

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 1.76	▼ \$ (0.02)	▲ \$ 0.06

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 41.21	▲ \$ 0.14	▲ \$ 0.1

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 43.42	▲ \$ 0.11	▼ \$ (0.1)

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00z GWDD Change

Cooler Change

Warmer Change

ECMWF Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	2.1	1.4	1.0	4.5
24 Hr Chg	-0.7	1.4	0.1	0.8

GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	0.7	-1.4	-0.3	-1.0
24 Hr Chg	-0.8	-4.7	0.6	-4.8

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	85.8	▼ -0.36	▼ -0.43

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	42.4	▼ -2.05	▼ -3.10

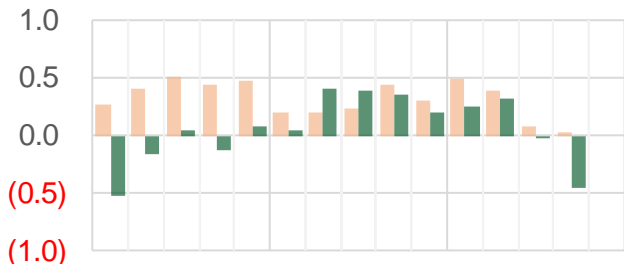
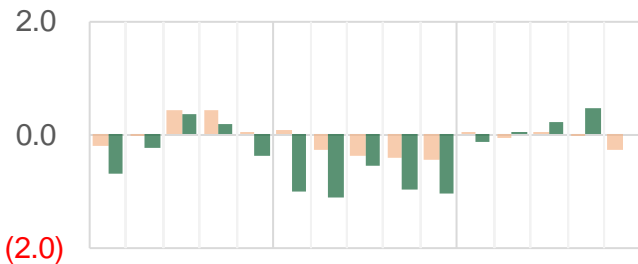
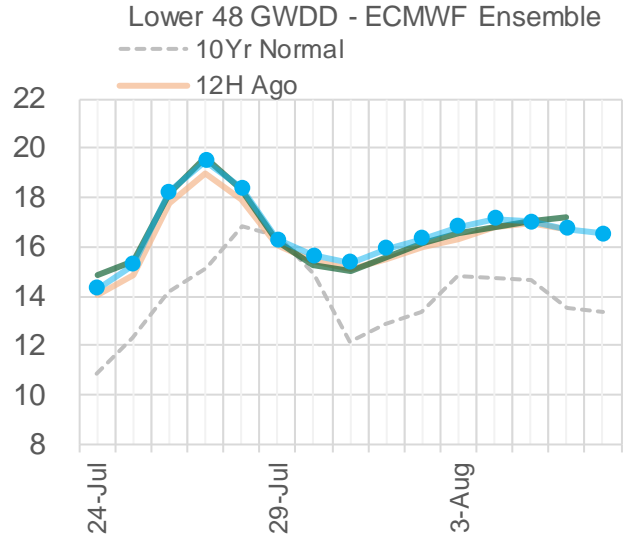
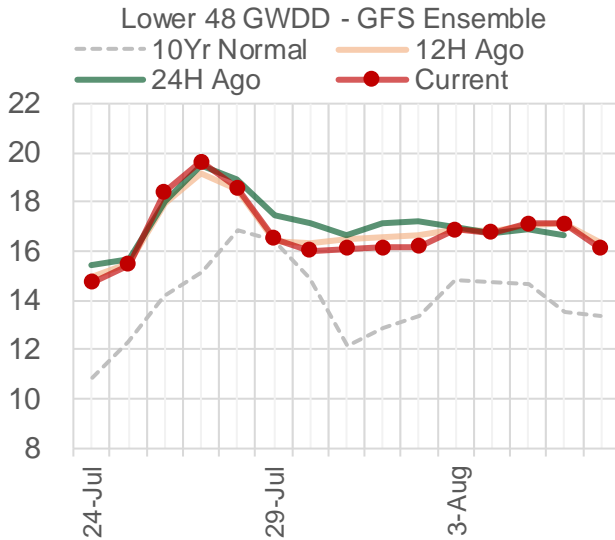
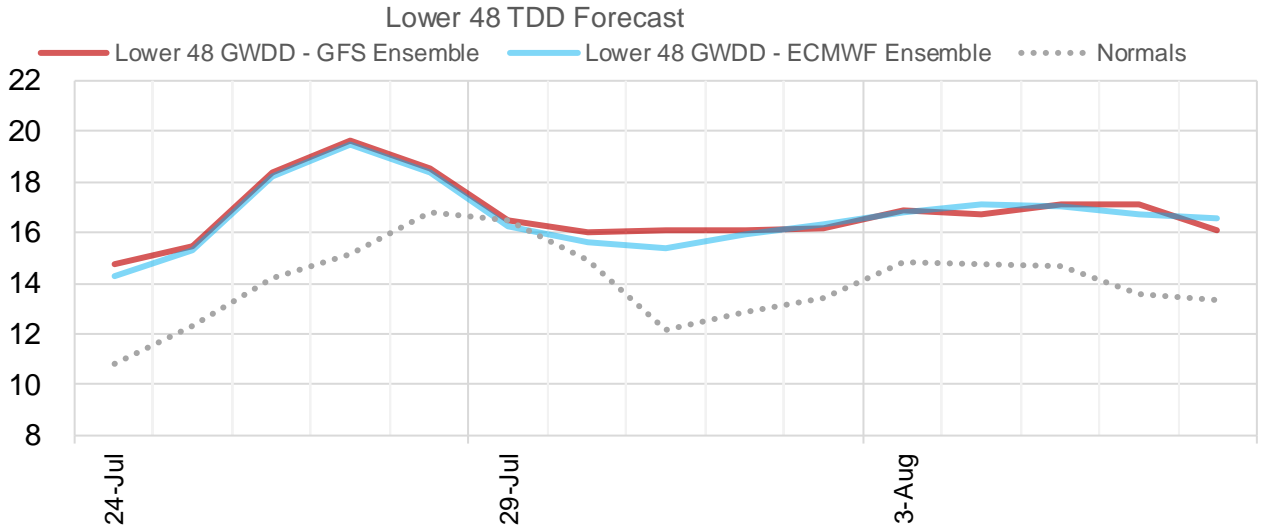
	Current	Δ from YD	Δ from 7D Avg
US ResComm	7.5	▼ -0.11	▼ -0.07

