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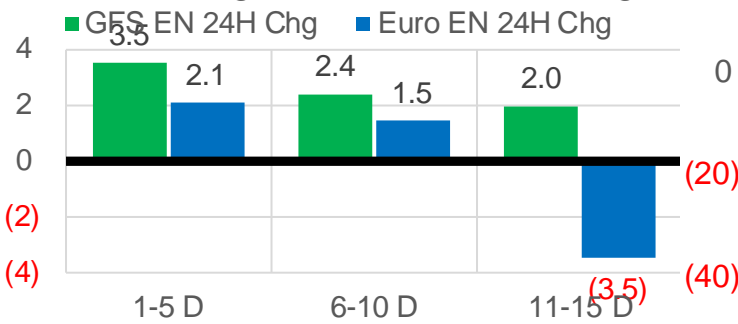
[Price Summary](#)

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 2.91	▲ \$ 0.05	▼ \$ (0.03)

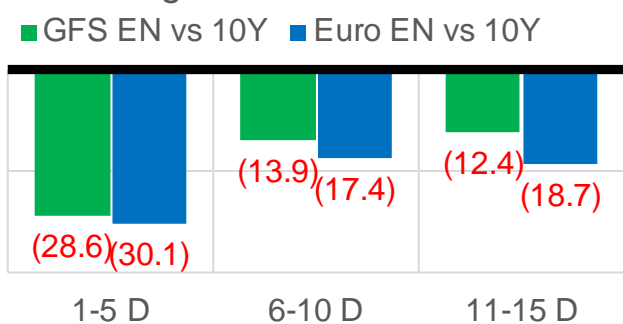
	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 40.64	▲ \$ 0.35	▲ \$ 2.5

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 42.85	▲ \$ 0.45	▲ \$ 2.5

L48 Region - 00z TDD vs 24H Ago



L48 Region - 00z TDD vs 10Y N



	Current	Δ from YD	Δ from 7D Avg
US Dry Production	86.4	▼ -2.62	▼ -3.50

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	0.0	▼ -23.75	▼ -23.98

	Current	Δ from YD	Δ from 7D Avg
US ResComm	0.0	▼ -15.64	▼ -15.94

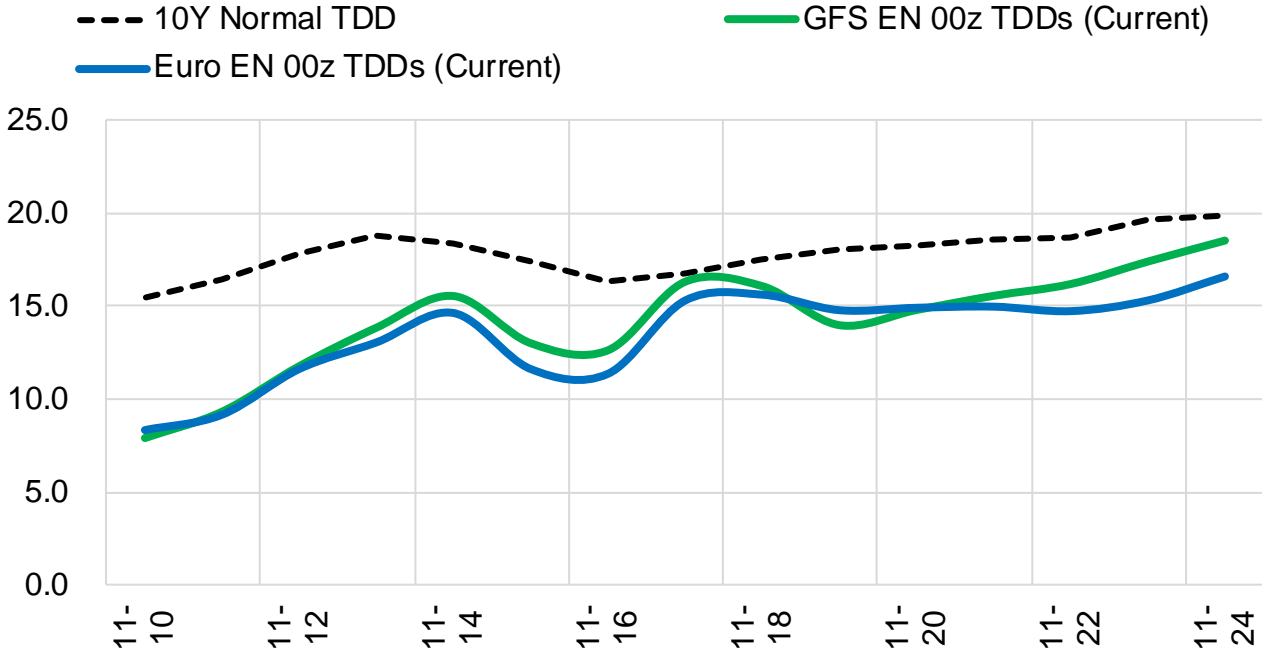
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.4	▲ 1.14	▲ 0.85

