



Competitive Energy Services Weekly Market Summary

December 17 - 21, 2018

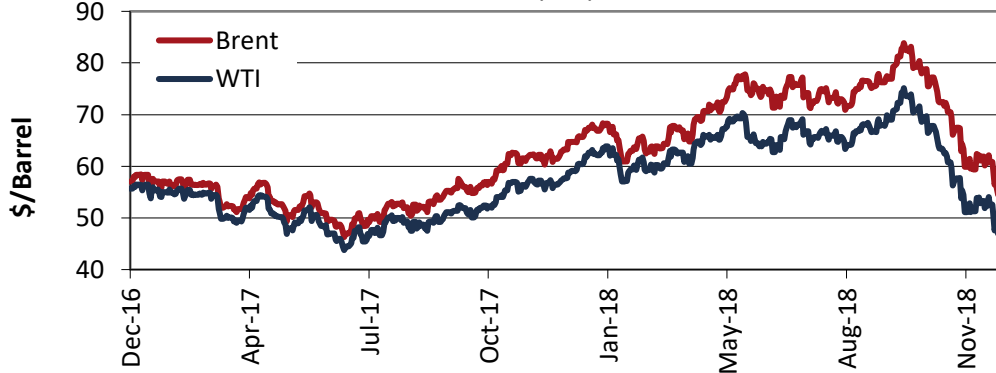
Synopsis of Last Week's Energy Markets

Near-term oil contracts fell almost 10% last week as domestic and global financial stress brought down prices. The Fed's interest rate hike, the partial government shutdown, and record output from Russia were all bearish factors last week. The natural gas market was mixed; near-term winter contracts fell slightly while the summer contracts climbed. A mild forecast for the end of December is helping to keep prices low.

Oil Market

Crude Oil - WTI & Brent

12-Month Forward Strips, past 24 months

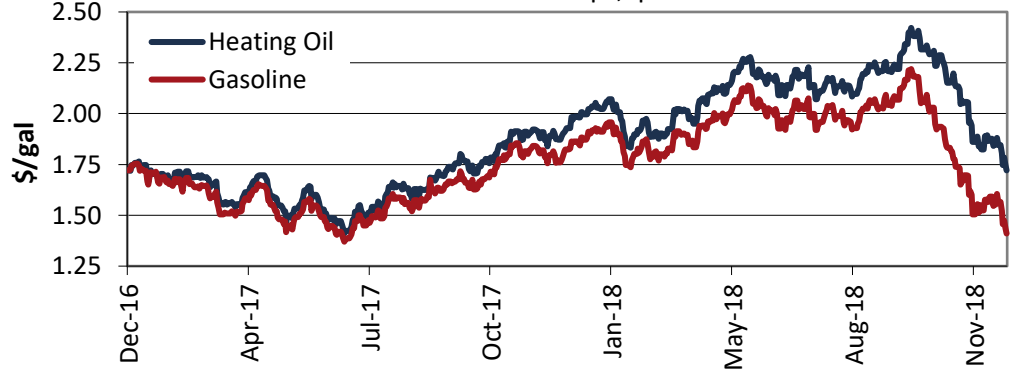


NYMEX WTI	last close	previous week	24-month high	24-month low
12 month strip, \$/bbl	\$47.17	\$52.55	\$75.39	\$43.82
date	12/21/18	12/14/18	10/3/18	6/21/17
change from last close		-10.2%	-37.4%	8%

US STORAGE (in million bbls)		crude oil
domestic stocks as of	12/14/18	441
gain / loss from previous week		-0.5
comparison to historic range		within