	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.0	▲ 0.07	▼ -0.34

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	2.9	▼ -0.45	▼ -0.67

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.6	▼ -0.09	▲ 0.17

Short-term Weather Model Outlooks (00z)



Source: WSI, Bloomberg

Lower 48 Component Models

Daily Balances

	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	DoD	vs. 7D
Lower 48 Dry Production	86.6	86.4	86.3	85.6	86.1	86.2	85.8	▼ -0.4	▼ -0.4
Canadian Imports	4.5	4.7	4.7	4.4	3.9	3.9	4.0	▲ 0.1	▼ -0.3
L48 Power	43.2	45.0	48.9	47.5	46.4	44.5	42.4	▼ -2.1	▼ -3.5
L48 Residential & Commercial	7.2	7.4	7.9	7.7	7.7	7.6	7.5	▼ -0.1	▼ -0.1
L48 Industrial	17.3	17.1	17.1	17.1	17.0	17.1	17.2	▲ 0.1	▲ 0.1
L48 Lease and Plant Fuel	4.8	4.8	4.8	4.8	4.8	4.8	4.8	▼ 0.0	▼ 0.0
L48 Pipeline Distribution	2.3	2.4	2.6	2.5	2.5	2.4	2.3	▼ -0.1	▼ -0.2
L48 Regional Gas Consumption	74.8	76.7	81.3	79.6	78.4	76.4	74.2	▼ -2.2	▼ -3.6
Net LNG Exports	3.6	3.6	4.0	3.6	3.5	3.4	2.9	▼ -0.5	▼ -0.7
Total Mexican Exports	6.2	6.1	6.4	6.6	6.4	6.7	6.6	▼ -0.1	▲ 0.2
Implied Daily Storage Activity	6.5	4.6	-0.7	0.2	1.7	3.7	6.1		
EIA Reported Daily Storage Activity									
Daily Model Error									

EIA Storage Week Balances

	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	24-Jul	WoW	vs. 4W
Lower 48 Dry Production	85.1	84.9	85.2	85.6	85.5	86.3	▲ 0.8	▲ 1.0
Canadian Imports	3.8	4.2	4.1	4.3	4.5	4.4	▼ -0.1	▲ 0.1
L48 Power	30.3	37.1	38.4	41.8	42.9	45.5	▲ 2.6	▲ 5.5
L48 Residential & Commercial	8.0	7.4	7.4	7.3	7.4	7.6	▲ 0.2	▲ 0.2
L48 Industrial	19.0	19.3	19.8	18.8	18.4	17.2	▼ -1.2	▼ -1.9
L48 Lease and Plant Fuel	4.8	4.8	4.8	4.8	4.8	4.8	▲ 0.0	▲ 0.0
L48 Pipeline Distribution	1.8	2.1	2.2	2.2	2.3	2.4	▲ 0.1	▲ 0.2
L48 Regional Gas Consumption	63.8	70.7	72.6	74.9	75.7	77.5	▲ 1.8	▲ 4.0
Net LNG Exports	3.8	4.0	4.0	3.0	3.3	3.6	▲ 0.3	▲ 0.0
Total Mexican Exports	5.6	5.9	5.8	5.9	6.2	6.4	▲ 0.2	▲ 0.5
Implied Daily Storage Activity	15.7	8.5	6.9	6.0	4.8	3.1	-1.7	
EIA Reported Daily Storage Activity	17.1	9.3	8.0	6.4	5.3			
Daily Model Error	-1.5	-0.8	-1.1	-0.4	-0.5			

