throes of the most recent state budget impasse, was recently characterized by House Majority Leader Dave Reed (R-Indiana) as likely to "get its day in court" sometime during the remainder of the legislative session.

"We're not going to prevent a vote; it's going to come up when it's going to come up," he told the media following the last of the budget votes last week. "I anticipate you are going to see a vote on that issue and a number of other issues folks want to have votes on, but that's okay. The majority will decide and we'll move on from there."

House Bill 1401, as it was approved by the House Finance Committee, implements a volumetric tax based on the price of natural gas with the amount of the tax increasing as the price of gas increases.

The legislation was also amended to include the perennially controversial and constitutionally-questioned issue of changing how natural gas royalties are paid out to leaseholders.

However, that version of the bill is unlikely to be the final version of the legislation should it advance through the House.

Currently, there are close to 400 different amendments filed to the legislation for consideration when the legislation is brought up before members during the second consideration Floor amendment process.

Those amendments run the gambit in terms of potential changes to the legislation, from total gut and replace amendments sponsored by some original supporters of the legislation, to an amendment by Representative Seth Grove (R-York) that would place a 2019 sunset on the tax unless all members of the General Assembly opt-in to the defined contribution pension plan authorized by the pension overhaul bill enacted earlier this year.

Other amendments, like those sponsored by Representative Chris Quinn (R-Delaware), would provide for environmental protections and a fund to mitigate the impact of gas pipeline development currently going on in Representative Quinn's southeastern Pennsylvania district.

"My legislation would expand and retool parts of the severance tax bill to put sensible regulatory reforms in place that seek to satisfy the concerns raised by citizens and environmental groups, provides resources for communities impacted by pipelines, and supports crucial environmental programs and initiatives," he said.

"My amendments help ensure efficient and appropriate government oversight while also protecting our natural resources, communities, recreational sites and our citizens."

While some are content to stick with the amendment process to chip away at the natural gas severance tax proposal, some in House leadership—namely Speaker Mike Turzai (R-Allegheny)—have noted they are flat-out against any such legislation.

"I am without a doubt adamantly opposed to a severance tax," he said in late October. "It's about real people. Back home, and all across Pennsylvania, there are real jobs."

He added that a severance tax is a "punitive approach" that singles out a job-producing industry merely as a means to balance the state's finances.

"This is about family sustaining jobs: welders, electricians, carpenters, marketing, engineers, accountants, lawyers, and the business that surrounds it that services the industry in terms of providers right here in Pennsylvania," he said. "The hit to the economy by continuing to take a punitive approach to jobs, I just don't understand it, because it's about jobs, jobs, jobs."

A number of PIOGA members took part in the Pennsylvania Jobs, Pennsylvania Energy Rally at the state capitol as attempts were being made to pass severance tax legislation in the House of Representatives as part of a budget revenue package.

A severance tax alone, however, is not likely to make its way through the entire General Assembly.

While already tied to the minimum royalty issue as a means to gain some House support, Senate Republican leaders have said they would like to see permitting and other regulatory reforms accompany the legislation as a means to help the industry in exchange for the tax.

"We would not consider any Marcellus Shale tax without the permit reforms," Senate Majority Leader Jake Corman (R-Centre) said. "Whether that can be done in another bill that ties the two together, we'd be happy to take a look at it, but clearly when we agreed to do [the tax] that was a significant component of it."

As part of a larger tax package, the Senate in a mid-summer attempt to break up the budget impasse logjam passed a severance tax proposal over to the House that contained extensive permitting and regulatory reforms.

It was those components that gave some environmentally-minded Democrats pause, despite their overall desire to see a severance tax enacted.

While that larger tax plan was never taken up by the House, a

An honest discussion about a Pennsylvania severance tax

Nearly four months after the start of the fiscal year, the House of Representatives completed work at the end of October on the final pieces of a budget revenue package. The Senate agreed to it, and the legislation went to the governor for approval. Whether a natural gas severance tax would be part of the House's package—as it was with the Senate-passed version—was a question that went right down to the wire.

As the accompanying article explains, a severance tax might not have been part of the final budget, but the issue is far from dead. A severance tax was a prominent plank of Tom Wolf's gubernatorial campaign, and as he gears up to run for reelection in 2018, he continues to push strongly for a production tax on our industry.