Heating Oil & Gasoline

NYMEX 12-Month Forward Strips, past 24 months

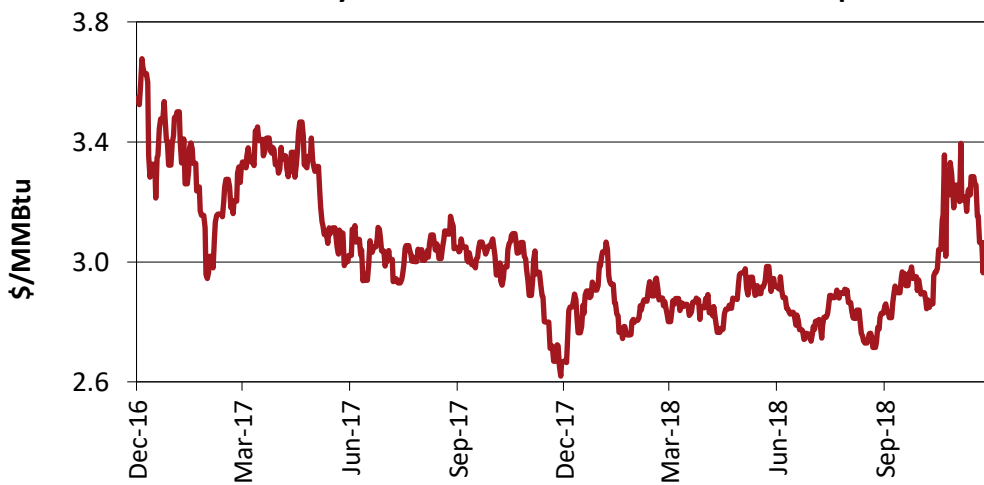


NYMEX Heating Oil	last close	previous week	24-month high	24-month low
12 month strip, \$/gal	\$1.72	\$1.84	\$2.43	\$1.41
date	12/21/18	12/14/18	10/3/18	6/21/17
change from last close		-6.7%	-29%	22%

US STORAGE (in million bbls)		distillate	propane	gasoline
domestic stocks as of	12/14/18	120	73	230
gain / loss from previous week		-4.2	-3.3	1.8
comparison to historic range		within	within	above

Natural Gas Market

NYMEX Henry Hub Futures: 12 Month Forward Strip



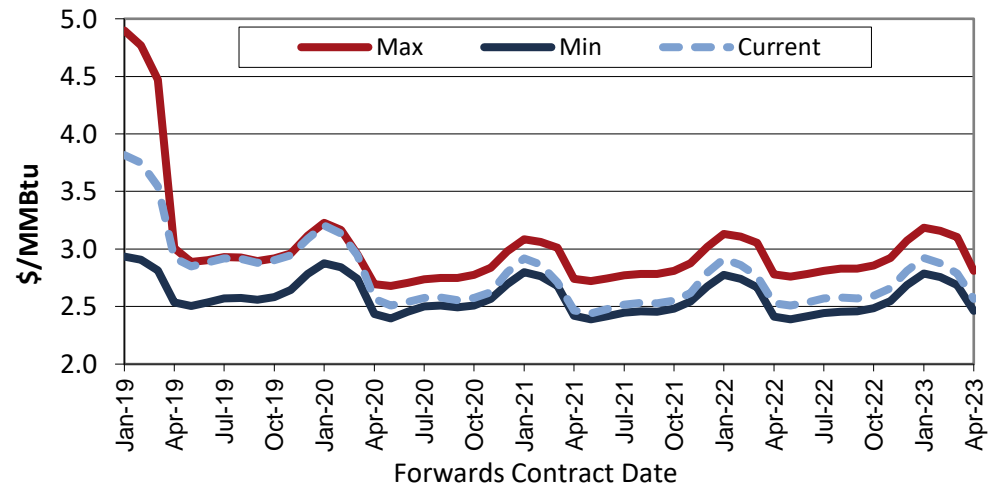
NYMEX PRICING	last close	previous week	24-month high	24-month low
12 mo. strip, \$/MMBtu	\$3.12	\$3.06	\$3.70	\$2.61
date	12/21/18	12/14/18	12/28/16	12/21/17
change from last close		1.7%	-16%	19%

