

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 1.57	▲ \$ 0.02	▼ \$ (0.05)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 26.57	▲ \$ 1.25	▲ \$ 5.0

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 32.73	▲ \$ 2.79	▲ \$ 7.7

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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	-2.9	-2.8	-1.9	-7.6
24 Hr Chg	0.6	5.8	2.9	9.3

GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	-2.7	-0.3	1.2	-1.8
24 Hr Chg	0.2	4.9	0.0	5.2

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	91.3	▼ -0.11	▼ -0.55

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	24.9	▼ -0.80	▼ -1.37

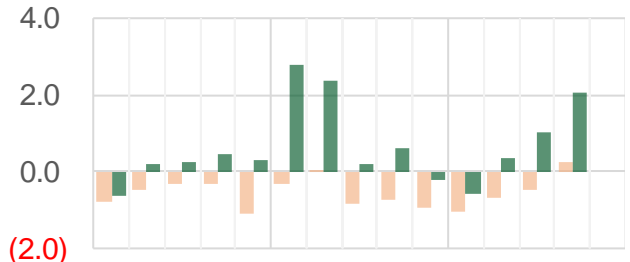
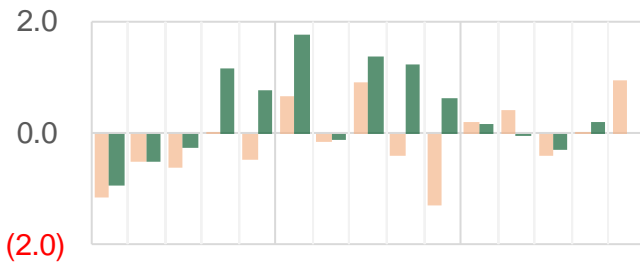
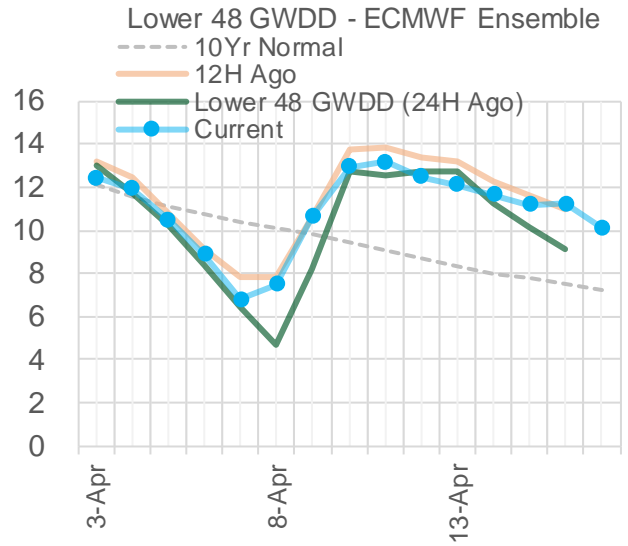
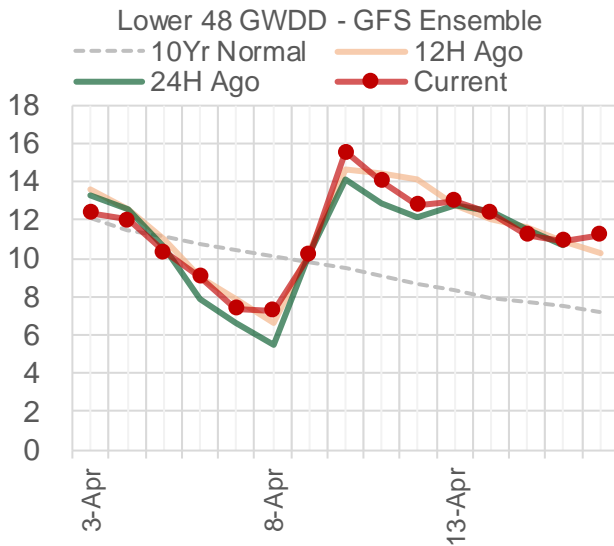
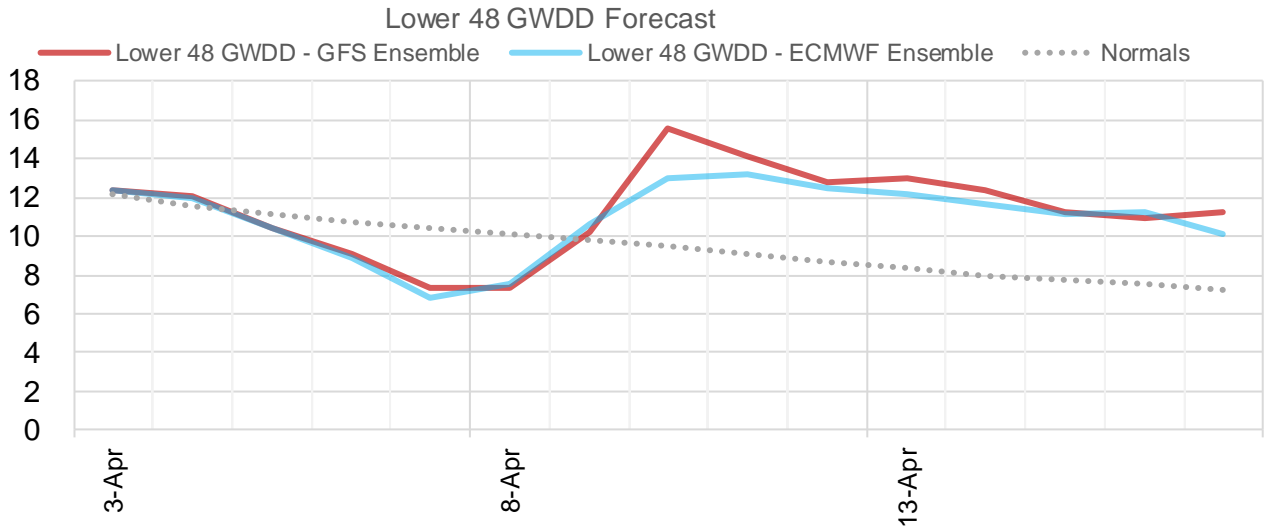
	Current	Δ from YD	Δ from 7D Avg
US ResComm	24.3	▼ -0.49	▲ 0.24

