

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 2.38	▲ \$ 0.04	▲ \$ 0.11

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 42.63	▼ \$ (0.26)	▲ \$ 0.4

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 45.22	▼ \$ (0.15)	▲ \$ 0.3

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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	2.2	2.3	0.0	4.4
24 Hr Chg	-2.1	4.9	-0.5	2.4

GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	1.0	3.4	3.9	8.3
24 Hr Chg	-2.8	0.2	-4.2	-6.8

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	85.4	▼ -1.23	▲ 11.48

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	40.0	▼ -0.25	▼ -2.89

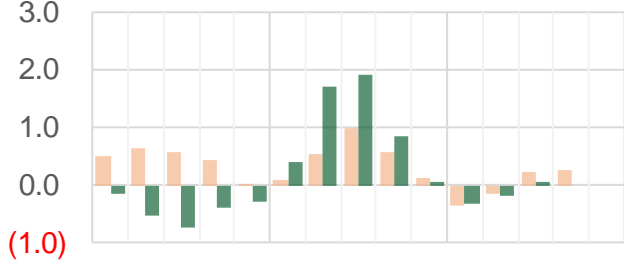
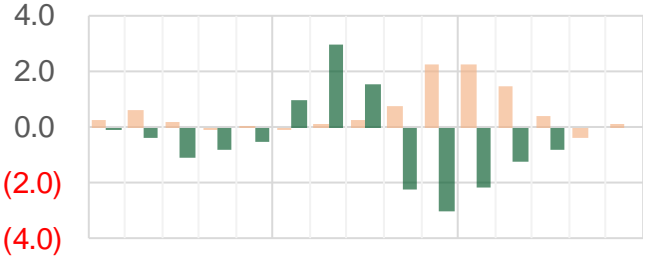
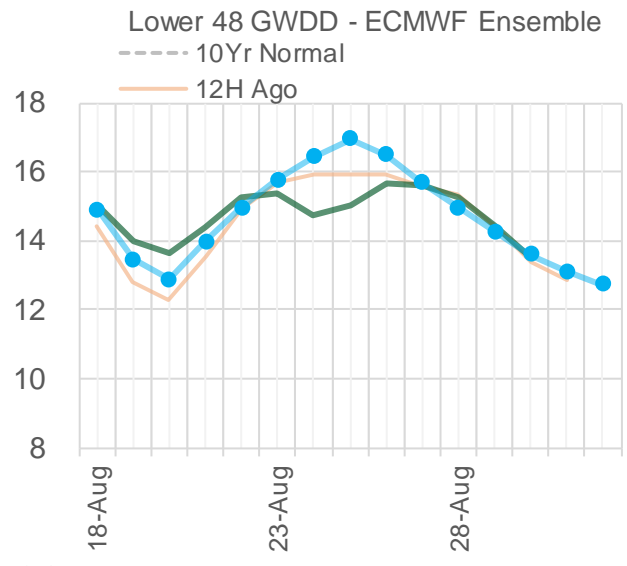
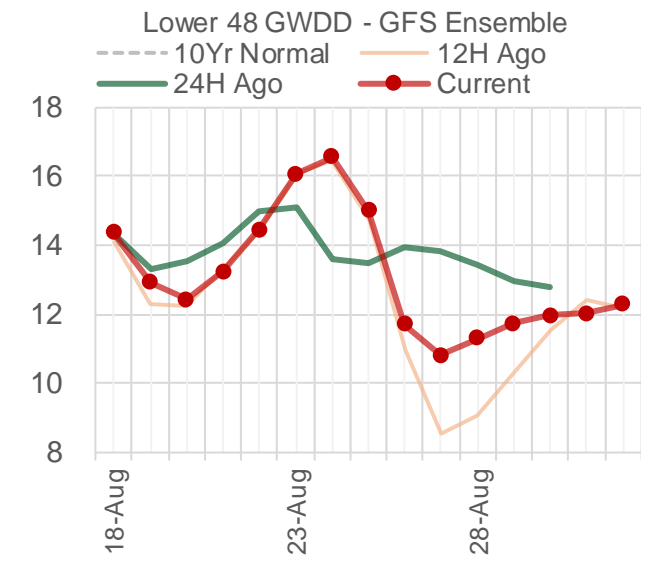
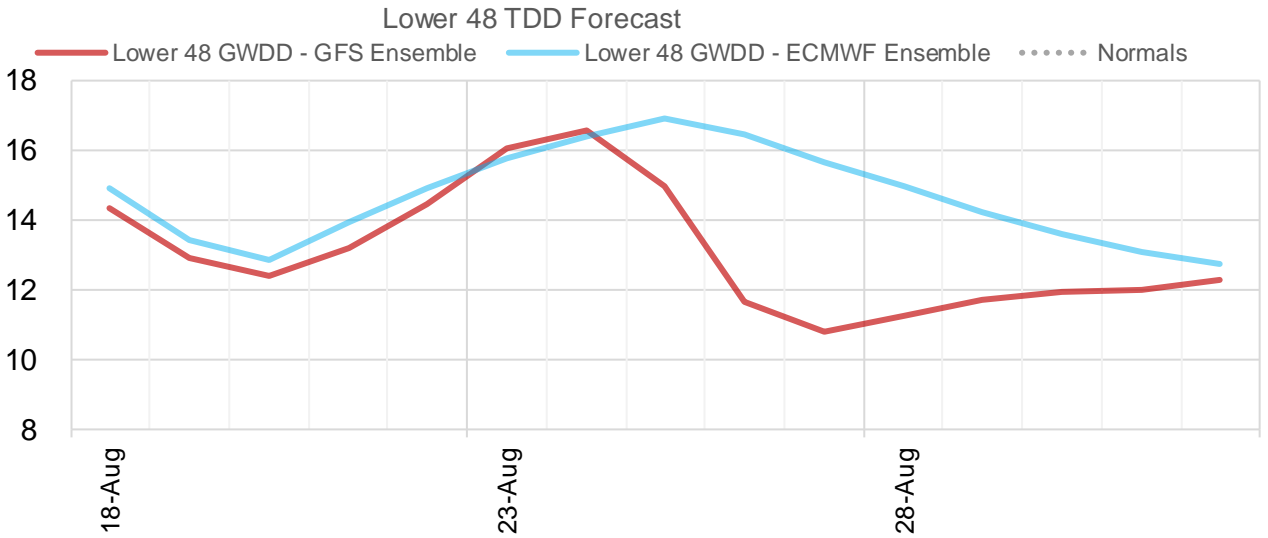
	Current	Δ from YD	Δ from 7D Avg
US ResComm	8.1	▲ 0.01	▲ 0.12

