



# Competitive Energy Services Weekly Market Summary

January 15 - 19, 2018

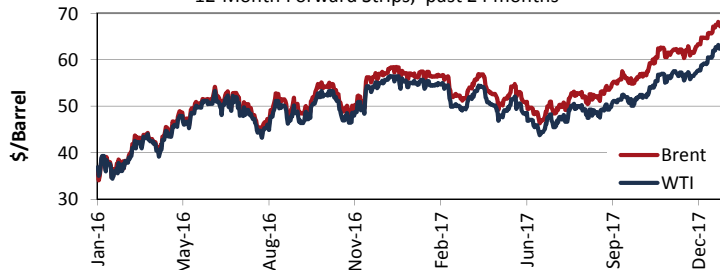
## Synopsis of Last Week's Energy Markets

Crude oil finally snapped a 4-week streak of gains from mid-December through January 12 despite bullish news last week. The EIA reported that US crude stocks are at a 3-year low, while OPEC and Russia achieved over 100% compliance with production cuts in December. Natural gas prices saw a modest decline last week in anticipation of mild weather and suppressed heating demand across the eastern U.S. Last week's storage withdrawal was lower than average as demand retreated and production recovered following the early-January cold snap.

## Oil Market

### Crude Oil - WTI & Brent

12-Month Forward Strips, past 24 months

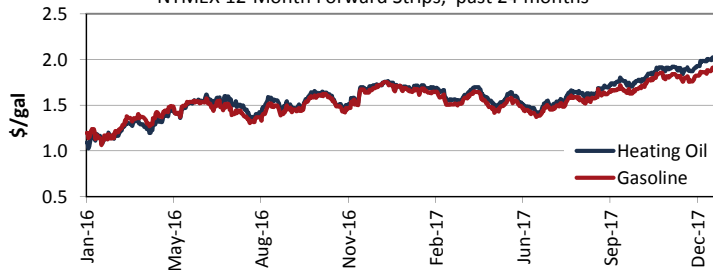


NYMEX WTI	last close	previous week	24-month high	24-month low
12 month strip, \$/bbl	\$61.97	\$62.67	\$62.67	\$33.63
date	1/19/18	1/12/18	1/12/18	2/11/16
change from last close		-1.1%	-1.1%	84%

US STORAGE (in million bbls)	crude oil
domestic stocks as of 1/12/18	413
gain / loss from previous week	-6.9
comparison to historic range	within

### Heating Oil & Gasoline

NYMEX 12-Month Forward Strips, past 24 months



NYMEX Heating Oil	last close	previous week	24-month high	24-month low
12 month strip, \$/gal	\$2.02	\$2.04	\$2.04	\$1.00
date	1/19/18	1/12/18	1/12/18	1/21/16
change from last close		-0.8%	-1%	102%

US STORAGE (in million bbls)	distillate	propane	gasoline
domestic stocks as of 1/12/18	139	58	241
gain / loss from previous week	-3.9	-3.7	3.6
comparison to historic range	within	within	within

## Natural Gas Market

### NYMEX Henry Hub Futures: 12 Month Forward Strip

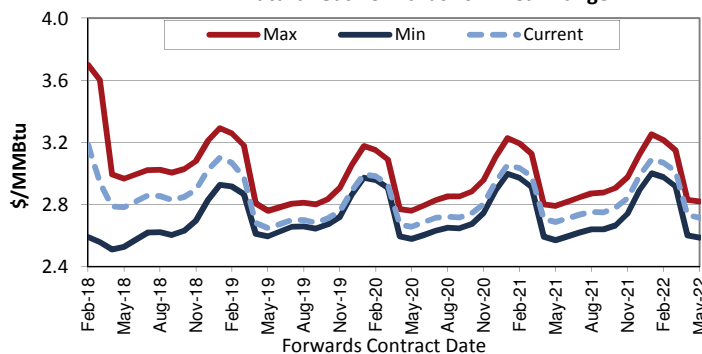


NYMEX PRICING	last close	previous week	24-month high	24-month low
12 mo. strip, \$/MMBtu	\$2.91	\$2.90	\$3.70	\$2.11
date	1/19/18	1/12/18	12/28/16	2/25/16
change from last close		0.3%	-21%	38%

CES SCORE	
12 month	46
18 month	53
24 month	60
36 month	63

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.

