

OPIS North America LPG Report

The Benchmark for NGL Spot Prices. Plus Exports, Freights, News, and Commentary on the United States, Canada and Mexico.



January 9, 2020

Energy Futures at Settlement

WTI Crude Oil (\$/bbl)		
Month	Price	Change
FEB	59.56	(0.05)
MAR	59.44	(0.02)
Brent Crude Oil (\$/bbl)		
Month	Price	Change
MAR	65.37	(0.07)
APR	64.66	(0.13)
Natural Gas (\$/mmbtu)*		
Month	Price	Change
FEB	2.166	0.025
MAR	2.148	0.014
RBOB (\$/gal)		
Month	Price	Change
FEB	1.653	0.00
MAR	1.663	0.00

*Preliminary Settlements

Table of Contents	
Mont Belvieu	p. 1
NGL Basket & ARB	p. 2
Conway & Bushton	p. 2
Hattiesburg	p. 3
Napoleonville	p. 3
Geismar/Sorrento	p. 3
Canada & West Coast	p. 4
Gulf Coast FOB LNG	p. 4

1/9/2020 - Oil futures had a choppy Thursday and whatever happens tomorrow, the big winners this week appear to be the exchanges, thanks to very brisk volumes. Refiners are having a rough January and marketers got some relief from some much-hoped-for wholesale price breaks in the last 48 hours.

February WTI lost 5cts bbl and settled at \$59.56/bbl. Expect to see quite a bit of conversation about whether the top of the eventual 2020 market was seen when prompt WTI fetched \$65.65/bbl just a couple of days ago. Similarly, Brent calmed down with late day quotes at \$65.37/bbl almost \$6.50/bbl below the weekly high.

Based on CFTC data, gasoline appears to be the most overbought energy contract, but the data doesn't show whether bets on higher prices are concentrated in winter, spring, summer or calendar positions. February RBOB closed up 0.39cts/gal today at \$1.6527/gal and the spot market in New York Harbor is only about \$4.17/bbl above March Brent. If adjusted for RINs' costs, the gasoline crack for merchant refiners is only about \$3.60/bbl, hardly reflecting traditional excess.

IN SPOT TRADING...

Spot NGLs at Mont Belvieu were little-moved Thursday, with even the largest price changes from the day before struggling to top 1% on average.

One of the biggest moves - a decline of 1.2% -- came in non-TET (Enterprise) propane, which traded at 42-43.5cts/gal. Its discount to TET (Lone Star) widened as deals there moved 0.8% higher at 44.75-46cts/gal and spread deals spanned from 2.375-2.625cts. Volumes were brisk for both grades as the former moved around 300,000 bbl and the latter almost 200,000 bbl.

Other non-TET (Targa) was assessed at 43.25-46cts/gal, based on bid/ask indications. Hattiesburg in-line anys were reported done at 46.25- 47.5cts/gal, while storage barrels were gauged 0.375ct below in-line.

Ethane anys withdrew by about 0.8% on volumes of around 150,000 bbl, as dealmaking

(Continued on Page 6)

OPIS Mont Belvieu Spot Gas Liquids Aggregate Prices (cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	43.333	45.167	44.2500	44.5487	43.500	45.333	44.4165	44.6598	44.833	46.667	45.7500	46.9202
N. Butane	69.813	71.188	70.5005	70.0108	69.813	71.188	70.5005	70.0108	69.750	71.219	70.4845	70.4792
Isobutane	79.000	80.750	79.8750	82.2500	79.000	80.750	79.8750	82.2500	73.875	77.625	75.7500	74.5313
N. Gasoline	121.500	125.000	123.2500	126.5866	121.500	125.000	123.2500	126.5866	119.708	123.208	121.4580	124.6770
EP Mix	11.000	12.500	11.7500	11.2188	11.000	12.500	11.7500	11.2188	11.375	12.875	12.1250	11.8854
Purity Ethane	15.750	16.500	16.1250	15.6667	16.000	16.750	16.3750	15.7917	15.875	17.000	16.4375	16.2604

OPIS Mont Belvieu Spot Gas Liquids Prices (cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
TET Propane	44.750	46.000	45.3750	45.5313	44.750	46.000	45.3750	45.5313	45.125	46.375	45.7500	46.1042
Non-TET Propane	42.000	43.500	42.7500	43.3229	42.250	43.750	43.0000	43.4896	45.125	46.625	45.8750	46.7708
Other Non-TET Propane	43.250	46.000	44.6250	44.7917	43.500	46.250	44.8750	44.9583	44.250	47.000	45.6250	47.8854
TET N. Butane	69.750	71.125	70.4375	70.3021	69.750	71.125	70.4375	70.3021	68.750	70.125	69.4375	70.6146
TET Isom N. Butane	70.000	71.375	70.6875	69.9688	70.000	71.375	70.6875	69.9688	70.250	71.750	71.0000	70.4896
Non-TET N. Butane	69.750	71.125	70.4375	69.8854	69.750	71.125	70.4375	69.8854	70.000	71.500	70.7500	70.4063
Other Non-TET N. Butane	69.750	71.125	70.4375	69.8854	69.750	71.125	70.4375	69.8854	70.000	71.500	70.7500	70.4063
TET Isobutane	79.000	80.750	79.8750	82.2500	79.000	80.750	79.8750	82.2500	73.875	77.625	75.7500	74.5313
Non-TET Isobutane	79.000	80.750	79.8750	82.2500	79.000	80.750	79.8750	82.2500	73.875	77.625	75.7500	74.5313
Other Non-TET Isobutane	79.000	80.750	79.8750	82.2500	79.000	80.750	79.8750	82.2500	73.875	77.625	75.7500	74.5313
TET N. Gasoline	124.500	128.000	126.2500	128.7813	124.500	128.000	126.2500	128.7813	122.375	125.875	124.1250	126.7604
Non-TET N. Gasoline	117.500	121.000	119.2500	123.1146	117.500	121.000	119.2500	123.1146	115.875	119.375	117.6250	121.3854
Other N. Gasoline	122.500	126.000	124.2500	127.8646	122.500	126.000	124.2500	127.8646	120.875	124.375	122.6250	125.8854
River N. Gasoline	123.500	127.000	125.2500	129.1146	123.500	127.000	125.2500	129.1146	121.875	125.375	123.6250	127.3854
EP Mix	11.000	12.500	11.7500	11.2188	11.000	12.500	11.7500	11.2188	11.375	12.875	12.1250	11.8854
Other Non-TET E-P Mix	11.000	12.500	11.7500	11.2188	11.000	12.500	11.7500	11.2188	11.375	12.875	12.1250	11.8854
Purity Ethane	15.750	16.500	16.1250	15.6458	16.000	16.750	16.3750	15.7708	15.875	17.000	16.4375	16.2396
Other Non-TET Purity Ethane	15.750	16.500	16.1250	15.6875	16.000	16.750	16.3750	15.8125	15.875	17.000	16.4375	16.2813