Monthly Balances

	2Yr Ago Jul-18	LY Jul-19	Mar-20	Apr-20	May-20	Jun-20	MTD Jul-20	MoM	vs. LY
Lower 48 Dry Production	81.8	90.1	93.3	91.8	86.0	84.9	85.7	▲ 0.8	▼ -4.3
Canadian Imports	5.6	5.0	4.1	4.0	3.9	4.0	4.3	▲ 0.3	▼ -0.7
L48 Power	39.1	40.9	28.3	25.3	26.3	34.3	43.1	▲ 8.8	▲ 2.2
L48 Residential & Commercial	7.8	8.1	27.5	20.9	12.3	7.7	7.4	▼ -0.3	▼ -0.7
L48 Industrial	20.7	20.3	22.8	20.7	20.3	19.6	18.2	▼ -1.4	▼ -2.1
L48 Lease and Plant Fuel	4.6	5.0	5.2	5.1	4.8	4.8	4.8	▲ 0.0	▼ -0.2
L48 Pipeline Distribution	2.2	2.2	2.5	2.1	1.9	2.0	2.3	▲ 0.3	▲ 0.1
L48 Regional Gas Consumption	74.3	76.6	86.4	74.2	65.6	68.3	75.8	▲ 7.4	▼ -0.8
Net LNG Exports	3.3	6.0	8.5	8.2	6.7	4.0	3.3	▼ -0.7	▼ -2.7
Total Mexican Exports	5.0	5.4	5.6	4.9	4.9	5.7	6.1	▲ 0.4	▲ 0.8
Implied Daily Storage Activity	4.8	7.1	-3.1	8.4	12.7	10.9	4.9		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

Regional S/D Models Storage Projection

Week Ending 24-Jul

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	2.8	0.7	3.6	23
East	-0.6	2.0	1.4	9
Midwest	2.7	-0.7	2.0	13
Mountain	2.9	-2.4	0.4	3
South Central	-2.8	2.2	-0.5	-4
Pacific	0.7	-0.3	0.4	3

*Adjustment Factor is calculated based on historical regional deltas

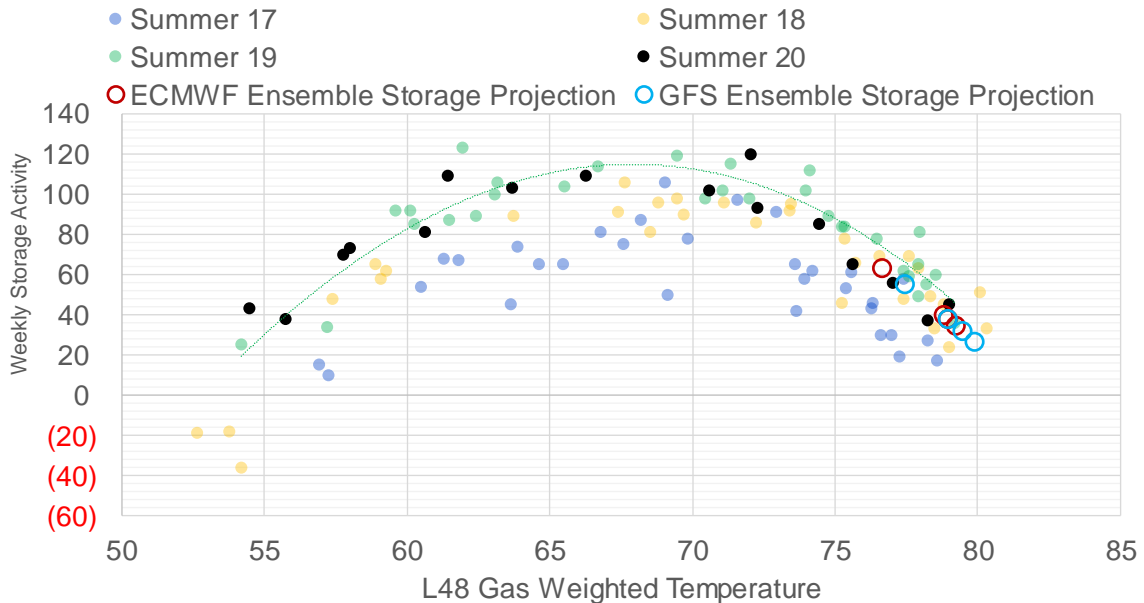
U.S. underground natural gas storage facilities by type (July 2015)