	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	3.6	▼ -0.71	▼ -0.23

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	8.5	▼ -0.73	▼ -0.87

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.2	▼ -0.43	▼ -0.43

Short-term Weather Model Outlooks (00z)



Source: WSI, Bloomberg

Lower 48 Component Models

Daily Balances

	28-Mar	29-Mar	30-Mar	31-Mar	1-Apr	2-Apr	3-Apr	DoD	vs. 7D
Lower 48 Dry Production	92.2	92.0	92.4	91.8	91.2	91.3	91.2	▼ -0.1	▼ -0.6
Canadian Imports	3.3	3.3	3.5	3.9	4.7	4.3	3.6	▼ -0.7	▼ -0.3
L48 Power	25.0	25.4	26.5	27.8	25.6	25.7	24.9	▼ -0.8	▼ -1.1
L48 Residential & Commercial	21.7	21.7	24.1	27.8	25.9	24.8	24.3	▼ -0.5	▼ 0.0
L48 Industrial	22.0	22.2	22.4	23.0	22.7	22.3	22.2	▼ -0.1	▼ -0.2
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.1	5.1	5.1	5.1	▼ 0.0	▼ 0.0
L48 Pipeline Distribution	2.1	2.2	2.3	2.4	2.3	2.3	0.0	▼ -2.3	▼ -2.3
L48 Regional Gas Consumption	75.9	76.6	80.4	86.0	81.5	80.1	76.5	▼ -3.7	▼ -3.6
Net LNG Exports	9.5	9.5	9.4	9.6	9.3	9.2	8.5	▼ -0.7	▼ -0.9
Total Mexican Exports	5.7	5.6	5.6	5.6	5.6	5.6	5.2	▼ -0.4	▼ -0.4
Implied Daily Storage Activity	4.5	3.6	0.5	-5.5	-0.5	0.6	4.7		
EIA Reported Daily Storage Activity									
Daily Model Error									

EIA Storage Week Balances

	28-Feb	6-Mar	13-Mar	20-Mar	27-Mar	3-Apr	WoW	vs. 4W	
Lower 48 Dry Production	91.5	91.2	90.9	91.9	91.5	91.8	▲ 0.3	▲ 0.4	
Canadian Imports	5.0	4.5	3.8	4.1	4.5	3.8	▼ -0.7	▼ -0.4	
L48 Power	29.6	27.9	27.3	29.2	28.6	26.2	▼ -2.3	▼ -2.0	
L48 Residential & Commercial	39.3	34.4	28.6	29.9	29.3	24.0	▼ -5.3	▼ -6.5	
L48 Industrial	24.8	23.8	23.1	23.0	22.9	22.4	▼ -0.6	▼ -0.9	
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.1	5.1	5.1	▲ 0.0	▲ 0.0	
L48 Pipeline Distribution	2.9	2.7	2.5	2.6	2.5	2.3	▼ -0.3	▼ -0.3	
L48 Regional Gas Consumption	101.7	93.9	86.5	89.9	88.4	80.0	▼ -8.4	▼ -9.7	
Net LNG Exports	8.8	7.8	8.0	7.9	9.3	9.4	▲ 0.1	▲ 1.1	
Total Mexican Exports	5.5	5.6	5.6	5.6	5.7	5.6	▼ 0.0	▲ 0.0	
Implied Daily Storage Activity	-19.4	-11.7	-5.4	-7.3	-7.3	0.6	7.9		
EIA Reported Daily Storage Activity	-15.6	-6.9	-1.3	-4.1	-2.7				
Daily Model Error	-3.9	-4.8	-4.1	-3.2	-4.6				

