



# Competitive Energy Services Weekly Market Summary

July 10 - 14, 2017

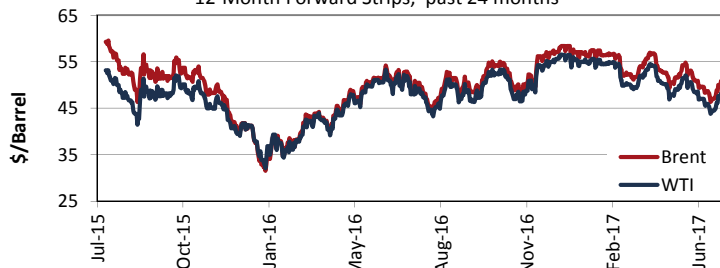
## Synopsis of Last Week's Energy Markets

Bullish fundamentals boosted crude oil prices last week. Both domestic and international agencies raised projections for 2017 global crude demand, and U.S. crude stocks dropped precipitously the prior week. Natural gas prices rose last week as the storage surplus continued to narrow despite recent mild weather. The surplus has fallen to 6.2% to the 5-year average and could weaken if forecasts for widespread heat waves materialize in late July.

## Oil Market

### Crude Oil - WTI & Brent

12-Month Forward Strips, past 24 months

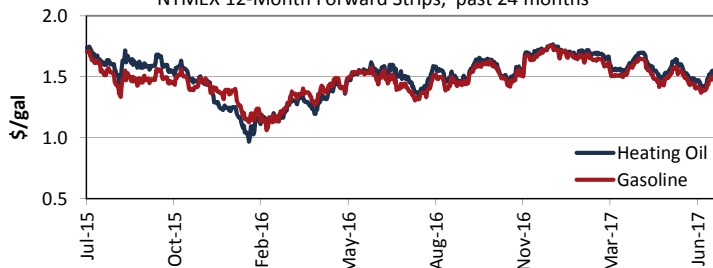


NYMEX WTI	last close	previous week	24-month high	24-month low
12 month strip, \$/bbl	\$47.53	\$45.47	\$56.70	\$32.40
date	7/14/17	7/7/17	1/6/17	1/20/16
change from last close		4.5%	-16.2%	47%

US STORAGE (in million bbls)	crude oil
domestic stocks as of	7/7/17
	495
gain / loss from previous week	-7.6
comparison to historic range	above

### 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	\$1.54	\$1.48	\$1.76	\$0.97
date	7/14/17	7/7/17	1/2/17	1/20/16
change from last close		3.7%	-13%	59%

US STORAGE (in million bbls)	distillate	propane	gasoline
domestic stocks as of	7/7/17		
	154	62	236
gain / loss from previous week	3.1	1.7	-1.6
comparison to historic range	within	within	above

## Natural Gas Market

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

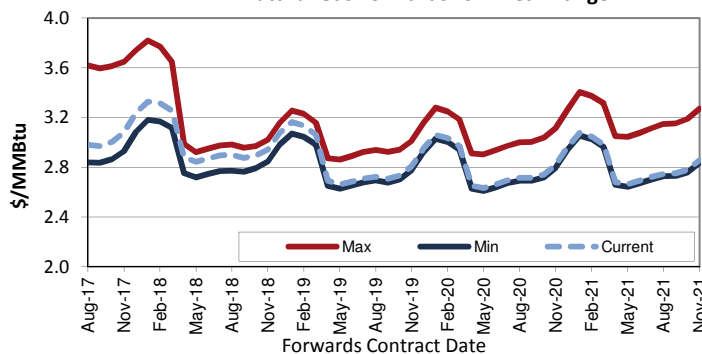


NYMEX PRICING	last close	previous week	24-month high	24-month low
12 mo. strip, \$/MMBtu	\$3.06	\$2.94	\$3.70	\$2.11
date	7/14/17	7/7/17	12/28/16	2/25/16
change from last close		4.0%	-17%	45%

CES SCORE	
12 month	66
18 month	59
24 month	63
36 month	72

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)	\$3.06	\$3.03	\$2.98	\$2.92

