



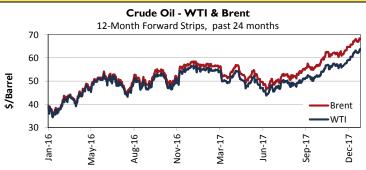
# Competitive Energy Services Weekly Market Summary

January 22 - 26, 2018

## Synopsis of Last Week's Energy Markets

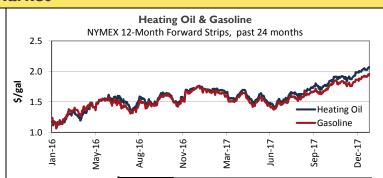
WTI and Brent climbed last week as US crude oil in storage continues to decline, although the domestic production rate is closing in on the 10M barrel per day mark. Crude prices are also being bolstered by a three-year low in the US dollar index. Natural gas prices advanced 10% last week amid cooler forecasts for February and declining inventory levels. This week's high storage withdrawal followed high heating demand and exports and left stocks at a 17.5% deficit to the 5-year average.

# Oil Market



NYMEX WTI	last close	previous week	24-month high	24-month low
12 month strip, \$/bbl	\$63.86	\$62.13	\$63.86	\$33.63
date	1/26/18	1/19/18	1/26/18	2/11/16
change from last close		2.8%	0.0%	90%

US STORAGE (in million	crude oil
domestic stocks as of	412
gain / loss from previou	-1.1
comparison to historic r	within



NYMEX Heating Oil	last close	previous week	24-month high	24-month low
12 month strip, \$/gal	\$2.07	\$2.02	\$2.07	\$1.08
date	1/26/18	1/19/18	1/26/18	2/9/16
change from last close		2.3%	0%	92%

US STORAGE (in million bbls)	distillate	propane	gasoline	
domestic stocks as of 1/19/18	140	54	244	
gain / loss from previous week	0.6	-4.0	3.1	
comparison to historic range	within	within	within	

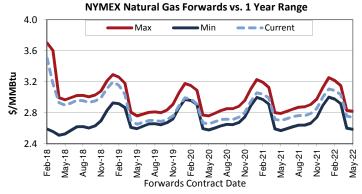
#### **Natural Gas Market**



NYMEX PRICING	last close	previous week	24-month high	24-month low	
12 mo. strip, \$/MMBTu	\$3.04	\$2.91	\$3.70	\$2.11	
date	1/26/18	1/19/18	12/28/16	2/25/16	
change from last close		4.8%	-18%	44%	

CES SCO	RE	
12 month	21	
18 month	33	
24 month	44	
36 month	53	

The Score provides a measure of how current prices compare to their 52-week range. A score close to 0 indicates that current prices are close to their 52-week highs; a score close to 100 indicates that current prices are close to their 52-week lows.



FORWARDS 12 month		18 month	24 month	36 month	
strip (\$/MMBTu)	\$3.04	\$2.97	\$2.92	\$2.88	

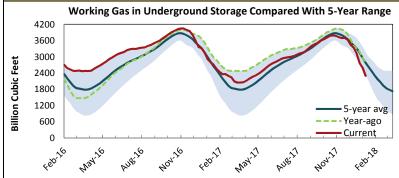
Natural gas futures are useful for both natural gas and electricity consumers because they drive electricity pricing in many U.S. markets. This chart compares the current natural gas price for each forward month on the NYMEX exchange to the highest and lowest prices for the same month over the past 12 months.



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January 22 - 26, 2018 Page 2 of 4

# **Natural Gas Storage**



This chart shows the amount of natural gas in storage at each point in time (red line) compared to the highest, lowest, and average amounts in the past 5 calendar years.

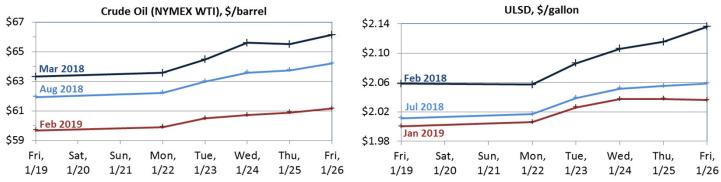
EIA Storage Data	date	Bcf	+/ -
Previous Stock Level	1/12/18	2,584	
Most Recent Stock Level	1/19/18	2,296	
Year-ago Stock Level		2,815	-18.4%
5-Year Average Stock Level		2,782	-17.5%
Most Recent Net Change	1/19/18	-288	
Year-Ago Net Change		-137	110%
5-Year Average Net Change		-164	76%

