



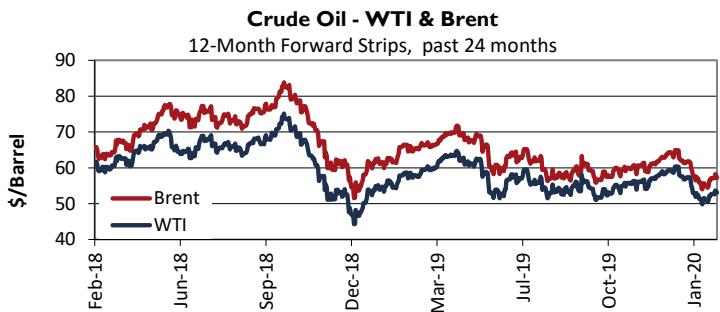
# Competitive Energy Services Weekly Market Summary

February 17 - 21, 2020

## Synopsis of Last Week's Energy Markets

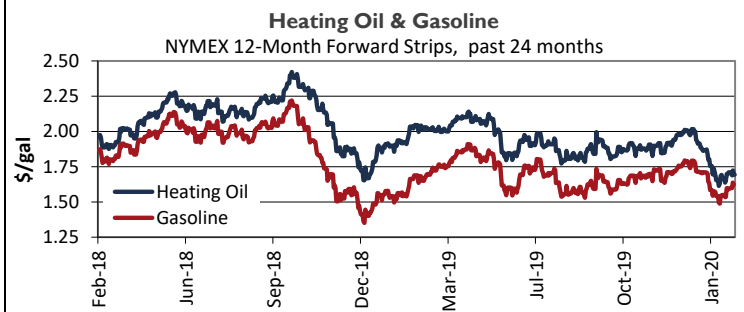
WTI crude oil prices on Friday, February 21 edged up week over week to \$53.38/BBL, up from \$52.05/BBL. Prices remain depressed from a decline in economic activity in Asian countries, specifically China, as a result of the spread of the coronavirus. Natural gas prices gain 4% last, settling at \$1.905/MMBtu on NYNEX on Friday. A Spanish buyer canceled LNG cargoes from a US supplier last week, raising concerns about exports amid the global LNG glut.

## Oil Market



NYMEX WTI	last close	previous week	24-month high	24-month low
12 month strip, \$/bbl	\$53.04	\$52.69	\$75.39	\$44.20
date	2/21/20	2/14/20	10/3/18	12/24/18
change from last close		0.7%	-29.6%	20%

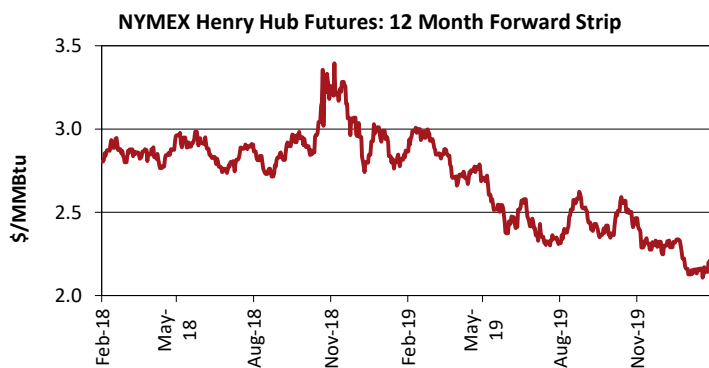
US STORAGE (in million bbls)	crude oil
domestic stocks as of	2/14/20
	443
gain / loss from previous week	0.4
comparison to historic range	within



NYMEX Heating Oil	last close	previous week	24-month high	24-month low
12 month strip, \$/gal	\$1.70	\$1.71	\$2.43	\$1.62
date	2/21/20	2/14/20	10/3/18	2/3/20
change from last close		-0.8%	-30%	5%

US STORAGE (in million bbls)	distillate	propane	gasoline	
domestic stocks as of	2/14/20	141	74	259
gain / loss from previous week	-0.6	-3.0	-2.0	
comparison to historic range	within	within	within	