OPIS Mont Belvieu Non-TET NGL Basket

Product	Any Current Month		Month To Date	
	Avg (cts/gal)	Avg (\$/bbl)	MTD (cts/gal)	MTD (\$/bbl)
Non-TET NGL Basket	46.7856	19.6500	47.3290	19.8782

OPIS Transatlantic ARB - Mont Belvieu/Cif ARA

Mont Belvieu Non-TET Avg			Cif ARA Physical Avg			Differential	
Product	(cts/gal)	(\$/mt)	Product	(cts/gal)	(\$/mt)	(cts/gal)	(\$/mt)
Propane	42.7500	222.728	Propane	91.3628	476.000	-48.613	-253.273
Butane	70.4375	319.082	Butane	108.8300	493.000	-38.393	-173.918

OPIS International LPG VLGC Freight Rates (\$/mt)

Origin	Destination	Today	Change
AG	Japan	65.500	0.500
Houston	Flushing	65.000	0.000
Houston	Chiba	119.000	0.000

OPIS FOB USGC Resale Differentials (cts/gal)

Propane	Today			Change
	Low	High	Avg	Avg
1H Feb	29.000	31.000	30.0000	0.0000
2H Feb	26.000	28.000	27.0000	0.0000

OPIS Conway In-Well Spot Gas Liquids Prices (cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	40.000	42.000	41.0000	40.7917	40.250	42.250	41.2500	40.8750	40.000	42.750	41.3750	41.4063
N. Butane	71.000	71.750	71.3750	71.8333	72.750	73.500	73.1250	74.4583	67.250	68.000	67.6250	68.0833
Isobutane	77.375	77.625	77.5000	76.7500	79.375	79.625	79.5000	78.7500	74.125	74.375	74.2500	75.4583
N. Gasoline	116.000	118.000	117.0000	121.1458	116.000	118.000	117.0000	121.1458	115.500	117.500	116.5000	120.5833
Ethane (in E-P)	10.000	11.250	10.6250	9.9167	10.000	11.250	10.6250	9.9167	10.750	12.000	11.3750	10.5833

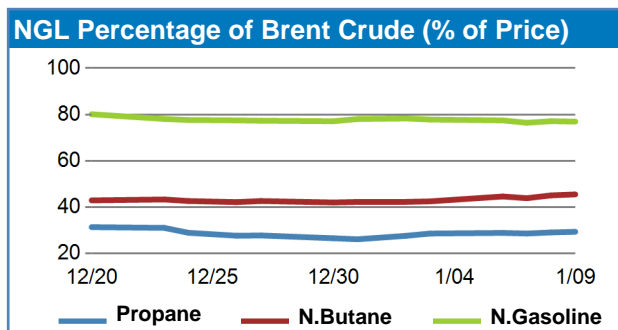
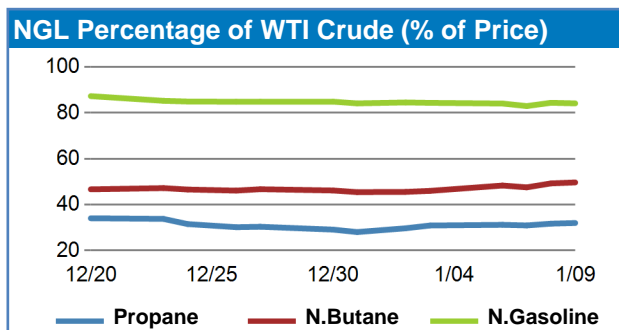
OPIS Conway In-Line Spot Gas Liquids Prices (cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	40.000	42.000	41.0000	40.7917	40.250	42.250	41.2500	40.8750	40.000	42.750	41.3750	41.4063
N. Butane	71.000	71.750	71.3750	71.8333	72.750	73.500	73.1250	74.4583	67.250	68.000	67.6250	68.0833
Isobutane	77.375	77.625	77.5000	76.7500	79.375	79.625	79.5000	78.7500	74.125	74.375	74.2500	75.4583
N. Gasoline	116.000	118.000	117.0000	121.1458	116.000	118.000	117.0000	121.1458	115.500	117.500	116.5000	120.5833
Ethane (in E-P)	10.000	11.250	10.6250	9.9167	10.000	11.250	10.6250	9.9167	10.750	12.000	11.3750	10.5833

OPIS Bushton Spot Gas Liquids Prices (cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane KM	40.000	42.000	41.0000	40.7917	40.250	42.250	41.2500	40.8750	40.000	42.750	41.3750	41.3125
N. Butane KM	71.000	71.750	71.3750	71.8333	72.750	73.500	73.1250	74.4583	67.250	68.000	67.6250	68.0833
Isobutane KM	77.375	77.625	77.5000	76.7500	79.375	79.625	79.5000	78.7500	74.125	74.375	74.2500	75.4583
N. Gasoline KM	116.000	118.000	117.0000	121.1458	116.000	118.000	117.0000	121.1458	115.500	117.500	116.5000	120.5833
Ethane (in E-P) KM	10.000	11.250	10.6250	9.9167	10.000	11.250	10.6250	9.9167	10.750	12.000	11.3750	10.5833

20-Day Spread Trends



OPIS Hattiesburg Spot Gas Liquids Prices (cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane - In-Line	46.250	47.500	46.8750	47.8542	46.250	47.500	46.8750	47.8542	46.500	47.750	47.1250	48.1042
Propane - Storage	45.750	47.250	46.5000	47.7917	45.750	47.250	46.5000	47.7917	46.000	47.500	46.7500	48.0417

OPIS FOB Southeast Louisiana Spot Gas Liquids Aggregate Prices (cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	27.250	28.750	28.0000	28.5729	27.250	28.750	28.0000	28.5729	30.375	31.875	31.1250	32.0208
N. Butane	53.250	54.625	53.9375	66.1354	53.250	54.625	53.9375	66.1354	53.500	55.000	54.2500	66.6563
Isobutane	71.375	73.125	72.2500	78.8542	71.375	73.125	72.2500	78.8542	66.250	70.000	68.1250	71.1354
N. Gasoline	109.750	113.250	111.5000	115.3646	109.750	113.250	111.5000	115.3646	108.125	111.625	109.8750	113.6354
Purity Ethane	13.750	14.500	14.1250	13.6458	13.750	14.500	14.1250	13.6458	13.875	15.000	14.4375	14.2396