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	10.4	▲ 0.36	▲ 0.09

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.2	▼ -0.01	▲ 0.07

## Short-term Weather Model Outlooks (00z)

### L48 Region



Source: WSI, Bloomberg

## Lower 48 Component Models

Gulf Dry Production	31.5	31.5	31.8	31.4	31.6	31.8	31.4	-0.4	-0.2
Illinois Dry Production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Michigan Dry Production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midcon Dry Production	9.2	9.3	9.2	9.1	9.0	9.0	8.9	0.0	-0.2
Midwest E Dry Production	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
Midwest W Dry Production	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
Northeast Dry Production	33.0	33.0	33.0	33.0	33.0	33.0	33.0	0.0	0.0
N England Dry Production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pacific NW Dry Production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rockies Dry Production	8.2	8.3	8.3	8.1	8.0	8.2	7.9	-0.3	-0.3
Southeast Dry Production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Southwest Dry Production	5.9	6.0	5.9	5.7	5.8	5.7	5.6	-0.2	-0.3
<b>Lower 48 Dry Production</b>	<b>91.0</b>	<b>90.5</b>	<b>90.0</b>	<b>88.5</b>	<b>88.8</b>	<b>89.0</b>	<b>86.4</b>	<b>▼-2.6</b>	<b>▼-3.2</b>
<b>Canadian Imports</b>	<b>4.1</b>	<b>3.7</b>	<b>2.9</b>	<b>3.2</b>	<b>3.2</b>	<b>3.3</b>	<b>4.4</b>	<b>▲1.1</b>	<b>▲1.1</b>
L48 Power	24.0	25.5	24.1	22.8	23.1	23.8	0.0	▼-23.8	▼-23.9
L48 Residential & Commercial	17.0	14.4	13.7	13.8	14.1	15.6	0.0	▼-15.6	▼-14.8
L48 Industrial	23.8	24.0	24.4	24.6	25.0	24.6	0.0	▼-24.6	▼-24.4
L48 Lease and Plant Fuel	5.0	5.0	5.0	4.9	4.9	4.9	0.0	▼-4.9	▼-4.9
L48 Pipeline Distribution	1.9	1.9	1.8	1.7	1.7	1.8	0.0	▼-1.8	▼-1.8
<b>L48 Regional Gas Consumption</b>	<b>71.7</b>	<b>70.8</b>	<b>68.9</b>	<b>67.7</b>	<b>68.8</b>	<b>70.7</b>	<b>0.0</b>	<b>▼-70.7</b>	<b>▼-69.8</b>
Cameron Exports	2.07	2.11	1.79	2.03	2.02	1.46	2.05	▲0.6	▲0.1
Cove Point Exports	0.79	0.79	0.79	0.79	0.79	0.79	0.79	▼0.0	▼0.0
Elba Exports	0.25	0.25	0.23	0.25	0.25	0.25	0.24	▼0.0	▼0.0
Everett Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	▲0.0	▲0.0
Freeport Exports	1.34	1.35	1.47	1.47	1.84	1.10	1.10	▲0.3	▲0.3
Golden Pass Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	▲0.0	▲0.0
Lake Charles Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	▲0.0	▲0.0
Neptune Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	▲0.0	▲0.0
Northeast Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	▲0.0	▲0.0
Chorpus Christie Exports	1.68	1.63	1.68	1.64	1.60	1.66	1.63	▼0.0	▼0.0
Sabine Pass Exports	4.20	4.18	4.12	4.07	4.03	4.00	3.81	▼-0.2	▼-0.3
<b>Net LNG Delivered</b>	<b>10.34</b>	<b>10.32</b>	<b>10.08</b>	<b>10.25</b>	<b>10.53</b>	<b>10.00</b>	<b>10.36</b>	<b>▲0.4</b>	<b>▲0.1</b>
<b>Total Mexican Exports</b>	<b>6.0</b>	<b>6.4</b>	<b>6.4</b>	<b>6.0</b>	<b>5.9</b>	<b>6.2</b>	<b>6.2</b>	<b>▼0.0</b>	<b>▲0.1</b>
<b>Implied Daily Storage Activity</b>	<b>7.0</b>	<b>6.7</b>	<b>7.6</b>	<b>7.7</b>	<b>6.7</b>	<b>5.4</b>	<b>74.3</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									
L48 Lease and Plant Fuel	4.8	4.8	4.8	4.9	4.8	5.0	0.0	▲0.1	▲0.1
L48 Pipeline Distribution	2.0	2.2	2.1	2.2	2.5	2.3	0.0	▼-0.2	▲0.0
<b>L48 Regional Gas Consumption</b>	<b>69.1</b>	<b>72.8</b>	<b>70.6</b>	<b>75.0</b>	<b>83.0</b>	<b>79.9</b>	<b>0.0</b>	<b>▼-3.1</b>	<b>▲4.5</b>
Cameron Exports	0.0	0.2	0.4	0.9	1.3	1.9	0.0	▲0.7	▲1.3
Cove Point Exports	0.0	0.0	0.4	0.8	0.8	0.8	0.0	▲0.0	▲0.3
Elba Exports	0.2	0.2	0.2	0.2	0.3	0.2	0.0	▼0.0	▼0.0
Everett Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	▲0.0	▼0.0
Freeport Exports	1.7	1.8	2.0	1.8	1.4	1.4	0.0	▼-0.1	▼-0.4
Golden Pass Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	▲0.0	▲0.0
Lake Charles Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	▲0.0	▲0.0
Neptune Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	▲0.0	▲0.0
Northeast Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	▲0.0	▲0.0
Chorpus Christie Exports	1.3	1.6	1.6	1.6	1.6	1.7	0.0	▲0.1	▲0.1
Sabine Pass Exports	3.5	3.6	2.1	2.8	3.9	4.2	0.0	▲0.3	▲1.1
<b>Net LNG Exports</b>	<b>6.8</b>	<b>7.5</b>	<b>6.9</b>	<b>8.0</b>	<b>9.2</b>	<b>10.2</b>	<b>0.0</b>	<b>▲1.0</b>	<b>▲2.3</b>
<b>Total Mexican Exports</b>	<b>6.3</b>	<b>6.2</b>	<b>6.2</b>	<b>6.3</b>	<b>6.2</b>	<b>6.0</b>	<b>0.0</b>	<b>▼-0.2</b>	<b>▼-0.3</b>
<b>Implied Daily Storage Activity</b>	<b>9.9</b>	<b>6.2</b>	<b>7.0</b>	<b>4.2</b>	<b>-5.4</b>	<b>-0.7</b>	<b>4.6</b>		
<b>EIA Reported Daily Storage Activity</b>	<b>10.7</b>	<b>6.6</b>	<b>7.0</b>	<b>4.1</b>	<b>-5.1</b>	<b>0.0</b>	<b>0.0</b>		
<b>Daily Model Error</b>	<b>-0.8</b>	<b>-0.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.2</b>	<b>0.0</b>		
L48 Pipeline Distribution	2.0	2.0	2.7	2.7	2.1	2.0	1.0	▼0.0	▼1.0
<b>L48 Regional Gas Consumption</b>	<b>90.3</b>	<b>92.5</b>	<b>78.3</b>	<b>76.4</b>	<b>69.9</b>	<b>75.8</b>	<b>66.7</b>	<b>▼-9.1</b>	<b>▼-25.7</b>
Cameron Exports	0.0	0.5	1.2	1.1	0.0	0.7	1.9	▲1.2	▲1.4
Cove Point Exports	0.8	0.8	0.7	0.7	0.5	0.5	0.8	▲0.3	▼0.0
Elba Exports	0.0	0.0	0.0	0.1	0.2	0.2	0.2	▲0.0	▲0.2
Everett Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	▲0.0	▲0.0
Freeport Exports	0.0	0.4	0.0	0.4	1.3	1.7	1.5	▼-0.2	▲1.1
Golden Pass Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	▲0.0	▲0.0
Lake Charles Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	▲0.0	▲0.0
Neptune Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	▲0.0	▲0.0
Northeast Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	▲0.0	▲0.0
Chorpus Christie Exports	0.1	1.4	0.2	0.7	1.5	1.6	1.6	▲0.0	▲0.3
Sabine Pass Exports	3.4	4.0	1.1	1.0	2.5	3.2	4.1	▲0.9	▲0.1