Unfortunately, Wolf and other severance tax proponents continue to make false statements about a tax and natural gas pricing. In response, PIOGA sent a detailed letter to House members rebutting the false claims as they were considering House Bill 1401 as potential part of the budget package. PIOGA also put together the concise set of bullet points below. We continue to encourage members to reach out to their elected officials in opposition to new taxes on our industry and hope you can communicate these points to them about imposing a damaging and inappropriate severance tax. The "honest discussion" bullet points can also be found in the news section of our homepage, www.pioga.org.

Not <u>paying</u> "fair share."

False: Natural gas drillers pay ALL the taxes other businesses pay, PLUS the impact "fee" that NO OTHER businesses pay, so natural gas drillers ARE paying MORE than their fair share.

Not <u>getting</u> "our fair share."

False: Most of the natural gas produced in Pennsylvania is from privately owned resources and so does not belong to the general public, or the state. The public IS being fairly compensated for the natural gas produced from publicly owned resources through bonus and rental payments and royalties via leases with state agencies.

Most (80 percent) of the tax would be paid by out-of-state consumers.

False: The severance tax would NOT be a gross receipts tax paid by consumers, but would be levied on—and paid by—Pennsylvania producers, reducing revenue needed for continuing investment.

Consumer gas prices are set by an international market and include severance taxes.

False: Natural gas prices in the Appalachian region are set by gas-on-gas competition among Appalachian producers that bid against each other to sell gas at the lowest price. State severance taxes are irrelevant, and there is no such thing as an international market.

"The gas is here so the drillers won't leave."

False: The natural gas is indeed here, but also in many other states that have not targeted the industry in this manner. Industry investment capital will move to these other states—and preclude additional development here—even though they have severance taxes, because of their overall more predictable and reasonable regulations and their more attractive cumulative tax structures. For the week ending October 20, there were 32 drilling rigs running in Pennsylvania, compared to 436 in Texas.

"Pennsylvania is the only gas-producing state without a severance tax."

False: We have an impact "fee" and other states with severance taxes don't have state taxes we have—there is no state corporate income tax in Texas or Wyoming and no state personal income tax in Texas, Wyoming or Alaska. Picking one aspect of another state's tax structure while ignoring the whole structure is the ultimate false comparison and is not fair, reasonable or commonsense.

Impact "fee" collections have averaged about 5 percent of the wellhead value of gas in Pennsylvania, comparable to other states that impose a severance tax and **higher than the effective severance tax rate on unconventional wells in Texas—Pennsylvania's No. 1 competitor for natural gas markets.**

number of Republican-sponsored amendments to House Bill 1401 take on the issues of environmental and permitting reforms.

On the other side of the issues, the severance tax concept has been a rallying cry for Gov. Tom Wolf, who has repeatedly called on the General Assembly as a whole—and the Republican-controlled House in particular—to send him a severance tax proposal he can sign.

Speaking at the Pennsylvania Press Club luncheon this week, the governor put the failure to get such a proposal to his desk at the feet of special interests, who he said have more influence in the General Assembly than the desires of constituents.

"It is past time to pass a tax on shale. We are still the only gas-producing state that has not taken this commonsense step," he said. "Pennsylvania is blowing by these states in production, but has missed out on literally billions of dollars in revenue because of special interests in Harrisburg."

Currently, neither the House nor the Senate is expected to return to voting session until Monday, November 13. *(Editor's note: Since this article was published, House leaders announced their next voting day would be November 20.)* ■

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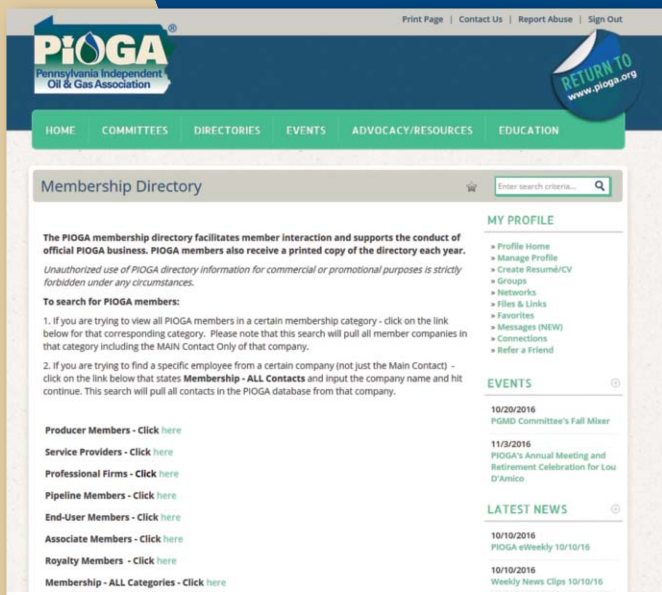