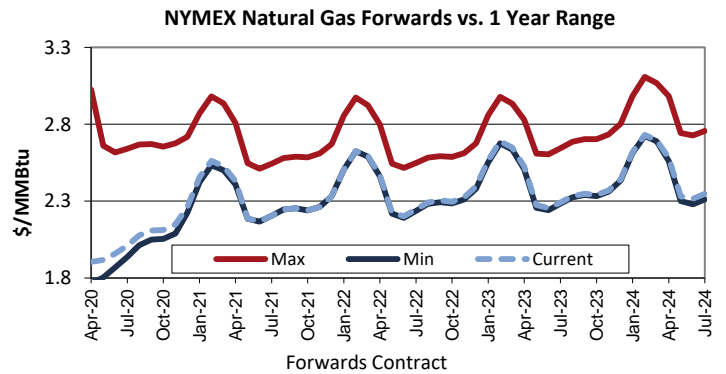
## Natural Gas Market



NYMEX PRICING	last close	previous week	24-month high	24-month low
12 mo. strip, \$/MMBtu	\$2.17	\$2.14	\$3.43	\$2.11
date	2/21/20	2/14/20	11/14/18	2/10/20
change from last close		1.3%	-37%	3%

CES SCORE	
12 month	91
18 month	93
24 month	95
36 month	95

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.



FORWARDS	12 month	18 month	24 month	36 month
strip (\$/MMBtu)	\$2.17	\$2.20	\$2.25	\$2.30

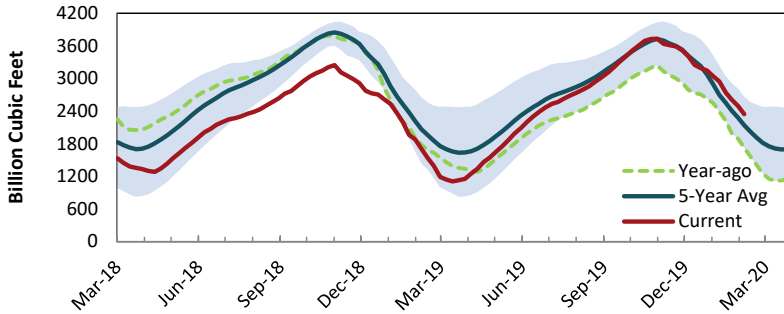
Natural gas futures are useful for both natural gas and electricity consumers because they drive electricity pricing in many U.S. markets. This chart compares the current natural gas price for each forward month on the NYMEX exchange to the highest and lowest prices for the same month over the past 12 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	2/7/20	2,494	
Most Recent Stock Level	2/14/20	2,343	
Year-ago Stock Level		1,730	35.4%
5-Year Average Stock Level		2,143	9.3%
Most Recent Net Change	2/14/20	-151	
Year-Ago Net Change		-163	
5-Year Average Net Change		-136	

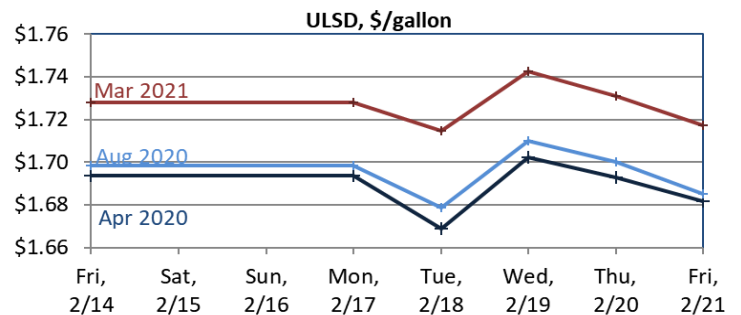
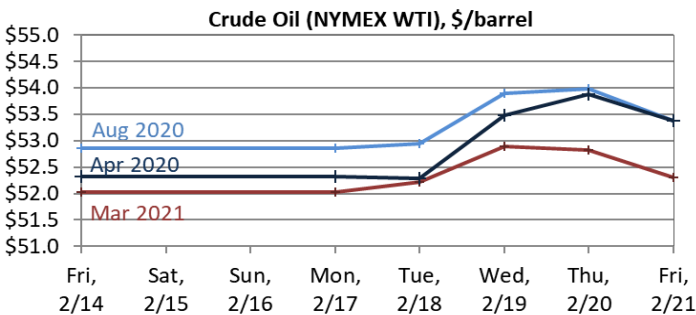
Data Source: EIA <http://tonto.eia.doe.gov/oog/info/ngs/ngs.html>