Weather Model Storage Projection

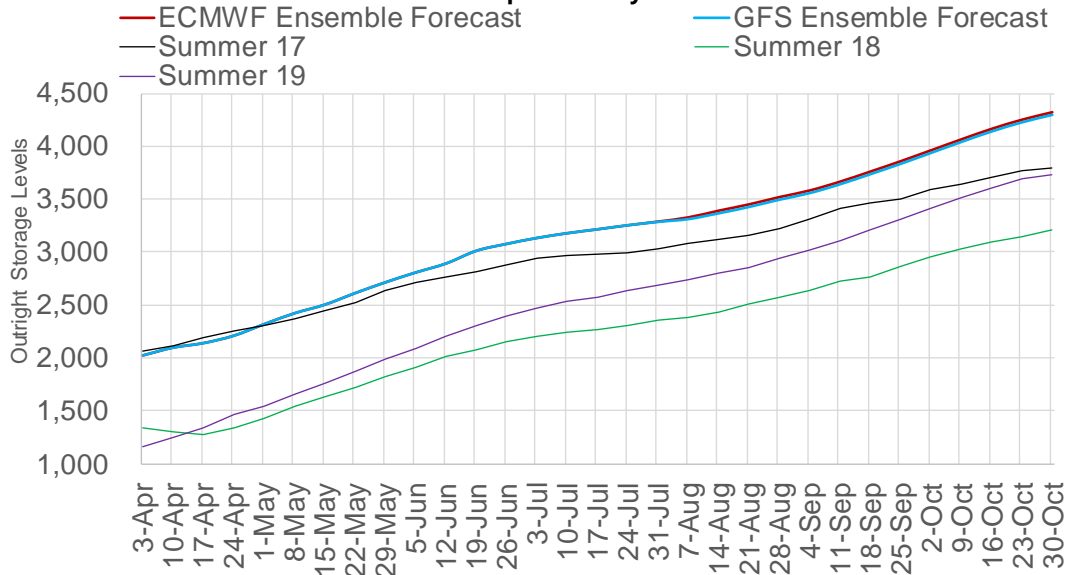
Next report and beyond	
Week Ending	Week Storage Projection
31-Jul	33
7-Aug	33
14-Aug	59

Weather Storage Model - Next 4 Week Forecast



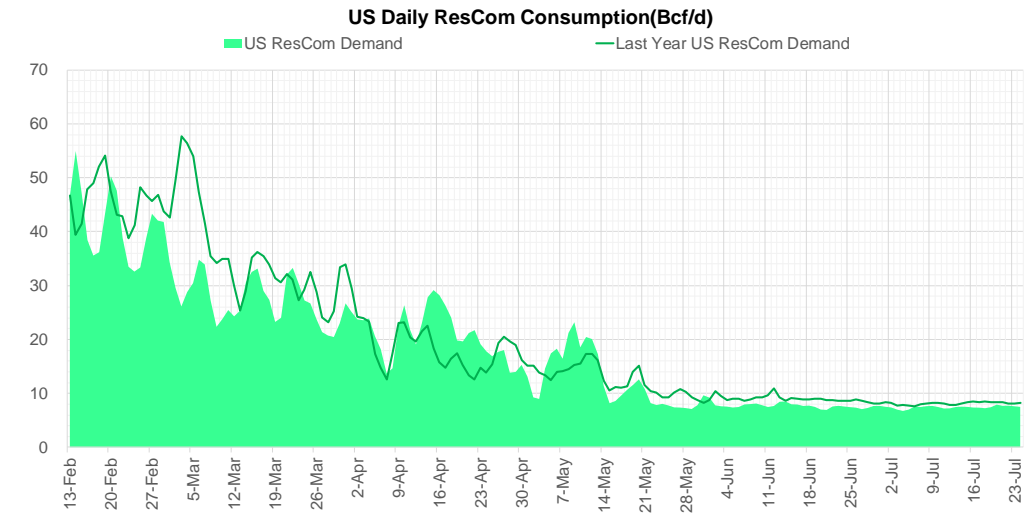
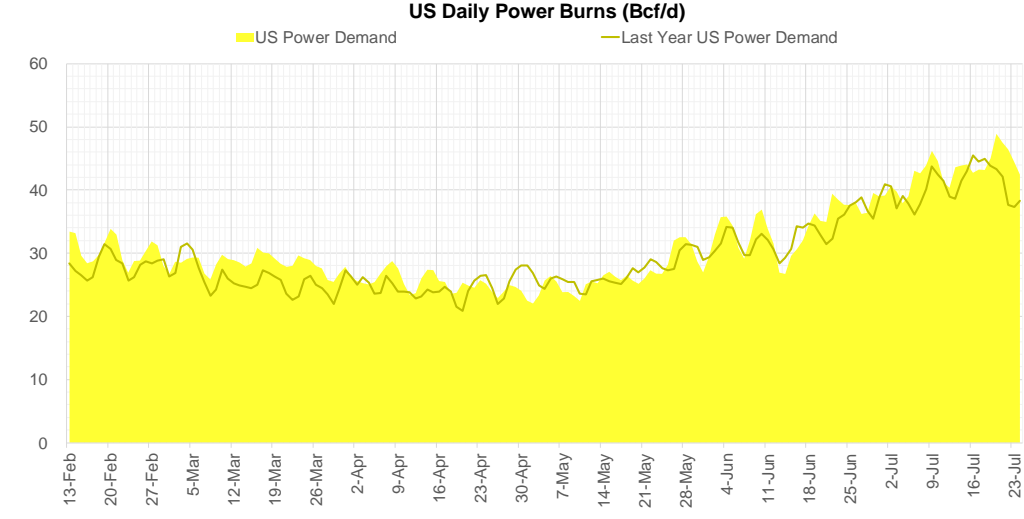
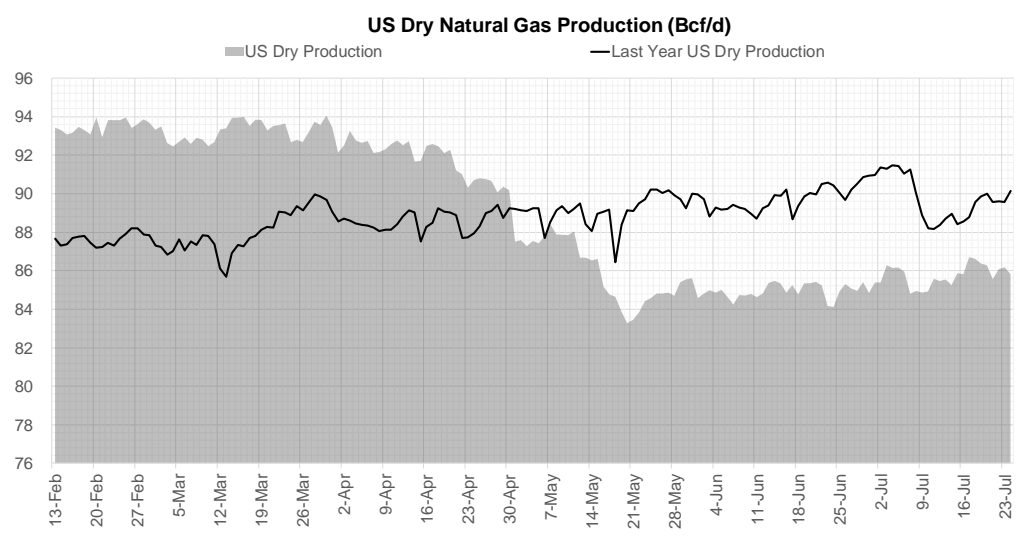
Weather Based End of Winter Projection (Bcf)