	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.5	▼ -0.06	▼ -0.45

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	4.6	▼ -0.27	▼ -0.04

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.3	▼ -0.86	▼ -0.89

Short-term Weather Model Outlooks (00z)



Source: WSI, Bloomberg

Lower 48 Component Models

Daily Balances

	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug	18-Aug	DoD	vs. 7D
Lower 48 Dry Production	85.3	86.1	86.4	0.0	86.7	86.6	85.4	▼ -1.2	▲ 13.5
Canadian Imports	5.5	5.2	4.7	4.6	4.6	4.6	4.5	▼ -0.1	▼ -0.3
L48 Power	46.0	45.3	43.8	40.1	38.7	40.2	40.0	▼ -0.2	▼ -2.4
L48 Residential & Commercial	8.2	8.2	8.1	7.6	7.6	8.1	8.1	▲ 0.0	▲ 0.1
L48 Industrial	19.7	20.0	20.1	20.2	20.2	20.3	20.1	▼ -0.2	▼ 0.0
L48 Lease and Plant Fuel	4.8	4.8	4.8	4.8	4.8	4.8	4.7	▼ -0.1	▼ -0.1
L48 Pipeline Distribution	2.5	2.5	2.4	2.2	2.1	2.2	2.2	▼ 0.0	▼ -0.1
L48 Regional Gas Consumption	81.1	80.7	79.2	74.9	73.4	75.6	75.1	▼ -0.6	▼ -2.4
Net LNG Exports	4.4	4.5	4.4	4.8	4.8	4.8	4.6	▼ -0.3	▼ -0.1
Total Mexican Exports	6.2	6.3	6.3	6.2	6.0	6.2	5.3	▼ -0.9	▼ -0.9
Implied Daily Storage Activity	-0.9	-0.2	1.3	-81.4	7.2	4.5	4.9		
EIA Reported Daily Storage Activity									
Daily Model Error									

EIA Storage Week Balances

	10-Jul	17-Jul	24-Jul	31-Jul	7-Aug	14-Aug	WoW	vs. 4W
Lower 48 Dry Production	85.7	85.6	86.3	86.3	86.3	86.4	▲ 0.1	▲ 0.2
Canadian Imports	4.3	4.5	4.4	4.5	4.6	5.0	▲ 0.4	▲ 0.5
L48 Power	41.9	42.9	45.4	45.5	40.8	43.0	▲ 2.2	▼ -0.7
L48 Residential & Commercial	7.8	7.9	8.1	8.2	7.7	7.8	▲ 0.1	▼ -0.1
L48 Industrial	18.5	18.1	17.5	17.3	18.5	19.4	▲ 0.9	▲ 1.5
L48 Lease and Plant Fuel	4.8	4.8	4.8	4.8	4.8	4.8	▲ 0.0	▼ 0.0
L48 Pipeline Distribution	2.3	2.3	2.4	2.4	2.2	2.3	▲ 0.1	▼ 0.0
L48 Regional Gas Consumption	75.2	76.0	78.2	78.2	74.1	77.3	▲ 3.3	▲ 0.7
Net LNG Exports	3.0	3.3	3.6	3.1	3.9	4.4	▲ 0.5	▲ 0.9
Total Mexican Exports	5.9	6.2	6.4	6.2	6.1	6.0	▼ -0.1	▼ -0.2
Implied Daily Storage Activity	5.8	4.5	2.5	3.3	6.9	3.7	-3.2	
EIA Reported Daily Storage Activity	6.4	5.3	3.7	4.7	8.3			
Daily Model Error	-0.6	-0.7	-1.2	-1.4	-1.4			

