



# Competitive Energy Services Weekly Market Summary

April 3 - 7, 2017

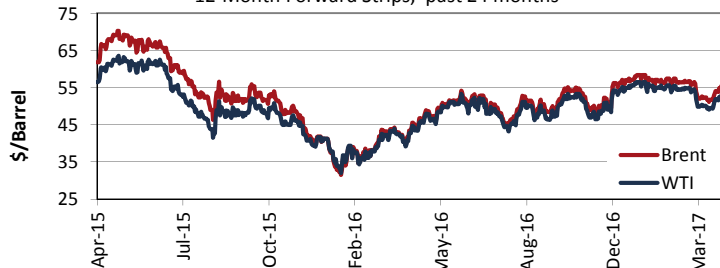
## Synopsis of Last Week's Energy Markets

Oil prices climbed for the second straight week despite record high storage levels in the US and robust domestic production. OPEC and Russia continue to push speculation of an extension of the joint production cuts, and the airstrike in Syria also boosted crude oil. Natural gas prices rose last week as forecasts of rising exports and cooling demand amid relatively low production indicate that storage could tighten this summer. Thursday's EIA report signaled a slightly early start to the injection season as cold weather retreats.

## Oil Market

### Crude Oil - WTI & Brent

12-Month Forward Strips, past 24 months

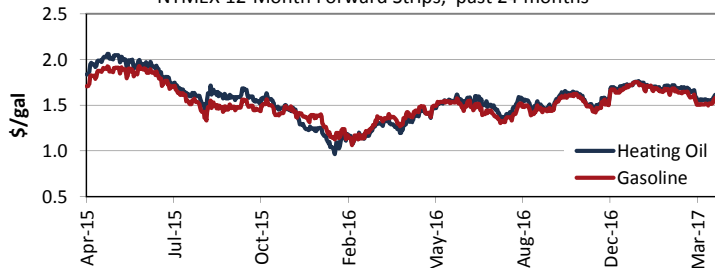


NYMEX WTI	last close	previous week	24-month high	24-month low
12 month strip, \$/bbl	\$53.26	\$51.94	\$63.51	\$32.40
date	4/7/17	3/31/17	5/6/15	1/20/16
change from last close		2.5%	-16.1%	64%

US STORAGE (in million bbls)	crude oil
domestic stocks as of	3/31/17
gain / loss from previous week	535.5
comparison to historic range	1.5
	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	\$1.67	\$1.61	\$2.06	\$0.97
date	4/7/17	3/31/17	5/6/15	1/20/16
change from last close		3.4%	-19%	72%

US STORAGE (in million bbls)	distillate	propane	gasoline
domestic stocks as of	3/31/17		
gain / loss from previous week	152.4	41.6	239.1
comparison to historic range	-0.5	-1.2	-0.6
	within	within	within

## Natural Gas Market

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

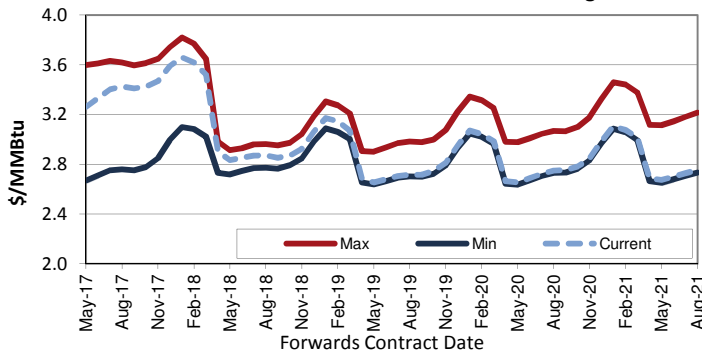


NYMEX PRICING	last close	previous week	24-month high	24-month low
12 mo. strip, \$/MMBtu	\$3.42	\$3.33	\$3.70	\$2.11
date	4/7/17	3/31/17	12/28/16	2/25/16
change from last close		2.6%	-8%	62%