CES SCORE

12 month	19
18 month	24
24 month	36
36 month	49

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



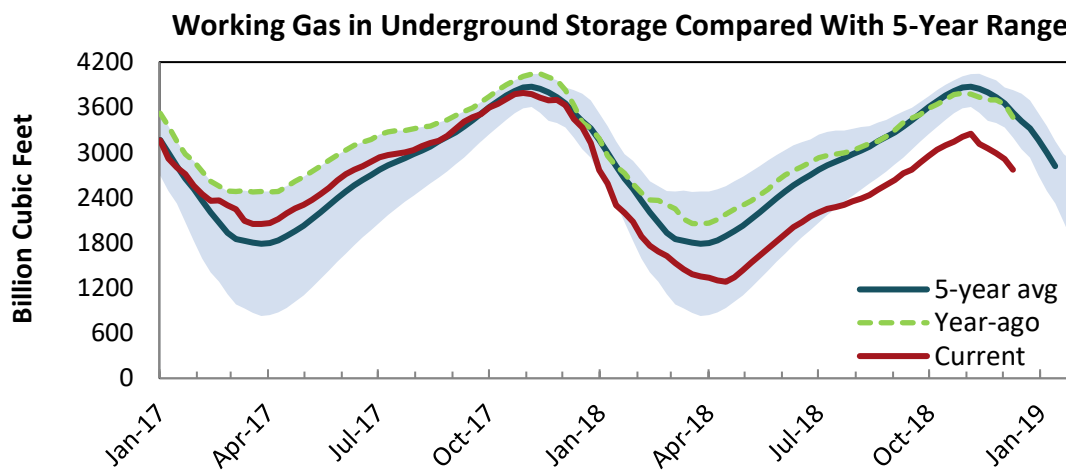
FORWARDS	12 month	18 month	24 month	36 month
strip (\$/MMBtu)	\$3.12	\$3.02	\$2.92	\$2.82

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



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	12/7/18	2,914		
Most Recent Stock Level	12/14/18	2,773		
Year-ago Stock Level		3,470	-20.1%	
5-Year Average Stock Level		3,528	-21.4%	
Most Recent Net Change	12/14/18	-141		
Year-Ago Net Change		-166		
5-Year Average Net Change		-144		

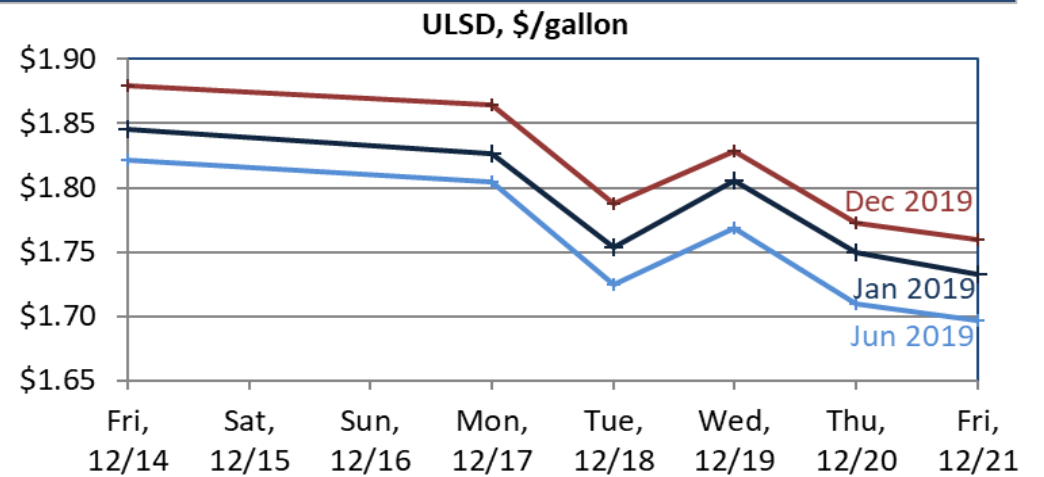
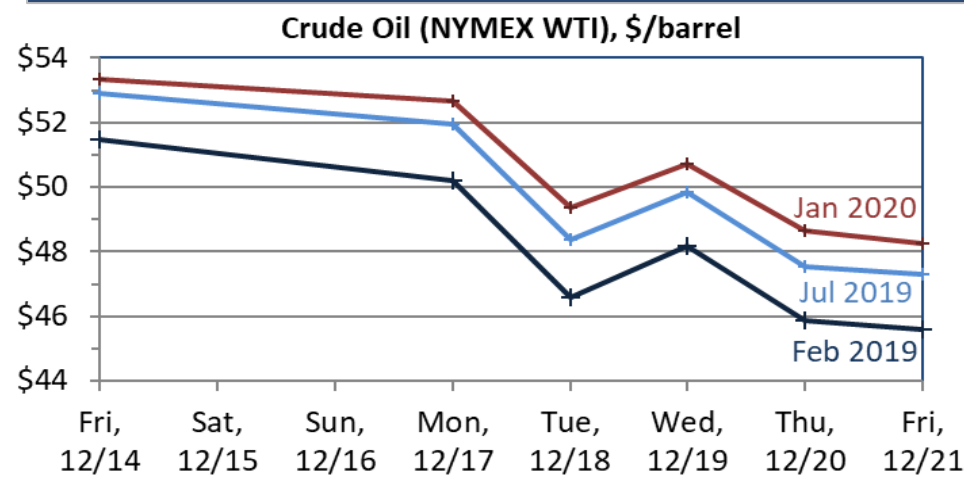
Data Source: EIA <http://tonto.eia.doe.gov/oog/info/ngs/ngs.html>