Monthly Balances

	2Yr Ago Aug-18	LY Aug-19	Apr-20	May-20	Jun-20	Jul-20	MTD Aug-20	MoM	vs. LY
Lower 48 Dry Production	83.3	92.4	91.7	86.0	84.9	85.9	81.5	▼ -4.4	▼ -10.9
Canadian Imports	5.0	4.4	3.9	3.9	4.0	4.4	4.8	▲ 0.4	▲ 0.4
L48 Power	38.2	41.1	25.5	26.9	34.5	43.7	41.4	▼ -2.3	▲ 0.3
L48 Residential & Commercial	7.8	7.8	20.4	13.0	8.6	8.0	7.8	▼ -0.2	▼ 0.0
L48 Industrial	20.2	22.0	20.6	18.8	18.5	17.9	19.4	▲ 1.4	▼ -2.6
L48 Lease and Plant Fuel	4.7	5.1	5.1	4.8	4.8	4.8	4.8	▼ 0.0	▼ -0.3
L48 Pipeline Distribution	2.1	2.3	2.1	1.9	2.1	2.3	2.3	▼ -0.1	▲ 0.0
L48 Regional Gas Consumption	73.0	78.2	73.7	65.4	68.4	76.8	75.6	▼ -1.2	▼ -2.6
Net LNG Exports	3.3	5.2	8.2	6.7	4.0	3.3	4.3	▲ 1.0	▼ -0.9
Total Mexican Exports	5.0	5.4	4.9	4.9	5.7	6.1	6.0	▼ -0.1	▲ 0.6
Implied Daily Storage Activity	7.0	8.0	8.7	12.9	10.7	4.2	0.3		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

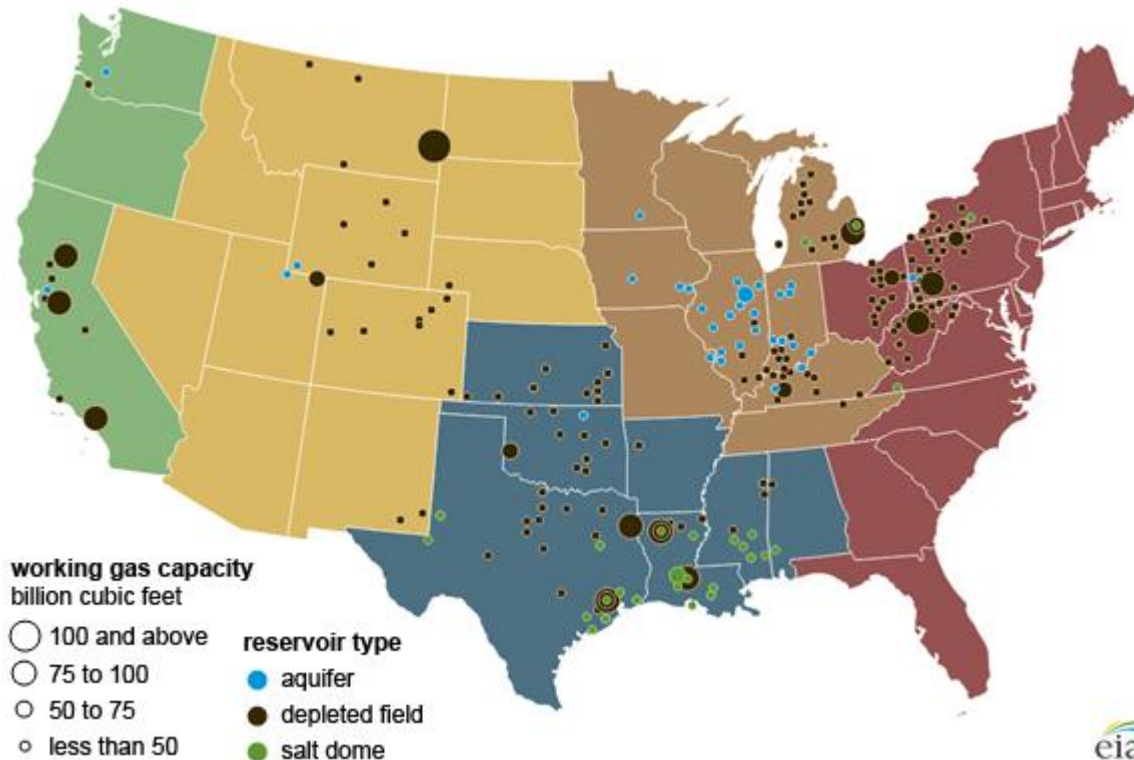
Regional S/D Models Storage Projection

Week Ending 14-Aug

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	3.4	1.6	5.1	39
East	0.0	2.5	2.4	19
Midwest	2.2	0.1	2.3	17
Mountain	3.1	-2.3	0.7	5
South Central	-2.5	2.0	-0.5	-2
Pacific	0.6	-0.6	0.1	1