### NYMEX Natural Gas Forwards vs. 1 Year Range



FORWARDS	12 month	18 month	24 month	36 month
strip (\$/MMBtu)	\$2.91	\$2.87	\$2.85	\$2.83

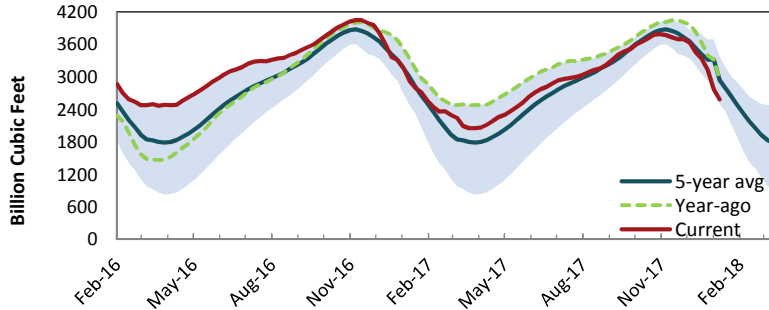
Natural gas futures are useful for both natural gas and electricity consumers because they drive electricity pricing in many U.S. markets. This chart compares the current natural gas price for each forward month on the NYMEX exchange to the highest and lowest prices for the same month over the past 12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



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### Natural Gas Storage

Working Gas in Underground Storage Compared With 5-Year Range



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	1/5/18	2,767	
Most Recent Stock Level	1/12/18	2,584	
Year-ago Stock Level		2,952	-12.5%
5-Year Average Stock Level		2,946	-12.3%
Most Recent Net Change	1/12/18	-183	
Year-Ago Net Change		-230	-20%
5-Year Average Net Change		-203	-10%

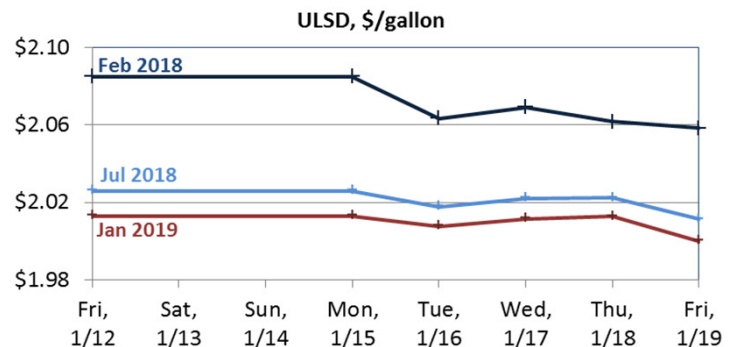
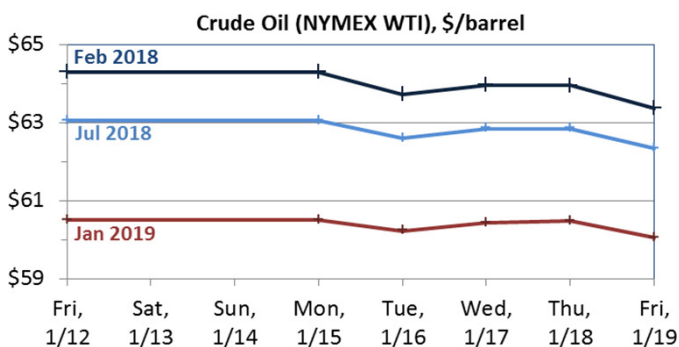
Data Source: EIA <http://tonto.eia.doe.gov/oog/info/ngs/ngs.html>