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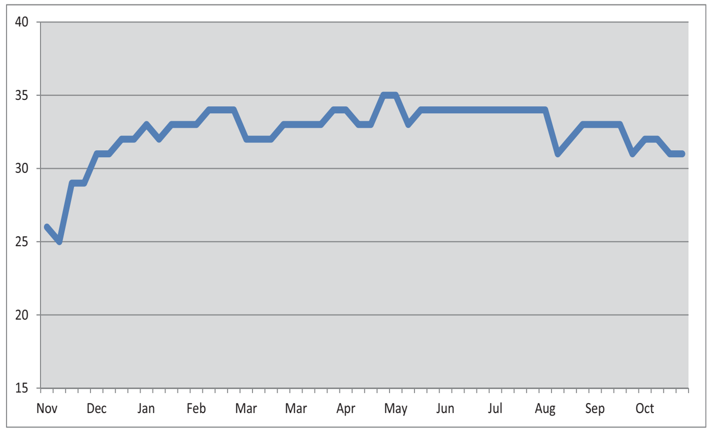
Oil & Gas Dashboard

Pennsylvania Rig Count



Penn Grade Crude Oil Prices

Natural Gas Futures Closing Prices

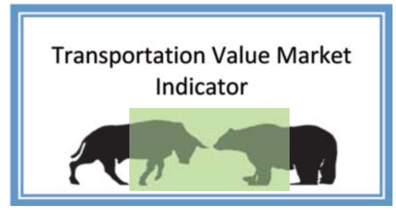
Month	Price
December	$3.122
January 2018	3.221
February	3.221
March	3.183
April	2.946
May	2.923
June	2.950
July	2.981
August	2.983
September	2.973
October	2.977
November	3.047

Prices as of November 6

Sources

American Refining Group: www.amref.com/Crude-Prices-New.aspx
Ergon Oil Purchasing: www.ergon.com/prices.php
Gas futures: quotes.ino.com/exchanges/?r=NYMEX_NG
Baker Hughes rig count: phx.corporate-ir.net/phoenix.zhtml?c=79687&p=irol-reportsother
NYMEX strip chart: Emkey Energy LLC, emkeyenergy.com

Northeast Pricing Report — November 2017



While overall trading was mixed, all trading points' month ahead pricing increased. TETCO M3 had the greatest increase of $0.82 per MMBtu while Algonquin had the lowest increase of $0.29 per MMBtu. For the one-year term, Dominion South had the greatest increase of $0.07 per MMBtu while Transco Z6 had the largest decrease of $0.23 per MMBtu. For long-term pricing, all trading points decreased nearly the same amount.

For transportation, only Dominion South to TETCO M3 and Leidy to TETCO M3 had an increase in value of $0.15 and $0.29 per MMBtu respectively. The decreases ranged from Transco Leidy to Transco Z6 of $0.04 per MMBtu to Dominion South to Algonquin of $0.38 per MMBtu. Demand for early November is expected to remain moderate as the southern and eastern states continue seeing warm temperatures.