CES SCORE	
12 month	25
18 month	33
24 month	41
36 month	59

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)	\$3.42	\$3.23	\$3.18	\$3.05

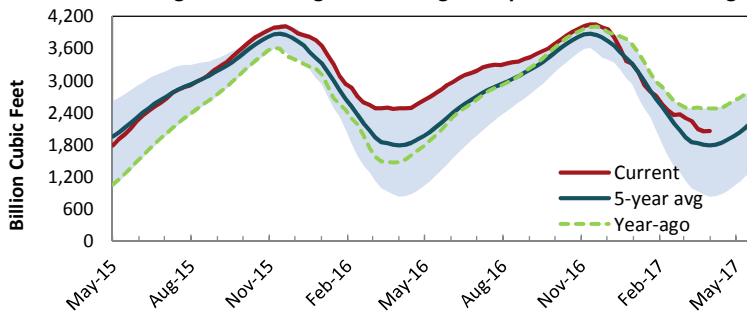
Natural gas futures are useful for both natural gas and electricity consumers because they drive electricity pricing in many U.S. markets including New England, Texas and, to a lesser extent, New York and the Mid-Atlantic. This chart compares the current natural gas price for each forward month on the 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	3/24/17	2,049	
Most Recent Stock Level	3/31/17	2,051	
Year-ago Stock Level		2,478	-17.2%
5-Year Average Stock Level		1,786	14.8%
Most Recent Net Change	3/31/17	2	
Year-Ago Net Change		6	
5-Year Average Net Change		-13	

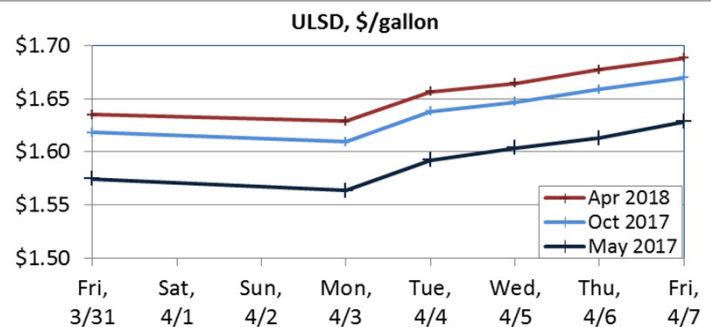
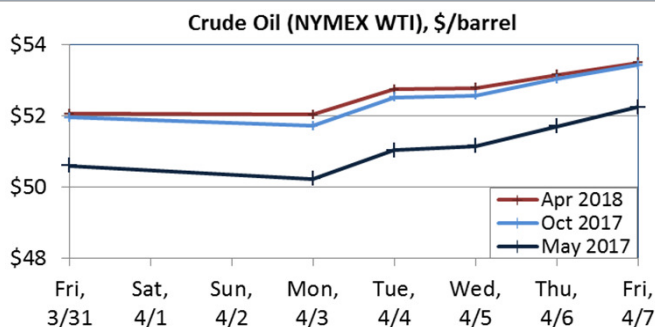
Data Source: EIA <http://tonto.eia.doe.gov/oog/info/ngs/ngs.html>

### Market Assessment

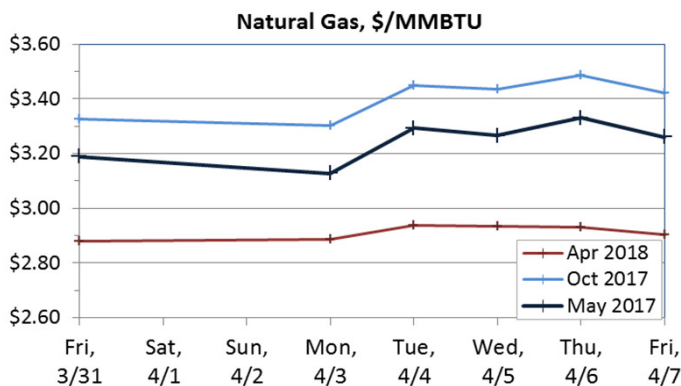
NYMEX Futures Summary Statistics

	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	Apr-17	3/21/17	\$47.34	May-17	\$52.24	Jan-18	\$53.60	May-17	\$52.24	\$53.57
Heating oil	Apr-17	3/31/17	\$1.57	May-17	\$1.63	Feb-18	\$1.70	May-17	\$1.63	\$1.69
Natural gas	Apr-17	3/29/17	\$3.26	May-17	\$3.26	Jan-18	\$3.56	Apr-18	\$2.90	\$3.57