10Y normals past 15 day forecast window



The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are not necessarily indicative of future results. This communication may contain links to third party websites which are not under the control of and are not maintained by ION Energy Group, and ION Energy Group is not responsible for their content.

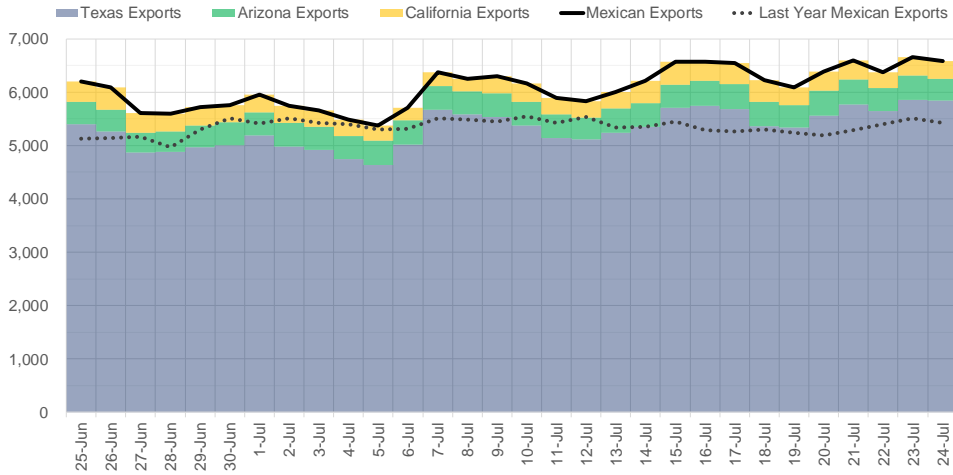
Supply – Demand Trends



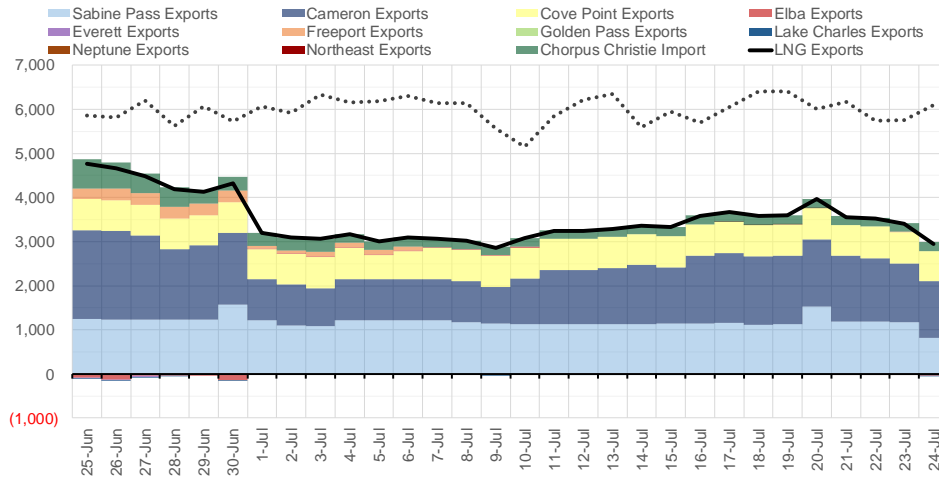
Source: Bloomberg

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Mexican Exports - Last 30 days (MMcf/d)