### Market Assessment

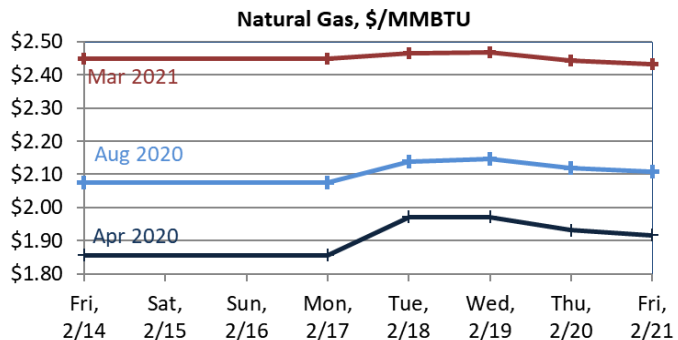
NYMEX Futures Summary Statistics

	Last Expired Contract	Exp. Date	Price	Prompt Month	Price	Most Expensive Next 12 Months	Price	Least Expensive Next 12 Months	Price	Winter Avg (Feb20-Mar20)
Crude oil	Mar-20	2/20/20	\$53.78	Apr-20	\$53.38	Jun-20	\$53.54	Feb-21	\$52.44	\$52.60
Heating oil	Feb-20	1/31/20	\$1.62	Mar-20	\$1.69	Feb-21	\$1.72	Jun-20	\$1.68	\$1.72
Natural gas	Feb-20	1/29/20	\$1.88	Mar-20	\$1.91	Jan-21	\$2.56	Mar-20	\$1.91	\$2.45

NYMEX End-of-Day Settlements



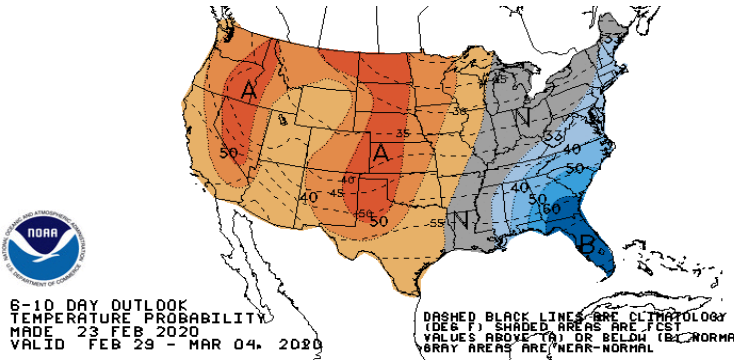
WTI crude oil prices on Friday, February 21 edged up week over week to \$53.38/BBL, up from \$52.05/BBL. Prices remain impacted from a decline in economic activity in Asian countries, specifically China, as a result of the spread of the coronavirus. Prices edged a bit higher as several OPEC members discussed deeper output cuts for crude oil. Speculators are uncertain as to the extent and involvement of cuts of some key members, as Russia has shown hesitation to deepening production cuts. A continuing story remains the high inventory builds in the U.S., causing concern of global oversupply and depressing the prices for oil.



Natural gas prices jumped 8% on Tuesday, the largest gain in over a year, with late February forecasts predicting cold temperatures across most of the U.S. Prices declined throughout the week as revised forecasts indicated milder temperatures. Despite the intra week declines, prices settled up 4% at \$1.905/MMBtu on NYNEX on Friday. Storage inventories were 9% above average after larger than expected withdrawals (151 Bcf) the week of February 14th. On a global scale, the Coronavirus outbreak in China has slowed Chinese LNG purchases, exacerbating the global LNG glut. Last week a Spanish buyer canceled LNG cargoes from the US, raising concerns about how slowing exports will affect the domestic natural gas glut.

The National Weather Service near-term forecast calls for below average temperatures along the eastern seaboard and above average temperatures in the Central and Western U.S. The CES Market Score on page 1 decreased from the previous week. Clients with electricity or natural gas contracts expiring in 2020 should consult with a CES representative for customized guidance.