*Adjustment Factor is calculated based on historical regional deltas

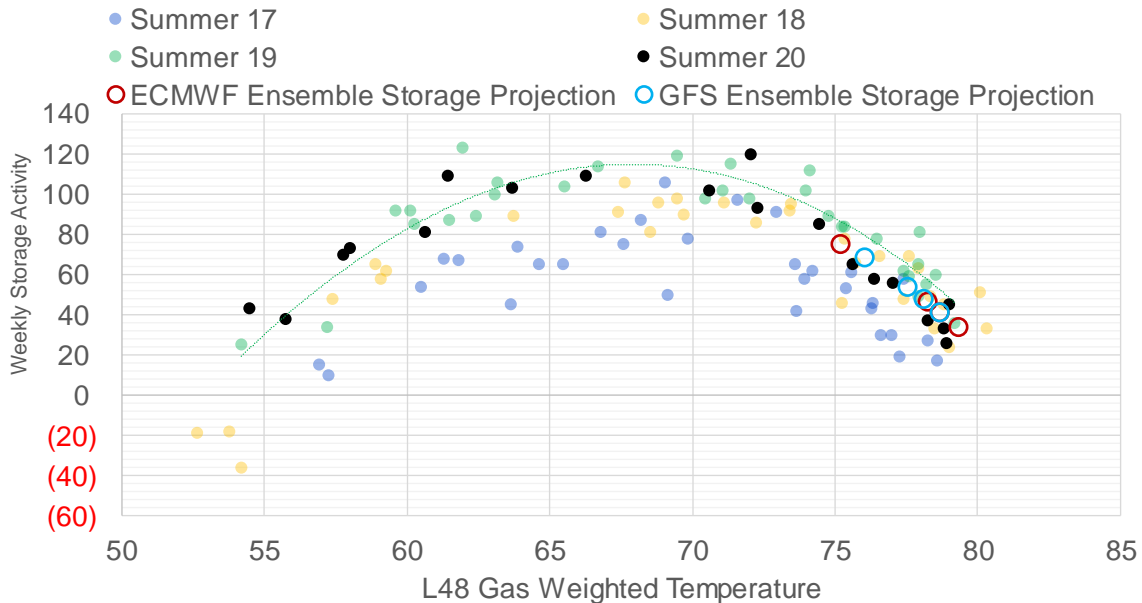
U.S. underground natural gas storage facilities by type (July 2015)



Weather Model Storage Projection

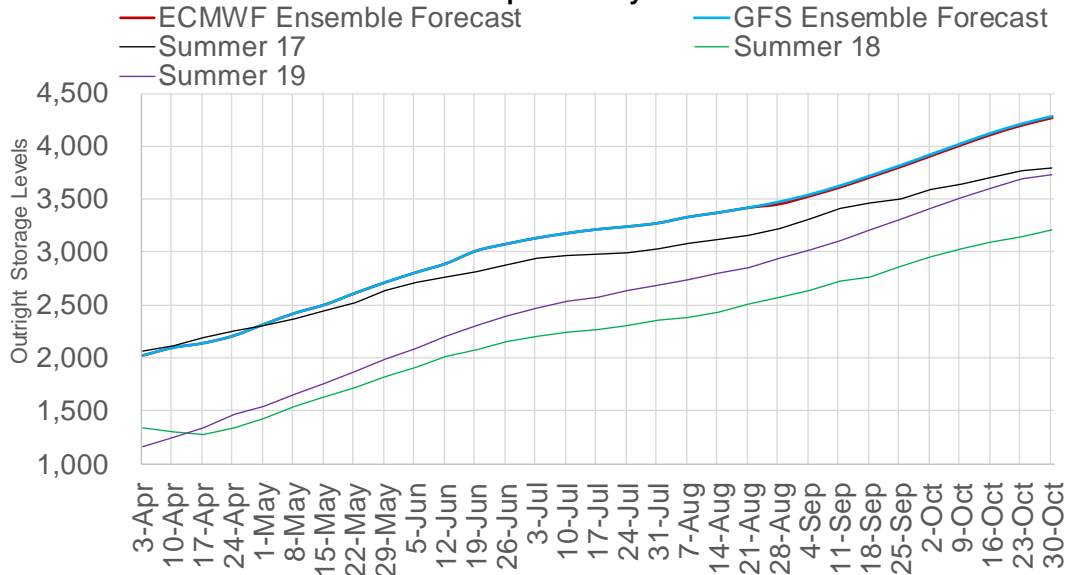
Next report and beyond	
Week Ending	Week Storage Projection
21-Aug	47
28-Aug	44
4-Sep	72