Market Assessment

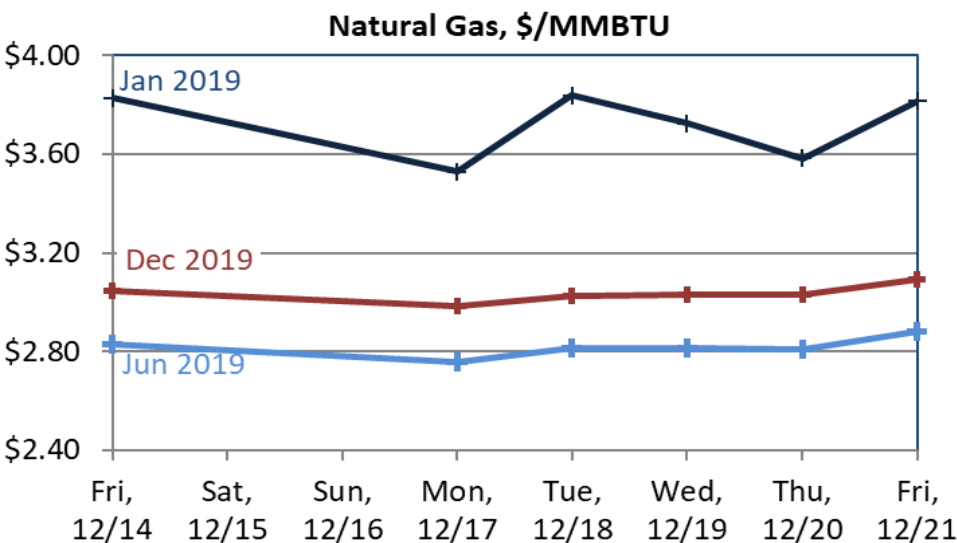
NYMEX Futures Summary Statistics

	Last Expired Contract	Exp. Date	Price	Prompt Month	Price	Most Expensive Next 12 Months	Price	Least Expensive Next 12 Months	Price	Next Winter Avg (Nov19-Mar20)
Crude oil	Jan-19	12/19/18	\$47.20	Feb-19	\$45.59	Jan-20	\$48.24	Feb-19	\$45.59	\$48.23
Heating oil	Dec-18	11/30/18	\$1.85	Jan-19	\$1.73	Dec-19	\$1.76	May-19	\$1.69	\$1.76
Natural gas	Dec-18	11/28/18	\$4.72	Jan-19	\$3.82	Jan-19	\$3.82	May-19	\$2.85	\$3.06

