Southeastern Ohio Oil and Gas Association Gas Committee Report October, 2018

PRICING

Prices October 9, 2018

NYMEX Settle – October -2018	\$3.02
One Year NYMEX strip (Nov., 2018 – Oct., 2019)	\$2.95
Summer NYMEX strip for 2019 (April-October, 2019)	\$2.74
Winter NYMEX strip – 2019 (Nov., 2018 – Mar. 2019)	\$3.12
TCO Index Posting –October, 2018	\$2.73
DTI Index Posting – October, 2018	\$2.43

Working gas in underground storage, Lower 48 states

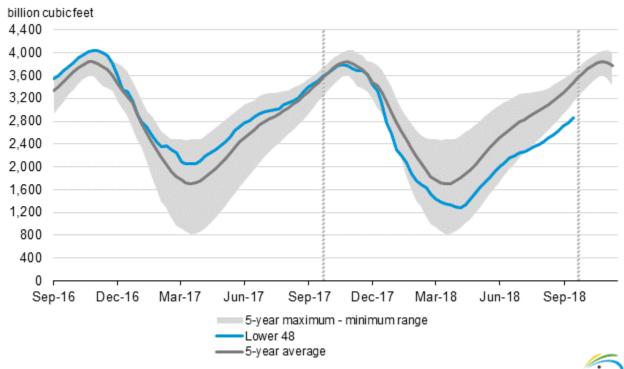
					Historical Comparisons			
	Stocks billion cubic feet (Bcf)				Year ago (09/28/17)		5-year average (2013-17)	
Region	09/28/18	09/21/18	net change	implied flow	Bcf	% change	Bcf	% change
East	763	729	34	34	859	-11.2	848	-10.0
Midwest	836	800	36	36	985	-15.1	973	-14.1
Mountain	177	173	4	4	220	-19.5	206	-14.1
Pacific	262	259	3	3	310	-15.5	335	-21.8
South Central	829	807	22	22	1,127	-26.4	1,111	-25.4
Salt	181	173	8	8	301	-39.9	288	-37.2
Nonsalt	648	634	14	14	827	-21.6	823	-21.3
Total	2,866	2,768	98	98	3,502	-18.2	3,473	-17.5

Totals may not equal sum of components because of independent rounding.

Summary

Working gas in storage was 2,866 Bcf as of Friday, September 28, 2018, according to EIA estimates. This represents a net increase of 98 Bcf from the previous week. Stocks were 636 Bcf less than last year at this time and 607 Bcf below the five-year average of 3,473 Bcf. At 2,866 Bcf, total working gas is below the five-year historical range.

Working gas in underground storage compared with the 5-year maximum and minimum



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2013 through 2017. The dashed vertical lines indicate current and year-ago weekly periods.

EIA WEEKLY REPORT OCTOBER 4, 2018:

Source: U.S. Energy Information Administration

_Natural Gas

Northeast prices increase. At the Algonquin Citygate, which serves Boston-area consumers, prices went up 37¢ from \$3.23/MMBtu last Wednesday to \$3.60/MMBtu yesterday. At the Transcontinental Pipeline Zone 6 trading point for New York City, prices increased 44¢ from \$2.85/MMBtu last Wednesday to \$3.29/MMBtu yesterday.

Tennessee Zone 4 Marcellus spot prices increased 22¢ from \$1.70/MMBtu last Wednesday to \$1.92/MMBtu yesterday. Prices at Dominion South in southwest Pennsylvania fell 7¢ from \$2.16/MMBtu last Wednesday to \$2.09/MMBtu yesterday, reaching a weekly low of

\$1.21/MMBtu on Monday. Tennessee Gas Pipeline, which transports natural gas from the Gulf of Mexico to the Northeast, issued a *Force Majeure* on October 2 for an *Emergent Repair at Station 317* near Troy, Pennsylvania. An estimated 0.15 Bcf of natural gas could be affected, and the estimated in-service date is October 19.

