



# Competitive Energy Services Weekly Market Summary

May 29 - June 2, 2017

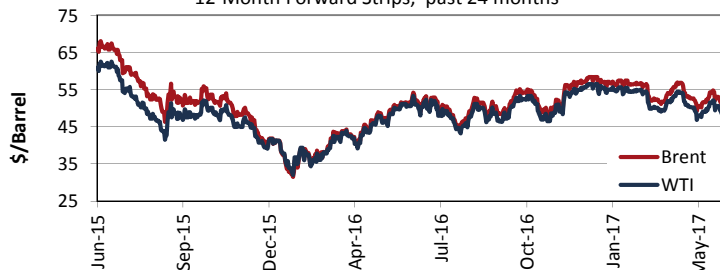
## Synopsis of Last Week's Energy Markets

Crude oil slid over 4% in the four trading days last week on doubts that OPEC and Russia could do enough to rebalance the global glut in crude stocks as US production grows, reaching 6.5% over year-ago levels. Natural gas prices plummeted last week as a cool start to June is expected to curb any late-spring cooling demand and could allow the storage surplus to swell in the coming weeks. July futures slipped 9.4%, closing at \$3 on Friday afternoon.

## Oil Market

### Crude Oil - WTI & Brent

12-Month Forward Strips, past 24 months

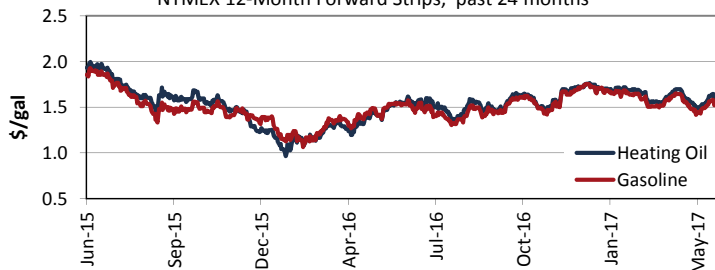


NYMEX WTI	last close	previous week	24-month high	24-month low
12 month strip, \$/bbl	\$48.39	\$50.50	\$62.86	\$32.40
date	6/2/17	5/26/17	6/10/15	1/20/16
change from last close		-4.2%	-23.0%	49%

US STORAGE (in million bbls)	crude oil
domestic stocks as of	5/26/17
	510
gain / loss from previous week	-6.4
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	\$1.53	\$1.60	\$2.00	\$0.97
date	6/2/17	5/26/17	6/10/15	1/20/16
change from last close		-4.4%	-24%	58%

US STORAGE (in million bbls)	distillate	propane	gasoline
domestic stocks as of	5/26/17		
	147	47	237
gain / loss from previous week	0.4	3.45	-2.9
comparison to historic range	within	within	above

## Natural Gas Market

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

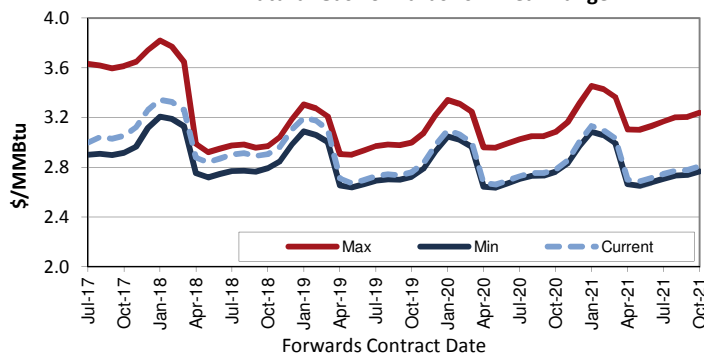


NYMEX PRICING	last close	previous week	24-month high	24-month low
12 mo. strip, \$/MMBTu	\$3.09	\$3.32	\$3.70	\$2.11
date	6/2/17	5/26/17	12/28/16	2/25/16
change from last close		-7.0%	-17%	46%

CES SCORE	
12 month	70
18 month	59
24 month	61
36 month	70

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)	\$3.09	\$3.04	\$3.01	\$2.95