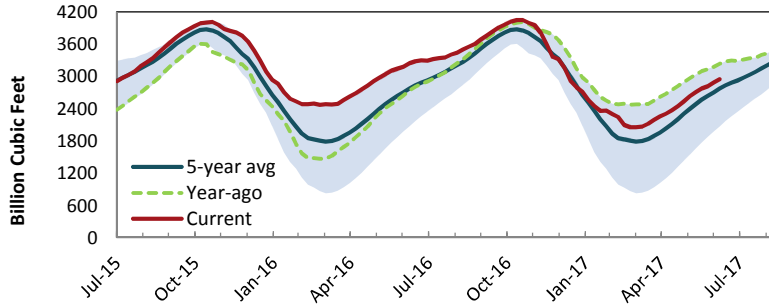
Natural gas futures are useful for both natural gas and electricity consumers because they drive electricity pricing in many U.S. markets. This chart compares the current natural gas price for each forward month on the NYMEX exchange to the highest and lowest prices for the same month over the past 12 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	6/30/17	2,888	
Most Recent Stock Level	7/7/17	2,945	
Year-ago Stock Level		3,234	-8.9%
5-Year Average Stock Level		2,773	6.2%
Most Recent Net Change	7/7/17	57	
Year-Ago Net Change		61	
5-Year Average Net Change		72	

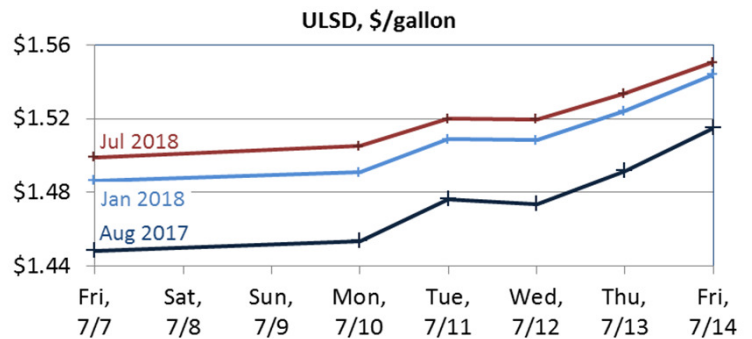
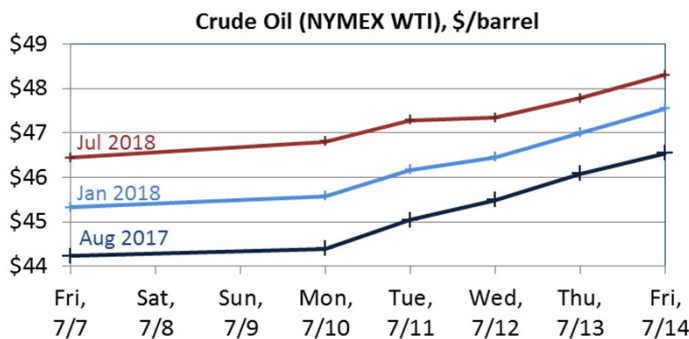
Data Source: EIA <http://tonto.eia.doe.gov/oog/info/ngs/ngs.html>