Monthly Balances

	2Yr Ago Apr-18	LY Apr-19	Dec-19	Jan-20	Feb-20	Mar-20	MTD Apr-20	MoM	vs. LY
Lower 48 Dry Production	80.5	88.6	93.4	92.3	91.3	91.5	91.3	▼ -0.2	▲ 2.7
Canadian Imports	5.6	4.6	4.5	4.8	5.3	4.1	4.2	▲ 0.1	▼ -0.4
L48 Power	23.5	24.1	28.9	29.8	29.9	27.9	25.4	▼ -2.6	▲ 1.3
L48 Residential & Commercial	24.3	17.5	38.8	41.6	41.4	28.6	25.0	▼ -3.6	▲ 7.4
L48 Industrial	22.3	21.9	24.8	25.2	24.9	23.0	22.4	▼ -0.6	▲ 0.5
L48 Lease and Plant Fuel	4.6	4.9	5.2	5.1	5.1	5.1	5.1	▼ 0.0	▲ 0.2
L48 Pipeline Distribution	1.9	1.9	2.9	3.0	3.0	2.5	1.5	▼ -1.0	▼ -0.3
L48 Regional Gas Consumption	76.5	70.3	100.6	104.7	104.2	87.1	79.4	▼ -7.7	▲ 9.1
Net LNG Exports	3.5	4.4	7.8	8.3	8.5	8.4	9.0	▲ 0.6	▲ 4.6
Total Mexican Exports	4.3	4.8	5.0	5.2	5.3	5.6	5.5	▼ -0.1	▲ 0.7
Implied Daily Storage Activity	1.8	13.7	-15.4	-21.2	-21.4	-5.6	1.6		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

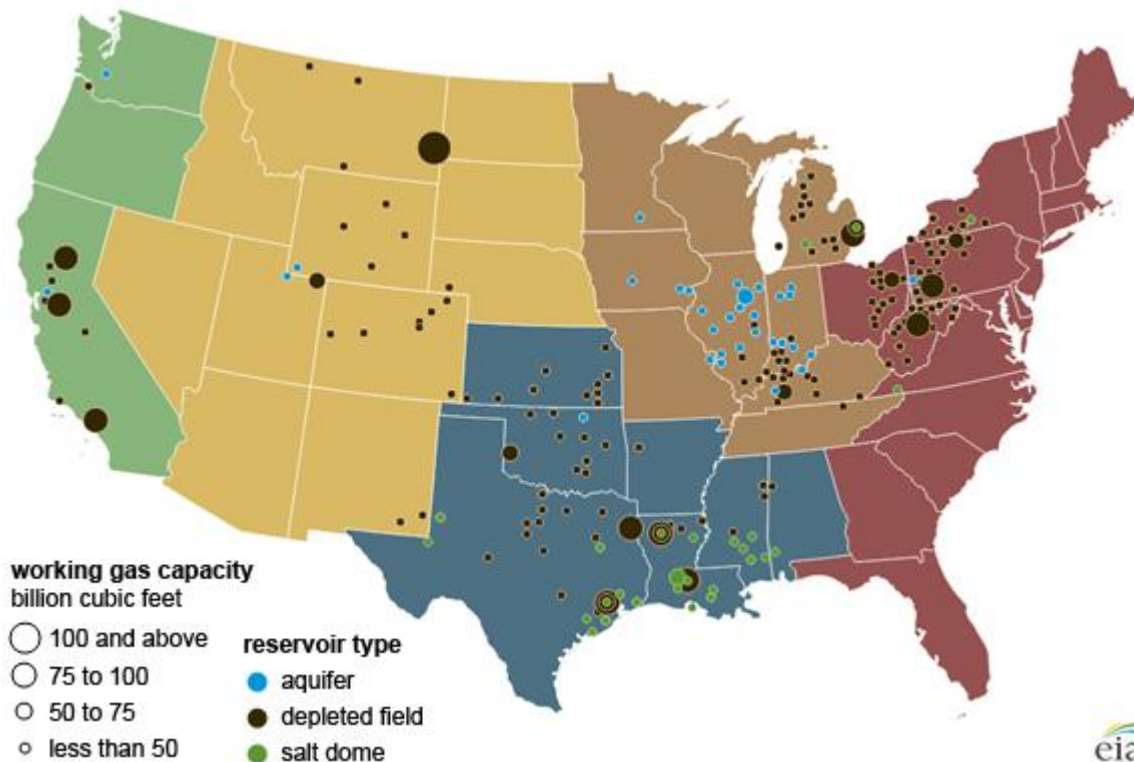
Regional S/D Models Storage Projection

Week Ending 3-Apr

	Daily Raw Storage	Daily Adjustment Factor	Daily Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	0.6	4.1	4.7	33
East	-2.5	2.4	-0.1	-0.9
Midwest	-1.3	1.4	0.1	0.9
Mountain	2.1	-1.8	0.3	1.9
South Central	1.6	1.9	3.5	24.5
Pacific	0.7	0.3	0.9	6.6