**National Weather Service Forecast**



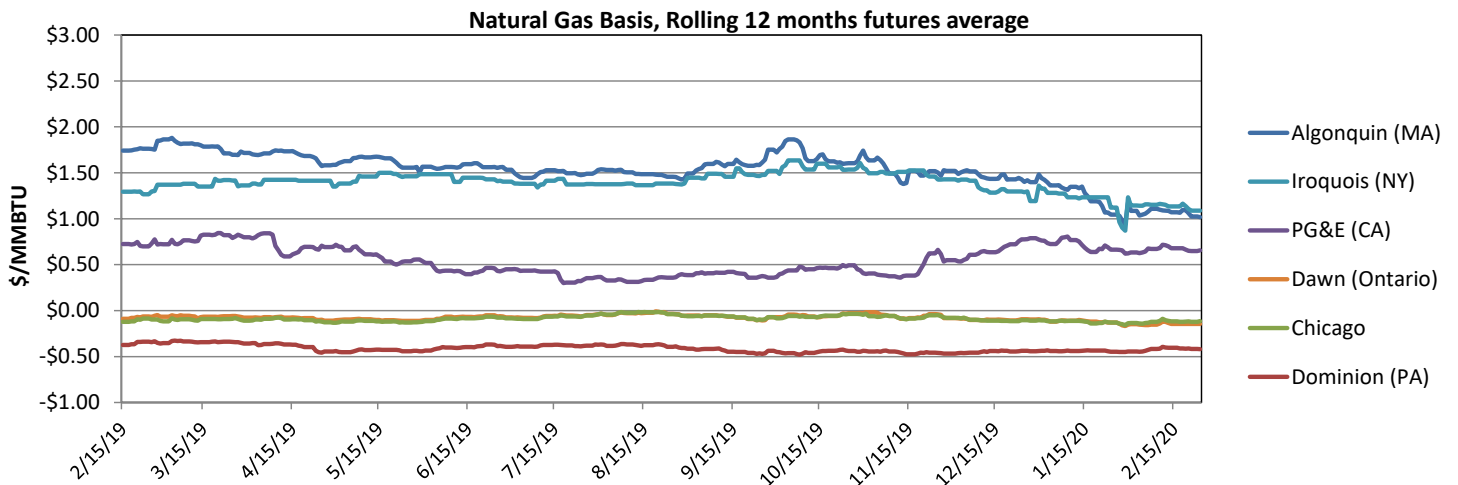
**6 - 10 Day Forecast for Feb 29 - Mar 4**

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.

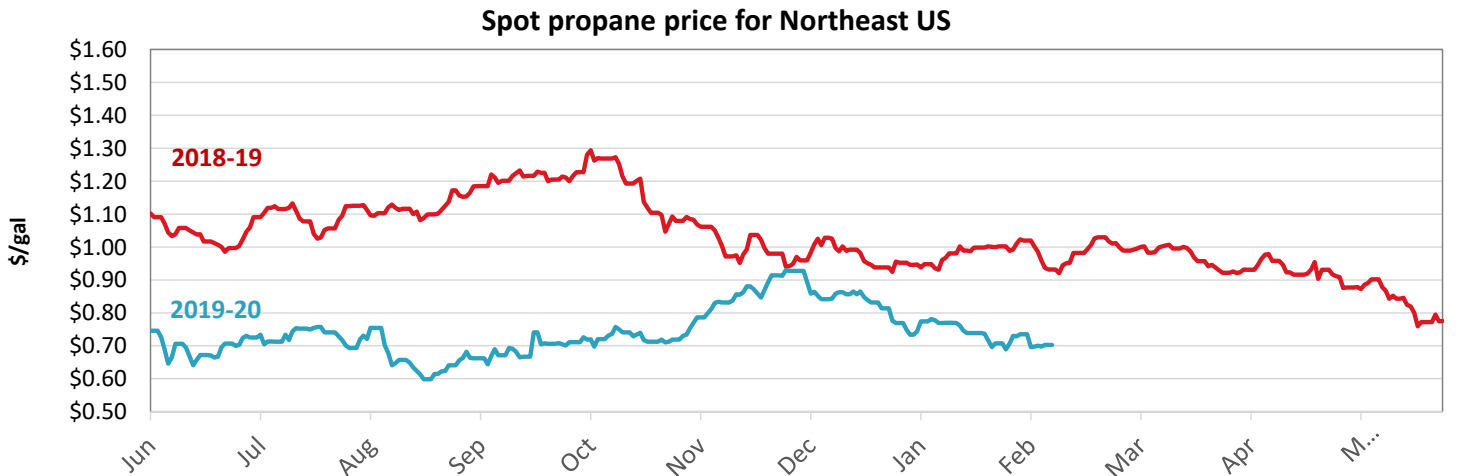
Source: Chart from the National Weather Service Climate Prediction Center [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)

