

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 5.92	▼ \$ (0.22)	▼ \$ (0.44)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 88.11	▼ \$ (0.80)	▼ \$ (2.8)

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 94.51	▼ \$ (0.85)	▼ \$ (2.6)

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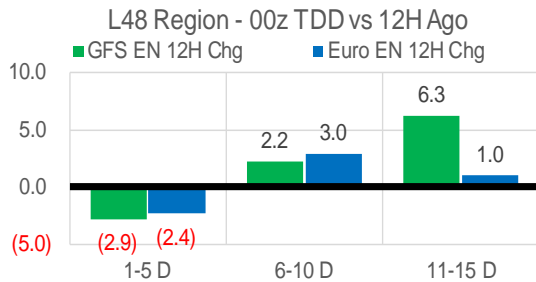
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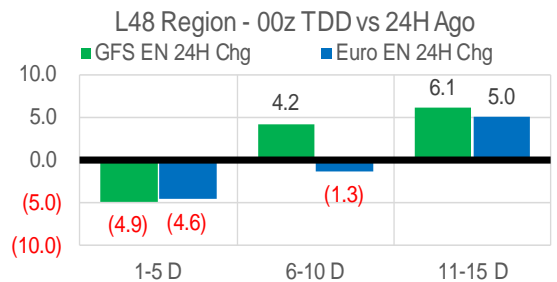
[Nat Gas Futures Open Interest](#)

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### Vs. 12H Ago



### Vs. 24H Ago



	Current	Δ from YD	Δ from 7D Avg
US Dry Production	100.3	▼ -0.29	▲ 0.05

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	28.3	▼ -1.06	▼ -0.58

	Current	Δ from YD	Δ from 7D Avg
US ResComm	20.5	▼ -1.25	▲ 3.66

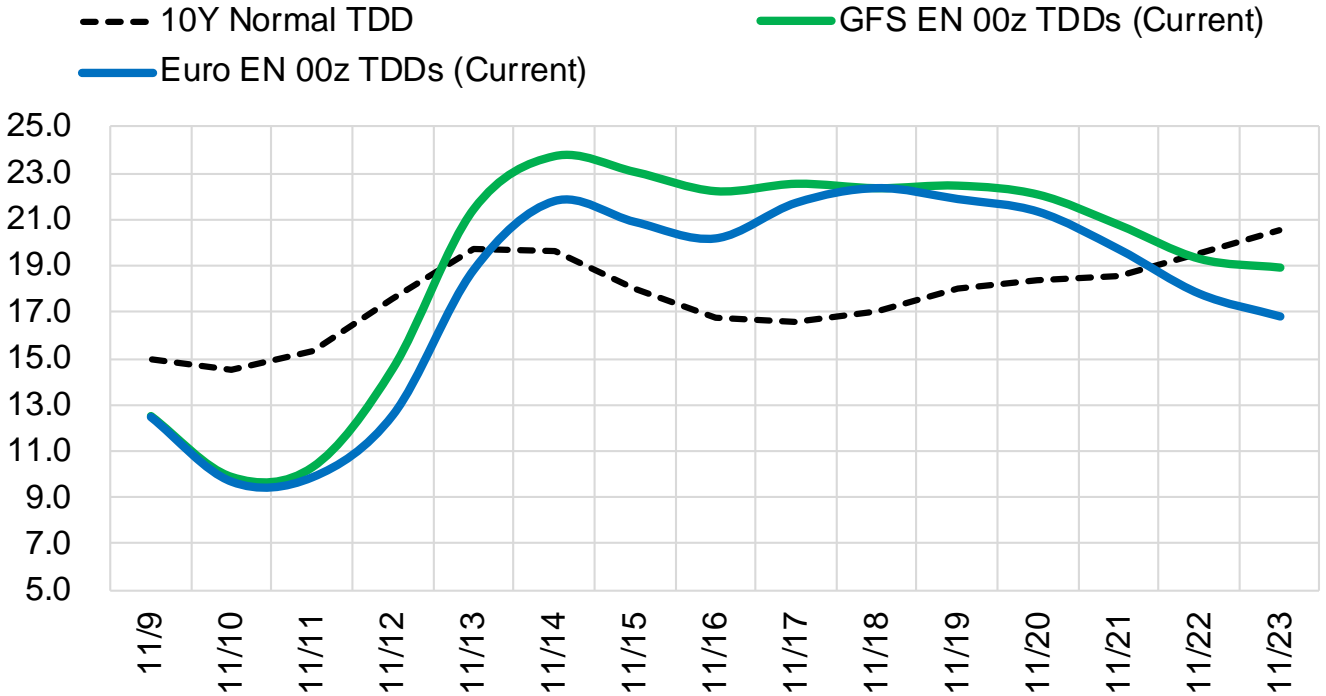
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.1	▼ -0.02	▲ 0.01