NYMEX End-of-Day Settlements



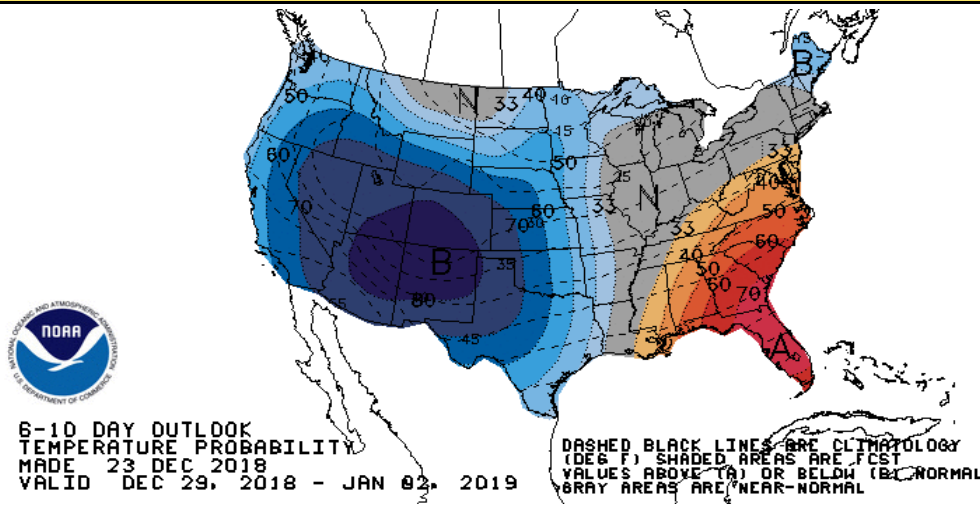
Crude oil prices dropped precipitously last week. Prompt-month WTI blew through the \$50 support level it had been testing since November 23. US production has been above 11.5M barrels per day since the end of October, and on Tuesday Russia reported its December rate to be at a record 11.42M barrels per day. On Thursday the Federal Reserve announced it was raising the benchmark interest rate by a quarter percent, and it also revised downward its estimates for 2019 economic growth. This sent global equities tumbling, taking oil prices along. The partial government shutdown, which began midnight Friday, is adding to the bearish sentiment in the equities and commodities markets. As of Monday morning, prompt month WTI was trading below \$45 per barrel.



The Jan/Feb/March 2019 natural gas contracts slipped last week while summer 2019 contracts rose. Natural gas stocks in all five US storage regions are below the 5-year historical low, and for this time of year, total US stocks are at the lowest point since 2005. The winter 2019 contracts had traded below \$3.50 per MMBTU from mid-2015 through October of this year, and the premium for winter gas versus non-winter was low compared to 2015-2017. Thus, gas storage customers had little incentive to pay to store gas for sale or use this winter. However, mild December weather has allowed the weekly net injection into storage to exceed the five-year average for the past two report weeks.

The National Weather Service near-term forecast once again calls for above-average temperatures for the Southeast and normal temperatures for most of the East. The natural gas market scores on page 1 declined from the previous week. Clients with electricity or natural gas contracts expiring in 2019 should consult with a CES representative for customized guidance.

National Weather Service Forecast



6 - 10 Day Forecast for Dec 29 - Jan 2

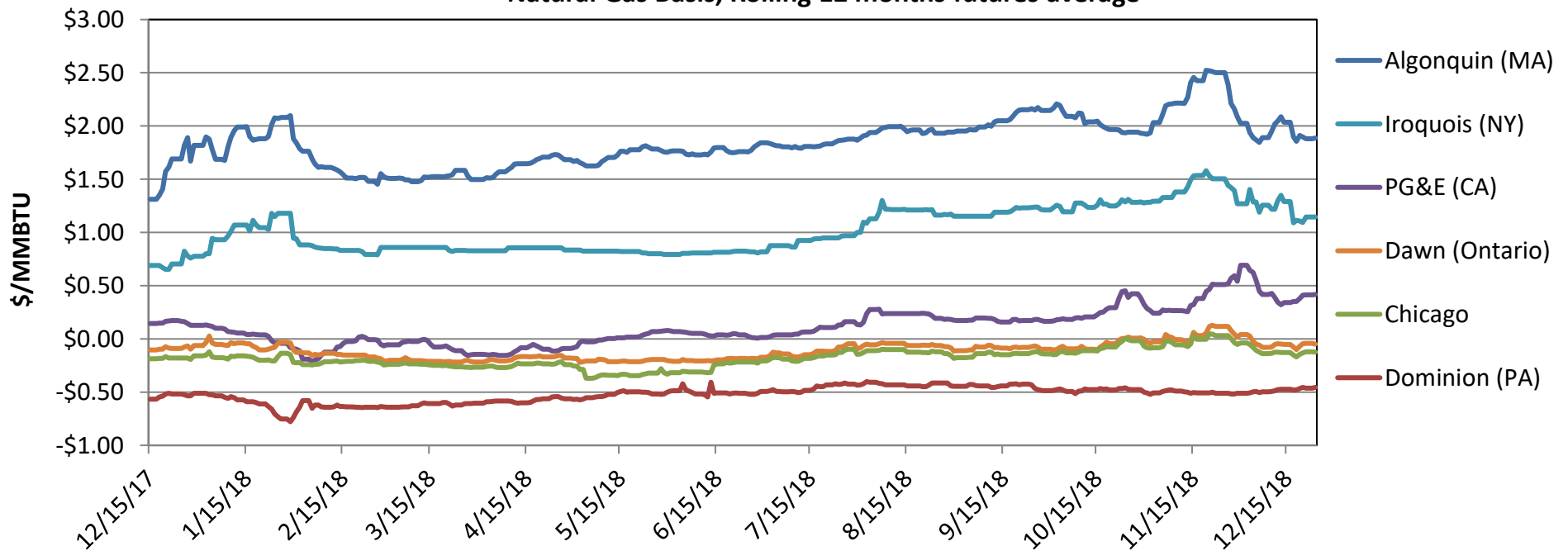
This map depicts forecasted temperatures for next week compared to the long term average. The blue/purple areas are forecast to be colder than normal, white areas are normal, and yellow/orange/red areas are warmer than normal. Abnormally hot weather in the summer and cold weather in the winter can increase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