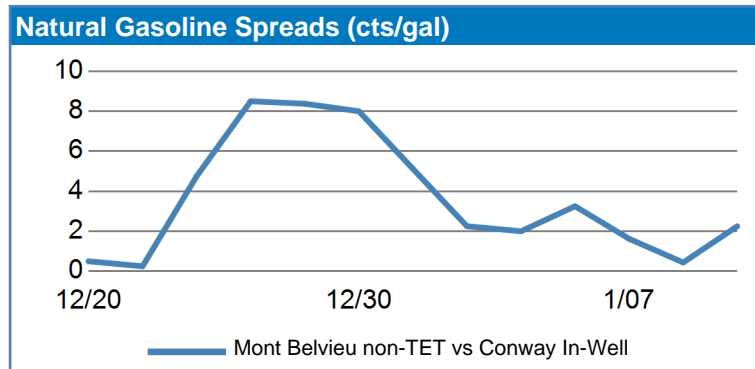
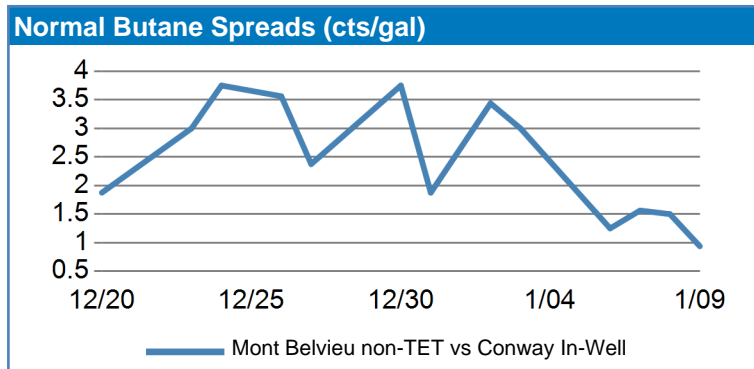
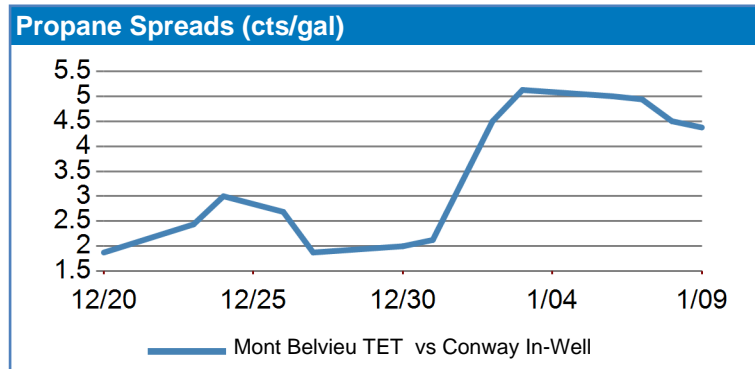
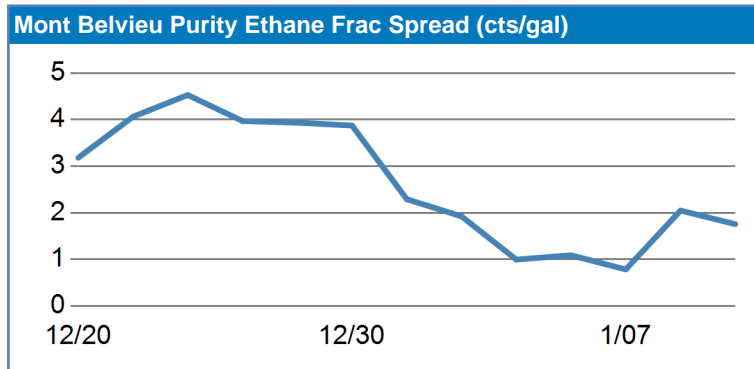
OPIS FOB Napoleonville Spot Gas Liquids Prices (cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	27.250	28.750	28.0000	28.5729	27.250	28.750	28.0000	28.5729	30.375	31.875	31.1250	32.0208
N. Butane	53.250	54.625	53.9375	66.1354	53.250	54.625	53.9375	66.1354	53.500	55.000	54.2500	66.6563
Isobutane	71.375	73.125	72.2500	78.8542	71.375	73.125	72.2500	78.8542	66.250	70.000	68.1250	71.1354
N. Gasoline	109.750	113.250	111.5000	115.3646	109.750	113.250	111.5000	115.3646	108.125	111.625	109.8750	113.6354
Purity Ethane	9.250	10.000	9.6250	9.1458	9.250	10.000	9.6250	9.1458	9.375	10.500	9.9375	9.7396
Ethane (in E-P)	11.000	12.500	11.7500	11.2188	11.000	12.500	11.7500	11.2188	11.375	12.875	12.1250	11.8854

OPIS FOB Geismar/Sorrento Area Spot Gas Liquids Prices (cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	27.250	28.750	28.0000	28.5729	27.250	28.750	28.0000	28.5729	30.375	31.875	31.1250	32.0208
N. Butane	53.250	54.625	53.9375	66.1354	53.250	54.625	53.9375	66.1354	53.500	55.000	54.2500	66.6563
Isobutane	71.375	73.125	72.2500	78.8542	71.375	73.125	72.2500	78.8542	66.250	70.000	68.1250	71.1354
N. Gasoline	109.750	113.250	111.5000	115.3646	109.750	113.250	111.5000	115.3646	108.125	111.625	109.8750	113.6354
Purity Ethane	18.250	19.000	18.6250	18.1458	18.250	19.000	18.6250	18.1458	18.375	19.500	18.9375	18.7396

20-Day Spread Trends



Canada Spot Gas Liquids Prices

OPIS Sarnia Spot Gas Liquids Prices (US cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	69.250	70.000	69.6250	79.6250	69.250	70.000	69.6250	79.6250	69.625	70.375	70.0000	80.1979
N. Butane	86.250	87.625	86.9375	86.8021	86.250	87.625	86.9375	86.8021	85.250	86.625	85.9375	87.1146
Isobutane	79.000	80.750	79.8750	82.2500	79.000	80.750	79.8750	82.2500	73.875	77.625	75.7500	74.5313

OPIS Edmonton Spot Gas Liquids Prices (US cts/gal)