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	11.3	▼ -0.24	▼ -0.34

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.5	▼ -0.18	▲ 0.53

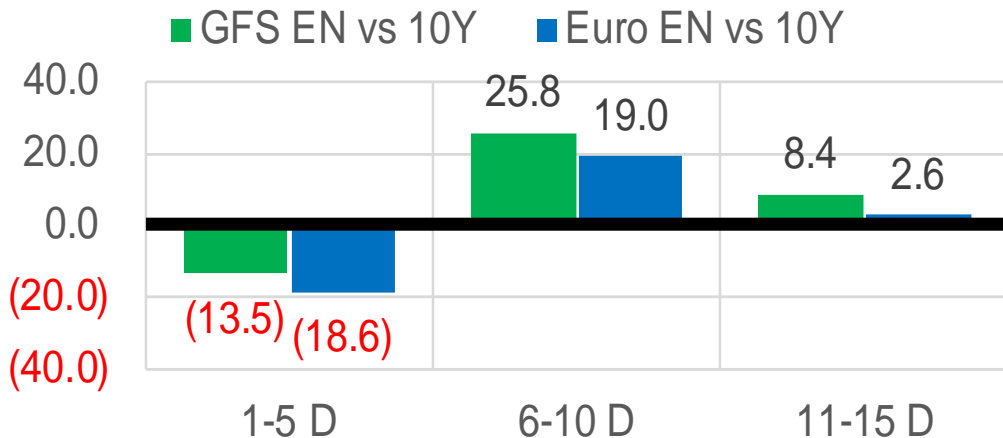
## Short-term Weather Model Outlooks (00z)

### L48 Region



### Vs. 10Y Normal

#### L48 Region - 00z TDD vs 10Y Normal



Source: WSI , Bloomberg

## Lower 48 Component Models

### Daily Balances

	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	8-Nov	9-Nov	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>100.8</b>	<b>100.9</b>	<b>99.2</b>	<b>99.5</b>	<b>99.7</b>	<b>100.5</b>	<b>100.3</b>	▼ -0.3	▲ 0.1
<b>Canadian Imports</b>	<b>4.0</b>	<b>4.3</b>	<b>4.0</b>	<b>4.1</b>	<b>4.1</b>	<b>4.1</b>	<b>4.1</b>	▼ 0.0	▲ 0.0
L48 Power	28.8	28.2	27.1	28.2	30.7	29.4	28.3	▼ -1.1	▼ -0.4
L48 Residential & Commercial	16.8	15.4	14.9	14.9	18.3	21.8	20.5	▼ -1.2	▲ 3.5
L48 Industrial	21.8	22.2	22.9	23.2	23.6	23.8	23.3	▼ -0.5	▲ 0.4
L48 Lease and Plant Fuel	5.6	5.6	5.5	5.6	5.6	5.6	5.6	▼ -0.1	▼ 0.0
L48 Pipeline Distribution	2.6	2.5	2.4	2.5	2.8	2.9	2.8	▼ -0.1	▲ 0.2
<b>L48 Regional Gas Consumption</b>	<b>75.6</b>	<b>74.0</b>	<b>72.9</b>	<b>74.3</b>	<b>81.1</b>	<b>83.5</b>	<b>80.5</b>	▼ -3.0	▲ 3.6
<b>Net LNG Delivered</b>	<b>11.11</b>	<b>11.25</b>	<b>12.28</b>	<b>11.75</b>	<b>11.60</b>	<b>11.50</b>	<b>11.26</b>	▼ -0.2	▼ -0.3
<b>Total Mexican Exports</b>	<b>6.4</b>	<b>6.1</b>	<b>5.3</b>	<b>5.5</b>	<b>5.8</b>	<b>6.7</b>	<b>6.5</b>	▼ -0.2	▲ 0.6
Implied Daily Storage Activity	11.6	13.9	12.8	12.0	5.4	2.9	6.1		
EIA Reported Daily Storage Activity									
Daily Model Error									