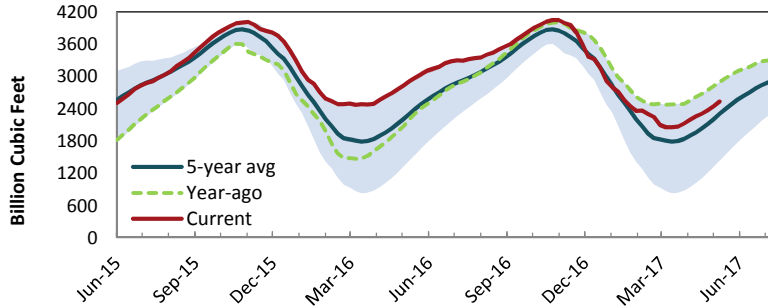
Natural gas futures are useful for both natural gas and electricity consumers because they drive electricity pricing in many U.S. markets. This chart compares the current natural gas price for each forward month on the NYMEX exchange to the highest and lowest prices for the same month over the past 12 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	5/19/17	2,444	
Most Recent Stock Level	5/26/17	2,525	
Year-ago Stock Level		2,895	-12.8%
5-Year Average Stock Level		2,300	9.8%
Most Recent Net Change	5/26/17	81	
Year-Ago Net Change		80	
5-Year Average Net Change		97	

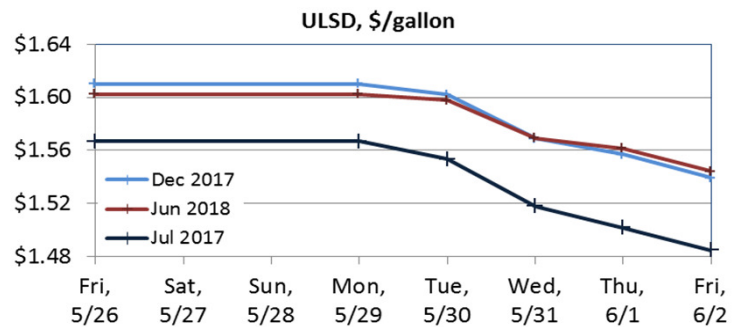
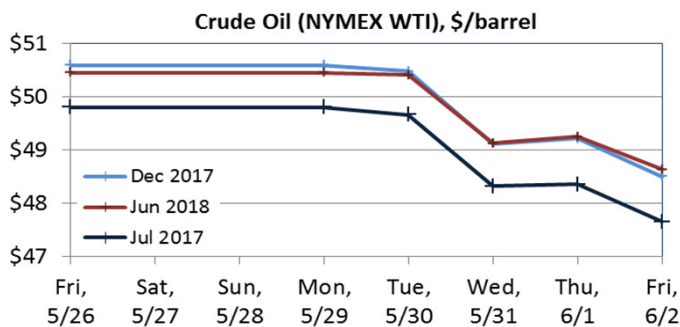
Data Source: EIA <http://tonto.eia.doe.gov/oog/info/ngs/ngs.html>

### Market Assessment

NYMEX Futures Summary Statistics

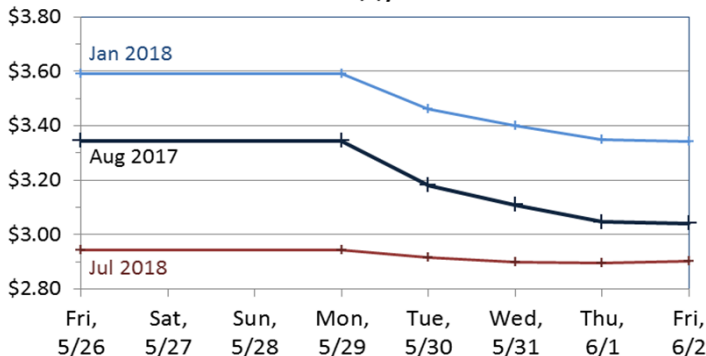
	Last Expired Contract	Exp. Date	Price	Prompt Month	Price	Most Expensive Next 12 Months	Price	Least Expensive Next 12 Months	Price	Next Winter Avg (Nov17-Mar18)
Crude oil	Jun-17	5/22/17	\$50.73	Jul-17	\$47.66	Mar-18	\$48.70	Aug-17	\$47.87	\$48.58
Heating oil	Jun-17	5/31/17	\$1.52	Jul-17	\$1.48	Feb-18	\$1.56	Jul-17	\$1.48	\$1.55
Natural gas	Jun-17	4/26/17	\$3.24	Jul-17	\$3.00	Jan-18	\$3.34	May-18	\$2.84	\$3.26