Data Source: EIA http://tonto.eia.doe.gov/oog/info/ngs/ngs.html

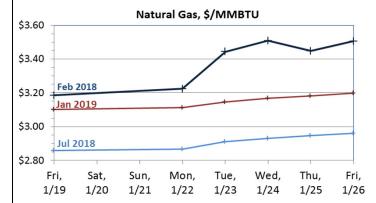
## **Market Assessment**

	NYMEX Futures Summary Statistics											
	Last Expired Prompt Most Expensive Least Expensive Next Winter Avg											
	Contract	Exp. Date	Price	Month	Price	Next 12 Months	Price	Next 12 Months	Price	(Nov18-Mar19)		
Crude oil	Feb-18	1/22/18	\$63.49	Mar-18	\$66.14	Mar-18	\$66.14	Jan-19	\$61.66	\$61.65		
Heating oil	Jan-18	12/29/17	\$2.08	Feb-18	\$2.06	Feb-18	\$2.14	Jan-19	\$2.04	\$2.03		
Natural gas	Jan-18	12/27/17	\$2.74	Feb-18	\$3.19	Feb-18	\$3.51	May-18	\$2.90	\$3.10		

#### **NYMEX End-of-Day Settlements**



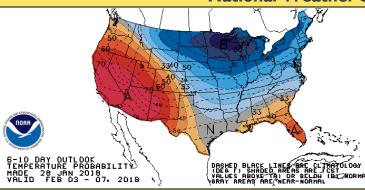
Prompt month WTI reached the \$65 per barrel mark last Wednesday and has stayed above it since, while London-traded Brent-crude, the international benchmark, is now in the \$71-72 range. The EIA reported on Wednesday that domestic crude stocks have declined for 10 straight weeks. Although US production rates have increased with the price of WTI and are projected to soon surpass the current record from 1970, exports have worn down storage levels to 3-year lows. The ban on crude oil exports was lifted in December 2015 and shipments began the next month. Also boosting commodity prices is the US dollar index, currently at a three-year low. On the bearish side, Baker Hughes reported on Friday that US oil rigs jumped by 12 last week.



Natural gas prices climbed 32 cents this week, driven by a 22-cent surge in February contracts on Tuesday alone. Weather forecasts indicate that February cold could arrive sooner than previously expected. The Midwest in particular could see lower-than-average temperatures that would boost heating demand. This alongside projections for a significant storage withdrawal put upward pressure on the markets early in the week. The EIA reported a 288 Bcf storage withdrawal on Thursday; this draw is tied for the second-highest on record and leaves storage inventories below the historical 5-year minimum. One-month futures closed at \$3.505 on Friday afternoon, a 10% gain over the previous week.

The National Weather Service near-term forecast calls for cooler-than-normal temperatures for the northern US from Maine to Washington state. The natural gas market scores on page 1 declined from the previous week. Clients with electricity or natural gas contracts expiring in 2018 should consult with a CES representative for customized guidance.

# **National Weather Service Forecast**



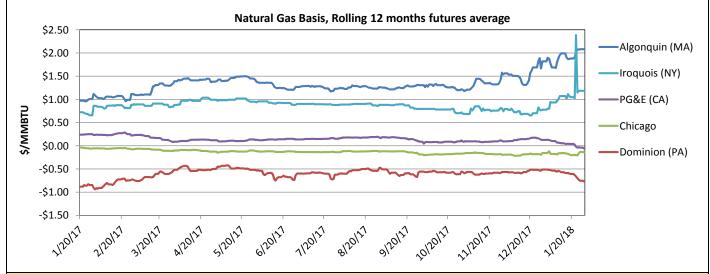
## 6 - 10 Day Forecast for Feb 3 - 7

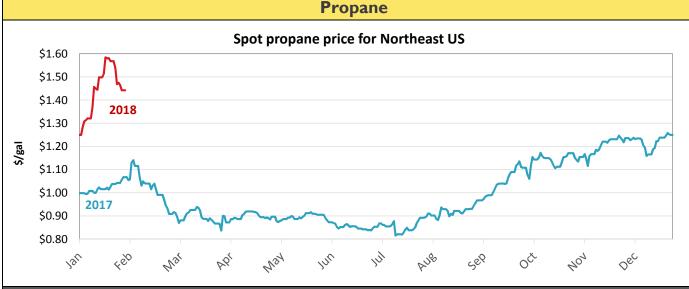
This map depicts forecasted temperatures for next week compared to the long term average. The blue/purple areas are forecast to be colder than normal, white areas are normal, and yellow/orange/red areas are warmer than normal. Abnormally hot weather in the summer and cold weather in the winter can increase the price for natural gas, oil, and electricity.

CLITHINGLOGY Source: Chart from the National Weather Service Climate Prediction

## **Natural Gas Basis Futures**

Basis is the price differential between Henry Hub, located in Erath, Louisiana, and the liquidity point closest to the end-user. Because Henry Hub is used as the delivery point for NYMEX natural gas futures contracts, the cost of using natural gas in any geographic region of the country can be approximated by adding the basis price for the appropriate liquidity point to the NYMEX futures contract. Basis prices can be negative (indicating that natural gas at a liquidity point is cheaper than at the Henry Hub) or positive (indicating that natural gas at a different liquidity point is more expensive than at the Henry Hub). Basis prices are a key component of regional electricity and natural gas costs.