### EIA Storage Week Balances

	LY 5-Nov	7-Oct	14-Oct	21-Oct	LW 28-Oct	Current 4-Nov	WoW	vs. LY
<b>Lower 48 Dry Production</b>	<b>96.0</b>	<b>101.8</b>	<b>101.7</b>	<b>100.4</b>	<b>101.1</b>	<b>101.0</b>	▼ -0.1	▲ 5.0
<b>Canadian Imports</b>	<b>5.5</b>	<b>6.0</b>	<b>5.5</b>	<b>6.1</b>	<b>5.3</b>	<b>4.9</b>	▼ -0.4	▼ -0.6
L48 Power	30.3	30.5	30.7	30.9	28.9	29.5	▲ 0.6	-0.8
L48 Residential & Commercial	23.4	12.9	14.7	20.9	15.9	17.7	▲ 1.8	-5.6
L48 Industrial	22.0	20.8	20.3	20.0	21.1	21.0	▼ -0.1	-1.0
L48 Lease and Plant Fuel	5.4	5.7	5.7	5.6	5.6	5.6	▼ 0.0	0.3
L48 Pipeline Distribution	3.2	2.7	2.8	3.2	2.8	2.8	▲ 0.1	-0.3
<b>L48 Regional Gas Consumption</b>	<b>84.2</b>	<b>72.6</b>	<b>74.1</b>	<b>80.6</b>	<b>74.3</b>	<b>76.7</b>	▲ 2.3	▼ -7.5
<b>Net LNG Exports</b>	<b>10.9</b>	<b>11.0</b>	<b>11.0</b>	<b>11.5</b>	<b>11.4</b>	<b>11.9</b>	▲ 0.6	▲ 1.1
<b>Total Mexican Exports</b>	<b>6.1</b>	<b>6.7</b>	<b>6.6</b>	<b>6.7</b>	<b>6.4</b>	<b>6.3</b>	▼ -0.1	▲ 0.2
Implied Daily Storage Activity	0.3	17.5	15.6	7.7	14.3	11.0	-3.3	10.7
EIA Reported Daily Storage Activity	1.0	17.9	15.9	7.4	15.3			
Daily Model Error	-0.7	-0.4	-0.3	0.3	-1.0			

### Monthly Balances

	2Yr Ago Nov-20	LY Nov-21	Jul-22	Aug-22	Sep-22	Oct-22	MTD Nov-22	MoM	vs. LY
<b>Lower 48 Dry Production</b>	<b>91.2</b>	<b>96.4</b>	<b>97.8</b>	<b>98.2</b>	<b>100.6</b>	<b>101.3</b>	<b>100.2</b>	▼ -1.1	▲ 3.7
<b>Canadian Imports</b>	<b>4.6</b>	<b>5.3</b>	<b>5.9</b>	<b>5.4</b>	<b>5.9</b>	<b>5.7</b>	<b>4.2</b>	▼ -1.5	▼ -1.1
L48 Power	25.7	29.3	44.8	43.8	37.0	30.1	29.1	▼ -1.1	▼ -0.3
L48 Residential & Commercial	24.4	28.2	8.2	7.8	8.9	16.6	16.6	▲ 0.0	▼ -11.6
L48 Industrial	22.5	23.3	19.4	19.7	20.5	20.6	22.4	▲ 1.9	▼ -0.9
L48 Lease and Plant Fuel	5.0	5.4	5.5	5.5	5.5	5.7	5.6	▼ -0.1	▲ 0.2
L48 Pipeline Distribution	2.7	3.3	3.1	3.0	2.8	2.9	2.6	▼ -0.3	▼ -0.7
<b>L48 Regional Gas Consumption</b>	<b>80.3</b>	<b>89.5</b>	<b>81.0</b>	<b>79.9</b>	<b>74.7</b>	<b>75.9</b>	<b>76.4</b>	▲ 0.5	▼ -13.2
<b>Net LNG Exports</b>	<b>10.1</b>	<b>11.4</b>	<b>10.9</b>	<b>11.0</b>	<b>11.5</b>	<b>11.3</b>	<b>11.6</b>	▲ 0.3	▲ 0.2
<b>Total Mexican Exports</b>	<b>6.1</b>	<b>6.1</b>	<b>7.0</b>	<b>6.9</b>	<b>6.7</b>	<b>6.6</b>	<b>6.0</b>	▼ -0.5	▼ -0.1
Implied Daily Storage Activity	-0.7	-5.3	4.8	5.8	13.6	13.2	10.3		
EIA Reported Daily Storage Activity									
Daily Model Error					-0.5				

Source: Bloomberg, analytix.ai

## Daily Average Generation Data

### Nuclear Generation Daily Average - GWh (NRC)

	1-Nov	2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	DoD	vs. 7D
NRC Nuclear Daily Output	75.8	76.0	75.3	76.8	76.8	76.8	76.8	0.0	0.5
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	104.9	0.0	0.0
NRC Nuclear Outage	29.0	28.9	29.6	28.1	28.1	28.1	28.1	0.0	-0.5
NRC % Nuclear Cap Utilization	77.1	77.3	76.5	78.1	78.1	78.1	78.1	0.0	0.5

### Wind Generation Daily Average - MWh (EIA)

	1-Nov	2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	DoD	vs. 7D
CALI Wind	2555	3579	3131	1283	2680	2791	2511	-279	-158
TEXAS Wind	11096	15614	20777	20596	13126	12252	8692	-3560	-6885
US Wind	49216	70047	79068	73151	68099	47654	54238	6584	-10301