The national benchmark average spot price increases for the third straight week. This report week (Wednesday, September 26 to Wednesday, October 3), Henry Hub spot prices rose 13ϕ from \$3.13/MMBtu last Wednesday to its weekly high of \$3.26/MMBtu yesterday. This report week marks the third straight week of price increases; during this time, Henry Hub spot prices have risen 11%.

Henry Hub and spot prices increased with forecasts of cooler weather across the Great Plains and low storage inventories in the Lower 48 states. At the Chicago Citygate, prices increased 29¢ from \$2.89/MMBtu last Wednesday to its weekly high of \$3.18/MMBtu yesterday. Prices at PG&E Citygate in Northern California rose 22¢, up from \$3.28/MMBtu last Wednesday to its weekly high of \$3.50/MMBtu yesterday. Prices at SoCal Citygate increased 72¢ from \$3.70/MMBtu last Wednesday to its weekly high of \$4.42/MMBtu yesterday.

Nymex futures increase. At the Nymex, the October 2018 contract expired last Wednesday at \$3.021/MMBtu. The November 2018 contract increased to \$3.230/MMBtu, up 25¢ from last Wednesday to yesterday. The price of the 12-month strip averaging November 2018 through October 2019 futures contracts climbed 12¢ to \$2.931/MMBtu.

Supply remains flat. According to data from PointLogic Energy, the average total supply of natural gas remained the same as in the previous report week, averaging 89.3 billion cubic feet per day (Bcf/d). Dry natural gas production remained constant week over week. Average net imports from Canada increased by 5% from last week.

Overall demand decreases with lower power generation. Total U.S. consumption of natural gas fell by 1% compared with the previous report week, according to data from PointLogic Energy. Natural gas consumed for power generation declined by 6% week over week. Industrial sector consumption increased by 1% week over week. In the residential and commercial sectors, consumption increased by 12% with mixed regional heating and cooling demand. Temperatures were close to normal across much of the Lower 48 states, but warmer than normal in the Southeast and Southwestern regions and cooler than normal across the Great Plains. Natural gas exports to Mexico were the same as last week, averaging 4.8 Bcf/d.

U.S. liquefied natural gas (LNG) exports decrease week over week. Four LNG vessels (all from the Sabine Pass liquefaction terminal) with a combined LNG-carrying capacity of 14.2 Bcf departed the United States from September 27 through October 3. One tanker (LNG-carrying capacity 3.8 Bcf) was loading at Sabine Pass on Wednesday. No LNG vessels departed from Cove Point last week because the facility is undergoing scheduled maintenance. The facility has not received any natural gas feedstock pipeline deliveries since September 21.

Cheniere Energy, the operator of the Sabine Pass liquefaction terminal, has filed a <u>request</u> with the Federal Energy Regulatory Commission to introduce refrigerants as part of the commissioning activities for Train 5. The <u>first LNG export cargo from Train 5</u> is expected before the end of this year.

Second Quarter – 2018 – Utica Production Volumes:

During the second quarter of 2018, Ohio's horizontal shale well produced 4,488,104 barrels of oil and 554,306,916 Mcf (545 billion cubic feet) of natural gas, according to figures released today by the Ohio Department of Natural Resources (ODNR).

Natural gas production from the second quarter of 2018 showed a 42.25% increase over the second quarter of 2017, while oil production increased 10.98% for the same period.

	2017 Quarter 2 (Shale)	2018 Quarter 2 (Shale)	Percentage Change
Barrels of oil	4,044,072 bbl	4,488,104 bbl	10.98%
Mcf of natural gas	389,662,485 Mcf	554,306,916 Mcf	42.25%

The ODNR quarterly report lists 2,035 horizontal shale wells, 2,002 of which reported oil and natural gas production during the quarter. Of the wells reporting oil and natural gas results:

- The average amount of oil produced was 2,242 barrels.
- The average amount of natural gas produced was 276,877 Mcf.
- The average number of second quarter days in production was 85.

As of September 29, 2018, there have been 2,892 Utica shale permits issues in Ohio, and 2,420 of them have been developed.

There are currently 1,969 Utica shale wells in production, with 18 rigs running.