# **Spot Prices**

Spot Frices									
	New England ISO Real Time F								
		1/22/18	1/23/18	1/24/18	1/25/18	1/26/18	1/27/18	1/28/18	Avg
	Maine RT On Pk	47	55	43	94	58			59
	Maine RT Off Pk	9	55	13	79	62	47	25	41
	NH RT On Pk	47	57	49	102	59			63
	NH RT Off Pk	10	57	18	87	64	49	28	45
	Vermont RT On Pk	47	56	49	101	58			62
	Vermont RT Off Pk	9	57	22	90	65	48	28	46
	Connecticut RT On Pk	47	56	50	103	59			63
	Connecticut RT Off Pk	10	57	22	92	66	49	28	46
	Rhode Island RT On Pk	47	56	50	105	60			64
	Rhode Island RT Off Pk	10	57	23	93	67	50	29	47
	NE Mass RT On Pk	47	57	50	105	60			64
	NE Mass RT Off Pk	10	57	22	92	66	50	29	47
	SE Mass RT On Pk	47	57	50	106	60			64
	SE Mass RT Off Pk	10	57	26	96	67	50	29	48
	WC Mass RT On Pk	47	57	50	105	60			64
	WC Mass RT Off Pk	10	58	22	92	67	50	29	47
	New York ISO Real Time Pow	er Pricing B	y Zone (\$/N	ИWh)					Avg
	Capital RT On Pk	30	39	37	34	35			35
=	Capital RT Off Pk	21	19	18	25	19	40	32	25
Power (\$/MWh	Central RT On Pk	28	29	35	30	23			29
ĮΣ	Central RT Off Pk	20	13	16	23	18	12	23	18
r (\$	Hudson RT On Pk	30	38	38	33	32			34
§ §	Hudson RT Off Pk	21	18	18	25	19	32	30	23
8	Mohawk RT On Pk	28	30	36	30	24	4.0	20	30
	Mohawk RT Off Pk	20	14	17	24	18	13	23	18
	Milwood RT On Pk	30	38	38	34	32	22	20	34
	Milwood RT Off Pk	21	18	18	26	19	32	30	24
	NYC RT On Pk NYC RT Off Pk	44 21	58 18	51 18	39 26	48 20	35	33	48 24
	PJM Real Time Power Pricing		_	10	20	20	33	33	Avg
	Eastern Hub On Pk	23	25	35	40	35			31
	Eastern Hub Off Pk	17	21	23	31	48	29	26	28
	Western Hub On Pk	23	25	37	39	32			31
	Western Hub Off Pk	17	21	25	31	35	29	25	26
	PPL Zone On Pk	22	24	33	38	30			30
	PPL Zone Off Pk	17	21	22	30	32	28	25	25
	AEP RT On Pk	22	24	38	37	27			30
	AEP RT Off Pk	17	21	25	31	28	28	25	25
	Chicago RT On Pk	21	24	34	31	22			26
	Chicago RT Off Pk	16	20	24	28	17	26	24	22
	New Jersey Hub On Pk	26	25	34	39	30			31
	New Jersey Hub Off Pk	19	22	23	30	33	31	26	26
	California ISO Real Time Pow	er Pricing (\$	/MWh)						Avg
	SoCal Edison RT On Pk	33	29	38	30	30			32
	SoCal Edison RT Off Pk	34	29	30	34	29	35	22	31
		1/22/18	1/23/18	1/24/18	1/25/18	1/26/18	1/27/18	1/28/18	Avg
ξū	Henry Hub, LA	3.14	3.35	3.54	3.63	3.58			
Ĭ	TZ6, MA	6.19	8.99	8.76	8.85	5.07			7.57
>	Algonquin, MA	3.28	11.48		9.64	4.63			7.26
\ <u>``</u>	Algoriquiti, IVIA					3.25			3.13
1/\$ se	Chicago Hub, IL	2.91	3.10	3.26	3.12	3.23			3.13
I Gas \$/F		2.91 2.83	3.10 3.49	3.26 4.49	3.12	3.10			3.44
ural Gas \$/P	Chicago Hub, IL								
Natural Gas \$/MIMBtu	Chicago Hub, IL New York, NY	2.83	3.49	4.49	3.27	3.10			3.44
Natural Gas \$/	Chicago Hub, IL New York, NY Dominion South, PA	2.83 2.49	3.49 2.67	4.49 2.79	3.27 2.74	3.10 2.78			3.44 2.69