### Generation Daily Average - MWh (EIA)

	1-Nov	2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	DoD	vs. 7D
US Wind	49216	70047	79068	73151	68099	47654	54238	6584	-10301
US Solar	10924	10357	9650	10931	10292	10493	10551	58	109
US Petroleum	1013	1054	921	975	939	960	1065	105	88
US Other	10320	10047	9846	9369	9676	8792	10670	1878	995
US Coal	75586	65479	62907	67308	62791	46615	69274	22658	5826
US Nuke	79717	79836	79692	80475	79897	68943	80483	11540	2389
US Hydro	24075	23119	23760	22571	20061	19432	24319	4887	2150
<b>US Gas</b>	<b>159249</b>	<b>153835</b>	<b>151603</b>	<b>148883</b>	<b>138610</b>	<b>124846</b>	<b>173589</b>	<b>48743</b>	<b>27418</b>

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

## Storage Week Average Generation Data

### Nuclear Generation Weekly Average - GWh (NRC)

	5-Nov	7-Oct	14-Oct	21-Oct	28-Oct	4-Nov	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	72.2	80.5	76.2	74.4	74.4	76.0	1.6	-0.3
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	32.7	24.4	28.7	30.5	30.5	28.9	-1.6	
NRC % Nuclear Cap Utilization	73.4	81.9	77.5	75.6	75.6	77.2	1.6	

### Wind Generation Weekly Average - MWh (EIA)

	5-Nov	7-Oct	14-Oct	21-Oct	28-Oct	4-Nov	WoW	WoW Bcf/d Impact
CALI Wind	1669	1370	1087	944	1974	1641	-333	0.1
TEXAS Wind	8472	6160	7842	9710	17228	10904	-6324	1.2
US Wind	35268	32707	41063	45195	64747	44699	-20049	3.8
							-31%	
							-0.4	

### Generation Weekly Average - MWh (EIA)

	5-Nov	7-Oct	14-Oct	21-Oct	28-Oct	4-Nov	LY	Current	WoW	WoW Bcf/d Impact
US Wind	35268	32707	41063	45195	64747	44699			-20049	3.8
US Solar	9998	15455	14503	14347	13755	11244			-2511	0.5
US Petroleum	1057	664	842	1054	933	990			57	0.0
US Other	9317	10812	11273	11285	9086	9908			822	-0.2
US Coal	80036	74744	76322	79517	69841	75079			5238	-1.0
US Nuke	76098	83242	77235	76583	77718	79723			2005	-0.4
US Hydro	25833	21917	20001	19318	19097	21587			2489	-0.5
<b>US Gas</b>	<b>162947</b>	<b>171116</b>	<b>170286</b>	<b>162314</b>	<b>148286</b>	<b>157579</b>			<b>9293</b>	<b>1.7</b>

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

## Monthly Average Generation Data

### Nuclear Generation Monthly Average - GWh (NRC)

	2Yr Ago		LY		MTD		Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	Same 30 days	Same 30 days	Aug-22	Sep-22	Oct-22	Nov-22			
	NRC Nuclear Daily Output	75.9	74.0	90.5	86.2	76.2			
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	104.9	0.0	0.0
NRC Nuclear Outage	29.0	30.8	14.3	18.7	28.7	28.4	29.5	-0.4	-1.3
NRC % Nuclear Cap Utilization	77.1	75.3	92.1	87.7	77.4	77.8	76.6	0.4	1.3

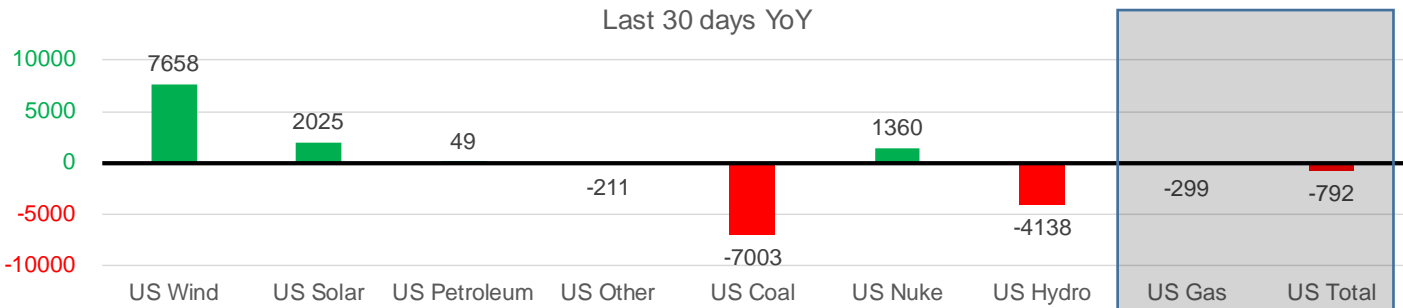
### Wind Generation Monthly Average - MWh (EIA)