Product	Any Current Month				Prompt Current Month				Out Month (Feb)			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	35.000	37.000	36.0000	39.5833	35.250	37.250	36.2500	39.6667	35.000	37.750	36.3750	40.1979
Field Grade Butane	77.125	77.375	77.2500	85.4583	77.125	77.375	77.2500	85.4583	72.000	72.250	72.1250	83.2917
N. Gasoline	140.024	144.786	142.4050	148.0533	140.024	144.786	142.4050	148.0533	140.905	141.619	141.2620	146.4204
N. Gasoline Diff to WTI*	(1.250)	0.750	(0.2500)	0.5417	(1.250)	0.750	(0.2500)	0.5417	(0.200)	0.100	(0.0500)	0.2167

* N. Gasoline Diff to WTI Implied Calendar Month Average

OPIS West Coast Spot Gas Liquids Prices

Any Prices (cts/gal)

Product	Los Angeles				San Francisco				Bakersfield			
	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	98.500	102.500	100.5000	101.6771	99.500	101.500	100.5000	100.6250	98.500	102.500	100.5000	101.3438
N. Butane	102.500	105.500	104.0000	103.3750	102.500	105.500	104.0000	103.3750	92.250	92.750	92.5000	91.8750
Butane Mix	102.500	105.500	104.0000	103.3750	102.500	105.500	104.0000	103.3750	92.250	92.750	92.5000	91.8750
Isobutane	109.625	110.125	109.8750	112.2500	109.625	110.125	109.8750	112.2500	---	---	---	---
N. Gasoline	---	---	---	---	---	---	---	---	140.750	143.125	141.9375	145.5729

Prompt Calif. Cap-at-the-Rack LPG Price (01/08/2020):	10.44	MTD:	10.392
---	-------	------	--------

Frac Spread and Percentage of Crude Snapshot (cts/gal)

Mont Belvieu

Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
TET Propane	45.375	0.375	25.5425	4.992	32.0186
Non-TET Propane	42.750	(0.500)	22.9175	4.703	30.1663
Non-TET N. Butane	70.438	0.562	47.9674	6.843	49.7039
TET N. Butane	70.438	0.562	47.9674	6.843	49.7039
TET Isom N. Butane	70.688	0.562	48.2174	6.868	49.8803
Non-TET Isobutane	79.875	0.250	58.2951	8.073	56.3634
TET Isobutane	79.875	0.250	58.2951	8.073	56.3634
Non-TET N. Gasoline	119.250	(0.438)	94.1352	10.831	84.1482
TET N. Gasoline	126.250	0.313	101.1352	11.467	89.0877
Purity Ethane	16.125	(0.125)	1.7558	2.425	11.3785
E-P Mix	11.750	---	---	---	---
River N. Gasoline	125.250	(0.438)	100.1352	11.376	88.3821
Other N. Gasoline	124.250	0.062	99.1352	11.285	87.6764
Oth N-TET N. Butane	70.438	0.562	47.9674	6.843	49.7039

Bushton

Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
Propane KM	41.000	0.500	21.1675	4.510	28.9315
N. Butane KM	71.375	---	48.9049	6.934	50.3654
Isobutane KM	77.500	0.250	55.9201	7.833	54.6875
N. Gasoline KM	117.000	(2.250)	91.8852	10.627	82.5605
Ethane (in E-P) KM	10.625	0.125	---	---	---

Napoleonville

Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
Propane	28.000	(0.500)	8.1675	3.080	19.7581
N. Butane	53.938	0.563	31.4674	5.240	38.0607
Isobutane	72.250	0.250	50.6701	7.303	50.9829
N. Gasoline	111.500	(0.438)	86.3852	10.127	78.6794
Purity Ethane	9.625	(0.125)	(4.7442)	1.447	6.7918
Ethane (in E-P)	11.750	---	---	---	---

Conway In-Well

Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
Propane	41.000	0.500	21.1675	4.510	28.9315
N. Butane	71.375	---	48.9049	6.934	50.3654
Isobutane	77.500	0.250	55.9201	7.833	54.6875
N. Gasoline	117.000	(2.250)	91.8852	10.627	82.5605
Ethane (in E-P)	10.625	0.125	---	---	---

Geismar/Sorrento

Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
Propane	28.000	(0.500)	8.1675	3.080	19.7581
N. Butane	53.938	0.563	31.4674	5.240	38.0607
Isobutane	72.250	0.250	50.6701	7.303	50.9829
N. Gasoline	111.500	(0.438)	86.3852	10.127	78.6794
Purity Ethane	18.625	(0.125)	4.2558	2.801	13.1426