NYMEX End-of-Day Settlements



Crude oil fell for a second consecutive week as the extension of the OPEC-led production cuts failed to turn the tide on the bearish market. July 2017, the prompt month contract, has fallen \$10 per barrel since the start of year when the production cuts began. US production rates have trended up since September and output from Libya is also increasing, casting doubt on the ability of OPEC and Russia to rebalance the world market, at least with the current level of production cuts. Over the weekend, four Arab states severed ties with Qatar over its support of the Muslim Brotherhood. Despite the conflict, both London-traded Brent and New York-traded WTI were declining on Monday.

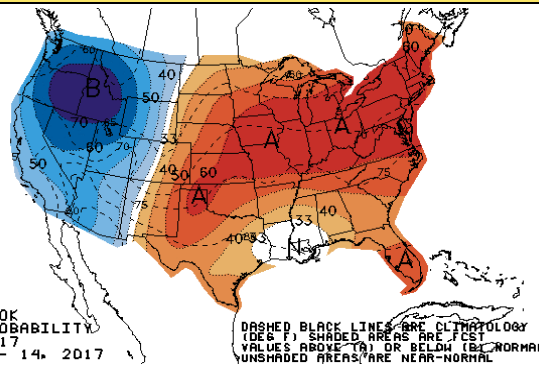
Natural Gas, \$/MMBTU



Natural gas prices dropped to levels last seen at the beginning of March amidst forecasts for a cool June that signal a mild end to spring and muted demand for cooling and power burn. One-month futures fell \$0.31 over the course of the week, largely reversing price gains from March and April that had accompanied forecasts for warm summer weather. This week's storage injection was higher than analysts' projections, further fueling price losses on Thursday: inventories rose by 81 Bcf, compared to forecasts of 77 Bcf and the average of 97 Bcf for this time of year. The storage surplus, currently at 9.8% to the 5-year average, is expected to widen in the coming weeks as the storage balance feels the impact of tepid cooling demand.

The National Weather Service near-term forecast calls for above-normal temperatures for the eastern half of the nation and below-normal temperatures for the western half. The natural gas market scores on page 1 improved dramatically from the previous week across all terms. 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 June 10 - 14, 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)



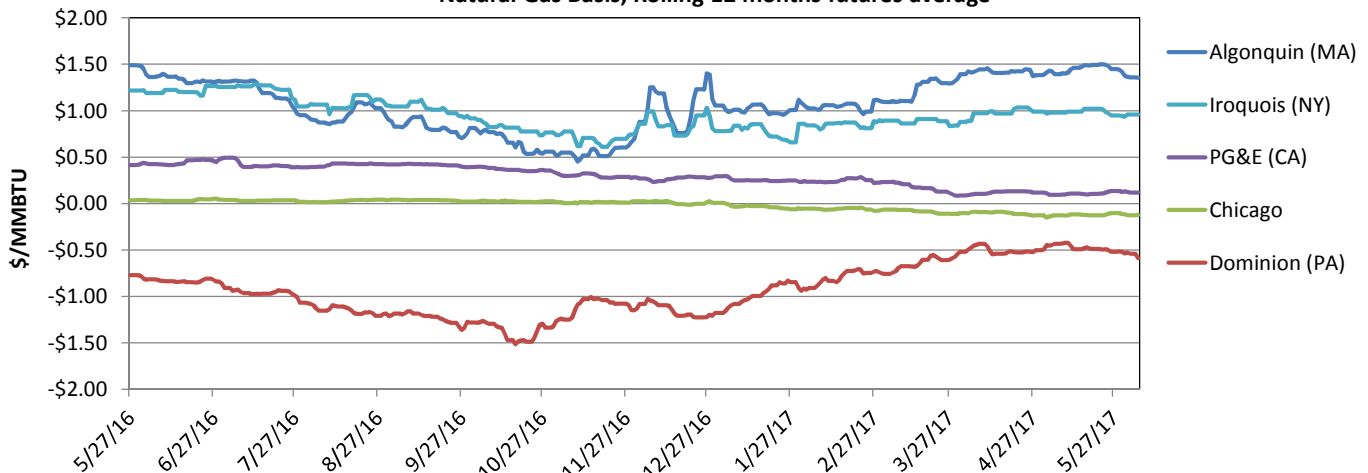
6-10 DAY OUTLOOK  
TEMPERATURE PROBABILITY  
MADE 4 JUN 2017  
VALID JUN 10 - 14, 2017