*Adjustment Factor is calculated based on historical regional deltas

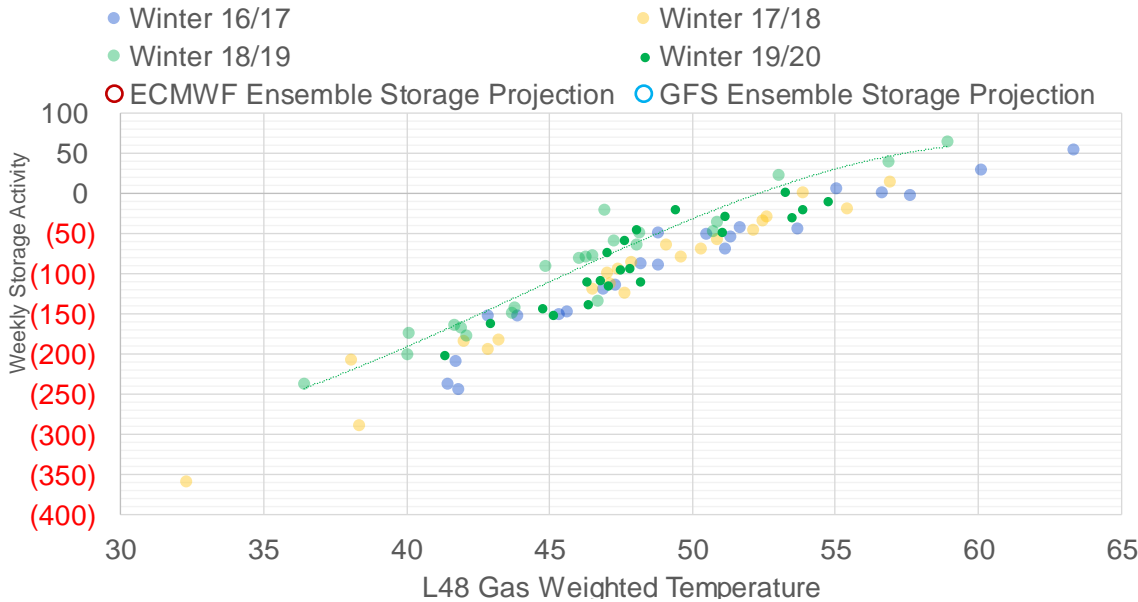
U.S. underground natural gas storage facilities by type (July 2015)



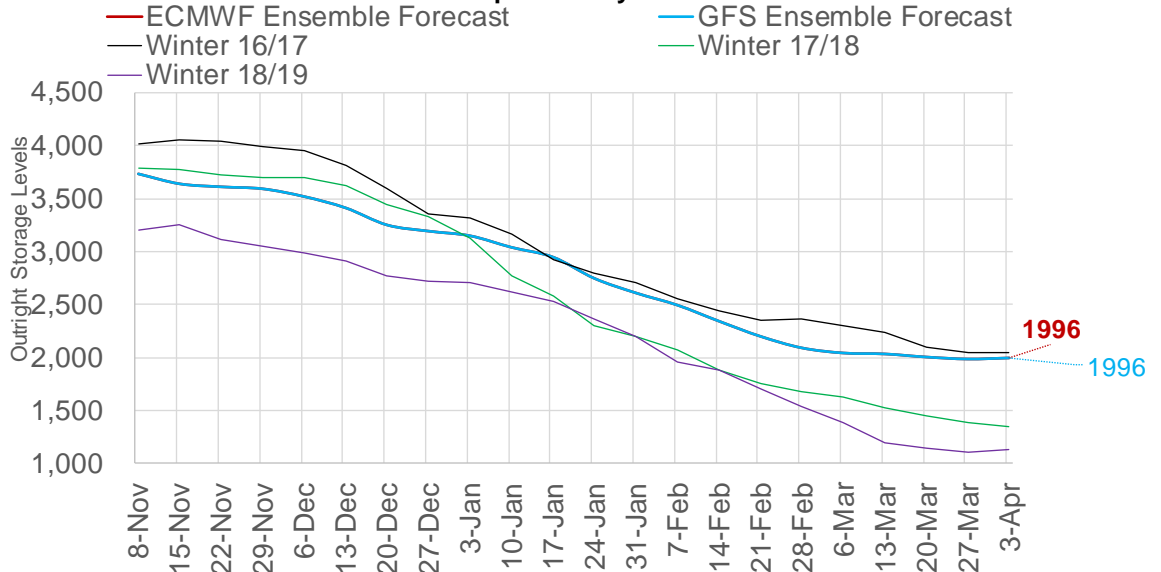
Weather Model Storage Projection

Week Ending	ECMWF Forecast	ECMWF Ensemble Storage Projection	GFS Forecast	GFS Ensemble Storage Projection
27-Mar	53.9	#N/A	53.9	#N/A
3-Apr	55.8	10	55.8	10
10-Apr				
17-Apr				