Net LNG Exports - Last 30 days (MMcf/d)



Source: Bloomberg

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Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

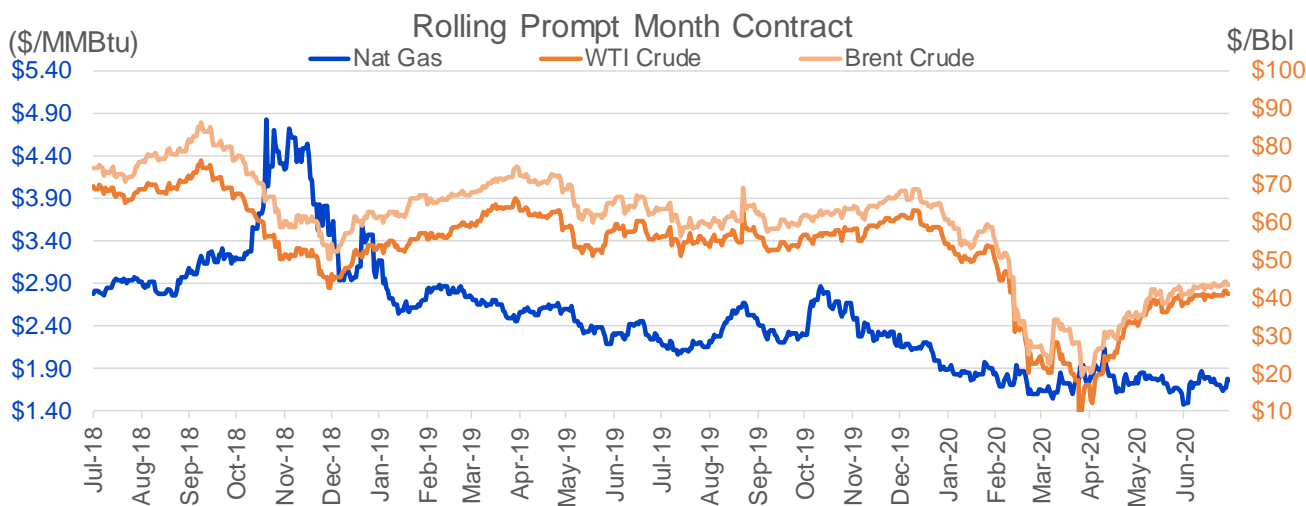
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
9	2020	P	1.50	8665	10	2020	P	1.50	50222
8	2020	P	1.50	7016	10	2020	C	2.75	49373
9	2020	P	1.30	6401	10	2020	C	2.50	37609
10	2020	P	1.50	6379	8	2020	C	2.00	36933
12	2020	P	2.00	5725	3	2021	P	2.00	35681
8	2020	P	1.60	5323	9	2020	P	1.50	35127
10	2020	P	1.30	5260	8	2020	P	1.50	32034
9	2020	P	1.10	5097	10	2020	P	1.60	31929
9	2020	C	3.25	5072	10	2020	C	3.00	31928
10	2020	P	1.10	5016	10	2020	P	2.00	30701
8	2020	P	1.65	4334	9	2020	C	2.50	30134
8	2020	P	1.70	4095	10	2020	P	1.25	28165
8	2020	C	2.00	3678	10	2020	P	1.75	28120
9	2020	C	2.25	3586	9	2020	C	3.00	24611
11	2020	P	1.75	3561	9	2020	P	1.00	24547
9	2020	C	2.00	3203	8	2020	C	2.50	23901
11	2020	P	1.85	3201	9	2020	P	1.20	23210
11	2020	P	1.90	3002	9	2020	C	2.00	22190
10	2020	C	2.50	2992	3	2021	C	3.00	21754
10	2020	P	1.75	2961	9	2020	P	1.30	19897
9	2020	P	1.65	2812	9	2020	P	1.75	19605
9	2020	P	1.35	2676	9	2020	P	1.25	19506
8	2020	C	1.90	2512	10	2020	P	1.30	19388
9	2020	C	2.10	2389	8	2020	C	2.25	18980
9	2020	C	3.00	2316	8	2020	P	1.30	18837
10	2020	C	2.25	2280	3	2021	C	6.00	18626
1	2021	C	3.75	2200	9	2020	C	2.75	18588
8	2020	P	1.55	2186	10	2020	C	2.10	18523
9	2020	P	1.40	2121	1	2021	C	3.50	18259
9	2020	P	1.75	1912	10	2020	C	3.25	18190
11	2020	P	2.20	1900	10	2020	P	2.10	18133
8	2020	C	1.70	1839	8	2020	P	1.60	18122
1	2021	C	4.75	1800	10	2020	P	1.00	17969
12	2020	C	3.25	1784	3	2021	C	3.50	17908
9	2020	P	1.25	1688	10	2020	C	2.25	17611
11	2020	C	2.75	1601	9	2020	C	2.25	17374
4	2021	P	2.00	1600	1	2021	C	3.00	17338
11	2020	C	2.60	1511	8	2020	P	1.75	17192
11	2020	P	1.60	1501	8	2020	P	1.00	16762
8	2020	C	1.85	1488	10	2020	C	2.40	16155
8	2020	P	1.40	1425	10	2020	C	2.00	15960
8	2020	C	1.80	1423	8	2020	P	1.20	15639
10	2020	P	1.60	1366	8	2020	P	1.25	15578
9	2020	P	1.00	1276	4	2021	C	3.00	15501
10	2020	C	2.35	1259	8	2020	P	1.65	15409
8	2020	P	1.80	1243	12	2020	P	1.50	15255
12	2020	C	3.50	1200	8	2020	C	3.00	14670
9	2020	C	1.90	1172	9	2020	C	2.10	14033
8	2020	C	1.95	1111	9	2020	P	2.00	13946
					11	2020	C	3.5	13869