	2Yr Ago		LY		MTD		Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	Same 30 days	Same 30 days	Aug-22	Sep-22	Oct-22	Nov-22			
	CALI Wind	1254	1867	2028	1608	1239			
TEXAS Wind	10696	11844	8440	7993	9916	13282	12256	3366	411
US Wind	43217	45870	33222	38270	43698	61106	53529	17408	7658

### Generation Monthly Average - MWh (EIA)

	2Yr Ago		LY		MTD		Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	Same 30 days	Same 30 days	Aug-22	Sep-22	Oct-22	Nov-22			
	US Wind	43217	45870	33222	38270	43698			
US Solar	7761	10675	16962	16163	14157	10478	12700	▲ 2222.2	▲ 2025
US Petroleum	788	953	1251	864	899	1006	1002	▼ -5	▲ 49
US Other	8708	10426	10597	10512	10500	10007	10216	▲ 209	▼ -211
US Coal	84959	79536	117203	92002	75808	65390	72533	▲ 7143	▼ -7003
US Nuke	79357	76581	92976	89057	78133	78890	77940	▼ -950	▲ 1360
US Hydro	26588	24682	30192	25202	19926	22886	20544	▼ -2342	▼ -4138
<b>US Gas</b>	<b>150288</b>	<b>157863</b>	<b>233739</b>	<b>200112</b>	<b>162320</b>	<b>155310</b>	<b>157564</b>	▼ -1299	▼ -299
<b>US Total</b>	<b>400262</b>	<b>406704</b>	<b>535696</b>	<b>470765</b>	<b>405761</b>	<b>404963</b>	<b>405912</b>	▲ 4978	▼ -792

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

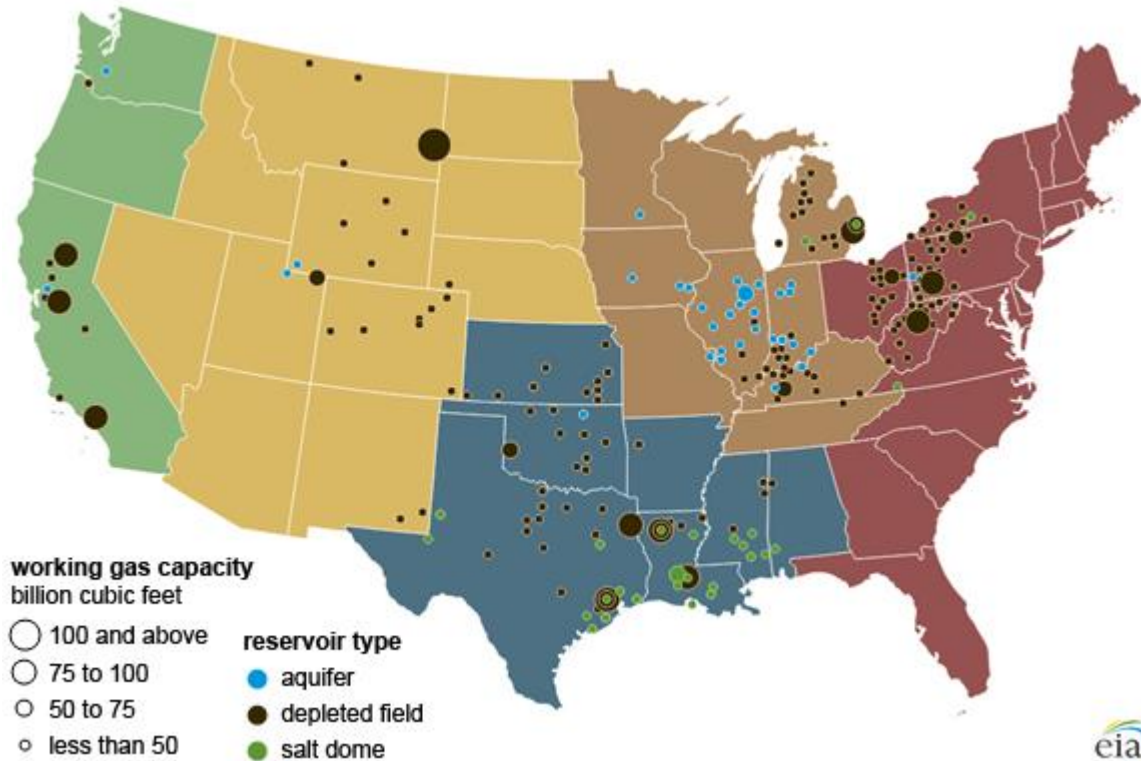
### Regional S/D Models Storage Projection