Demand Data did not update

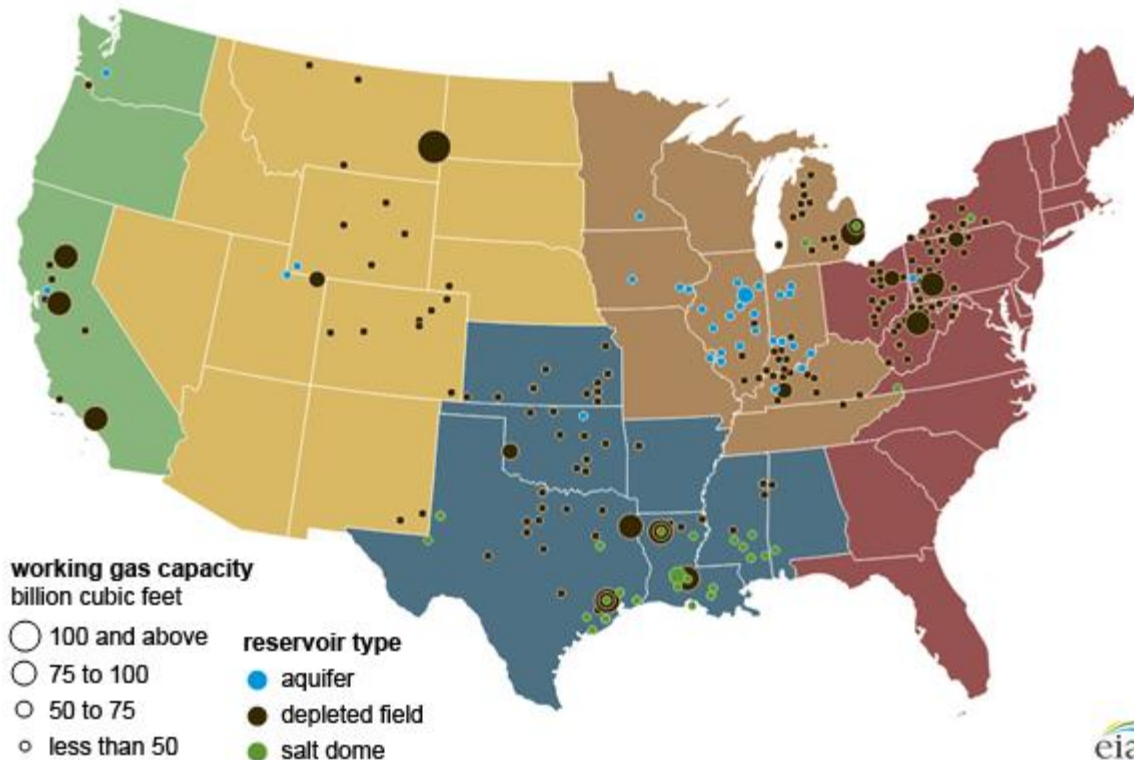
## Regional S/D Models Storage Projection

Week Ending 6-Nov

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-1.0	0.4	-0.6	-4
East	-3.1	2.1	-1.0	-7
Midwest	-0.3	1.4	1.1	8
Mountain	4.1	-3.1	1.0	7
South Central	-2.0	-0.1	-2.2	-15
Pacific	0.4	0.2	0.5	4