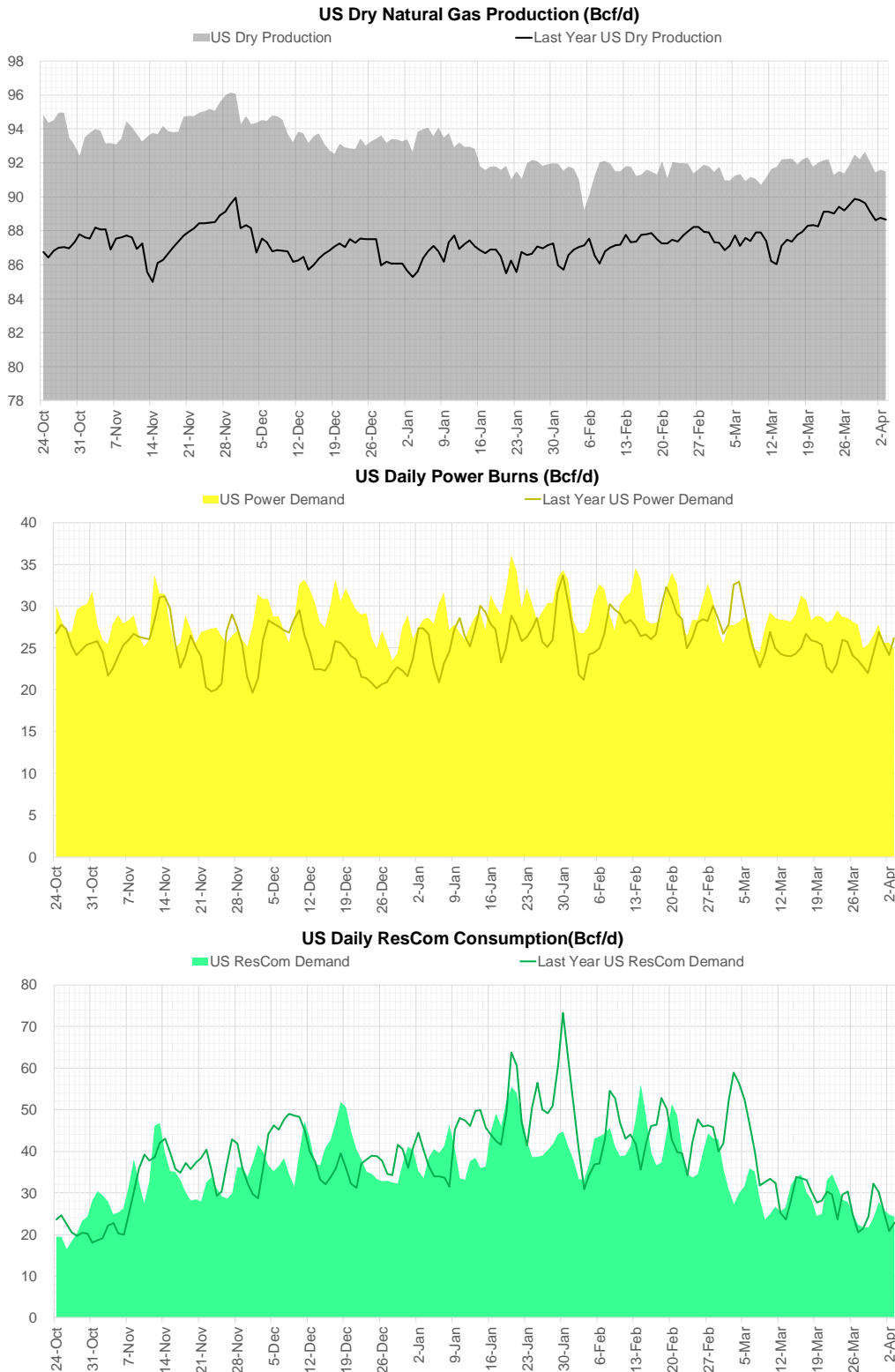
Weather Storage Model - Next 4 Week Forecast



Weather Based End of Winter Projection (Bcf) 10Y normals past 15 day forecast window



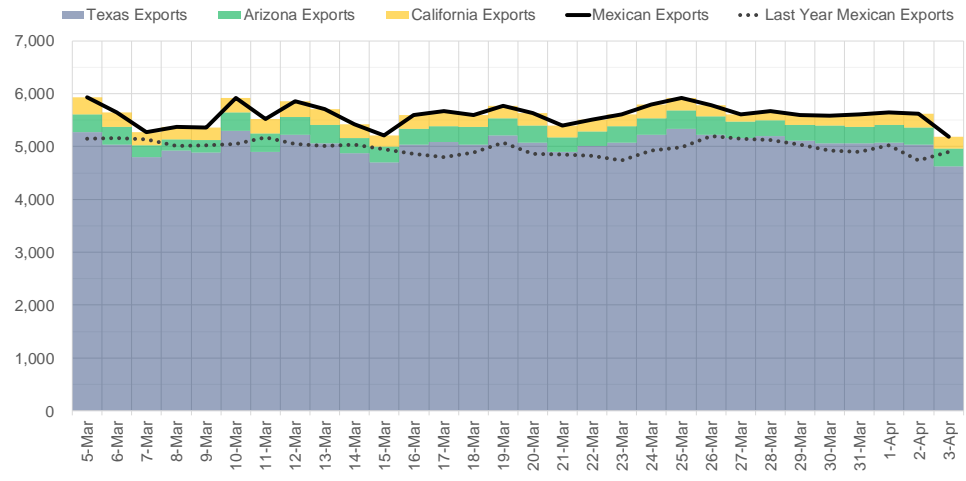
Supply – Demand Trends



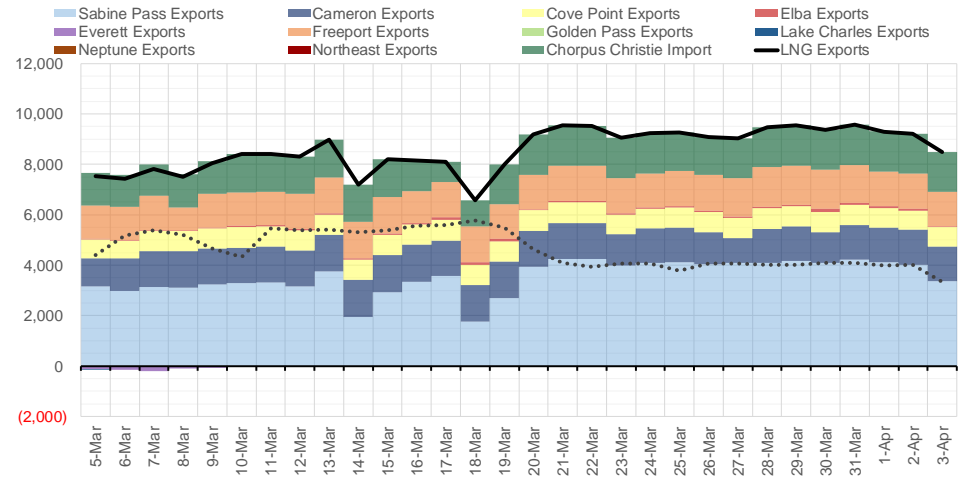
Source: Bloomberg

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.