Week Ending 4-Nov

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	12.1	-0.6	11.5	81
East	-0.1	2.4	2.4	17
Midwest	3.5	0.5	4.0	28
Mountain	4.9	-4.1	0.8	5
South Central	3.8	1.0	4.8	34
Pacific	0.0	-0.4	-0.4	-3

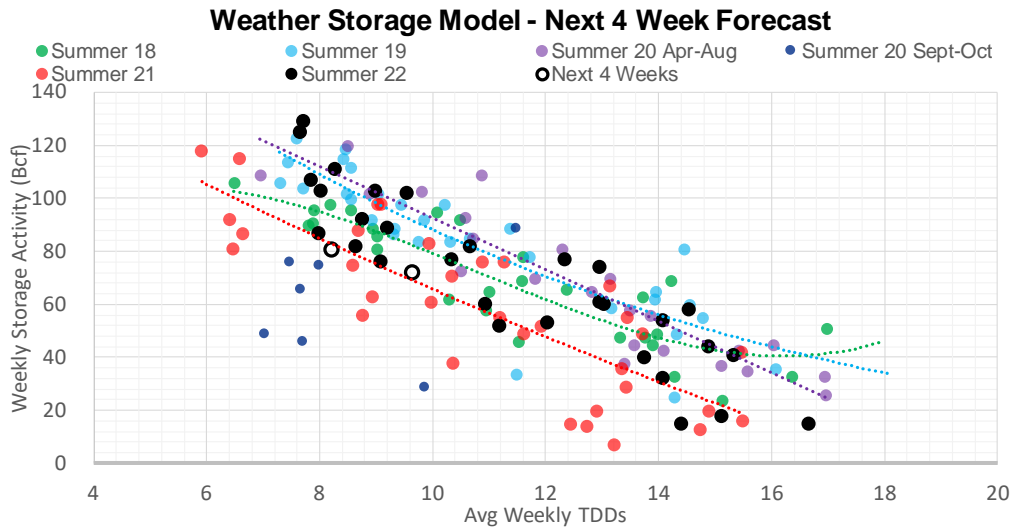
\*Adjustment Factor is calculated based on historical regional deltas

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

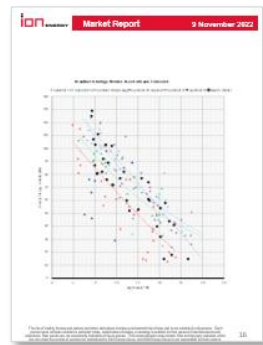


## Weather Model Storage Projection

Next report and beyond		
Week Ending	GWDDs	Week Storage Projection
04-Nov	8.2	81
11-Nov	9.7	72
18-Nov		
25-Nov		