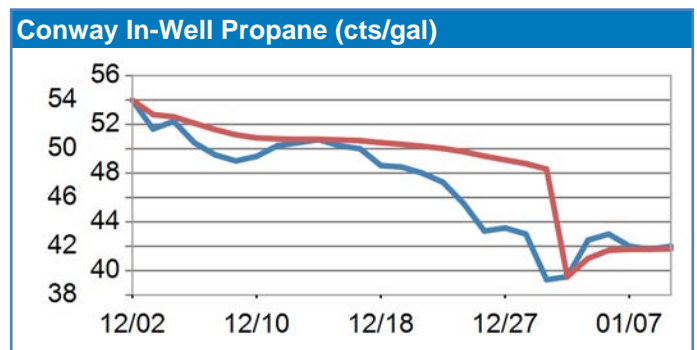
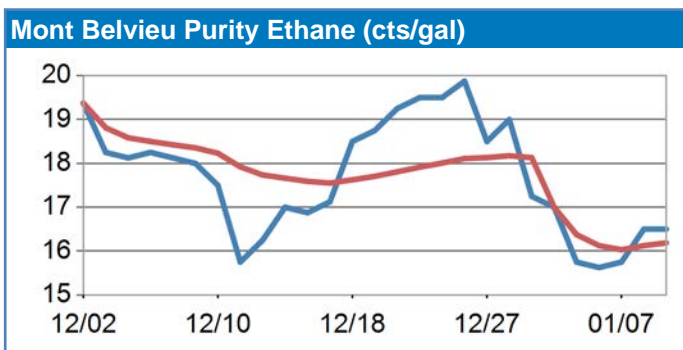
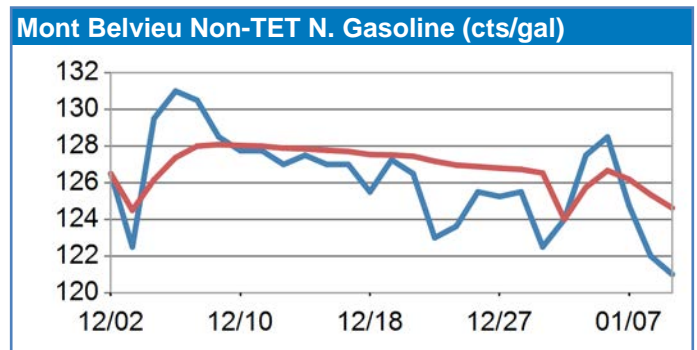
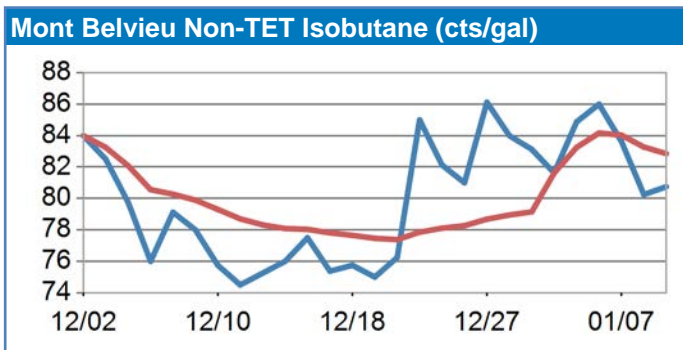
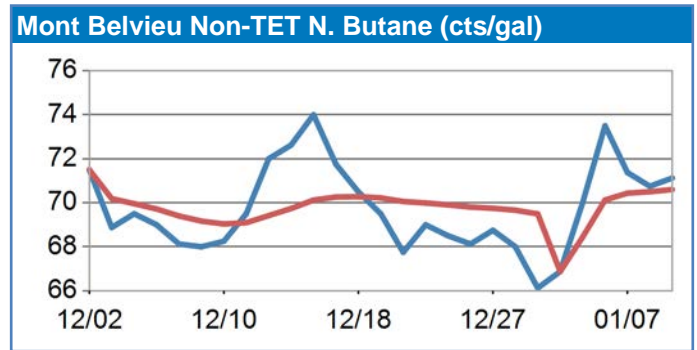
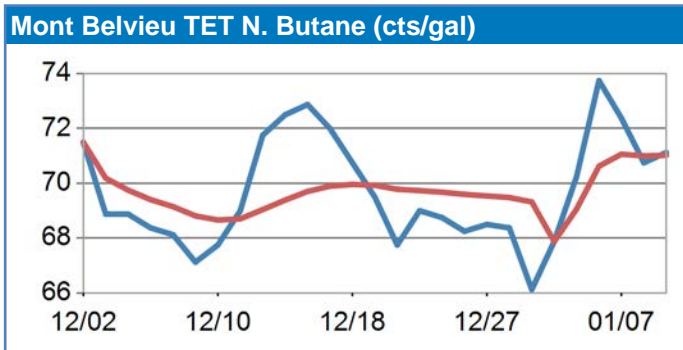
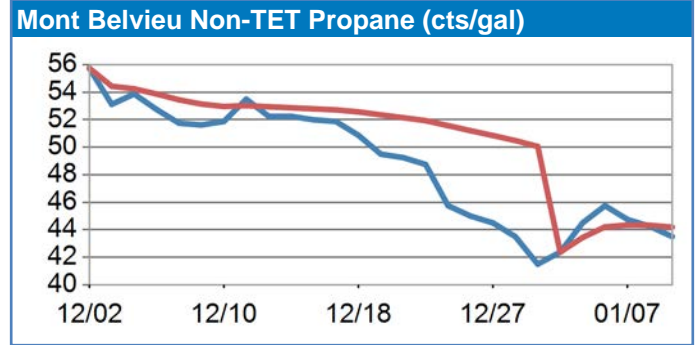
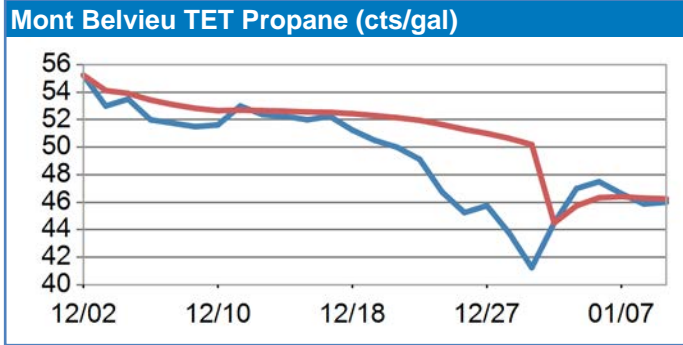
Percentage of Crude 5-Year Rolling Average

Market	Product	% Crude	5-Yr Avg
Mont Belvieu TET	Propane	32.0186	49.0749
Mont Belvieu Non-TET	N. Butane	49.7039	60.9174
Mont Belvieu Non-TET	N. Gasoline	84.1482	90.9485
Mont Belvieu	Purity Ethane	11.3785	18.5086
Conway In-Well	Propane	28.9315	43.6624

OPIS U.S. Gulf Coast FOB LNG Price Assessments (\$/MMBtu)

Periods	1-15 Day	16-30 Day	31-45 Day	46-60 Day
	01/10-01/24	01/25-02/08	02/09-02/23	02/24-03/09
Differential	0.761	0.569	0.553	0.520
NG Price	2.008	2.166	2.148	2.148
Assessment	2.769	2.735	2.701	2.668

Daily Average and Month-to-Date Average Prices



Legend

- Represents daily anys average price, the mean of each trading day's lowest and highest price in US cents per gallon.
- Represents month-to-date anys average price, the sum of each trading day's anys average price divided by the sum of trading days since the beginning of month.

spanned from 15.75-16.5cts/gal. E/P mix anys were gauged at 11- 12.5cts/gal, flat to the day before.

In heavies activity, non-TET natural gasoline spanned a wide range of \$1.175-\$1.21/gal, down by less than 0.5% overall, though at least one source deemed the day's peak as "ridiculously high." Others, however, felt it may have been spurred by panic buying as crude briefly gained some footing, while another source suggested that "someone was buying cheap Conway and selling EPC."

Non-TET normal butane, meanwhile, rose by 0.8% to 69.75-71.125cts/gal, and isobutane was assessed about half a percent higher at 79-80.75cts/gal based on bid/ask indications.

--Jessica Marron, jmarron@opisnet.com

So much for the tub-thumping over the Iran "crisis." Front-month WTI today settled more than \$1.50/bbl lower than where it stood Thursday evening, which was before news broke of the U.S. airstrike that took out Iran's top general. In

the bargain, WTI is again back below \$60/bbl.

With this disruption in the rear-view mirror (at least for now), an interesting stretch may be on tap for propane, especially product traded in the Midcontinent.