Source: CME, Nasdaq, ICE

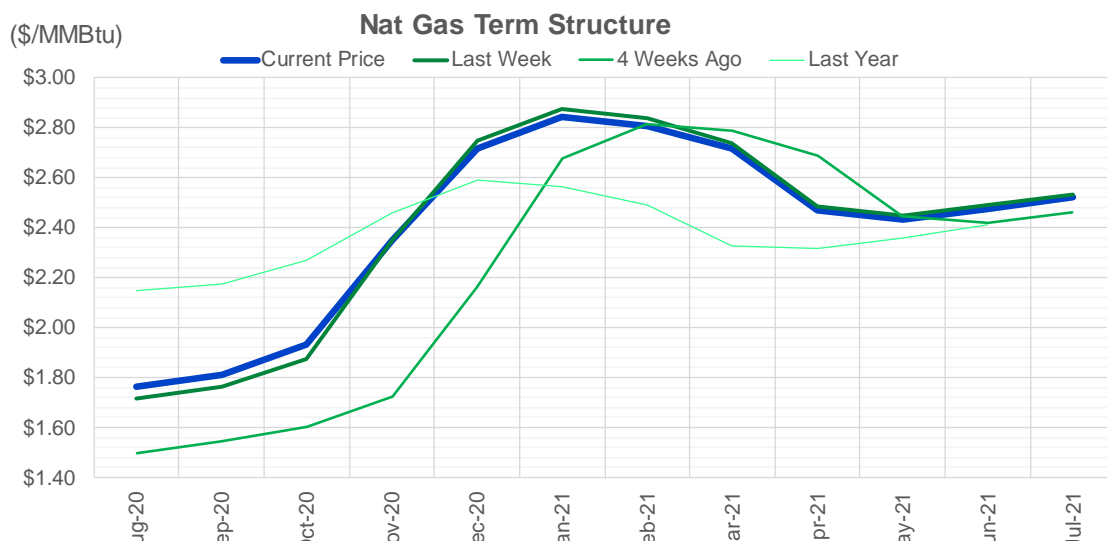
Nat Gas Futures Open Interest CME, and ICE Combined

CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MM			
	Current	Prior	Daily Change	FOR JUNE 26	Current	Prior	Daily Change
AUG 20	34031	52186	-18155	AUG 20	70203	71352	-1148.75
SEP 20	351198	340981	10217	SEP 20	74871	77676	-2805.5
OCT 20	145365	142267	3098	OCT 20	83530	84267	-737.5
NOV 20	95603	97495	-1892	NOV 20	67451	67463	-12.25
DEC 20	86163	85606	557	DEC 20	63608	62956	651.5
JAN 21	127169	126364	805	JAN 21	81293	80348	945
FEB 21	41720	41831	-111	FEB 21	49108	48716	392.25
MAR 21	80173	79667	506	MAR 21	66939	66444	494.25
APR 21	78065	76856	1209	APR 21	54263	53316	947
MAY 21	34629	34323	306	MAY 21	47071	46630	441.75
JUN 21	20440	20199	241	JUN 21	46076	45698	378
JUL 21	17136	17122	14	JUL 21	46685	46172	512.5
AUG 21	14119	14074	45	AUG 21	47064	46567	497
SEP 21	16463	16310	153	SEP 21	44688	44542	145.75
OCT 21	42122	41963	159	OCT 21	66478	66164	313.5
NOV 21	22340	22225	115	NOV 21	38101	37986	114.75
DEC 21	15454	15449	5	DEC 21	39668	39549	118.75
JAN 22	14559	14313	246	JAN 22	31444	31222	222.25
FEB 22	8786	8833	-47	FEB 22	28127	27917	209.75
MAR 22	13594	13602	-8	MAR 22	30050	29813	237.75
APR 22	13381	13385	-4	APR 22	29018	29062	-43.75
MAY 22	5291	5286	5	MAY 22	22997	22849	148
JUN 22	2553	2550	3	JUN 22	22495	22518	-22.5
JUL 22	1930	1923	7	JUL 22	22524	22487	36.75
AUG 22	1352	1350	2	AUG 22	22295	22321	-25.25
SEP 22	1865	1860	5	SEP 22	21933	21965	-32
OCT 22	2309	2304	5	OCT 22	23607	23523	84.25
NOV 22	1654	1648	6	NOV 22	20701	20726	-24.5
DEC 22	1329	1324	5	DEC 22	21178	21203	-25.25
JAN 23	2592	2608	-16	JAN 23	11227	11210	16.25