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

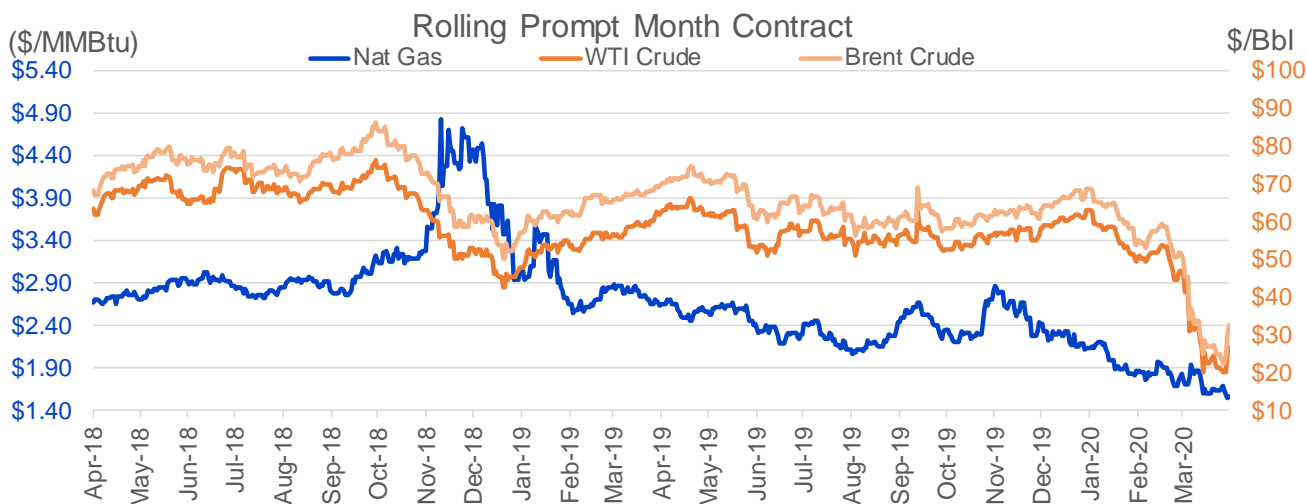
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
5	2020	C	2.00	12835	5	2020	P	1.50	58758
5	2020	P	1.25	11133	6	2020	P	1.25	52751
5	2020	P	1.40	8226	5	2020	P	1.25	45686
5	2020	C	1.65	6845	5	2020	C	2.00	42384
10	2020	C	3.00	6612	10	2020	P	1.50	42349
5	2020	C	1.75	6585	5	2020	P	1.40	37086
5	2020	P	1.50	5707	10	2020	P	1.60	34009
10	2020	P	1.60	5126	3	2021	P	2.00	33317
7	2020	P	1.75	4741	5	2020	P	1.60	30456
5	2020	C	1.85	4443	5	2020	P	1.75	29483
6	2020	P	1.50	4025	6	2020	C	2.50	26002
5	2020	P	1.45	3659	5	2020	C	2.25	23925
7	2020	P	1.25	3637	6	2020	P	2.00	23698
7	2020	C	2.00	2925	7	2020	C	3.00	23080
5	2020	P	1.55	2886	5	2020	C	2.50	22967
5	2020	C	1.70	2869	6	2020	C	2.00	22829
1	2021	C	3.00	2500	7	2020	P	1.50	22060
6	2020	C	2.00	2317	7	2020	C	2.75	21783
5	2020	C	1.60	2225	6	2020	P	1.50	21310
5	2020	P	1.00	2185	9	2020	C	2.50	21262
6	2020	P	1.60	2061	5	2020	C	2.75	21083
7	2020	P	1.65	2045	10	2020	C	3.00	20909
7	2020	P	1.50	1670	5	2020	C	3.00	20857
6	2020	C	1.75	1535	10	2020	C	2.75	20782
5	2020	C	1.80	1462	7	2020	P	2.00	20779
1	2021	C	2.75	1450	5	2020	P	1.70	20439
6	2020	C	1.80	1443	7	2020	C	2.50	20293
6	2020	P	1.25	1441	9	2020	P	1.50	20191
6	2020	P	1.45	1324	5	2020	P	2.00	19622
5	2020	P	1.30	1309	8	2020	P	1.50	19305
5	2020	C	1.90	1263	5	2020	C	2.15	19207
5	2020	P	1.70	1211	7	2020	P	1.75	19113
10	2020	P	1.50	1150	1	2021	C	3.00	18760
5	2020	P	1.60	1038	7	2020	P	1.25	18205
7	2020	C	3.00	1020	5	2020	P	1.80	18183
5	2020	C	2.15	1004	5	2020	P	1.00	17611
6	2020	C	1.85	1003	9	2020	C	3.00	17271
1	2021	C	5.00	1000	8	2020	C	3.00	17236
2	2021	C	5.00	1000	10	2020	C	2.50	17161
3	2021	C	5.00	1000	10	2020	P	1.25	16367
6	2020	C	1.70	984	6	2020	P	1.75	16326
5	2020	C	1.55	967	6	2020	P	1.60	16301
6	2020	P	1.40	964	6	2020	C	3.00	15743
10	2020	P	1.00	950	6	2020	C	2.25	15636
5	2020	P	1.75	892	1	2021	P	2.00	14733
7	2020	C	1.75	857	3	2021	C	3.00	14727
7	2020	C	2.25	808	3	2021	C	3.50	14681
5	2020	C	2.05	802	9	2020	P	1.25	14640
8	2020	C	2.50	707	5	2020	C	2.6	14572.5