DASHED BLACK LINES ARE CLIMATEOLOGY (DEG F). SHADED AREAS ARE FCST VALUES ABOVE (B) OR BELOW (B) NORMAL. UNSHADED AREAS ARE NEAR-NORMAL.

**Natural Gas Basis Futures**

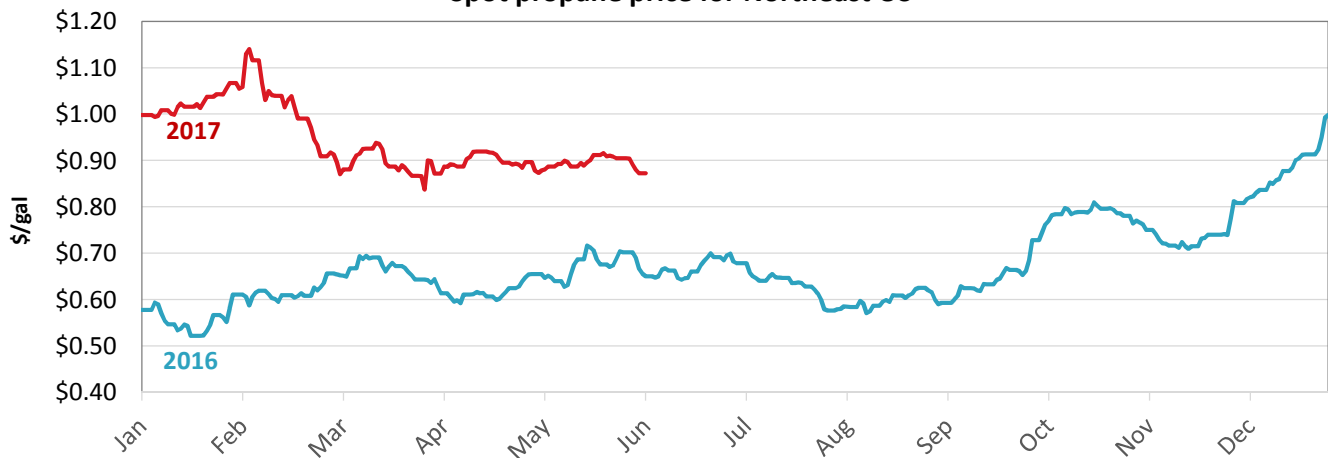
Basis is the price differential between Henry Hub, located in Erath, Louisiana, and the liquidity point closest to the end-user. Because Henry Hub is used as the delivery point for NYMEX natural gas futures contracts, the cost of using natural gas in any geographic region of the country can be approximated 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>	
		5/29/17	5/30/17	5/31/17	6/1/17	6/2/17	6/3/17	6/4/17		
Power (\$/MWh)	Maine RT On Pk	30	24	30	25	22			26	
	Maine RT Off Pk	19	31	16	21	22	16	14	20	
	NH RT On Pk	31	24	30	25	22			26	
	NH RT Off Pk	19	32	16	21	21	16	14	20	
	Vermont RT On Pk	30	24	31	24	23			26	
	Vermont RT Off Pk	19	31	15	21	22	16	13	20	
	Connecticut RT On Pk	31	24	30	25	23			27	
	Connecticut RT Off Pk	19	32	15	21	23	17	14	20	
	Rhode Island RT On Pk	31	24	30	25	23			26	
	Rhode Island RT Off Pk	19	32	15	21	23	17	14	20	
	NE Mass RT On Pk	31	24	30	25	23			27	
	NE Mass RT Off Pk	19	32	16	21	23	16	14	20	
	SE Mass RT On Pk	31	24	30	25	23			26	
	SE Mass RT Off Pk	20	32	16	21	23	16	14	20	
	WC Mass RT On Pk	31	24	30	25	23			27	
	WC Mass RT Off Pk	19	32	16	21	23	17	14	20	
			<b>New York ISO Real Time Power Pricing By Zone (\$/MWh)</b>							<b>Avg</b>
	Power (\$/MWh)	Capital RT On Pk	20	23	24	27	7			20
		Capital RT Off Pk	18	19	14	21	11	17	11	16
		Central RT On Pk	20	24	25	26	7			20
Central RT Off Pk		5	10	12	14	11	9	10	10	