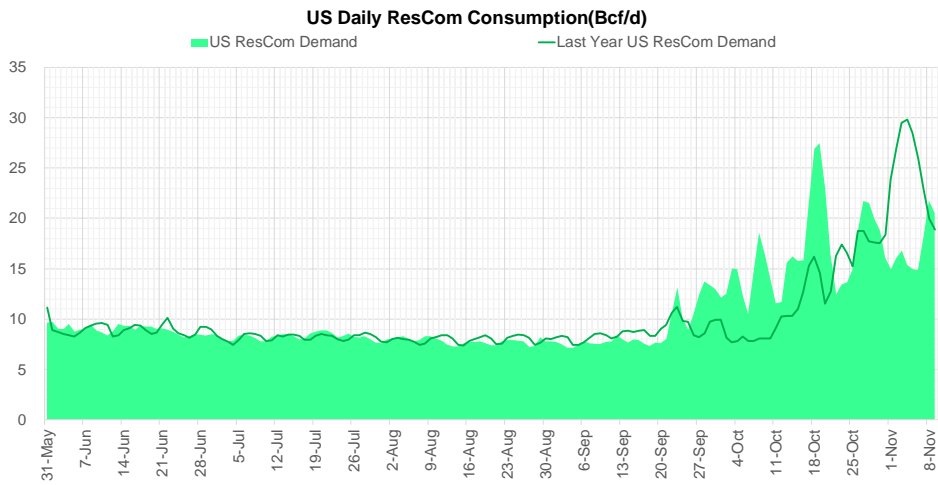
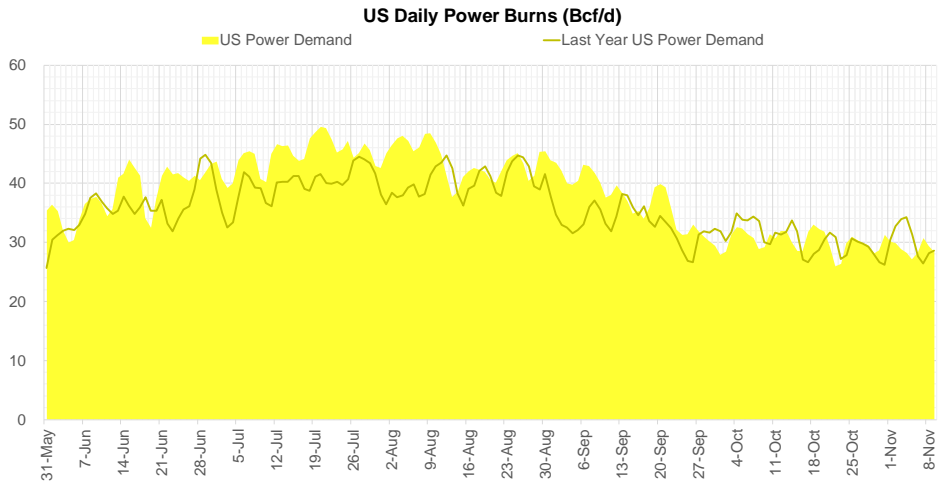
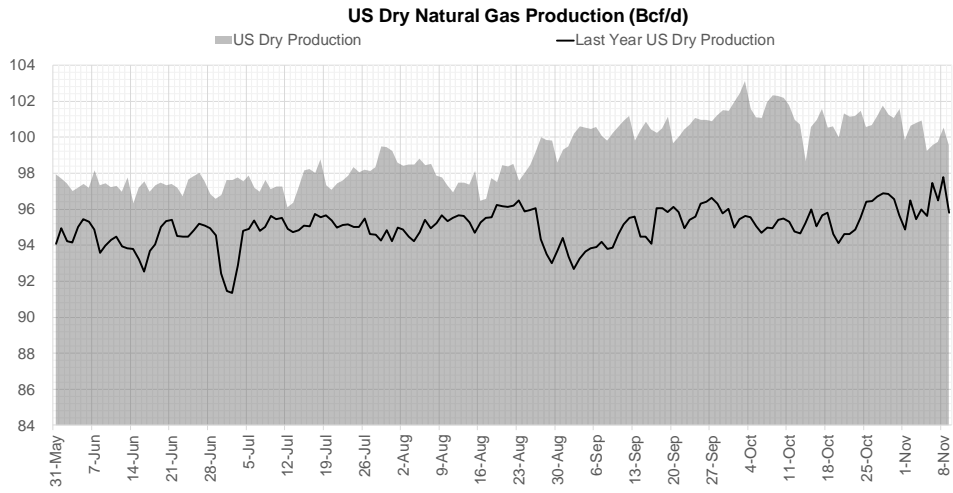


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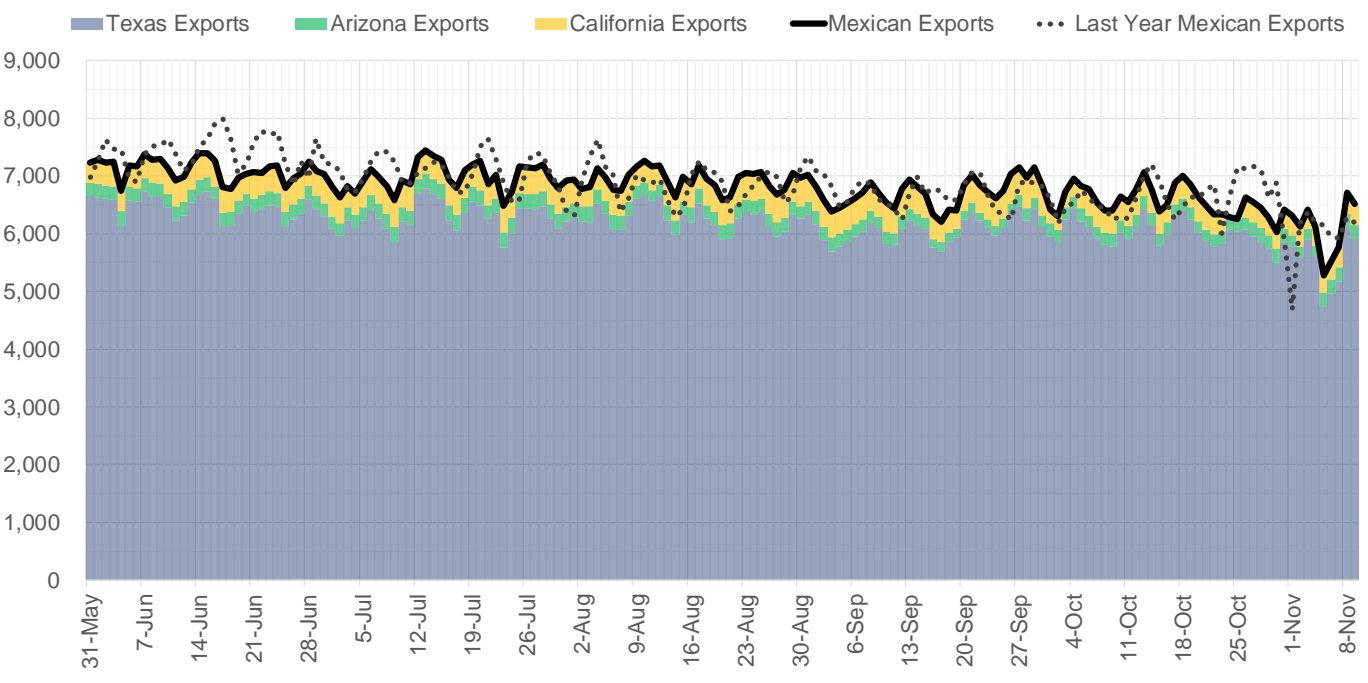
## Supply – Demand Trends