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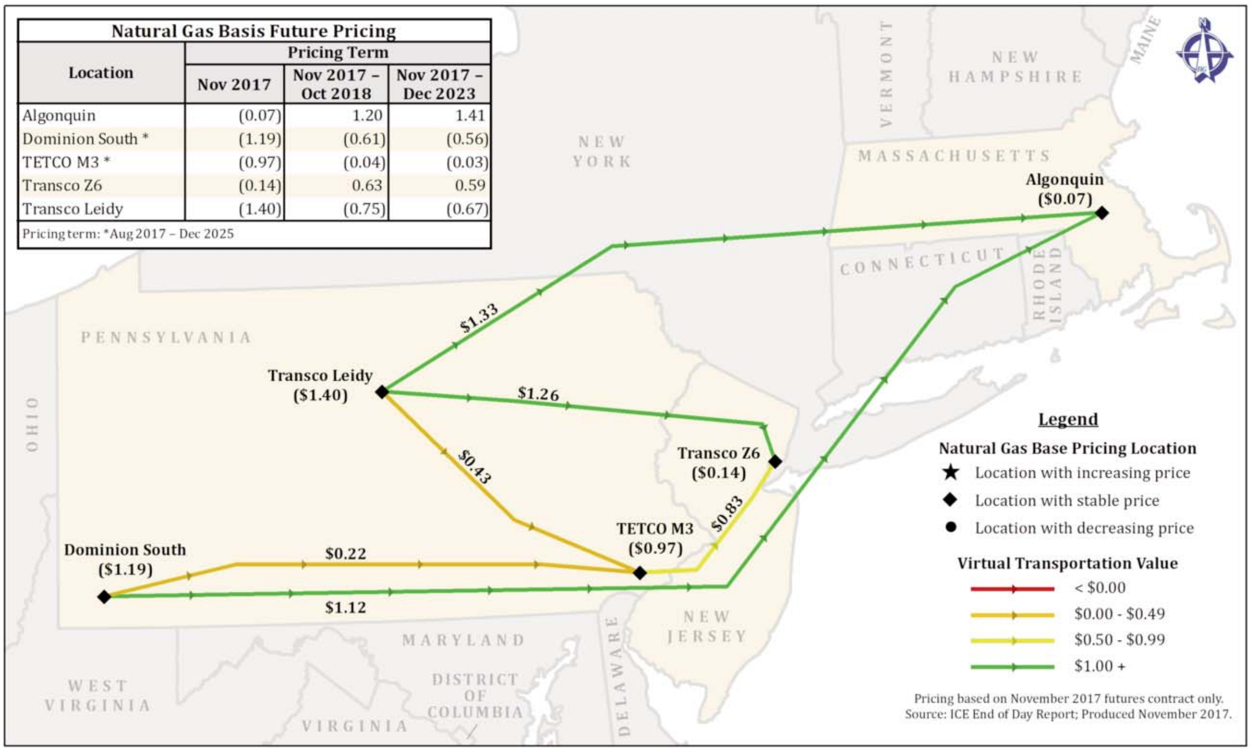
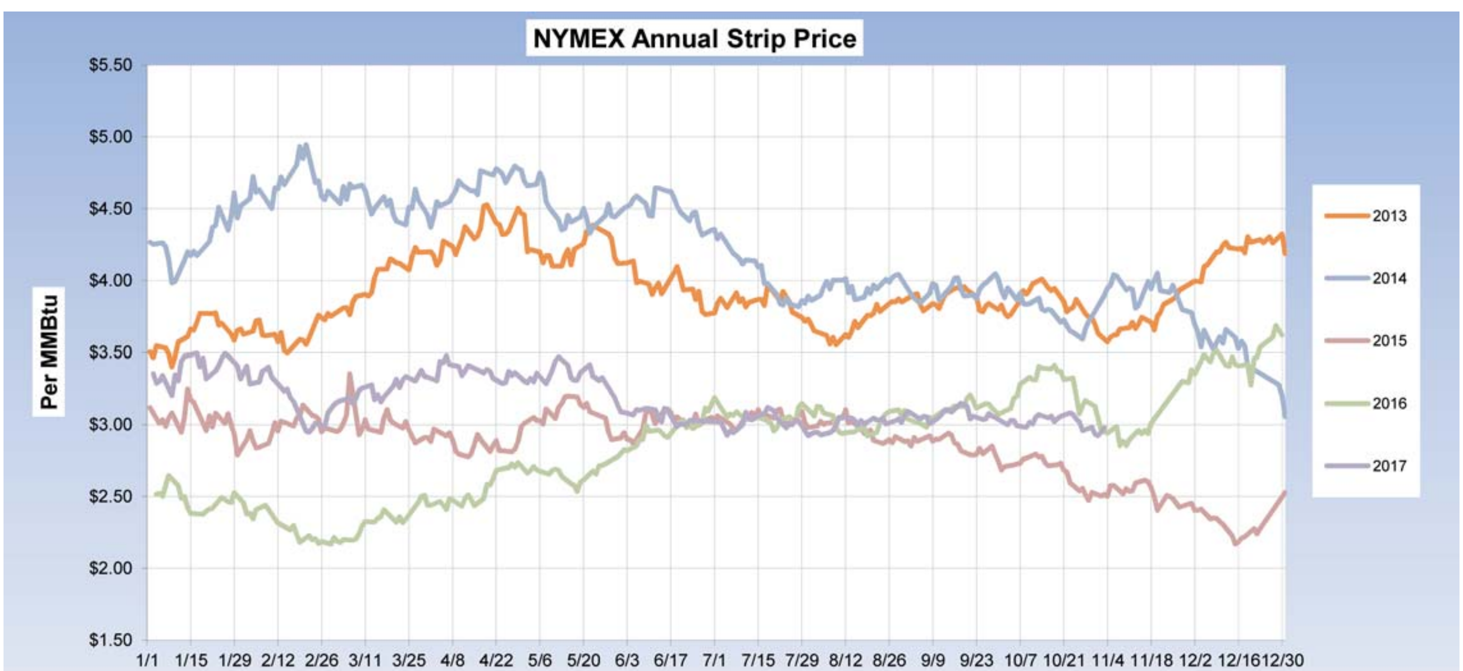