Hudson RT On Pk		21	24	24	27	7			21	
Hudson RT Off Pk		14	17	14	20	12	15	11	15	
Mohawk RT On Pk		18	22	21	24	7			18	
Mohawk RT Off Pk		5	11	12	14	11	6	10	10	
Milwood RT On Pk		21	24	25	28	7			21	
Milwood RT Off Pk		14	17	14	20	12	15	12	15	
NYC RT On Pk		42	25	25	28	31			30	
NYC RT Off Pk		26	26	15	21	14	19	12	19	
		<b>PJM Real Time Power Pricing By Zone (\$/MWh)</b>							<b>Avg</b>	
Power (\$/MWh)		Eastern Hub On Pk	28	29	28	28	26			28
		Eastern Hub Off Pk	21	22	22	21	21	21	21	21
		Western Hub On Pk	29	31	28	28	26			28
	Western Hub Off Pk	21	22	22	20	21	21	21	21	
	PPL Zone On Pk	27	27	27	27	26			27	
	PPL Zone Off Pk	21	21	21	20	21	21	21	21	
	AEP RT On Pk	31	35	28	27	26			29	
	AEP RT Off Pk	21	22	22	21	21	21	21	21	
	Chicago RT On Pk	30	33	27	27	30			29	
	Chicago RT Off Pk	13	17	21	6	17	17	17	15	
	New Jersey Hub On Pk	27	28	28	27	26			27	
	New Jersey Hub Off Pk	21	21	21	20	21	21	21	21	
			<b>California ISO Real Time Power Pricing (\$/MWh)</b>							<b>Avg</b>
	Natural Gas \$/MMBtu	SoCal Edison RT On Pk	27	24	134	19	16			44
SoCal Edison RT Off Pk		13	21	27	22	17	9	13	17	
		5/29/17	5/30/17	5/31/17	6/1/17	6/2/17	6/3/17	6/4/17	<b>Avg</b>	
Henry Hub, LA		3.21	3.20	3.11	3.06	3.10			3.14	
TZ6, MA		2.95	3.01	2.93	2.81	2.63			2.87	
Algonquin, MA			3.05		2.84				2.94	
Chicago Hub, IL		3.12	3.13	3.03	3.01	2.96			3.05	
New York, NY		2.82	2.87	2.72	2.75	2.45			2.72	
Dominion South, PA		2.74	2.77	2.66	2.58	2.41			2.63	
Opal Hub, WY		2.89	2.91	2.81	2.83	2.77			2.84	
PG&E Citygate, CA	3.46	3.48	3.38	3.42	3.37			3.42		
Kern River Deliveries	2.98	3.00	2.90	2.94	2.82			2.93		