Weather Storage Model - Next 4 Week Forecast



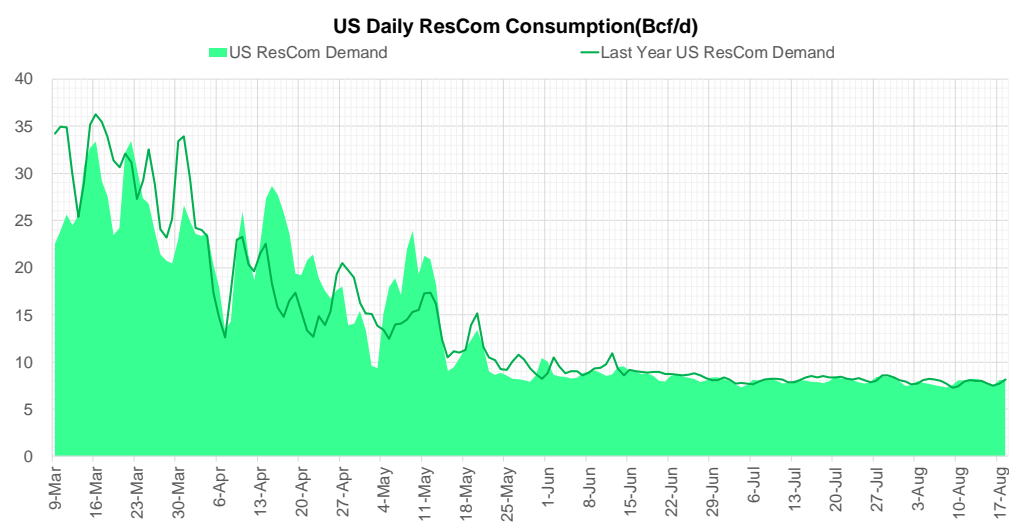
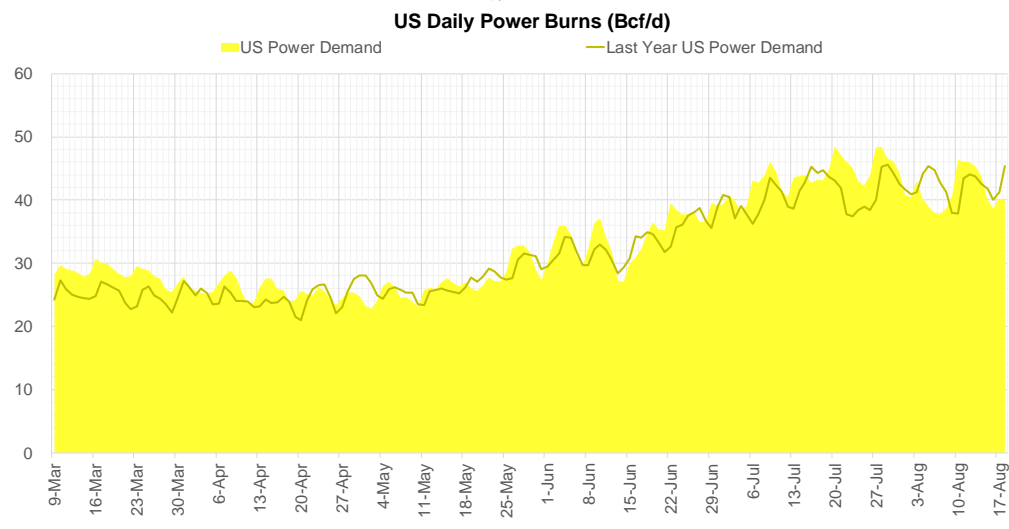
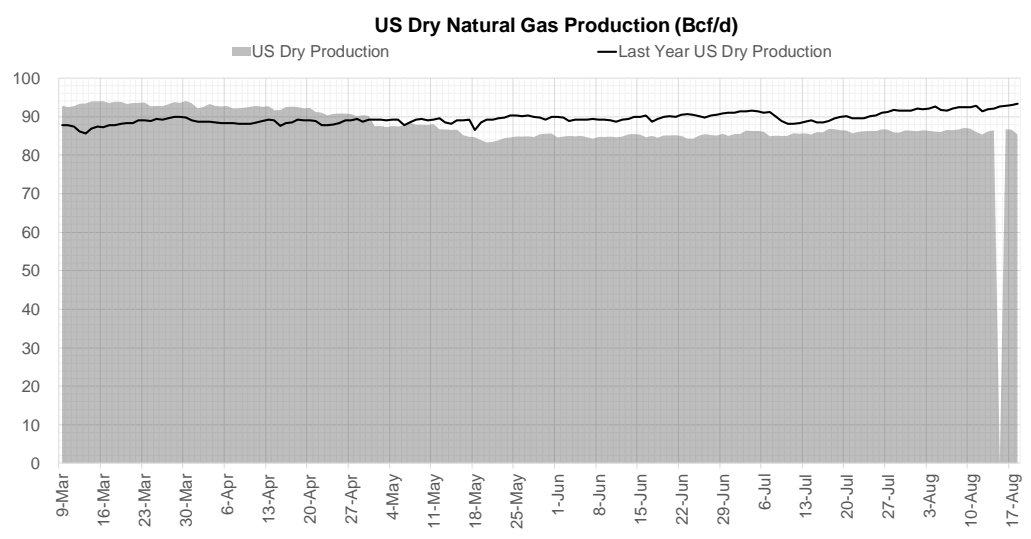
Weather Based End of Winter Projection (Bcf)

10Y normals past 15 day forecast window



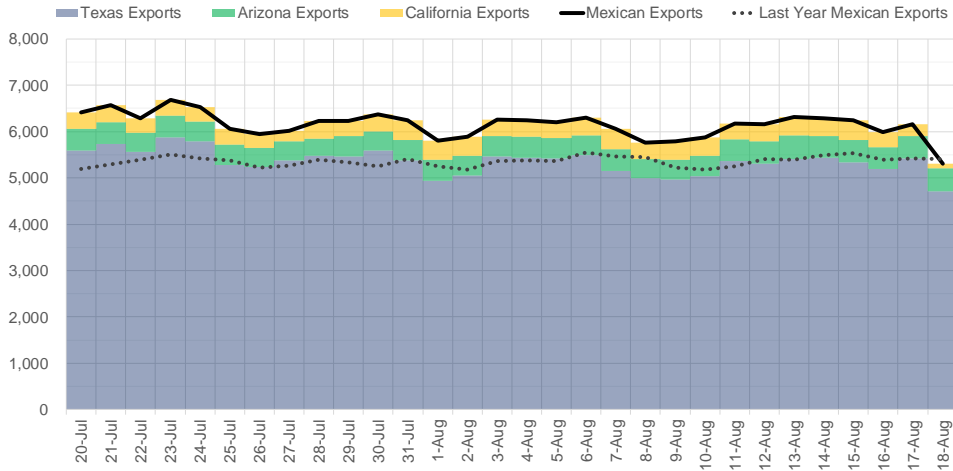
The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are 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