### Market Assessment

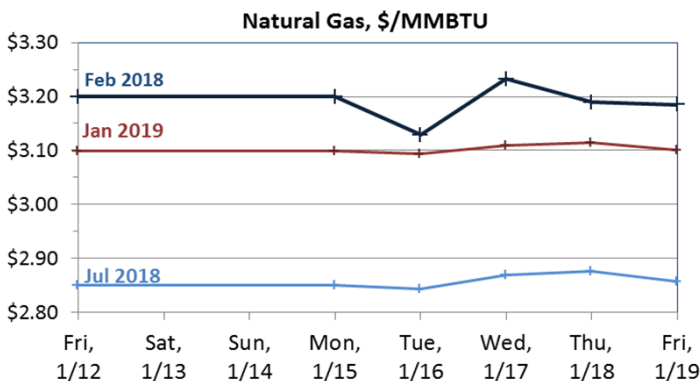
#### NYMEX Futures Summary Statistics

	Last Expired Contract	Exp. Date	Price	Prompt Month	Price	Most Expensive Next 12 Months	Price	Least Expensive Next 12 Months	Price	Next Winter Avg (Nov18-Mar19)
Crude oil	Jan-18	12/19/17	\$57.46	Feb-18	\$63.37	Feb-18	\$63.37	Jan-19	\$60.04	\$60.04
Heating oil	Jan-18	12/29/17	\$2.08	Feb-18	\$2.06	Feb-18	\$2.06	Jan-19	\$2.00	\$2.00
Natural gas	Jan-18	12/27/17	\$2.74	Feb-18	\$3.19	Feb-18	\$3.19	May-18	\$2.78	\$3.01

#### NYMEX End-of-Day Settlements



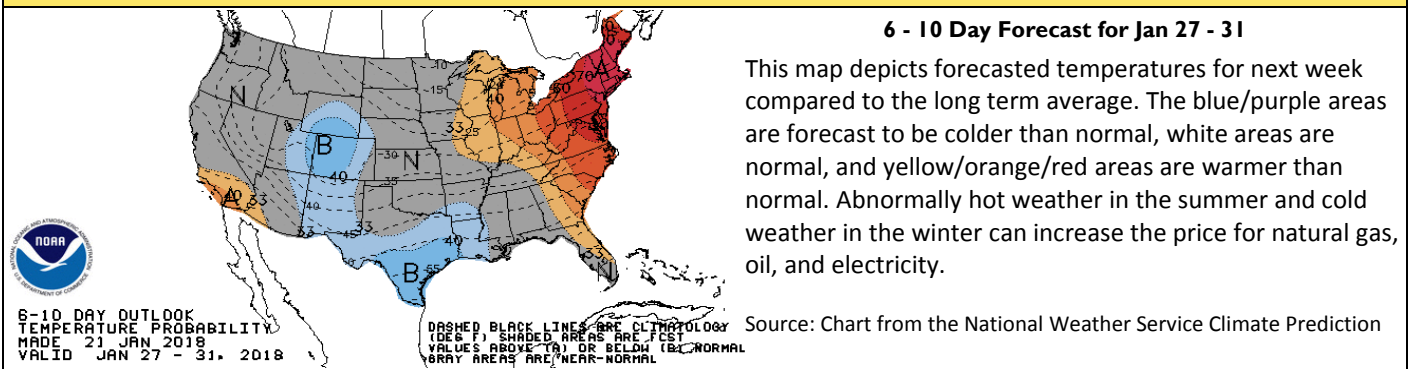
Crude oil prices declined last week despite fundamentals that were rather bullish for prices. Bloomberg estimated that OPEC and Russia achieved 129% compliance with the joint production cuts in December, although some of this was due to plummeting production from Venezuela. Domestically, the EIA reported a ninth straight drop in crude oil storage levels. Stocks at the NYMEX storage hub in Cushing, Oklahoma, saw a weekly drop of 4.2M barrels, the largest since records started in 2004. OPEC and Russia met over the weekend and signaled that cooperation will be necessary beyond the current production cuts, which are set to expire at the end of 2018.



Natural gas prices fell half a percent last week amid mixed weather forecasts for the coming weeks. Projections indicated that late January could be typical or warmer than normal especially for the Northeast, but colder weather and higher heating demand could return in mid-February. Thursday's EIA report weighed on markets as the weekly storage withdrawal fell short of the average draw for this time of year. Storage remains 12.3% below typical levels, however, thanks to sustained gains in exports over the past months and last week's record-breaking withdrawal following the New Year's cold snap. February futures lost just 2 cents by the end of the week, closing at \$3.185 on Friday afternoon.