**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.



**Propane**



**Spot Prices**

		<b>New England ISO Real Time Power Pricing By Zone (\$/MWh)</b>							<b>Avg</b>	
		2/17/20	2/18/20	2/19/20	2/20/20	2/21/20	2/22/20	2/23/20		
Power (\$/MWh)	Maine RT On Pk	20	23	14	22	24			21	
	Maine RT Off Pk	20	18	10	16	21	23	17	18	
	NH RT On Pk	21	23	15	22	25			21	
	NH RT Off Pk	21	18	10	16	21	23	17	18	
	Vermont RT On Pk	20	22	14	22	24			21	
	Vermont RT Off Pk	20	18	10	16	21	22	17	18	
	Connecticut RT On Pk	20	22	15	22	23			20	
	Connecticut RT Off Pk	20	18	10	16	21	22	17	18	
	Rhode Island RT On Pk	21	23	15	23	24			21	
	Rhode Island RT Off Pk	21	18	10	16	21	23	17	18	
	NE Mass RT On Pk	21	23	15	22	25			21	
	NE Mass RT Off Pk	21	18	10	16	21	23	17	18	
	SE Mass RT On Pk	21	23	15	23	25			21	
	SE Mass RT Off Pk	21	18	10	16	21	23	17	18	
	WC Mass RT On Pk	21	23	15	22	24			21	
	WC Mass RT Off Pk	21	18	10	16	21	23	17	18	
			<b>New York ISO Real Time Power Pricing By Zone (\$/MWh)</b>							<b>Avg</b>
		Capital RT On Pk	19	17	16	27	(125)			(9)
		Capital RT Off Pk	20	19	16	16	21	27	22	20
		Central RT On Pk	18	14	15	26	(123)			(10)
		Central RT Off Pk	13	8	12	15	16	9	8	11
		Hudson RT On Pk	20	17	16	27	(126)			(9)
		Hudson RT Off Pk	18	16	15	16	20	22	18	18
		Mohawk RT On Pk	19	14	15	26	(128)			(11)
		Mohawk RT Off Pk	13	8	12	16	16	9	8	12
		Milwood RT On Pk	20	17	16	28	(127)			(9)
		Milwood RT Off Pk	18	16	15	16	20	22	18	18
		NYC RT On Pk	23	26	17	31	(117)			(4)
	NYC RT Off Pk	18	16	15	17	20	23	21	19	
		<b>PJM Real Time Power Pricing By Zone (\$/MWh)</b>							<b>Avg</b>	
	Eastern Hub On Pk	19	19	18	24	24			21	
	Eastern Hub Off Pk	18	16	15	19	19	19	19	18	
	Western Hub On Pk	19	19	20	23	23			21	
	Western Hub Off Pk	17	15	15	19	19	19	19	18	
	PPL Zone On Pk	19	19	18	23	23			20	
	PPL Zone Off Pk	17	15	15	19	19	19	19	17	
	AEP RT On Pk	18	18	20	23	23			21	
	AEP RT Off Pk	17	15	16	19	19	19	19	18	
	Chicago RT On Pk	18	18	20	22	22			20	
	Chicago RT Off Pk	17	14	15	18	18	18	18	17	
	New Jersey Hub On Pk	19	19	18	23	23			20	
	New Jersey Hub Off Pk	18	15	15	19	19	19	19	18	
		<b>California ISO Real Time Power Pricing (\$/MWh)</b>							<b>Avg</b>	
	SoCal Edison RT On Pk	24	24	24	22	25			24	
	SoCal Edison RT Off Pk	18	23	28	24	26	20	15	22	
		2/17/20	2/18/20	2/19/20	2/20/20	2/21/20	2/22/20	2/23/20	<b>Avg</b>	
Natural Gas \$/MMBtu	Henry Hub, LA		2.05	2.03	2.01	1.96			2.01	
	TZ6, MA		2.49	2.80	2.49	2.10			2.47	
	Algonquin, MA		2.34	2.70	2.33	2.33			2.43	
	Chicago Hub, IL		1.86	1.90	1.83	1.75			1.84	
	New York, NY		1.90	2.23	1.98	1.75			1.97	
	Dominion South, PA		1.74	1.78	1.75	1.58			1.71	
	Opal Hub, WY		1.84	1.84	1.79	1.73			1.80	
	PG&E Citygate, CA		2.71	2.69	2.67	2.62			2.67	