\*Adjustment Factor is calculated based on historical regional deltas

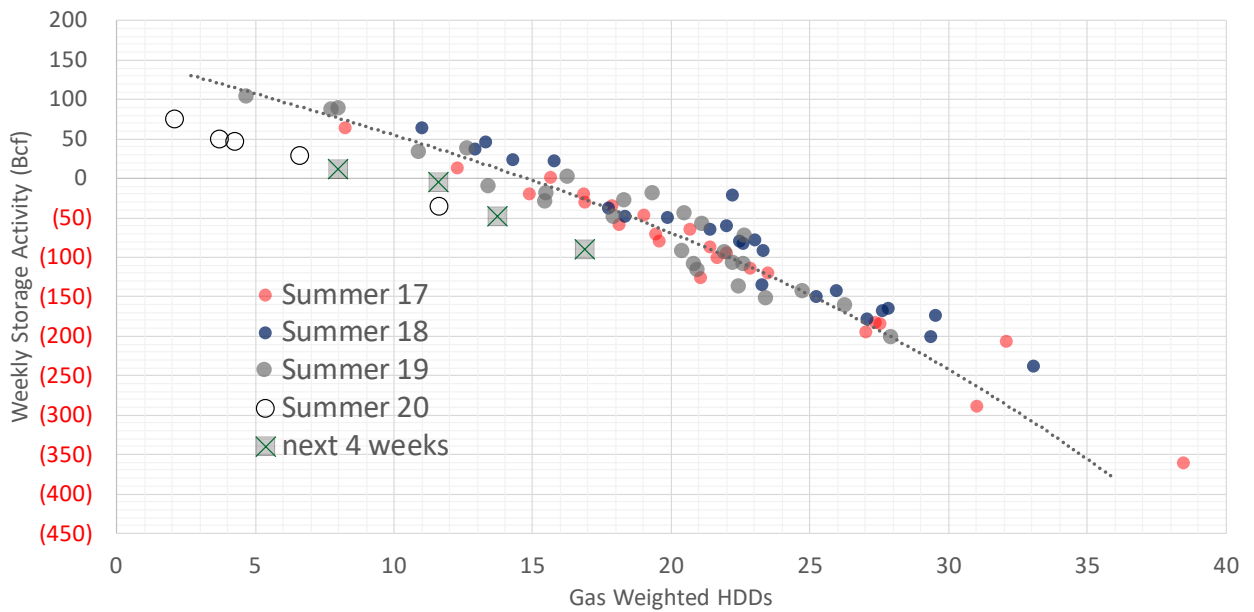
U.S. underground natural gas storage facilities by type (July 2015)



## Weather Model Storage Projection

Next report and beyond		
Week Ending	Temp	Week Storage Projection
06-Nov	11.6	-4
13-Nov	8.0	13
20-Nov	13.7	-47
27-Nov	16.9	-89

### Winter Storage Forecast

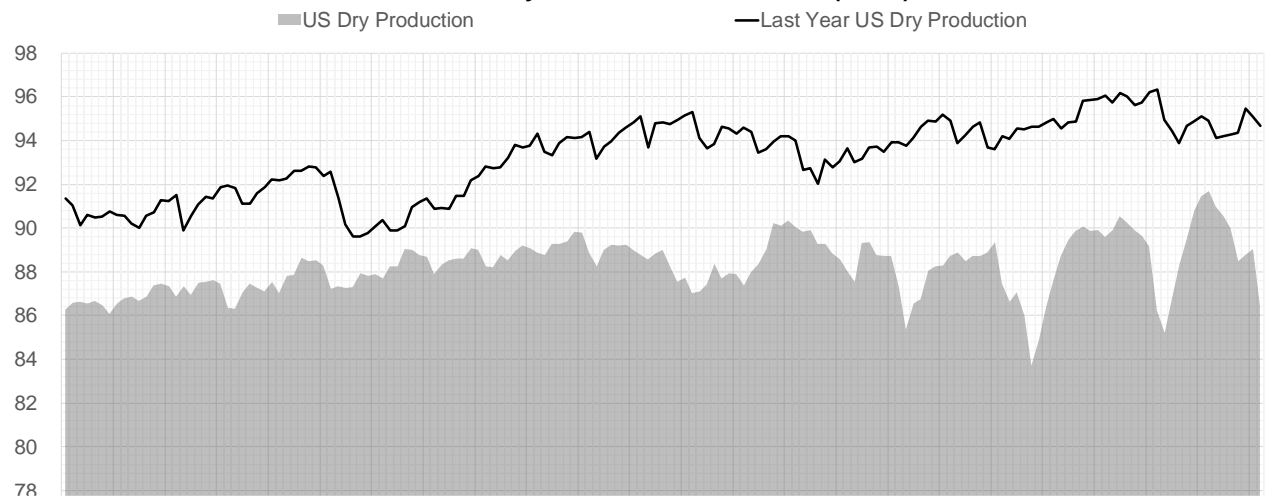


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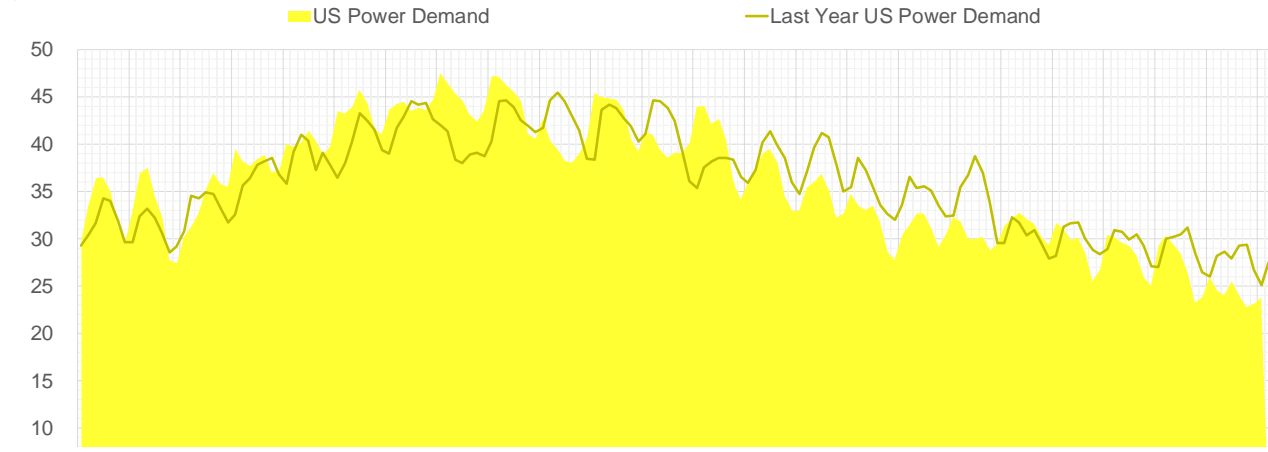