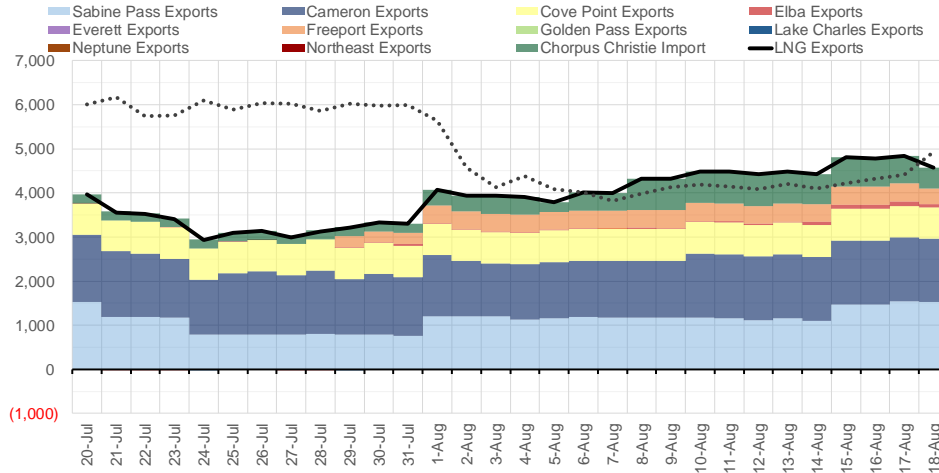


Source: Bloomberg

Mexican Exports - Last 30 days (MMcf/d)



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



Source: Bloomberg

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.

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

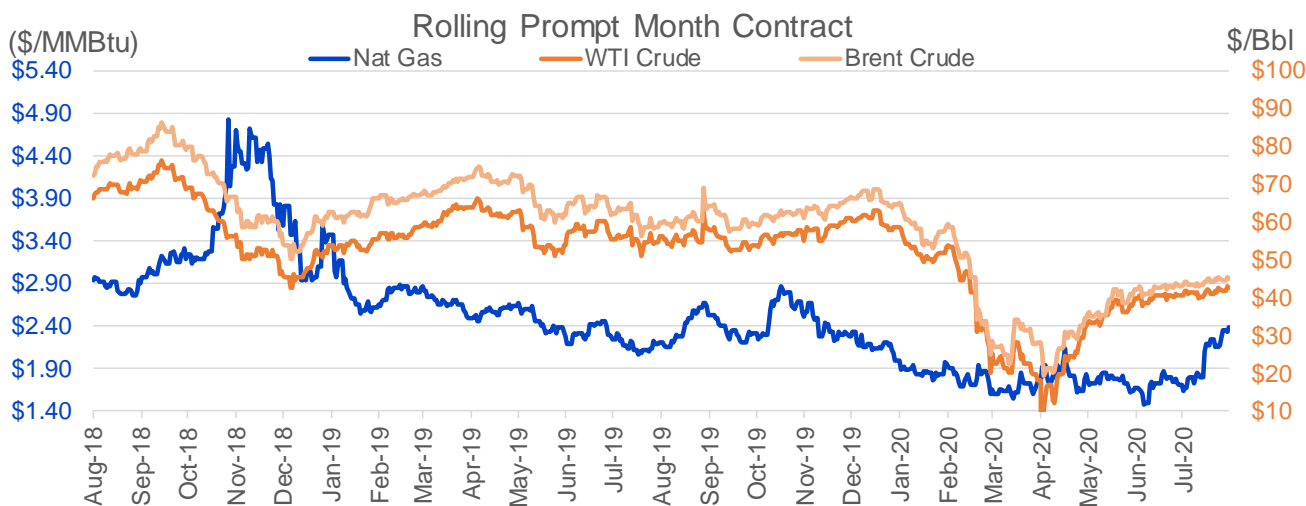
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
10	2020	C	2.75	5042	9	2020	C	2.50	48512
9	2020	P	2.00	4430	10	2020	P	1.50	46711
10	2020	C	3.00	4300	10	2020	C	2.75	42393
10	2020	C	2.40	3932	10	2020	C	2.50	39538
10	2020	P	2.00	3928	10	2020	P	2.00	36744
11	2020	C	3.10	3023	3	2021	P	2.00	35597
9	2020	C	2.50	2986	10	2020	P	1.60	34099
1	2021	C	5.00	2551	10	2020	C	3.00	33857
1	2021	C	7.00	2550	10	2020	P	1.75	29013
2	2021	C	5.00	2550	10	2020	P	1.25	28752
2	2021	C	7.00	2550	9	2020	C	3.00	24424
3	2021	C	5.00	2550	9	2020	P	1.00	24289
3	2021	C	7.00	2550	10	2020	P	1.00	23623
11	2020	C	3.75	2504	9	2020	P	1.50	23371
4	2021	C	5.00	2500	9	2020	C	2.00	22956
9	2020	P	2.15	2302	9	2020	P	1.20	22877
10	2020	C	2.70	2264	9	2020	P	2.00	22744
10	2020	C	2.50	2152	3	2021	C	3.00	22329
10	2020	P	2.05	2121	9	2020	P	1.75	22329
9	2020	P	2.30	1862	10	2020	C	2.10	21985
10	2020	C	2.65	1774	11	2020	C	3.50	20513
10	2020	C	3.25	1660	10	2020	P	2.10	20374
9	2020	C	2.40	1631	3	2021	C	6.00	20354
9	2020	C	3.00	1546	9	2020	C	2.75	20038
9	2020	P	2.10	1420	9	2020	C	2.25	19944
10	2020	P	2.40	1417	12	2020	P	2.00	19587
9	2020	P	1.90	1249	9	2020	P	1.30	19373
9	2020	C	2.30	1236	9	2020	P	1.25	19214
10	2020	C	3.50	1204	10	2020	P	1.30	19117
11	2020	C	2.80	1202	1	2021	C	4.50	18924
10	2020	P	2.25	1193	10	2020	C	3.25	18851
11	2020	C	3.40	1053	3	2021	C	3.50	18664
9	2020	C	2.75	1024	10	2020	C	2.00	18661
11	2020	C	3.50	1000	1	2021	C	3.50	18178
12	2020	C	3.50	975	10	2020	C	2.25	17312
9	2020	C	2.35	941	11	2020	C	3.00	17087
9	2020	P	2.20	864	10	2020	C	3.50	16757
10	2020	C	4.00	860	1	2021	C	3.00	16603
9	2020	C	2.55	785	10	2020	P	1.80	16408
9	2020	C	2.60	772	12	2020	P	1.50	16401
11	2020	C	3.05	712	11	2020	C	2.75	15732
9	2020	P	1.95	710	4	2021	C	3.00	14899
9	2020	P	2.25	692	11	2020	C	3.25	14683
10	2020	P	1.75	664	1	2021	P	2.25	14553
11	2020	C	3.25	636	9	2020	P	2.10	14329
10	2020	P	1.60	611	4	2021	C	5.00	14281
10	2020	C	2.30	545	9	2020	C	2.40	13914
3	2021	P	2.50	525	1	2021	C	3.75	13827
10	2020	C	3.15	524	10	2020	C	2.40	13765
					2	2021	C	5	13518.75