Source: CME, ICE



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	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21
Current Price	\$1.764	\$1.810	\$1.930	\$2.346	\$2.718	\$2.843	\$2.808	\$2.716	\$2.468	\$2.434	\$2.477	\$2.524
Last Week	\$1.718	\$1.765	\$1.876	\$2.350	\$2.749	\$2.874	\$2.841	\$2.740	\$2.483	\$2.450	\$2.490	\$2.535
vs. Last Week	\$0.046	\$0.045	\$0.054	-\$0.004	-\$0.031	-\$0.031	-\$0.033	-\$0.024	-\$0.015	-\$0.016	-\$0.013	-\$0.011
4 Weeks Ago	\$1.495	\$1.544	\$1.605	\$1.725	\$2.162	\$2.676	\$2.816	\$2.787	\$2.688	\$2.446	\$2.419	\$2.461
vs. 4 Weeks Ago	\$0.269	\$0.266	\$0.325	\$0.621	\$0.556	\$0.167	-\$0.008	-\$0.071	-\$0.220	-\$0.012	\$0.058	\$0.063
Last Year	\$2.169	\$2.150	\$2.177	\$2.267	\$2.461	\$2.590	\$2.565	\$2.489	\$2.326	\$2.315	\$2.361	\$2.410
vs. Last Year	-\$0.405	-\$0.340	-\$0.247	\$0.079	\$0.257	\$0.253	\$0.243	\$0.227	\$0.142	\$0.119	\$0.116	\$0.114

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	1.60	1.66	0.06
TETCO M3	\$/MMBtu	1.81	1.72	-0.09
FGT Zone 3	\$/MMBtu	1.74	1.80	0.06
Zone 6 NY	\$/MMBtu	1.74	1.61	-0.13
Chicago Citygate	\$/MMBtu	1.63	1.65	0.02
Michcon	\$/MMBtu	1.63	1.60	-0.03
Columbia TCO Pool	\$/MMBtu	1.47	1.49	0.02
Ventura	\$/MMBtu	1.57	1.63	0.06
Rockies/Opal	\$/MMBtu	1.50	1.52	0.02
El Paso Permian Basin	\$/MMBtu	1.33	1.46	0.13
Socal Citygate	\$/MMBtu	1.67	1.86	0.19
Malin	\$/MMBtu	1.54	1.63	0.09
Houston Ship Channel	\$/MMBtu	1.62	1.70	0.08
Henry Hub Cash	\$/MMBtu	1.63	1.60	-0.03
AECO Cash	C\$/GJ	1.46	1.44	-0.02
Station2 Cash	C\$/GJ	1.45	1.62	0.17
Dawn Cash	C\$/GJ	1.63	1.64	0.01

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks		vs. Last Year
				Ago		
NatGas Jan/Apr	\$/MMBtu	-0.38	▲ 0.016	▼ -0.005	▼ -0.003	
NatGas Mar/Apr	\$/MMBtu	-0.248	▲ 0.009	▼ -0.490	▼ -0.488	
NatGas Oct/Nov	\$/MMBtu	0.42	▼ -0.058	▼ -0.021	▲ 0.349	
NatGas Oct/Jan	\$/MMBtu	0.91	▼ -0.085	▼ -0.178	▲ 0.573	
WTI Crude	\$/Bbl	41.21	▲ 0.620	▲ 2.720	▼ -14.990	
Brent Crude	\$/Bbl	43.42	▲ 0.280	▲ 2.400	▼ -20.040	
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000	
Heating Oil	cents/Gallon	125.40	▲ 3.490	▲ 11.770	▼ -65.040	
Propane, Mt. Bel	cents/Gallon	0.50	▲ 0.015	▼ -0.002	▲ 0.007	
Ethane, Mt. Bel	cents/Gallon	0.22	▼ -0.001	▼ -0.002	▲ 0.070	
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.000	
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▼ -7.500	