### Market Assessment

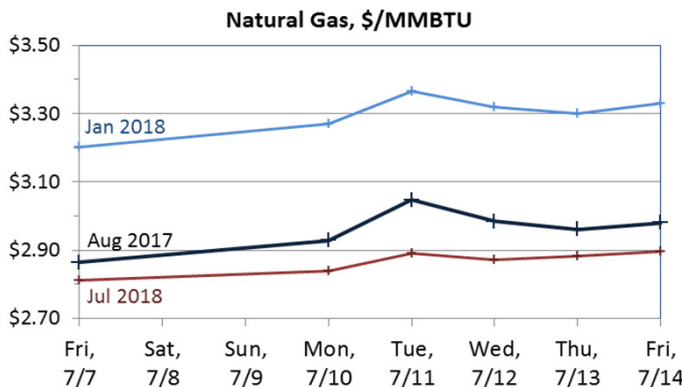
#### NYMEX Futures Summary Statistics

	Last Expired Contract	Exp. Date	Price	Prompt Month	Price	Most Expensive Next 12 Months	Price	Least Expensive Next 12 Months	Price	Next Winter Avg (Nov17-Mar18)
Crude oil	Jul-17	6/20/17	\$43.23	Aug-17	\$46.54	Jul-18	\$48.30	Aug-17	\$46.54	\$47.52
Heating oil	Jul-17	6/30/17	\$1.48	Aug-17	\$1.52	Jul-18	\$1.55	Aug-17	\$1.52	\$1.54
Natural gas	Jul-17	6/28/17	\$3.07	Aug-17	\$2.98	Jan-18	\$3.33	May-18	\$2.84	\$3.24

#### NYMEX End-of-Day Settlements



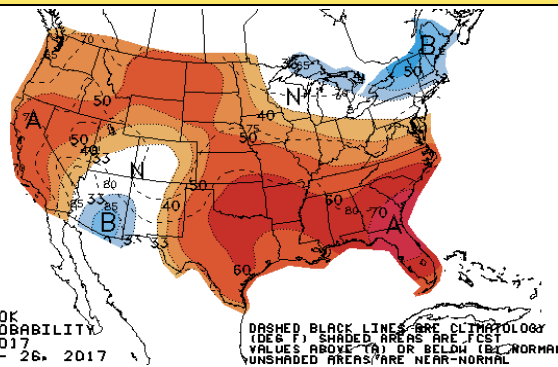
Crude oil prices climbed each day last week, gaining 5% over the week. Prices rose as the Paris-based International Energy Agency raised its global demand outlook for 2017, largely from projected second quarter growth from Germany and the U.S. Meanwhile, the domestic Energy Information Administration cut its US production forecast for 2018, further bouying prices. On Wednesday, it reported a 7.6M barrel drop in crude oil stocks due to reduced imports and increased refining rates, as evident in a 3.1M barrel increase in distillates stocks. Domestic production rose modestly from the previous week, and active oil rigs gained by 2.



Prompt month natural gas rose 4% last week to \$2.98, rebounding from the previous week's 4-month lows amid forecasts of warming temperatures across the continental U.S. August futures climbed early in the week, gaining 11.8 cents on Tuesday alone following the warm forecasts and projections for another lower-than-average storage gain. With this week's build of 57 Bcf, compared to the average gain of 72 Bcf, eight of the past 10 injections have been weaker than normal. The surplus has fallen over the course of the 2017 injection season from 14.8% to just 6.2% as relatively mild weather and muted demand for generation seem to be outweighed by rising overseas LNG shipments pipeline exports to Mexico.

The National Weather Service near-term forecast calls for above-normal temperatures for almost all of the United States except for New England. The natural gas market scores on page 1 declined from the previous week. Clients with electricity or natural gas contracts expiring in 2017 or 2018 should consult with a CES representative for customized guidance.

**National Weather Service Forecast**



**6 - 10 Day Forecast for July 22 - 26, 2017**

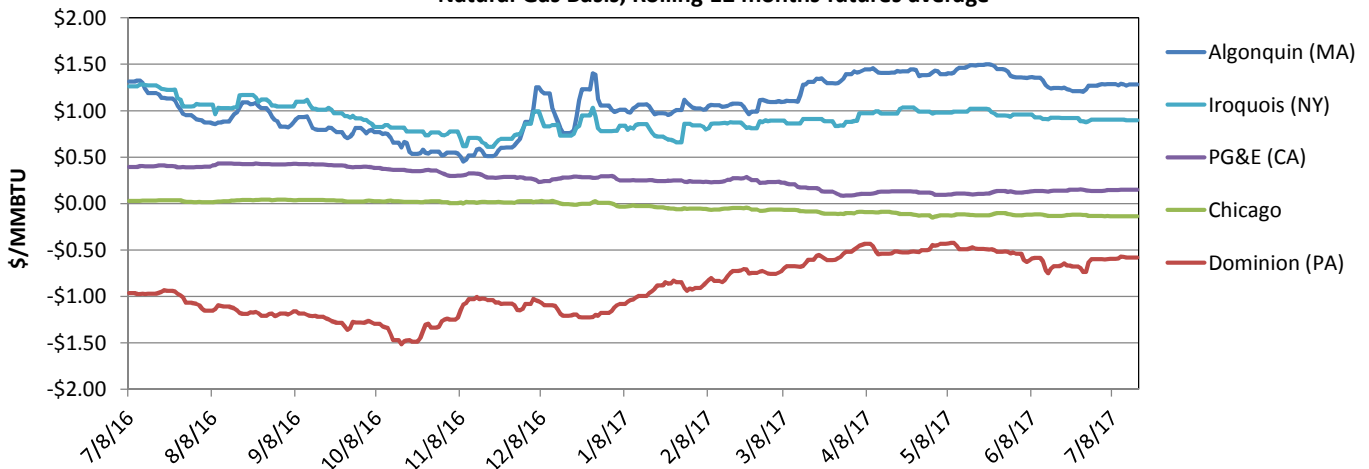
This map depicts forecasted temperatures for next week compared to the long term average. The blue/purple areas are forecast to be colder than normal, white areas are normal, and yellow/orange/red areas are warmer than normal. Abnormally hot weather in the summer and cold weather in the winter can increase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