As OPIS reported yesterday, the updated weather outlook from the National Oceanographic and Atmospheric Administration (NOAA) portends a cold snap over the entire swath of the American heartland over the coming couple of weeks.

With PADD2 (Midwest) propane inventories already lower than the year-ago print and seasonal averages, this would appear to have set the stage for a smart rally in the Conway propane price.

Wholesale propane in PADD2 and PADD3 currently is available at "summer prices." Any bounce from these levels would be especially cherished by sellers and traders, if not by the actual consumer.

Stronger crude oil futures would have been a nice tailwind to have as Conway propane aspires for such a bounce. The collapse in crude oil now poses an inconvenient truth.

Part of the pricing game involves propane's relationship with crude oil as a percentage. If crude oil futures decline, this sets up a theoretically opposing force for the absolute propane price in cents.

At least one insightful market watcher today appeared alert to this fact, noting that another decline in propane prices, NOAA maps or no NOAA maps, "is not out of the realm of possibility."

Against this backdrop, Conway propane today managed a modest increase of 1.23% built on a range of 40-42cts/gal on 50,000 bbl confirmed. Conway propane's relationship with prices in Mont Belvieu also remained static, with the latter going at premiums in the 3-5cts/gal band compared with around 2cts/gal not too long ago.

Conway EP Mix tagged a 1.19% improvement today, trading at 10- 11.25cts/gal.

Normal butane ended flat on the day at 71-71.75cts/gal. Wet barrels went at a 1.75cts/gal premium over anys.

Isobutane had a rare liquid day, and was assessed at 77.375-77.625cts/gal to incorporate trade activity.

Natural gasoline was the lone laggard, ending the day 1.89% weaker at \$1.16-\$1.18/gal.

--Rajesh Joshi, rjoshi@opisnet.com

Propane prices trended lower in Sarnia Thursday when compared to the previous session and were assessed from 69.25cts/gal to 70cts/gal. Edmonton inventory propane held firm at a 5ct discount to Conway in-well supply.

In butanes, Edmonton field grade butane was last assessed at 54% of the WTI monthly futures average. Sarnia normal butane was estimated at a 16.5ct premium to the Mont Belvieu TET grade, and isobutane was seen unchanged at flat.

Edmonton natural gasoline for January was assessed from minus \$1.25/bbl to a premium of .75/bbl versus the front month WTI contract. February natural gasoline was assessed minus .20/bbl to plus .10/bbl and March minus 1.25ct to minus .75/bbl.

--Ben Scriber, bscriber@opisnet.com

West Coast propane trends were mixed when compared to

Gas Liquids Methodology

LPGas is published each business day. Prices reflect information confirmed by 5:00 pm eastern time. OPIS does not guarantee the accuracy of these prices. Editors have the ability to review and reflect transactions reached on electronic platforms, such as HostEnergy and ICE, within published ranges, but posted "bid/asked" numbers or even confirmed deals on such networks are viewed subjectively by OPIS staff.

For a description of the OPIS LP Report methodology, please visit www.opisnet.com/about/methodology.aspx

Editorial Staff

AMERICAS

Jessica Marron (MD, USA)
+1 301.284.2046
jmarron@opisnet.com

Rajesh Joshi (TX, USA)
+1 832.679.7223
rjoshi@opisnet.com

Mary Welge (NJ, USA)
+1 732.730.2563
mwelge@opisnet.com

Brad Addington (WA, USA)
+1 509.990.8975
baddington@opisnet.com

Tom Galatola (NJ, USA)
+1 732.730.2527
tgalatola@opisnet.com

Charles Kim (GA, USA)
+1 832.619.8650
ckim@opisnet.com

Ben Scriber (TX, USA)
+1 832.679.7224
bscriber@opisnet.com

Diane Miller (NJ, USA)
+1 732.730.2530
dmiller@opisnet.com

Bobbie Clark (TX, USA)
+1 832.679.7198
bclark@opisnet.com

EUROPE

Dermot McGowan (London, UK)
+44 752.522.5300
dmcgowan@opisnet.com

Inge Erhard (London, UK)
+44 777.375.7940
ierhard@opisnet.com

Rob Sheridan (London, UK)
+44 (0)7976612863
rsheridan@opisnet.com
ICE chat: rsheridan3

EUROPE

Cuckoo James (London, UK)
+44 7773 646543
cjames@opisnet.com
ICE: cjames9

Yazdi Merchant (London, UK)
+44 7801 383135
ymerchant@opisnet.com

ASIA

Hanwei Wu (Singapore)
+65 98341951
Hanwei.Wu@ihsmarkit.com

Schedule

Schedule for the week of 01/06/2020. Subject to change without notice.
Mont Belvieu: 1/6 Rajesh Joshi, 1/7-8 Tom Galatola, 1/9-10 Jessica Marron
Conway: 1/6-7 Ben Scriber, 1/8-9 Rajesh Joshi, 1/10 Bobbie Clark
CA and WC: 1/6 Tom Galatola, 1/7 Mary Welge, 1/8-9 Ben Scriber, 1/10 Tom Galatola

For subscription information, please call
888.301.2645 (U.S. only) or +1 301.284.2000
or email energycs@opisnet.com.

the prior session. Normal butane anys and isobutane anys moved higher in today's session and followed the Mont Belvieu non-TET market.

Propane ranges from 98.5cts/gal to \$1.0250/gal, 99.5cts/gal-\$1.015/gal and 98.5cts/gal to \$1.0250/gal were assessed for Los Angeles, San Francisco and Bakersfield, respectively. The ranges were assessed at supplier postings, less Cap-at-the-Rack costs of 10.44cts.

Normal butane in Los Angeles, San Francisco and Bakersfield moved higher alongside Mont Belvieu prices. Normal butane anys for Los Angeles were estimated at \$1.04/gal. The premium to Mont Belvieu was assessed at 33.5cts/gal. Los Angeles and San Francisco isobutane prices ticked up to \$1.09875/gal, and the premium to Mont Belvieu isobutane remained at 30cts.

Bakersfield natural gasoline remained flat at \$1.40750 -\$1.43125/gal, as the WTI average ticked down minimally to \$60.09/bbl.

--Ben Scriber, bscriber@opisnet.com

In the U.S. Gulf Coast FOB propane market, participants responded to the drop in Asian flat price and cash differentials by taking a cautious approach to fixing resale deals. Additional risks posed by potential weakness in Mont Belvieu pricing in the near future also factored in the lull in activity.

A market source said: "Right now things have just got a bit quiet as traders are waiting for some direction."