## Supply – Demand Trends

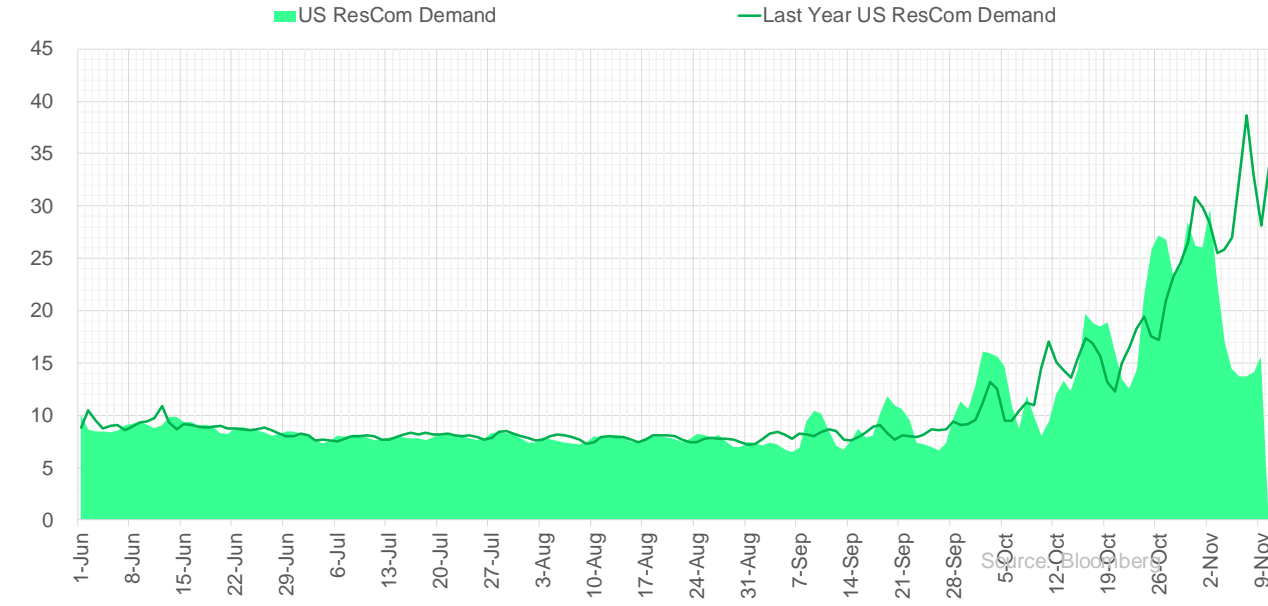
### US Dry Natural Gas Production (Bcf/d)