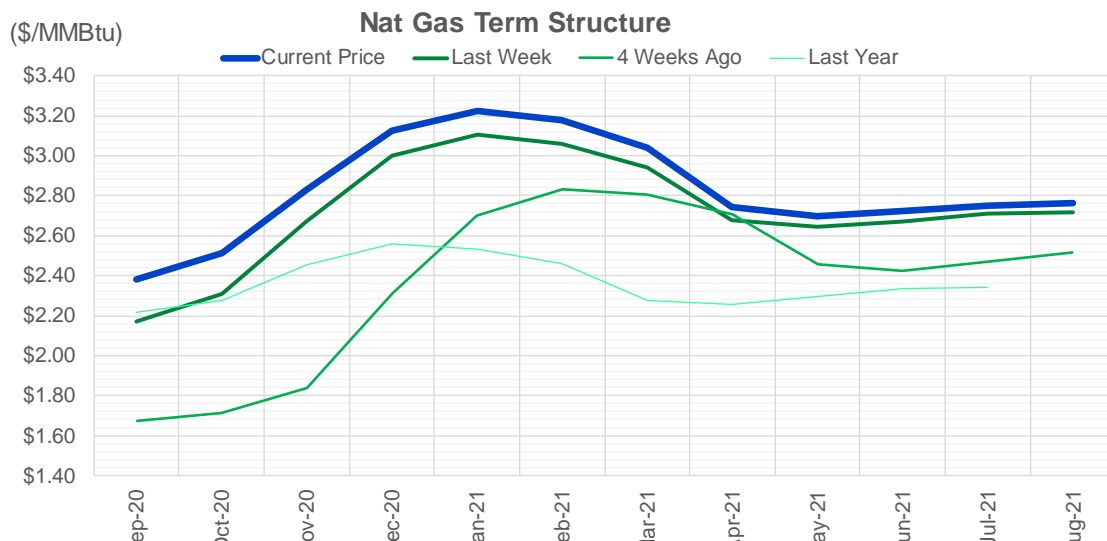
Source: CME, Nasdaq, ICE

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
SEP 20	109116	131188	-22072	SEP 20	70850	68491	2359.25
OCT 20	210116	209361	755	OCT 20	84248	83018	1230
NOV 20	184650	181427	3223	NOV 20	72323	71062	1261.25
DEC 20	98675	93972	4703	DEC 20	72930	72560	370.75
JAN 21	126365	126776	-411	JAN 21	87494	86937	557
FEB 21	42959	42718	241	FEB 21	53851	53847	3.75
MAR 21	80366	79892	474	MAR 21	69286	68643	643
APR 21	75715	74738	977	APR 21	59567	59378	188.75
MAY 21	45944	45175	769	MAY 21	50295	50353	-58
JUN 21	24584	23898	686	JUN 21	48090	48025	65
JUL 21	18546	17817	729	JUL 21	49794	49626	167.5
AUG 21	17797	17502	295	AUG 21	49005	48858	147.25
SEP 21	21926	21415	511	SEP 21	46563	46489	73.5
OCT 21	54303	53688	615	OCT 21	68130	68009	121
NOV 21	25627	25373	254	NOV 21	41253	41243	9.5
DEC 21	20479	19660	819	DEC 21	41274	41254	20
JAN 22	19025	18747	278	JAN 22	34839	34887	-48
FEB 22	11193	11102	91	FEB 22	29311	29363	-51.5
MAR 22	16695	16443	252	MAR 22	32259	32316	-56.75
APR 22	17979	17625	354	APR 22	32288	31708	580
MAY 22	5496	5465	31	MAY 22	23460	23444	15.5
JUN 22	2901	2813	88	JUN 22	23059	23114	-55.5
JUL 22	2170	2111	59	JUL 22	23060	22841	219
AUG 22	1706	1736	-30	AUG 22	23077	23105	-28.5
SEP 22	2236	2236	0	SEP 22	22229	22264	-35
OCT 22	2827	2794	33	OCT 22	23631	23659	-28.5
NOV 22	1981	1978	3	NOV 22	21517	21530	-12.5
DEC 22	1941	1948	-7	DEC 22	22261	22274	-13
JAN 23	2646	2646	0	JAN 23	12324	12308	15.5
FEB 23	693	693	0	FEB 23	11215	11173	42

Source: CME, ICE





	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21
Current Price	\$2.379	\$2.514	\$2.831	\$3.127	\$3.226	\$3.179	\$3.040	\$2.746	\$2.697	\$2.724	\$2.752	\$2.764
Last Week	\$2.171	\$2.311	\$2.670	\$3.003	\$3.106	\$3.060	\$2.938	\$2.679	\$2.646	\$2.674	\$2.709	\$2.716
vs. Last Week	\$0.208	\$0.203	\$0.161	\$0.124	\$0.120	\$0.119	\$0.102	\$0.067	\$0.051	\$0.050	\$0.043	\$0.048