Source: Chart from the National Weather Service Climate Prediction Center [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)

**Natural Gas Basis Futures**

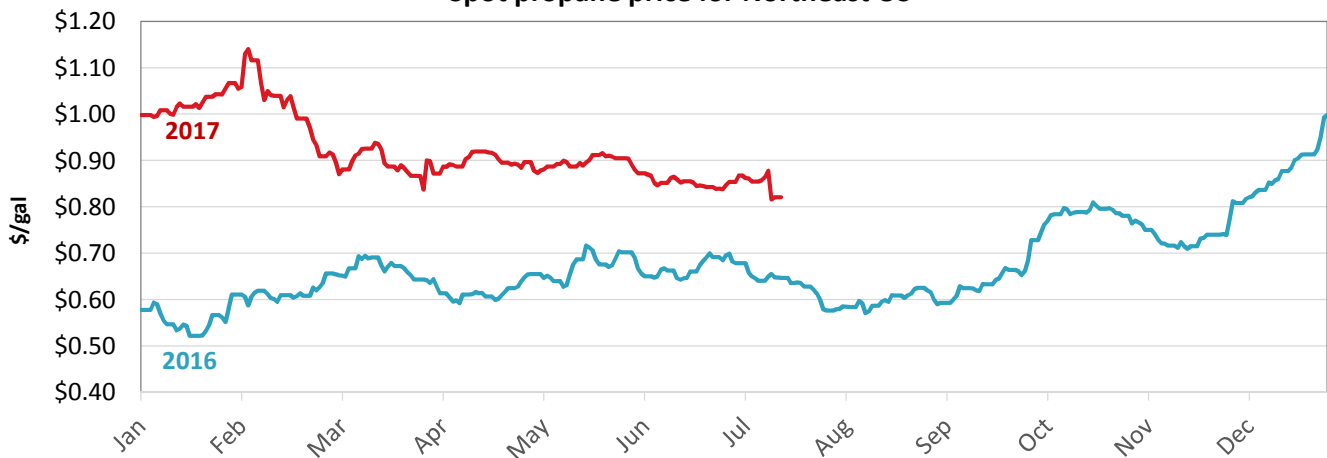
Basis is the price differential between Henry Hub, located in Erath, Louisiana, and the liquidity point closest to the end-user. Because Henry Hub is used as the delivery point for NYMEX natural gas futures contracts, the cost of using natural gas in any geographic region of the country can be approximated 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.