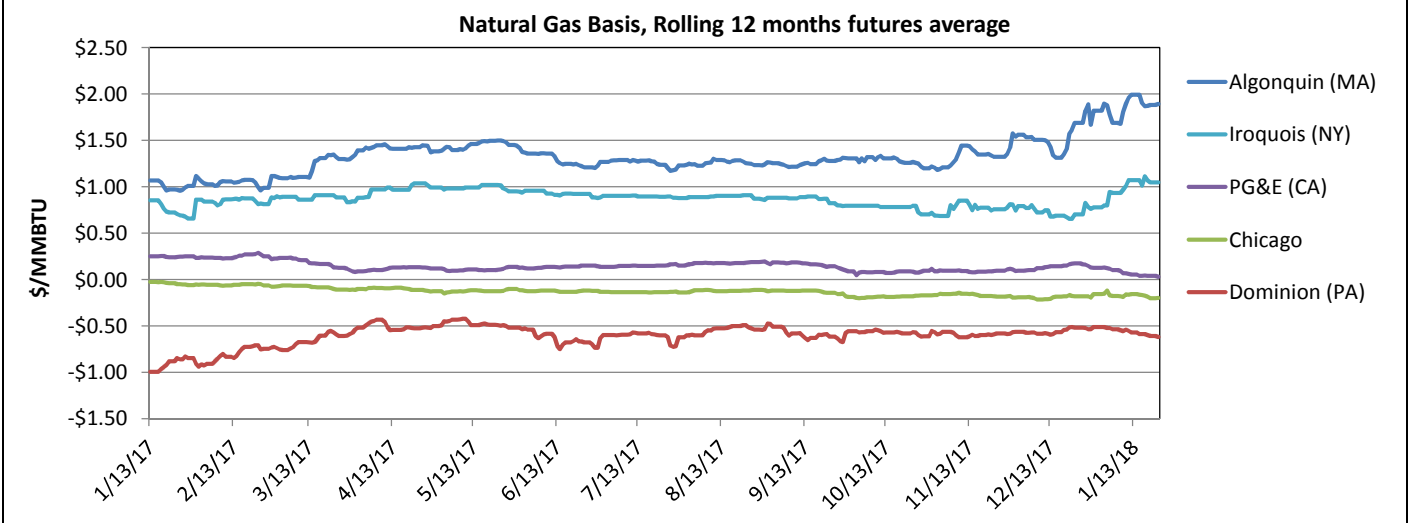
The National Weather Service near-term forecast calls for warmer-than-normal temperatures for the eastern third of the US, especially the Northeast. The natural gas market scores on page 1 are steady from the previous week. Clients with electricity or natural gas contracts expiring in 2018 should consult with a CES representative for customized guidance.

### National Weather Service Forecast

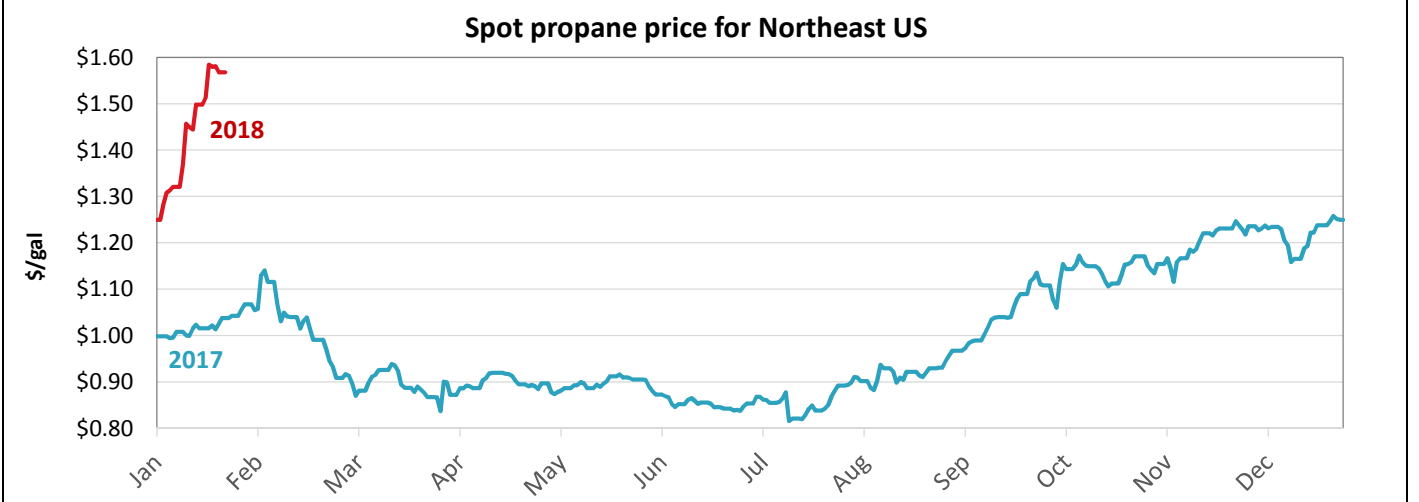


### Natural Gas Basis Futures

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.