Source: Chart from the National Weather Service Climate Prediction

Natural Gas Basis Futures

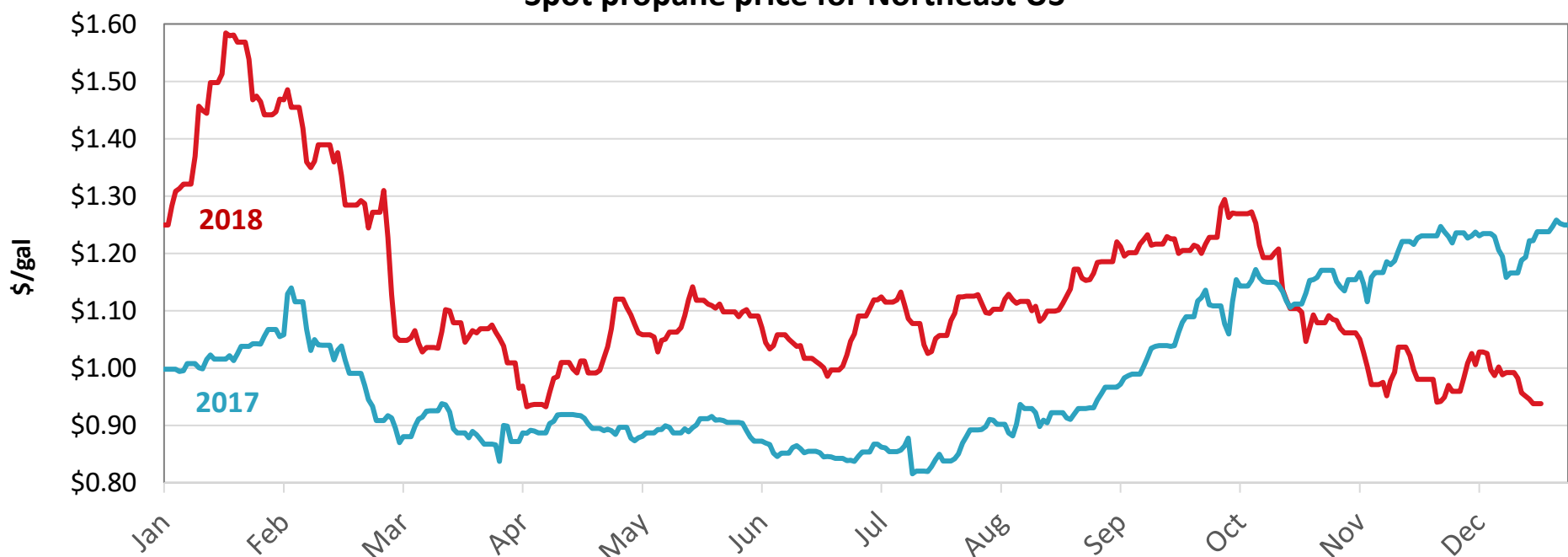
Basis is the price differential between Henry Hub, located in Erath, Louisiana, and the liquidity point closest to the end-user. Because Henry Hub is used as the delivery point for NYMEX natural gas futures contracts, the cost of using natural gas in any geographic region of the country can be approximated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