**Natural Gas Basis, Rolling 12 months futures average**



**Propane**

**Spot propane price for Northeast US**



**Spot Prices**

		<b>New England ISO Real Time Power Pricing By Zone (\$/MWh)</b>							<b>Avg</b>	
		7/10/17	7/11/17	7/12/17	7/13/17	7/14/17	7/15/17	7/16/17		
<b>Power (\$/MWh)</b>	Maine RT On Pk	32	30	41	28	18			30	
	Maine RT Off Pk	15	24	24	22	16	18	25	21	
	NH RT On Pk	33	32	42	29	18			31	
	NH RT Off Pk	15	25	25	23	16	19	26	21	
	Vermont RT On Pk	33	32	42	30	18			31	
	Vermont RT Off Pk	15	25	26	23	16	19	26	21	
	Connecticut RT On Pk	34	32	43	31	18			32	
	Connecticut RT Off Pk	16	25	26	23	16	19	26	22	
	Rhode Island RT On Pk	33	32	42	29	18			31	
	Rhode Island RT Off Pk	16	25	25	23	16	19	26	21	
	NE Mass RT On Pk	33	32	42	29	18			31	
	NE Mass RT Off Pk	16	25	25	23	16	19	26	21	
	SE Mass RT On Pk	33	32	42	29	18			31	
	SE Mass RT Off Pk	16	25	25	23	16	19	26	21	
	WC Mass RT On Pk	33	32	43	30	18			31	
	WC Mass RT Off Pk	16	25	26	23	16	19	26	21	
			<b>New York ISO Real Time Power Pricing By Zone (\$/MWh)</b>							<b>Avg</b>
	<b>Power (\$/MWh)</b>	Capital RT On Pk	31	33	40	27	20			30
		Capital RT Off Pk	13	25	25	27	12	15	24	20
		Central RT On Pk	32	33	40	26	21			30
Central RT Off Pk		11	24	24	26	11	15	24	19	
Hudson RT On Pk		32	33	41	32	20			32	
Hudson RT Off Pk		13	26	26	28	12	17	25	21	
Mohawk RT On Pk		29	32	40	27	19			29	
Mohawk RT Off Pk		10	24	12	23	11	15	23	17	
Milwood RT On Pk		33	35	42	34	20			33	
Milwood RT Off Pk		13	26	26	29	12	17	25	21	
NYC RT On Pk		36	38	43	54	21			38	
NYC RT Off Pk		13	27	28	31	13	20	26	23	
		<b>PJM Real Time Power Pricing By Zone (\$/MWh)</b>							<b>Avg</b>	
<b>Natural Gas \$/MMBtu</b>		Eastern Hub On Pk	32	32	37	47	47			39
		Eastern Hub Off Pk	16	20	22	23	23	23	23	21
	Western Hub On Pk	32	31	33	26	26			29	
	Western Hub Off Pk	16	20	21	22	22	22	22	21	
	PPL Zone On Pk	28	31	35	39	39			34	
	PPL Zone Off Pk	15	20	21	22	22	22	22	20	
	AEP RT On Pk	38	32	30	34	34			33	
	AEP RT Off Pk	17	20	21	22	22	22	22	21	
	Chicago RT On Pk	38	33	30	34	34			34	
	Chicago RT Off Pk	17	20	21	21	21	21	21	20	
	New Jersey Hub On Pk	31	32	37	42	42			37	
	New Jersey Hub Off Pk	15	20	21	22	22	22	22	21	
			<b>California ISO Real Time Power Pricing (\$/MWh)</b>							<b>Avg</b>
	<b>Natural Gas \$/MMBtu</b>	SoCal Edison RT On Pk	54	29	46	39	30			40
		SoCal Edison RT Off Pk	31	25	23	27	26	25	26	26
		7/10/17	7/11/17	7/12/17	7/13/17	7/14/17	7/15/17	7/16/17	<b>Avg</b>	
Henry Hub, LA		2.91	2.99	2.98	2.94	2.93			2.95	
TZ6, MA		2.42	2.70	2.58	2.28	2.41			2.48	
Algonquin, MA		2.40	2.79			2.60			2.60	
Chicago Hub, IL		2.76	2.88	2.86	2.78	2.79			2.81	
New York, NY		2.18	2.34	2.28	2.05	2.07			2.19	
Dominion South, PA		2.11	2.24	2.23	1.99	2.00			2.11	
Opal Hub, WY		2.60	2.66	2.71	2.61	2.57			2.63	
PG&E Citygate, CA	3.18	3.29	3.30	3.23	3.22			3.24		
Kern River Deliveries	2.87	2.88	2.88	2.79	2.77			2.84		