### Propane



**Spot Prices**

		<b>New England ISO Real Time Power Pricing By Zone (\$/MWh)</b>							
		1/15/18	1/16/18	1/17/18	1/18/18	1/19/18	1/20/18	1/21/18	<b>Avg</b>
<b>Power (\$/MWh)</b>	Maine RT On Pk	133	106	121	64	86			102
	Maine RT Off Pk	122	111	101	78	80	(15)	9	70
	NH RT On Pk	137	109	124	90	86			109
	NH RT Off Pk	126	114	102	93	118	15	19	84
	Vermont RT On Pk	139	110	125	108	86			114
	Vermont RT Off Pk	127	114	102	102	145	36	26	93
	Connecticut RT On Pk	140	111	126	111	86			115
	Connecticut RT Off Pk	127	115	103	104	151	39	27	95
	Rhode Island RT On Pk	140	111	126	112	86			115
	Rhode Island RT Off Pk	130	117	104	105	153	40	27	97
	NE Mass RT On Pk	138	110	126	122	86			117
	NE Mass RT Off Pk	127	116	104	110	168	54	32	101
	SE Mass RT On Pk	140	112	126	115	86			116
	SE Mass RT Off Pk	129	117	104	106	157	44	28	98
	WC Mass RT On Pk	140	111	126	112	87			116
	WC Mass RT Off Pk	129	116	104	106	153	41	28	97
	<b>New York ISO Real Time Power Pricing By Zone (\$/MWh)</b>								
	Capital RT On Pk	156	106	122	94	54			107
	Capital RT Off Pk	144	92	90	96	98	30	32	83
	Central RT On Pk	127	68	70	62	31			71
	Central RT Off Pk	53	71	47	78	71	14	30	52
	Hudson RT On Pk	152	96	112	84	46			98
	Hudson RT Off Pk	118	88	79	94	93	26	32	76
	Mohawk RT On Pk	134	68	74	64	32			74
	Mohawk RT Off Pk	58	74	50	81	74	14	30	54
	Milwood RT On Pk	153	97	114	86	48			100
	Milwood RT Off Pk	119	88	79	94	94	26	32	76
	NYC RT On Pk	176	127	127	105	91			125
	NYC RT Off Pk	119	89	79	95	95	32	34	78
<b>PJM Real Time Power Pricing By Zone (\$/MWh)</b>									<b>Avg</b>
	Eastern Hub On Pk	171	103	117	93	93			115
	Eastern Hub Off Pk	123	55	71	142	142	142	142	117
	Western Hub On Pk	142	96	113	82	82			103
	Western Hub Off Pk	79	51	70	115	115	115	115	94
	PPL Zone On Pk	160	100	113	85	85			109
	PPL Zone Off Pk	87	52	68	133	133	133	133	105
	AEP RT On Pk	80	74	77	77	77			77
	AEP RT Off Pk	69	44	64	114	114	114	114	90
	Chicago RT On Pk	39	57	31	45	45			44
	Chicago RT Off Pk	24	29	30	28	28	28	28	28
	New Jersey Hub On Pk	164	102	113	87	87			111
	New Jersey Hub Off Pk	89	53	70	134	134	134	134	107
<b>California ISO Real Time Power Pricing (\$/MWh)</b>									<b>Avg</b>
	SoCal Edison RT On Pk	56	34	33	38	30			38
	SoCal Edison RT Off Pk	32	29	32	32	24	27	30	29
<b>Natural Gas \$/MMBtu</b>		1/15/18	1/16/18	1/17/18	1/18/18	1/19/18	1/20/18	1/21/18	<b>Avg</b>
		Henry Hub, LA	5.46	3.92	3.54	3.20			
		TZ6, MA	13.96	13.00	6.57	6.21			9.94
		Algonquin, MA		13.66	7.11	5.32			8.70
		Chicago Hub, IL	3.93	3.32	3.02	2.95			3.31
		New York, NY	10.18	7.39	3.84	3.34			6.19
		Dominion South, PA	3.73	2.95	2.83	2.68			3.05
		Opal Hub, WY	3.72	2.92		2.74			3.13
	PG&E Citygate, CA	3.02	3.00	2.94	2.91			2.97	