		New England ISO Real Time Power Pricing By Zone (\$/MWh)							Avg	
		12/17/18	12/18/18	12/19/18	12/20/18	12/21/18	12/22/18	12/23/18		
Power (\$/MWh)	Maine RT On Pk	47	45	39	35	29			39	
	Maine RT Off Pk	27	31	39	40	23	16	29	29	
	NH RT On Pk	47	46	39	35	30			39	
	NH RT Off Pk	27	32	39	39	24	16	32	30	
	Vermont RT On Pk	46	45	38	34	29			38	
	Vermont RT Off Pk	26	31	38	38	23	16	31	29	
	Connecticut RT On Pk	44	44	37	33	30			38	
	Connecticut RT Off Pk	26	31	38	38	23	16	31	29	
	Rhode Island RT On Pk	45	45	38	34	30			39	
	Rhode Island RT Off Pk	26	31	39	39	23	16	31	30	
	NE Mass RT On Pk	47	46	39	34	31			39	
	NE Mass RT Off Pk	27	32	39	40	24	16	32	30	
	SE Mass RT On Pk	46	46	38	34	30			39	
	SE Mass RT Off Pk	27	32	39	39	23	16	31	30	
	WC Mass RT On Pk	46	45	38	34	30			39	
	WC Mass RT Off Pk	27	32	39	39	23	16	32	30	
		New York ISO Real Time Power Pricing By Zone (\$/MWh)							Avg	
	Capital RT On Pk	43	42	37	37	25			37	
	Capital RT Off Pk	31	33	32	33	35	29	31	32	
	Central RT On Pk	42	40	35	34	21			34	
	Central RT Off Pk	22	31	31	30	12	16	27	24	
	Hudson RT On Pk	43	42	37	37	25			37	
	Hudson RT Off Pk	28	32	33	33	29	26	31	30	
	Mohawk RT On Pk	41	40	30	31	20			32	
	Mohawk RT Off Pk	22	31	28	31	12	16	28	24	
	Milwood RT On Pk	43	42	38	38	25			37	
	Milwood RT Off Pk	28	32	33	33	29	26	31	30	
	NYC RT On Pk	43	42	38	38	25			37	
	NYC RT Off Pk	26	33	33	33	29	27	31	30	
			PJM Real Time Power Pricing By Zone (\$/MWh)							Avg
		Eastern Hub On Pk	32	31	42	31	31			33
Eastern Hub Off Pk		26	27	35	25	25	25	25	27	
Western Hub On Pk		39	34	45	31	31			36	
Western Hub Off Pk		26	29	58	25	25	25	25	31	
PPL Zone On Pk		32	33	34	35	35			34	
PPL Zone Off Pk		25	26	33	24	24	24	24	26	
AEP RT On Pk		37	32	37	30	30			33	
AEP RT Off Pk		28	28	35	24	24	24	24	27	
Chicago RT On Pk		36	31	31	29	29			31	
Chicago RT Off Pk		26	26	19	23	23	23	23	23	
New Jersey Hub On Pk		32	32	39	31	31			33	
New Jersey Hub Off Pk		25	27	35	25	25	25	25	27	
		California ISO Real Time Power Pricing (\$/MWh)							Avg	
		SoCal Edison RT On Pk	50	39	47	34	33			41
	SoCal Edison RT Off Pk	35	33	39	36	33	38	35	36	
		12/17/18	12/18/18	12/19/18	12/20/18	12/21/18	12/22/18	12/23/18	Avg	
Natural Gas \$/MMBtu	Henry Hub, LA	3.80	3.70	3.60	3.68				3.70	
	TZ6, MA	7.97	4.80		3.78	4.34			5.22	
	Algonquin, MA		5.00	3.75		5.00			4.58	
	Chicago Hub, IL	3.36	3.48	3.32	3.44	3.25			3.37	
	New York, NY	3.89	3.76	3.53	3.22	3.28			3.54	
	Dominion South, PA	3.43	3.48	3.22	3.16	3.04			3.27	
	Opal Hub, WY	4.15	4.03	3.78	3.73	3.67			3.87	
	PG&E Citygate, CA	4.26	4.28	4.17	4.59	4.05			4.27	