NYMEX End-of-Day Settlements



Crude oil prices gained for four days last week, rallying through trading today. Prices for WTI and Brent began to rise on Tuesday due to anticipation of a bullish EIA storage report and also a brief outage at the Buzzard oil field in the North Sea, crucial to the supply of London-traded Brent oil. On Wednesday, the EIA reported that both total US stocks and stocks at the NYMEX storage hub in Cushing, Oklahoma, added to already-record highs. Domestic production rose to a 16-month high. However, refining rates climbed ahead of the summer driving season, and the market reacted bullishly. Further boosting prices were OPEC and Russia's talk of possibly extending the production cuts, the US airstrikes on Syria on Thursday evening, and a outage at Libya's largest oil field.



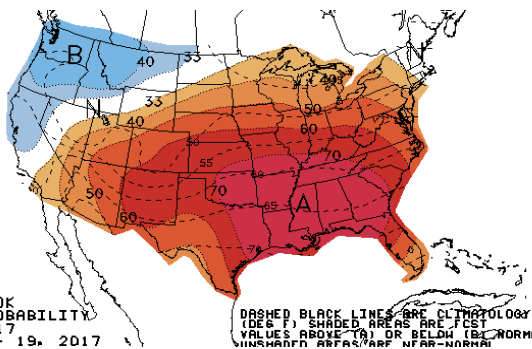
Natural gas prices rose and fell last week amid competing forecasts of a weekly inventory injection and a bullish summer storage balance. May futures gained 2% week-over-week, closing at \$3.26 on Friday. While demand for power burn and exports are expected to rise, production remains relatively low: domestic production fell from 83 Bcf/d in February 2016 to 79 Bcf/d in December, and averaged just 75 Bcf/d last week. Rising rig counts indicate that more production could come online as prices rise, however. Meanwhile, the EIA reported a net injection of 2 Bcf to storage this week as heating demand dissipates. Inventories closed the withdrawal season at a 14% surplus to average but 17% below last year's levels.

The National Weather Service near-term forecast calls for above-normal temperatures for most of the US except the Northwest, which is expected to see below-normal temperatures. The natural gas market scores on page 1 decreased from the previous week, except for the 12-month term. 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 OUTLOOK  
TEMPERATURE PROBABILITY  
MADE 9 APR 2017  
VALID APR 15 - 19, 2017