Natural Gas Basis Future Pricing

Location	Pricing Term		
	Nov 2017	Nov 2017 – Oct 2018	Nov 2017 – Dec 2023
Algonquin	(0.07)	1.20	1.41
Dominion South *	(1.19)	(0.61)	(0.56)
TETCO M3 *	(0.97)	(0.04)	(0.03)
Transco Z6	(0.14)	0.63	0.59
Transco Leidy	(1.40)	(0.75)	(0.67)

Pricing term: *Aug 2017 – Dec 2025



Spud Report: October

The data show below comes from the Department of Environmental Protection. A variety of interactive reports are available at www.dep.pa.gov/DataandTools/Reports/Oil and Gas Reports.

The table is sorted by operator and lists the total wells reported as drilled last month. **Spud** is the date drilling began at a well site. The **API number** is the drilling permit number issued to the well operator. An asterisk (*) after the API number indicates an unconventional well.

OPERATOR	WELLS	SPUD	API #	COUNTY	MUNICIPALITY
ARD Operating LLC	3	10/4/17	081-21705*	Lycoming	Cascade Twp
		10/4/17	081-21707*	Lycoming	Cascade Twp
		10/4/17	081-21704*	Lycoming	Cascade Twp
Blackhawk Energy LLC	3	10/2/17	083-56938	McKean	Wetmore Twp
		10/6/17	083-56939	McKean	Wetmore Twp
		10/12/17	083-56940	McKean	Wetmore Twp
Bull Run Energy LLC	1	10/24/17	083-56933	McKean	Keating Twp
Chief Oil & Gas LLC	9	10/3/17	015-23332*	Bradford	Leroy Twp
		10/3/17	015-23351*	Bradford	Leroy Twp
		10/3/17	015-23333*	Bradford	Leroy Twp
		10/23/17	015-23337*	Bradford	Leroy Twp
		10/23/17	015-23362*	Bradford	Leroy Twp
		10/23/17	015-23338*	Bradford	Leroy Twp
		10/23/17	015-23339*	Bradford	Leroy Twp
		10/23/17	015-23363*	Bradford	Leroy Twp
		10/23/17	015-23364*	Bradford	Leroy Twp
CNX Gas Co LLC	6	10/1/17	125-28269*	Washington	East Finley Twp
		10/1/17	125-27633*	Washington	East Finley Twp
		10/1/17	125-28278*	Washington	East Finley Twp
		10/2/17	125-28327*	Washington	East Finley Twp
		10/2/17	125-28276*	Washington	East Finley Twp
		10/2/17	125-28277*	Washington	East Finley Twp
Dunham Energy Partners LLC	4	10/2/17	053-30837	Forest	Kingsley Twp
		10/6/17	053-30838	Forest	Kingsley Twp
		10/11/17	053-30840	Forest	Kingsley Twp
		10/24/17	053-30839	Forest	Kingsley Twp
EM Energy PA LLC	10	10/5/17	019-22666*	Butler	Allegheny Twp
		10/6/17	019-22665*	Butler	Allegheny Twp
		10/6/17	019-22670*	Butler	Allegheny Twp
		10/7/17	019-22669*	Butler	Allegheny Twp
		10/7/17	019-22673*	Butler	Allegheny Twp
		10/8/17	019-22668*	Butler	Allegheny Twp
		10/9/17	019-22674*	Butler	Allegheny Twp
		10/9/17	019-22667*	Butler	Allegheny Twp
		10/9/17	019-22672*	Butler	Allegheny Twp
		10/11/17	019-22671*	Butler	Allegheny Twp
EQT Production Co	14	10/31/17	059-27504*	Greene	Jackson Twp
		10/31/17	059-27505*	Greene	Jackson Twp
		10/31/17	059-27506*	Greene	Jackson Twp
		10/31/17	059-27507*	Greene	Jackson Twp
		10/31/17	059-27508*	Greene	Jackson Twp
		10/31/17	059-27511*	Greene	Jackson Twp
		10/31/17	059-27512*	Greene	Jackson Twp
		10/31/17	059-27513*	Greene	Jackson Twp
		10/31/17	059-27514*	Greene	Jackson Twp
		10/31/17	059-27503*	Greene	Jackson Twp
		10/16/17	125-28379*	Washington	Carroll Twp
		10/16/17	125-28380*	Washington	Carroll Twp