4 Weeks Ago	\$1.675	\$1.714	\$1.837	\$2.310	\$2.703	\$2.833	\$2.803	\$2.705	\$2.457	\$2.425	\$2.469	\$2.519
vs. 4 Weeks Ago	\$0.704	\$0.800	\$0.994	\$0.817	\$0.523	\$0.346	\$0.237	\$0.041	\$0.240	\$0.299	\$0.283	\$0.245
Last Year	\$2.218	\$2.219	\$2.279	\$2.455	\$2.562	\$2.533	\$2.460	\$2.274	\$2.259	\$2.296	\$2.336	\$2.343
vs. Last Year	\$0.161	\$0.295	\$0.552	\$0.672	\$0.664	\$0.646	\$0.580	\$0.472	\$0.438	\$0.428	\$0.416	\$0.421

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	1.56	1.61	0.05
TETCO M3	\$/MMBtu	1.60	1.49	-0.11
FGT Zone 3	\$/MMBtu	1.55	2.23	0.68
Zone 6 NY	\$/MMBtu	1.55	1.53	-0.02
Chicago Citygate	\$/MMBtu	2.16	1.90	-0.26
Michcon	\$/MMBtu	2.08	1.83	-0.25
Columbia TCO Pool	\$/MMBtu	1.72	1.68	-0.04
Ventura	\$/MMBtu	2.12	1.85	-0.27
Rockies/Opal	\$/MMBtu	2.60	1.79	-0.81
El Paso Permian Basin	\$/MMBtu	1.48	1.46	-0.02
Socal Citygate	\$/MMBtu	13.27	1.91	-11.36
Malin	\$/MMBtu	2.73	1.91	-0.82
Houston Ship Channel	\$/MMBtu	2.29	2.12	-0.17
Henry Hub Cash	\$/MMBtu	2.32	1.97	-0.35
AECO Cash	C\$/GJ	1.96	1.65	-0.31
Station2 Cash	C\$/GJ	1.97	1.89	-0.09
Dawn Cash	C\$/GJ	2.13	1.87	-0.26

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks		vs. Last Year
				Ago		
NatGas Jan/Apr	\$/MMBtu	-0.48	▼ -0.053	▼ -0.104	▼ -0.080	
NatGas Mar/Apr	\$/MMBtu	-0.294	▼ -0.035	▼ -0.542	▼ -0.550	
NatGas Oct/Nov	\$/MMBtu	0.32	▼ -0.042	▼ -0.156	▲ 0.258	
NatGas Oct/Jan	\$/MMBtu	0.71	▼ -0.083	▼ -0.284	▲ 0.383	
WTI Crude	\$/Bbl	42.63	▲ 1.020	▲ 0.670	▼ -13.710	
Brent Crude	\$/Bbl	45.22	▲ 0.720	▲ 0.900	▼ -14.810	
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000	
Heating Oil	cents/Gallon	124.90	▲ 1.060	▼ -3.100	▼ -60.530	
Propane, Mt. Bel	cents/Gallon	0.50	▲ 0.001	▲ 0.010	▲ 0.112	
Ethane, Mt. Bel	cents/Gallon	0.24	▲ 0.011	▲ 0.029	▲ 0.088	
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.200	
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▼ -7.000	