#### 6 - 10 Day Forecast for April 15 - 19, 2017

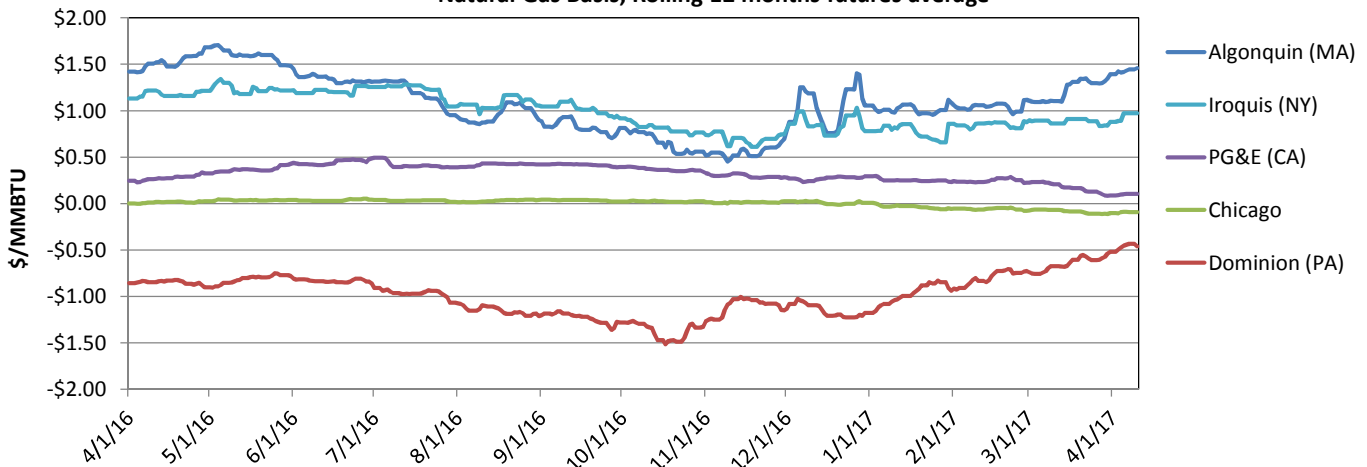
This map depicts forecasted temperatures for next week compared to the long term average. The blue/purple areas are forecast to be colder than normal, white areas are normal, and yellow/orange/red areas are warmer than normal. Abnormally hot weather in the summer and cold weather in the winter can increase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