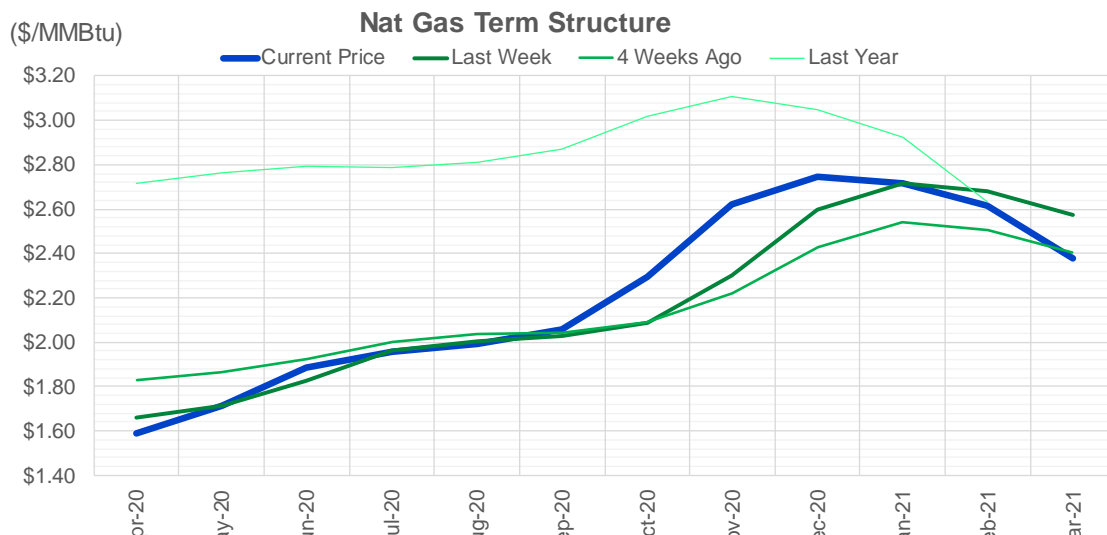
Source: CME, Nasdaq, ICE

Nat Gas Futures Open Interest CME, ICE and Nasdaq Combined

CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MM)				NASDAQ Henry Hub Futures (10,000 MMBtu)			
	Current	Prior	Daily Change		Current	Prior	Daily Change		Current	Prior	Daily Change
MAY 20	355019	350367	4652	MAY 20	94084	92088	1995.75	MAY 20	551	551	0
JUN 20	102626	98199	4427	JUN 20	60681	61512	-831.25	JUN 20	1367	1367	0
JUL 20	131297	128547	2750	JUL 20	66374	65117	1257.5	JUL 20	2871	2871	0
AUG 20	56438	56471	-33	AUG 20	57853	57750	102.5	AUG 20	549	549	0
SEP 20	101447	101619	-172	SEP 20	59105	58791	314	SEP 20	161	161	0
OCT 20	103689	101626	2063	OCT 20	73015	73608	-593	OCT 20	1010	1010	0
NOV 20	35039	35431	-392	NOV 20	49723	49594	129.25	NOV 20	741	741	0
DEC 20	37257	36799	458	DEC 20	53815	53449	366	DEC 20	242	242	0
JAN 21	67759	66539	1220	JAN 21	58634	57296	1338.25	JAN 21	336	336	0
FEB 21	28933	28856	77	FEB 21	37896	37393	503.25	FEB 21	33	33	0
MAR 21	47122	46122	1000	MAR 21	45222	44877	345.5	MAR 21	1106	1106	0
APR 21	53924	53267	657	APR 21	43438	42640	797.5	APR 21	775	775	0
MAY 21	15123	14936	187	MAY 21	34384	34129	255.5	MAY 21	46	46	0
JUN 21	11451	11166	285	JUN 21	32601	32343	257.5	JUN 21	45	45	0
JUL 21	8743	8914	-171	JUL 21	34987	34721	265.25	JUL 21	46	46	0
AUG 21	9044	8881	163	AUG 21	35558	35293	264.25	AUG 21	46	46	0
SEP 21	8497	8341	156	SEP 21	32191	31943	247.5	SEP 21	45	45	0
OCT 21	18033	17908	125	OCT 21	38281	37987	294	OCT 21	571	571	0
NOV 21	12929	12989	-60	NOV 21	29351	29352	-1.25	NOV 21	430	430	0
DEC 21	8306	8405	-99	DEC 21	30718	30612	105.5	DEC 21	30	30	0
JAN 22	6107	6184	-77	JAN 22	23343	23101	242.25	JAN 22	36	36	0
FEB 22	4178	4270	-92	FEB 22	20753	20493	260	FEB 22	33	33	0
MAR 22	7909	7822	87	MAR 22	22162	21875	286.75	MAR 22	900	900	0
APR 22	8155	7877	278	APR 22	19082	18685	396.5	APR 22	1050	1050	0
MAY 22	3249	3324	-75	MAY 22	18193	17856	337.25	MAY 22	51	51	0
JUN 22	1209	1168	41	JUN 22	17568	17204	363.75	JUN 22	50	50	0
JUL 22	1236	1202	34	JUL 22	17655	17326	329	JUL 22	51	51	0
AUG 22	870	836	34	AUG 22	17586	17265	321.5	AUG 22	51	51	0
SEP 22	930	896	34	SEP 22	17567	17166	400.5	SEP 22	50	50	0
OCT 22	1287	1281	6	OCT 22	18839	18429	409.5	OCT 22	515	515	0