### US Daily Power Burns (Bcf/d)

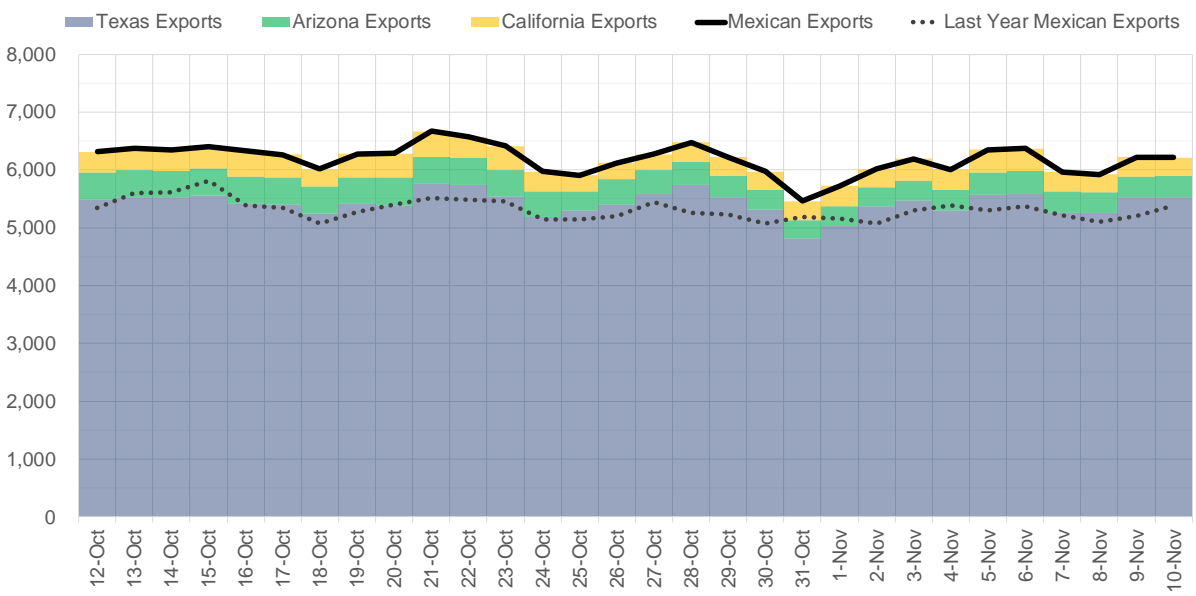


### US Daily ResCom Consumption (Bcf/d)

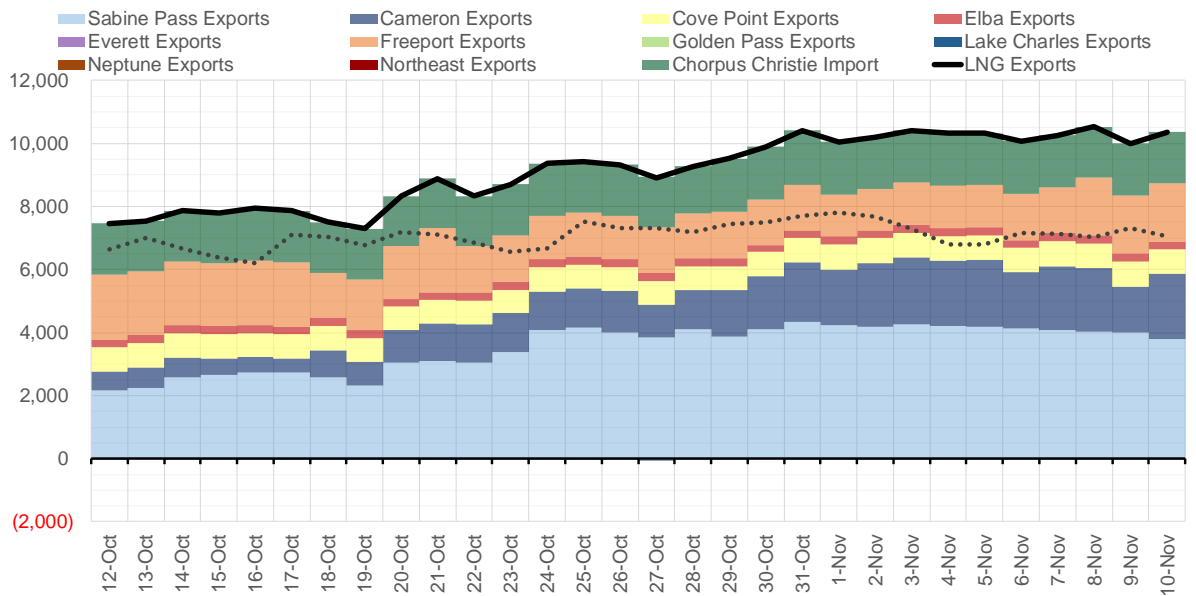


Source: Bloomberg

### 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

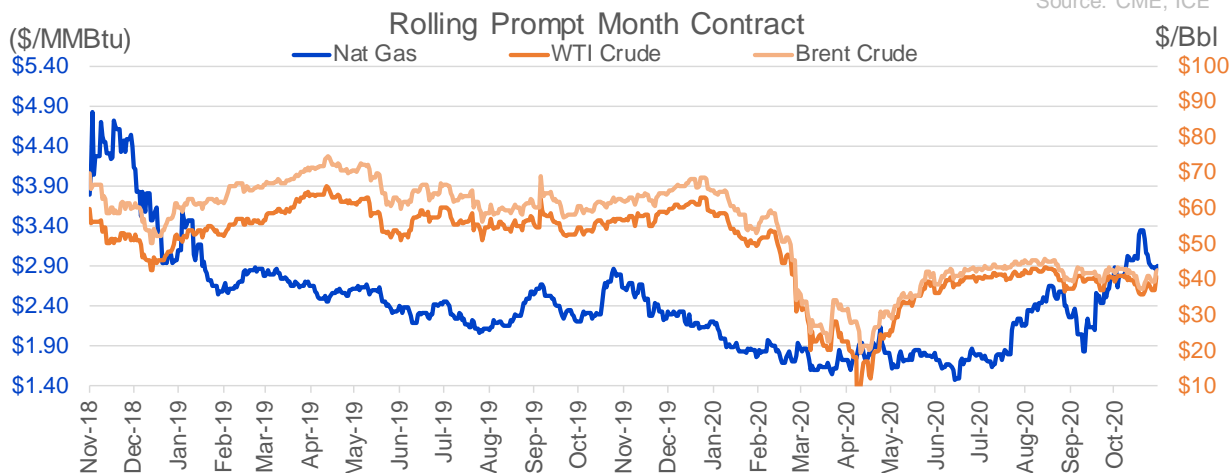
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
3	2021	C	4.00	6350	3	2021	P	2.00	38288
3	2021	C	4.50	5659	12	2020	P	2.00	33050
12	2020	C	3.75	4709	12	2020	C	4.00	32499
1	2021	C	3.50	4071	1	2021	C	4.50	30294
1	2021	C	5.00	3279	3	2021	C	3.25	29674
1	2021	C	3.00	3208	1	2021	C	3.50	29664
12	2020	C	3.25	3135	3	2021	C	4.00	28946
12	2020	C	3.50	3007	4	2021	C	4.00	28850
1	2021	C	4.50	2575	10	2021	C	4.00	28615
12	2020	C	3.35	2426	3	2021	C	6.00	27386
12	2020	P	2.75	2299	12	2020	P	2.50	27275
1	2021	P	2.50	2142	10	2021	C	3.25	27235
12	2020	C	3.05	2122	4	2021	C	5.00	26847
12	2020	P	2.50	2060	1	2021	P	2.50	26036
12	2020	C	4.00	1950	3	2021	C	7.00	24664
12	2020	C	3.00	1689	12	2020	C	3.75	24190
12	2020	C	3.30	1528	3	2021	C	4.50	23934
1	2021	C	4.00	1494	3	2021	C	5.00	23570
12	2020	P	2.70	1004	3	2021	C	3.50	22208
12	2020	P	2.80	942	1	2021	C	3.75	21762