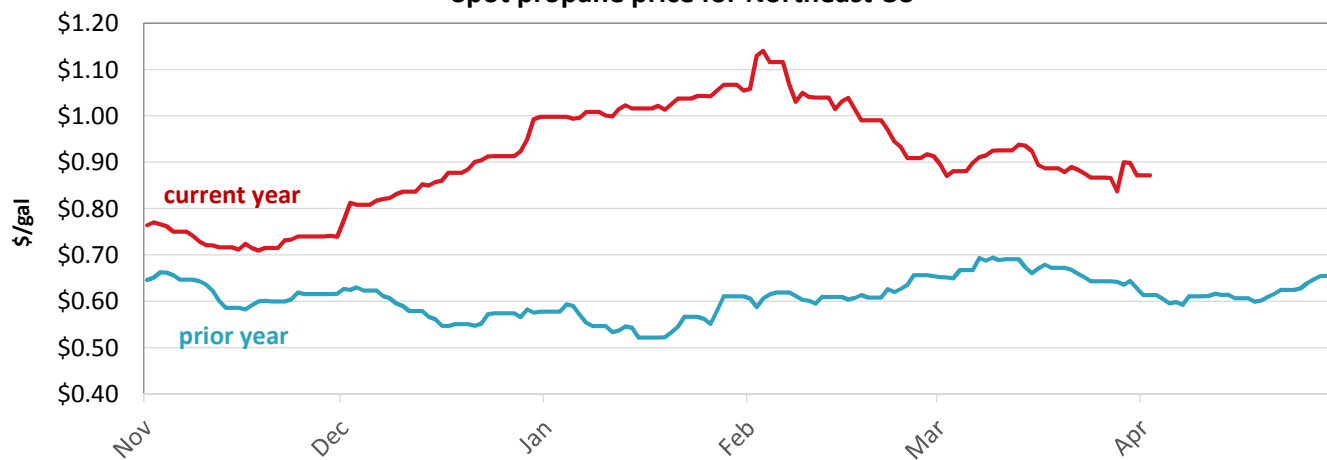
Basis is the price differential between Henry Hub, located in Erath, Louisiana, and the liquidity point closest to the end-user. Because Henry Hub is used as the delivery point for NYMEX natural gas futures contracts, the cost of using natural gas in any geographic region of the country can be approximated 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>	
		4/3/17	4/4/17	4/5/17	4/6/17	4/7/17	4/8/17	4/9/17		
Power (\$/MWh)	Maine RT On Pk	35	44	63	56	29			45	
	Maine RT Off Pk	30	29	49	28	36	21	26	31	
	NH RT On Pk	36	47	64	62	38			49	
	NH RT Off Pk	34	29	51	29	44	24	28	34	
	Vermont RT On Pk	36	44	63	60	37			48	
	Vermont RT Off Pk	33	28	50	28	43	23	27	33	
	Connecticut RT On Pk	37	48	64	64	38			50	
	Connecticut RT Off Pk	34	30	52	29	46	24	28	35	
	Rhode Island RT On Pk	36	47	63	62	37			49	
	Rhode Island RT Off Pk	33	29	50	29	44	24	28	34	
	NE Mass RT On Pk	36	47	64	63	37			50	
	NE Mass RT Off Pk	34	29	51	29	45	24	28	34	
	SE Mass RT On Pk	36	47	64	63	37			49	
	SE Mass RT Off Pk	34	29	51	29	45	24	28	34	
	WC Mass RT On Pk	36	47	64	63	38			50	
	WC Mass RT Off Pk	34	30	51	29	45	24	28	34	
		<b>New York ISO Real Time Power Pricing By Zone (\$/MWh)</b>							<b>Avg</b>	
Power (\$/MWh)	Capital RT On Pk	36	46	46	114	47			58	
	Capital RT Off Pk	42	32	72	50	57	25	29	44	
	Central RT On Pk	30	27	39	92	44			47	
	Central RT Off Pk	31	5	7	13	18	21	25	17	
	Hudson RT On Pk	36	45	46	121	48			59	
	Hudson RT Off Pk	41	24	54	40	47	24	29	37	
	Mohawk RT On Pk	30	25	39	88	45			45	
	Mohawk RT Off Pk	32	6	10	15	20	21	26	19	
	Milwood RT On Pk	36	46	47	126	49			61	
	Milwood RT Off Pk	41	25	55	40	48	27	30	38	
	NYC RT On Pk	36	47	47	128	51			62	
	NYC RT Off Pk	41	24	54	40	47	32	30	38	
			<b>PJM Real Time Power Pricing By Zone (\$/MWh)</b>							<b>Avg</b>
	Power (\$/MWh)	Eastern Hub On Pk	34	34	30	33	44			35
		Eastern Hub Off Pk	26	26	24	23	26	31	25	26
		Western Hub On Pk	33	35	30	32	42			34
Western Hub Off Pk		26	26	24	23	26	30	25	26	
PPL Zone On Pk		34	34	30	33	43			35	
PPL Zone Off Pk		26	26	24	23	26	30	25	26	
AEP RT On Pk		33	34	30	32	42			34	
AEP RT Off Pk		26	26	25	23	26	30	24	26	
Chicago RT On Pk		33	32	28	24	30			29	
Chicago RT Off Pk		25	24	14	21	24	18	21	21	
New Jersey Hub On Pk		34	33	30	33	43			35	
New Jersey Hub Off Pk		26	26	24	23	26	30	25	26	
		<b>California ISO Real Time Power Pricing (\$/MWh)</b>							<b>Avg</b>	
Natural Gas \$/MMBtu		SoCal Edison RT On Pk	10	44	39	101	58			50
		SoCal Edison RT Off Pk	12	16	27	30	83	25	25	31
				4/3/17	4/4/17	4/5/17	4/6/17	4/7/17	4/8/17	4/9/17
	Henry Hub, LA	3.05	3.07	3.21	3.23	3.19				3.15
	TZ6, MA	4.30	4.07	3.90	4.20	3.81				4.06
	Algonquin, MA			3.22	3.40	3.31				3.31
	Chicago Hub, IL	2.99	3.15	3.24	3.12	3.07				3.11
	New York, NY	2.84	2.92	3.08	3.14	2.95				2.99
	Dominion South, PA	2.79	2.82	3.00	3.04	2.91				2.91
	Opal Hub, WY	2.73	2.78	2.90	2.85	2.81				2.81
	PG&E Citygate, CA	3.23	3.29	3.39	3.37	3.37				3.33
	Kern River Deliveries	2.82	2.87	2.99	2.92	2.85				2.89