A broker added on LPG resale pricing: "Best offers are not yet below 30cpg for February FOBs but it is coming off."

OPIS established its 1H February assessment value accordingly in a range of 29-31cts/gal, steady day on day. Previously, a mid-February deal had been concluded at around 30cts/gal.

"We would expect more Mount Belvieu weakness. But so far the only weak market is FEI," a market participant said.

In Asia, cash premia have been volatile, shifting from +\$30s/t late last week to +\$50s/t early this week. On Thursday, the 1H March physical/paper differential stood relatively low at +\$46.5/t. Meanwhile, the propane Far Eastern Index for March has dropped from \$500/t on Monday 6 January to \$447/t on the day, adding to concerns the huge netbacks seen recently might be coming off.

"We think the peak has passed," a source said.

In fact, an OPIS analysis of netbacks revealed a dip in arbitrage economics from mid-week. On Thursday, netbacks dropped for the second day in a row, falling to 26.625cts/gal from 36.625cts/gal on Monday for U.S. Gulf Coast cargoes loading over 1H February.

--Cuckoo James; cjames@opisnet.com

In NW Europe, propane swaps for January fell for a third straight session, ending at \$447/t inside the 4:00-4:30pm GMT timeframe, down \$22/t on the day. The January marker has now lost \$63/t in just four sessions. January/February softened Thursday to +\$34/t from +\$38/t.

Two bidders returned to the TOT fold - a trader sought a 19-25 January TOT or 19.4-23kt cargo, whilst a retailer was seeking a TOT cargo along similar dates. Neither bid solicited

offer interest. With the flat price coming off steeply Thursday, bid ideas were also softening. Broking sources put the premium for propane slightly lower at +\$29/t to market, where OPIS made its assessment.

Some uncertainty surrounded the Very Large Gas Carrier (VLGC) Chaparral, which had been earmarked for the feedstock pool having loaded in the U.S. East Coast. On leaving the loadport, sources suggested the vessel could have been redirected to the Mediterranean.

Propane/naphtha continued to widen, ending at -\$80/t for January (around -\$50/t when taking into account the closing propane value-to-market). The spread for February stepped back into triple digit territory, ending at -\$105/t from -\$91/t.

The small-stem ARA-range propane market continued to be buoyed by deals Thursday, with a 1.7kt FOB parcel bid to \$550/t by a Norwegian major and booked by an Italian major. Outstanding interest came from a retailer, offering a similarly-sized FOB parcel ex-Karlshamn with a wider date range. No further deals were heard.

With no physical activity seen, large-cargo butane was pegged at 93% to January naphtha.

--Dermot McGowan, dmcgowan@opisnet.com

Asian LPG prices dropped for a second consecutive day amid weaker overnight crude as well as lower paper values and offers for Feb. cycles.

CFR Japan spot propane was assessed at \$523.50/mt, down \$45.50/mt from the previous session.

In the paper market, the Feb. propane CP swap dropped \$31.50/mt to \$507.50/mt, while the Feb.-March time-spread narrowed by \$0.50/mt to \$52.00/mt in backwardation.

In the H1 Feb. delivery cycle, the lowest offer was at a plus \$43/mt to the Feb. Far East quotes for a 23,000 mt propane parcel, which was \$6/mt less than the previous deal done on Wednesday during the afternoon trading session. No bid was heard.

In the H2 Feb. delivery cycle, the lowest offer was at a Jan. Far East quotes flat, which was equivalent to a \$48/mt drop as compared to previous session on Wednesday for a 23,000 mt propane parcel. No bid was heard.

As a result, H1 Feb., H2 Feb. and H1 Mar. delivery propane were assessed at \$530.50/mt, \$516.50/mt and \$500.50/mt, respectively, while evenly split LPG (11:11) was at \$604.50/mt, \$601.50/mt and \$574.50/mt.

Multiple bids were placed for FOB AG cargoes loading from end-Jan. to Feb.

One bid was placed at \$540/mt and \$570/mt for propane and butane, respectively, for a 45,000 mt evenly split cargo loading Jan. 20 to Feb. 4.

Another bid was at a discount of \$2/mt to the Feb. CP for a similar cargo, but with full month Feb loading. This bid appeared in the afternoon trading for four consecutive sessions without attracting an offer.

A third bid was placed at 50% of the outright price of \$520/mt and 50% of Feb. CP, which is the equivalent of \$513.75/mt, for a 46,000 mt propane cargo loading Feb. 1-5.

AG cargoes are still commanding a high premium for early Feb. loading due to a lack of offers, said sources.

Very few deals or bid levels were heard from Chinese buyers, they added, with market players waiting for demand to pick up.

A wave of maintenance closures emerged in China, after LPG prices jumped to squeeze propylene margin, spanning from end Dec. to Jan. as many were unable to secure January cargoes amid OPEC+ production cuts, as reported by OPIS earlier.

Sixteen petrochemical companies in North and Southeast Asia will crack 566,000 mt of LPG in February, down 8.6% from 619,000 mt planned in January, according to an IHS Markit OPIS poll conducted on Jan. 2-8. The February volume, if materialized, would be the smallest since October 2019.

Propane use by six will fall 9.3% to 360,000 mt in February from 397,000 mt this month. One will use both propane and butane but did not provide a breakdown.

The 11 participants that can crack butane plan to maintain their volume at 146,000 mt next month, compared to January.

BASF issued an FOB sell tender for three 46,000 mt AG origin evenly-split cargoes loading in April, May and June, according to a document.

The origin and laycan are to be declared by the 8th or 9th of the loading months and the pricing basis is the Saudi CP.

Bids can be placed on one or multiple cargoes, and the tender will close by 16:30 SGT and valid till 18:00 SGT on Friday.

Bharat Petroleum Corp. (BPCL) issued a CIF/DES tender to buy a maximum of 800,000 mt of evenly split LPG to be delivered from March 2020-2021 discharging at Dahej, Pir Pau or Mangalore and Haldia, according to a tender document.

Pricing basis is the Saudi CP of the nominated month of delivery.

The tender will close on Jan. 20 and valid till Feb. 7.

Pertamina may have cancelled its buy tender due to lack of offers, said sources.

It sought two 45,000 mt evenly split cargoes for Feb. 13-17 delivery to Kalbut and Tanjung Sekong, as reported by OPIS earlier.

BPCL may also have cancelled its buy tender for 20,000 mt evenly split in 4-5 lots to be delivered over Feb. 1-28 to Mumbai, for similar reasons, said market contacts.

The spot chartering rate for Houston to Japan via the Panama Canal gained \$5/mt to \$119.00/mt. The rate for Middle East to Asia up slightly on Wednesday to \$65.29/mt.