1	2021	P	3.00	760	12	2020	C	3.50	21750
2	2021	C	3.50	748	3	2021	C	3.00	21414
12	2020	C	3.80	723	12	2020	P	2.75	20985
3	2021	C	3.50	702	1	2021	C	4.00	20816
3	2021	C	6.00	702	12	2020	C	4.50	20521
1	2021	P	2.75	625	1	2021	C	5.00	20380
4	2021	C	3.25	625	1	2021	C	6.00	20370
4	2021	C	3.75	600	2	2021	P	2.25	20017
2	2021	C	4.00	598	8	2021	C	4.00	19605
2	2021	C	4.50	586	1	2021	C	3.00	19244
12	2020	P	2.90	497	2	2021	C	5.00	18901
12	2020	C	3.15	494	12	2020	P	3.00	18212
12	2020	P	3.00	426	1	2021	P	2.25	18189
2	2021	P	3.00	398	3	2021	P	2.50	18189
2	2021	C	3.00	374	8	2021	P	2.25	17792
4	2021	C	3.50	370	2	2021	C	3.50	17597
12	2020	C	3.40	355	1	2021	P	2.00	17592
12	2020	C	3.20	331	2	2021	C	4.00	17010
2	2021	C	3.75	329	2	2021	P	2.50	16934
1	2021	P	2.70	321	10	2021	C	5.00	16778
12	2020	C	4.75	300	2	2021	C	4.50	16424
3	2021	C	3.00	300	12	2020	C	5.00	15830
6	2021	C	3.50	300	4	2021	C	3.00	15469
4	2021	C	3.00	250	12	2020	C	3.25	15172
5	2021	C	2.90	250	1	2021	C	3.25	14808
5	2021	C	3.50	250	12	2020	C	3.00	14778
5	2021	C	3.50	250	10	2021	C	3.00	14661
3	2021	C	3.25	200	12	2020	P	1.50	14450
10	2021	C	3.00	200	5	2021	C	3.50	13932
					5	2021	C	3	13811