Source: CME, Nasdaq, ICE





	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Current Price	\$1.587	\$1.712	\$1.886	\$1.958	\$1.990	\$2.059	\$2.292	\$2.623	\$2.748	\$2.716	\$2.616	\$2.375
Last Week	\$1.659	\$1.714	\$1.826	\$1.961	\$2.007	\$2.027	\$2.087	\$2.303	\$2.597	\$2.714	\$2.682	\$2.572
vs. Last Week	-\$0.072	-\$0.002	\$0.060	-\$0.003	-\$0.017	\$0.032	\$0.205	\$0.320	\$0.151	\$0.002	-\$0.066	-\$0.197
4 Weeks Ago	\$1.827	\$1.865	\$1.925	\$2.003	\$2.038	\$2.045	\$2.089	\$2.218	\$2.429	\$2.539	\$2.503	\$2.404
vs. 4 Weeks Ago	-\$0.240	-\$0.153	-\$0.039	-\$0.045	-\$0.048	\$0.014	\$0.203	\$0.405	\$0.319	\$0.177	\$0.113	-\$0.029
Last Year	\$2.677	\$2.715	\$2.764	\$2.791	\$2.789	\$2.810	\$2.870	\$3.018	\$3.107	\$3.049	\$2.926	\$2.633
vs. Last Year	-\$1.090	-\$1.003	-\$0.878	-\$0.833	-\$0.799	-\$0.751	-\$0.578	-\$0.395	-\$0.359	-\$0.333	-\$0.310	-\$0.258

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	1.46	1.56	0.10
TETCO M3	\$/MMBtu	1.37	1.35	-0.02
FGT Zone 3	\$/MMBtu	1.38	1.67	0.29
Zone 6 NY	\$/MMBtu	1.38	1.38	0.00
Chicago Citygate	\$/MMBtu	1.51	1.51	0.00
Michcon	\$/MMBtu	1.50	1.53	0.02
Columbia TCO Pool	\$/MMBtu	1.45	1.39	-0.06
Ventura	\$/MMBtu	1.44	1.41	-0.03
Rockies/Opal	\$/MMBtu	1.42	1.31	-0.12
El Paso Permian Basin	\$/MMBtu	0.19	0.45	0.26
Socal Citygate	\$/MMBtu	1.55	1.40	-0.15
Malin	\$/MMBtu	1.45	1.42	-0.03
Houston Ship Channel	\$/MMBtu	1.57	1.61	0.04
Henry Hub Cash	\$/MMBtu	1.69	1.47	-0.22
AECO Cash	C\$/GJ	1.37	1.23	-0.14
Station2 Cash	C\$/GJ	1.39	1.41	0.01
Dawn Cash	C\$/GJ	1.47	1.53	0.06

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks		vs. Last Year
				Ago		
NatGas Jan/Apr	\$/MMBtu	-0.52	▼ -0.025	▼ -0.193	▼ -0.050	
NatGas Mar/Apr	\$/MMBtu	0.187	▲ 0.025	▲ 0.193	▼ -0.106	
NatGas Oct/Nov	\$/MMBtu	0.23	▲ 0.017	▲ 0.104	▲ 0.188	
NatGas Oct/Jan	\$/MMBtu	0.69	▲ 0.062	▲ 0.239	▲ 0.381	
WTI Crude	\$/Bbl	20.31	▼ -4.180	▼ -26.470	▼ -42.150	
Brent Crude	\$/Bbl	24.74	▼ -2.650	▼ -26.390	▼ -44.570	
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000	
Heating Oil	cents/Gallon	93.23	▼ -16.550	▼ -60.090	▼ -107.450	
Propane, Mt. Bel	cents/Gallon	0.26	▼ -0.033	▼ -0.144	▼ -0.369	
Ethane, Mt. Bel	cents/Gallon	0.11	▼ -0.021	▼ -0.045	▼ -0.105	
Coal, PRB	\$/MTon	12.30	▲ 0.000	▼ -0.100	▼ -0.300	
Coal, ILB	\$/MTon	31.05	▲ 0.000	▼ -0.750	▼ -14.000	