		10/16/17	125-28381*	Washington	Carroll Twp
		10/16/17	125-28382*	Washington	Carroll Twp
Gas & Oil Mgmt Assoc Inc	3	10/10/17	123-48067	Warren	Mead Twp
		10/18/17	123-48081	Warren	Mead Twp
		10/25/17	123-48080	Warren	Mead Twp
Inflection Energy (PA) LLC	1	10/19/17	081-21664*	Lycoming	Shrewsbury Twp
JKLM Energy LLC	4	10/9/17	105-21896*	Potter	Sweden Twp
		10/9/17	105-21898*	Potter	Sweden Twp
		10/10/17	105-21883*	Potter	Sweden Twp
		10/10/17	105-21897*	Potter	Sweden Twp
PennEnergy Resources LLC	12	10/11/17	019-22511*	Butler	Jackson Twp
		10/11/17	019-22653*	Butler	Jackson Twp
		10/12/17	019-22649*	Butler	Jackson Twp
		10/12/17	019-22650*	Butler	Jackson Twp
		10/12/17	019-22651*	Butler	Jackson Twp
		10/12/17	019-22652*	Butler	Jackson Twp
		10/30/17	019-22678*	Butler	Winfield Twp
		10/30/17	019-22633*	Butler	Winfield Twp
		10/30/17	019-22634*	Butler	Winfield Twp
		10/30/17	019-22636*	Butler	Winfield Twp
		10/31/17	019-22680*	Butler	Winfield Twp
		10/31/17	019-22638*	Butler	Winfield Twp
Pennfield Energy LLC	6	10/2/17	121-46158	Venango	Allegheny Twp
		10/4/17	121-46157	Venango	Allegheny Twp
		10/9/17	121-46156	Venango	Allegheny Twp
		10/11/17	121-46155	Venango	Allegheny Twp
		10/13/17	121-46154	Venango	Allegheny Twp
		10/17/17	121-46153	Venango	Allegheny Twp
Pennhills Resources LLC	6	10/3/17	083-56942	McKean	Wetmore Twp
		10/6/17	083-56941	McKean	Wetmore Twp
		10/11/17	083-56943	McKean	Wetmore Twp
		10/16/17	083-56944	McKean	Wetmore Twp
		10/23/17	083-56948	McKean	Wetmore Twp
		10/27/17	083-56947	McKean	Wetmore Twp
Range Resources Appalachia	18	10/30/17	003-22464*	Allegheny	Frazer Twp
		10/30/17	003-22465*	Allegheny	Frazer Twp
		10/30/17	003-22462*	Allegheny	Frazer Twp
		10/30/17	003-22463*	Allegheny	Frazer Twp
		10/20/17	125-28257*	Washington	Amwell Twp
		10/20/17	125-28260*	Washington	Amwell Twp
		10/21/17	125-28259*	Washington	Amwell Twp
		10/21/17	125-28258*	Washington	Amwell Twp
		10/19/17	125-28123*	Washington	Robinson Twp
		10/20/17	125-28116*	Washington	Robinson Twp
		10/21/17	125-28115*	Washington	Robinson Twp
		10/21/17	125-28122*	Washington	Robinson Twp
		10/23/17	125-28117*	Washington	Robinson Twp
		10/30/17	125-28411*	Washington	Smith Twp
		10/30/17	125-28413*	Washington	Smith Twp
		10/30/17	125-28409*	Washington	Smith Twp
		10/30/17	125-28412*	Washington	Smith Twp
		10/30/17	125-28410*	Washington	Smith Twp
Repsol Oil & Gas USA LLC	5	10/16/17	117-21865*	Tioga	Hamilton Twp
		10/16/17	117-21866*	Tioga	Hamilton Twp
		10/16/17	117-21867*	Tioga	Hamilton Twp
		10/16/17	117-21868*	Tioga	Hamilton Twp
		10/16/17	117-21869*	Tioga	Hamilton Twp
Rice Drilling B LLC	2	10/26/17	059-27494*	Greene	Aleppo Twp
		10/26/17	059-27493*	Greene	Aleppo Twp
Seneca Resources Corp	2	10/6/17	081-21606*	Lycoming	Hepburn Twp
		10/7/17	081-21621*	Lycoming	Hepburn Twp
SWN Production Co LLC	5	10/4/17	115-22321*	Susquehanna	Great Bend Twp
		10/5/17	115-22322*	Susquehanna	Great Bend Twp
		10/14/17	115-22341*	Susquehanna	New Milford Twp
		10/15/17	115-22342*	Susquehanna	New Milford Twp
		10/16/17	115-22127*	Susquehanna	New Milford Twp