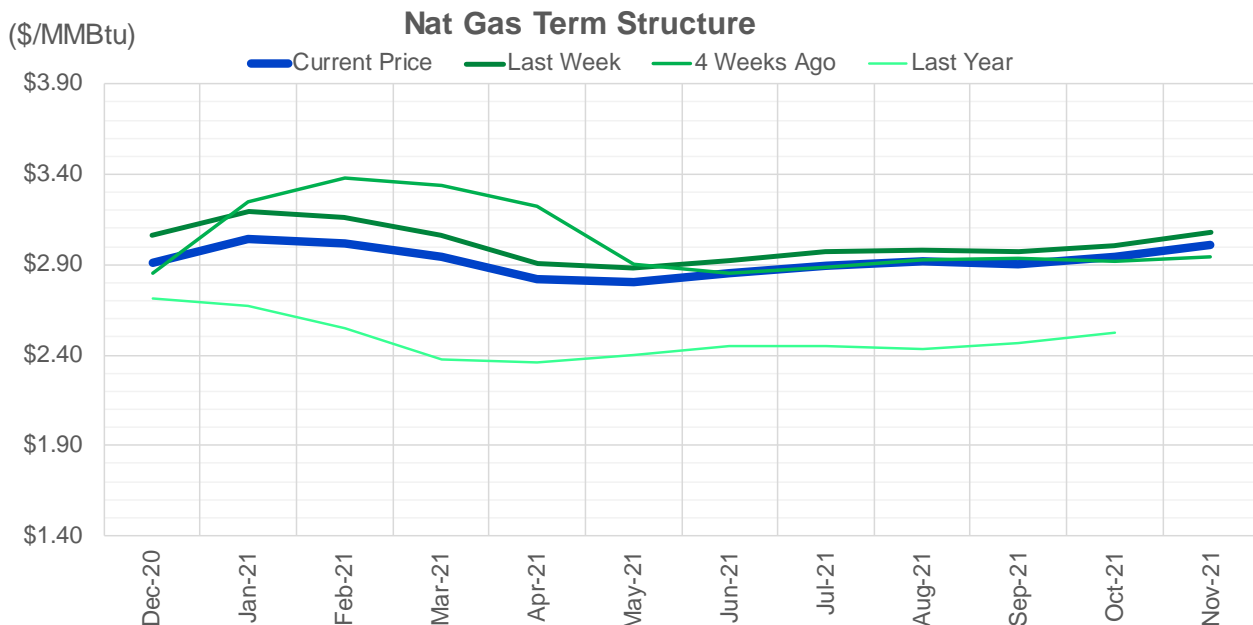
Source: CME, ICE



## 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
DEC 20	144128	150128	-6000	DEC 20	74943	74225	718.25
JAN 21	240031	232372	7659	JAN 21	93138	93265	-127
FEB 21	99759	92169	7590	FEB 21	66135	66096	39
MAR 21	143373	142414	959	MAR 21	89993	89884	109.25
APR 21	79478	78478	1000	APR 21	71926	71953	-26.75
MAY 21	58350	57295	1055	MAY 21	71619	71866	-246.75
JUN 21	34309	33746	563	JUN 21	58028	57920	108.25
JUL 21	30840	27852	2988	JUL 21	60708	60592	116.25
AUG 21	28794	28780	14	AUG 21	64830	64784	46
SEP 21	38174	37583	591	SEP 21	58467	58686	-219.5
OCT 21	92992	92159	833	OCT 21	68623	68497	126.75
NOV 21	36571	36167	404	NOV 21	54264	54302	-38.5
DEC 21	30496	30712	-216	DEC 21	47981	47992	-11.25
JAN 22	30086	30942	-856	JAN 22	46120	46291	-171
FEB 22	23522	23599	-77	FEB 22	37487	37620	-132.5
MAR 22	23913	24041	-128	MAR 22	40870	41010	-140
APR 22	25443	25682	-239	APR 22	41184	41128	55.5
MAY 22	10586	10550	36	MAY 22	30005	30012	-7.75
JUN 22	5666	5669	-3	JUN 22	29541	29562	-20.25
JUL 22	4529	4723	-194	JUL 22	30782	30595	187.5
AUG 22	3635	3647	-12	AUG 22	29351	29187	164.25
SEP 22	3510	3513	-3	SEP 22	29223	29268	-45
OCT 22	4944	4931	13	OCT 22	33600	33546	54.25
NOV 22	4415	4416	-1	NOV 22	29259	29190	69
DEC 22	4721	4718	3	DEC 22	31593	31522	71.25
JAN 23	4333	4321	12	JAN 23	14940	14937	3
FEB 23	1047	1029	18	FEB 23	13867	13857	10
MAR 23	2305	2305	0	MAR 23	13911	13908	3
APR 23	1557	1557	0	APR 23	12829	12811	18
MAY 23	445	444	1	MAY 23	11485	11446	38.75





	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21
<b>Current Price</b>	<b>\$2.911</b>	<b>\$3.041</b>	<b>\$3.016</b>	<b>\$2.946</b>	<b>\$2.820</b>	<b>\$2.807</b>	<b>\$2.851</b>	<b>\$2.894</b>	<b>\$2.916</b>	<b>\$2.903</b>	<b>\$2.943</b>	<b>\$3.013</b>
Last Week	\$3.059	\$3.195	\$3.159	\$3.063	\$2.907	\$2.881	\$2.921	\$2.971	\$2.983	\$2.969	\$3.006	\$3.076
vs. Last Week	-\$0.148	-\$0.154	-\$0.143	-\$0.117	-\$0.087	-\$0.074	-\$0.070	-\$0.077	-\$0.067	-\$0.066	-\$0.063	-\$0.063
4 Weeks Ago	\$2.855	\$3.247	\$3.379	\$3.341	\$3.224	\$2.905	\$2.855	\$2.884	\$2.925	\$2.934	\$2.920	\$2.946
vs. 4 Weeks Ago	\$0.056	-\$0.206	-\$0.363	-\$0.395	-\$0.404	-\$0.098	-\$0.004	\$0.010	-\$0.009	-\$0.031	\$0.023	\$0.067
Last Year	\$2.621	\$2.714	\$2.668	\$2.547	\$2.373	\$2.357	\$2.400	\$2.446	\$2.452	\$2.436	\$2.464	\$2.526
vs. Last Year	\$0.290	\$0.327	\$0.348	\$0.399	\$0.447	\$0.450	\$0.451	\$0.448	\$0.464	\$0.467	\$0.479	\$0.487

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	0.69	5.01	4.32
TETCO M3	\$/MMBtu	0.38	3.27	2.89
FGT Zone 3	\$/MMBtu	0.40	3.08	2.68
Zone 6 NY	\$/MMBtu	0.40	3.96	3.56
Chicago Citygate	\$/MMBtu	2.33	3.06	0.73
Michcon	\$/MMBtu	2.21	2.80	0.59
Columbia TCO Pool	\$/MMBtu	0.35	2.38	2.03
Ventura	\$/MMBtu	2.28	3.23	0.95
Rockies/Opal	\$/MMBtu	3.32	3.00	-0.32
El Paso Permian Basin	\$/MMBtu	2.43	2.76	0.33
Socal Citygate	\$/MMBtu	4.80	4.06	-0.74
Malin	\$/MMBtu	3.31	3.73	0.42
Houston Ship Channel	\$/MMBtu	2.71	3.00	0.29
Henry Hub Cash	\$/MMBtu	2.58	2.89	0.31
AECO Cash	C\$/GJ	2.16	2.33	0.17
Station2 Cash	C\$/GJ	1.85	5.06	3.21
Dawn Cash	C\$/GJ	2.21	2.92	0.71

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jan21/Apr21	\$/MMBtu	-0.221	▲ 0.067	▲ 0.253	▲ 0.257
NatGas Mar21/Apr21	\$/MMBtu	-0.126	▲ 0.030	▼ -0.445	▼ -0.411
NatGas Oct21/Nov21	\$/MMBtu	0.070	▼ 0.000	▲ 0.020	▲ 0.005
NatGas Apr21/Oct21	\$/MMBtu	0.123	▼ -0.066	▼ -0.310	▼ -0.293
WTI Crude	\$/Bbl	40.64	▲ 2.980	▲ 0.440	▼ -16.160
Brent Crude	\$/Bbl	42.85	▲ 3.140	▲ 0.400	▼ -19.210
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	123.24	▲ 10.530	▲ 6.340	▼ -66.520
Propane, Mt. Bel	cents/Gallon	0.56	▲ 0.007	▲ 0.040	▲ 0.036
Ethane, Mt. Bel	cents/Gallon	0.22	▼ -0.004	▲ 0.010	▲ 0.023
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.050
Coal, PRB	\$/MMBtu	0.70			
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▼ -4.500
Coal, ILB	\$/MMBtu	1.32			

## Winter Storage Forecast