--Lujia Wang, lwang@opisnet.com

IN THE LNG MARKET...

U.S. Gulf Coast (USGC) LNG market closed Thursday moving slightly higher on the day largely due to a rally in European gas prices while US spot prices contracted lower absorbing pressure from declining near term demand. US average temps were expected to warm back above 50 degrees for the weekend and domestic consumption levels by Saturday are expected to have contracted by more than 12% since Wednesday. With the noted continued strength in European gas values, the OPIS arbitrage indicator remained pointing in that direction for all four periods.

OPIS assessed the 1st period at \$2.769/MMBtu, the 2nd at \$2.735/MMBtu, the 3rd at \$2.701/MMBtu and the 4th period at \$2.668/MMBtu. Collectively the four periods gained an average of \$0.04/MMBtu with the 1st leading the way higher picking up \$0.063/MMBtu.

U.S. natural gas values were mixed on the day. Prompt month February futures did test down to near \$2.10/MMBtu during the session but prices were able to recover by the close and ended up advancing higher by \$0.025/MMBtu to settle at \$2.166/MMBtu. However, cash prices were moving in the other direction as the OPIS-assessed Henry Hub spot physical for January 10th began disconnecting somewhat falling to \$2.008/MMBtu which was down by \$0.068/MMBtu.

The FOB USGC LNG differentials were able to capitalize somewhat but mostly on the back of the falling spot market being marked against the premium European front months which also saw a slight increase in the backwardation of their respective curves. As such the 1st period gained \$0.131/MMBtu to close at \$0.761/MMBtu. However, the forward three spot loading periods representing the 16 to 60 day periods were only able to gain a little more than \$0.01/MMBtu as the 2nd period finished at \$0.569/MMBtu, the 3rd at \$0.553/MMBtu and the 4th at \$0.52/MMBtu.

In other LNG news, IHS Markit issued on January 8 a report on US LNG activity in the second half of 2019 affirmation the notion that the first wave of liquefaction capacity buildout is ending soon.

According to the US LNG Export Monitor: H2 2019, the US added 22.6 MMtpa of export capacity this past year. Also, trains under construction at the Cameron, Freeport and Elba Island LNG terminals will come online in 2020 bringing close to 21 MMtpa of new capacity to completion.

Overall, 2019 was a year of global records in new capacity, with the US comprising approximately 30 MMtpa of the 70 MMtpa of sanctioned capacity according to IHS Markit. Different strategies helped three major projects reach FID last year, Golden Pass, Cheniere's Sabine Pass Train 6 and Venture Global's Calcasieu Pass. Golden Pass' sponsors, Qatar Petroleum and ExxonMobil, allocated the project's offtake capacity to their affiliate Ocean LNG. IHS Markit said this "enabled the project to move forward more quickly and added to the growing trend of affiliate marketing supporting large-scale FIDs."

Along these same lines, the report also offered a warning that contracting activity slowed down in the second half of 2019 might just be the precursor to surplus LNG market conditions. The recent record levels of liquefaction investment, and an extended period of lower spot prices may create challenges for the large number of pre-FID projects still seeking customers. With each additional FID, there is a growing risk of subsequent projects in the United States (and elsewhere) being crowded out.

Nonetheless, one bright spot offered in the report was that during the back half of 2019, FERC was able to clear up a great deal of its existing LNG permitting backlog. Over the past year, FERC has authorized 11 LNG projects totaling nearly 130 MMtpa of capacity and subsequently just three projects are still awaiting approval, which in each case has likely been scheduled for 2020.

--Luke Larsen, luke.larsen@ihsmarkit.com

IN THE NEWS...

Global economic growth is on "a fragile upward path" in 2020 after last year seeing its weakest performance since the 2008

global financial crisis, according to the latest forecast by the World Bank.

In its Global Economics Prospects report, the bank projects growth will rise by 2.5% in the coming year after seeing a 2.4% increase in 2019. The report, however, warns that an "unprecedented runup in debt worldwide," and slowing productivity growth could derail improvements.

"The world economy is poised for a modest rebound this year - if everything goes just right," the bank said.

The growth will be driven by emerging and developing economies, which the bank says will see growth accelerate to 4.1% this year from 3.5% in 2019. Meanwhile, the bank projects growth in advanced economies will slow from 1.6% in 2019 to 1.4% this year, with the decline reflecting lingering weakness in manufacturing.

The report notes that most commodity prices fell in 2019 due to reduced growth. Oil prices, measured by the bank as an average basket of Brent, Dubai, and West Texas Intermediate crude, declined 10% from 2018 levels to an average \$61/bbl in 2019. The report projects oil will decline further in the coming year, averaging \$59/bbl in 2020 and 2021, although a further significant reduction in trade tensions between the United States and China could boost oil demand, the report said.

The semi-annual report warns there are several circumstances that could hamper economic growth in the coming year. These include trade disputes, a slowdown in major economies that could have worldwide impacts, extreme weather, geopolitical tensions and financial problems in emerging markets similar to those seen in Argentina and Turkey in 2018.

But the bank seemed most concerned about the issue of public debt in emerging economies and slowing productivity growth.

It warned that emerging and developing markets are seeing "the largest, fastest, and most broad-based wave of debt accumulation ... in the last 50 years." Total public debt among those economies was about 170% of GDP in 2018 compared to a level of 115% just eight years earlier.

While acknowledging that if done correctly, public borrowing can spur economic development and be beneficial for populations, the bank also warned that "the three previous waves of debt accumulation have ended badly." These included the sovereign defaults in the early 1980s; the need for major debt relief in the 2000s; and the global financial crisis in 2008-2009.

High debt also limits government ability to deploy fiscal stimulus to counter an economic downturn and can "crowd out" private investment needed for long-term growth, the bank said.

Private and public investment are needed to address the slowdown of growth in productivity, particularly in emerging economies.

"Among emerging and developing economies ... the slowdown from 6.6% in 2007 to a trough of 3.2% in 2015 has been the steepest, longest, and broadest on record," the bank said.

Much of that fall off can be attributed to a slowdown in improvements in education, urbanization and institutions since the global financial crisis, the bank said, calling for "a comprehensive approach" to rekindling productivity growth.

The report notes that inflation is at a median of 3% in low income countries after peaking at 25% in 1994. But the bank warns that low inflation should not be taken for granted, warning of "mounting fiscal pressures and the risk of exchange rate shocks."

"To maintain low and stable inflation, monetary and fiscal policy frameworks need to be strengthened and supported by efforts to replace price controls with more efficient policies," the report said.