	October	September	August	July	June	May
Total wells	**114**	**84**	**66**	**83**	**84**	**67**
Unconventional Gas	91	78	58	72	67	60
Conventional Gas	0	1	0	0	0	0
Oil	23	5	8	10	16	7
Combination Oil/Gas	0	0	0	1	1	0

Calendar of Events

PIOGA Events

Info: www.pioga.org/events

Annual Oil and Gas Tax & Accounting Seminar
November 30, Hyatt Place Pittsburgh South, Washington

PIOGATech: Risk Assessment/Compliance
December 14, The Chadwick, Wexford

Holiday Mixer
December 14, The Chadwick, Wexford

Spring Meeting
March 21, 2018, Rivers Casino, Pittsburgh

Ted Cranmer Memorial Golf Outing & Steak Fry
June 4, 2018, Wanango Golf Club, Reno

21st Annual Divot Diggers Golf Outing
August 23, 2018, Tam O'Shanter Golf Club, Hermitage

Fall Oktoberfest and Annual Meeting
October 17-18, 2018, Seven Springs Resort, Champion

Industry events

WVONGA Embracing Energy Womens Conference
November 10-11, Transcanada Building, Charleston, WV
Info: www.wvonga.com

IOGAWV Tax Seminar
November 14, Marriott Town Center Hotel, Charleston, WV
Info: iogawv.com

IOGAWV Winter Meeting
January 23-24, 2018, Marriott Town Center Hotel, Charleston
Info: iogawv.com

OOGA Winter Meeting
March 7-9, 2018, Hilton Columbus at Easton, Columbus, OH
Info: www.ooga.org

IPAA Midyear Meeting
June 25-27, Austin, TX
Info: www.ipaa.org/events

➔ **More events: www.pioga.org**

Guidelines for member news submissions

We are happy to accept submissions of news items by PIOGA member companies regarding new products or services, new facilities, expansions, open houses, promotions and hirings, and similar developments. The news must apply specifically to the company's Pennsylvania operations and products/services for use in the oil and gas industry. Personnel items must be for Pennsylvania-based employees or whose territory includes Pennsylvania, except in the case of top company officers.

All such items will be used in the newsletter on a space-available basis and are subject to editing for length, clarity and appropriateness. Submissions should be e-mailed to Matt Benson (matt@pioga.org) and the subject line should clearly state that it is PIOGA member news. Material is due by the first of the month to be considered for that month's issue.

If you have an idea for a more in-depth article, particularly on technical issues, or would like to submit a PIOGA Member Profile, please e-mail Benson at the address above.

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JOIN US FOR THESE 2018 PIOGA EVENTS

- **Spring Meeting**
  March 21 / Rivers Casino, Pittsburgh
- **Ted Cranmer Memorial Golf Outing and Steak Fry**
  June 4 / Wanango Golf Club, Reno
- **21st Annual Divot Diggers Golf Outing**
  August 23, Tam O'Shanter Golf Club, Hermitage
- **Fall Oktoberfest and Annual Meeting**
  October 17-18 / Seven Springs Mountain Resort, Champion
- **Annual Oil & Gas Tax and Accounting Seminar**
  November 28 / Location TBA

PLUS:

- **PIOGATech technical training on critical environmental and safety topics**
- **Mixers and other fun networking events**

Mark your calendars and watch your email for more information