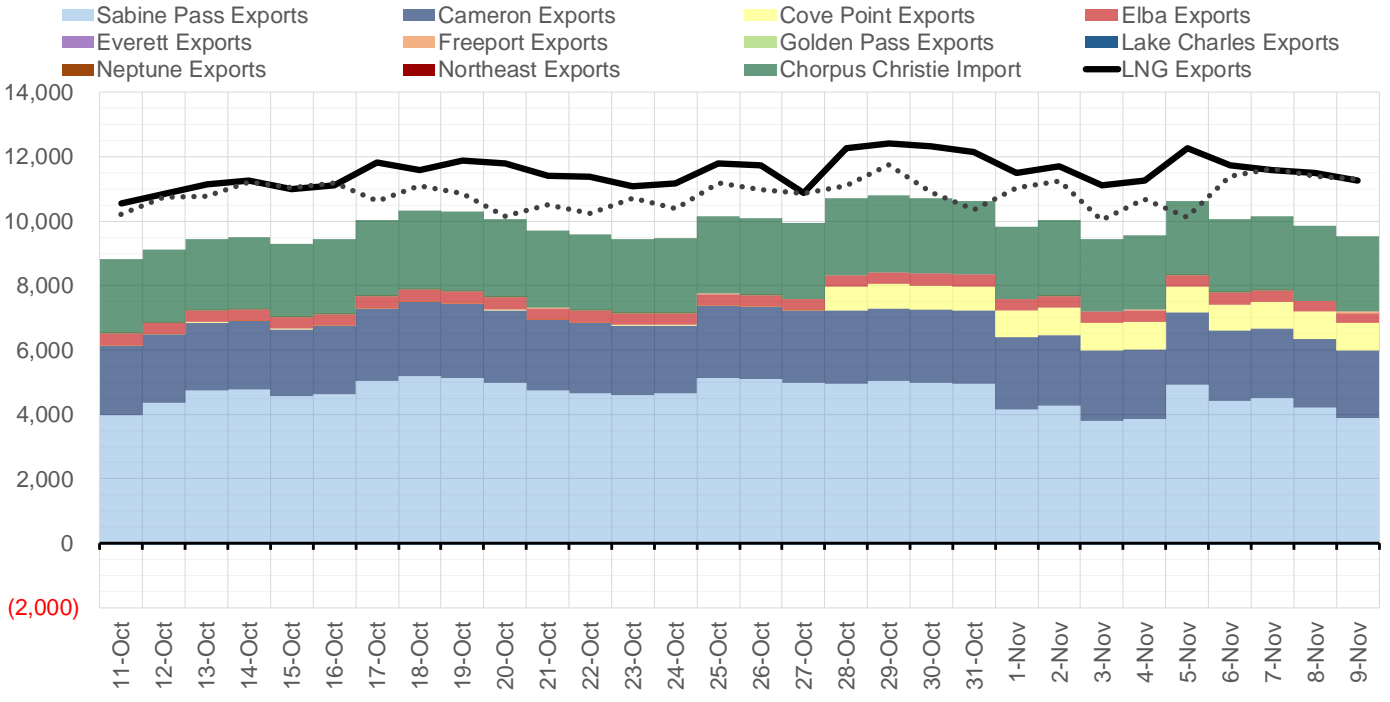
Source: Bloomberg

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## Mexican Exports (MMcf/d)



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



Source: Bloomberg

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## Nat Gas Options Volume and Open Interest CME and ICE Combined

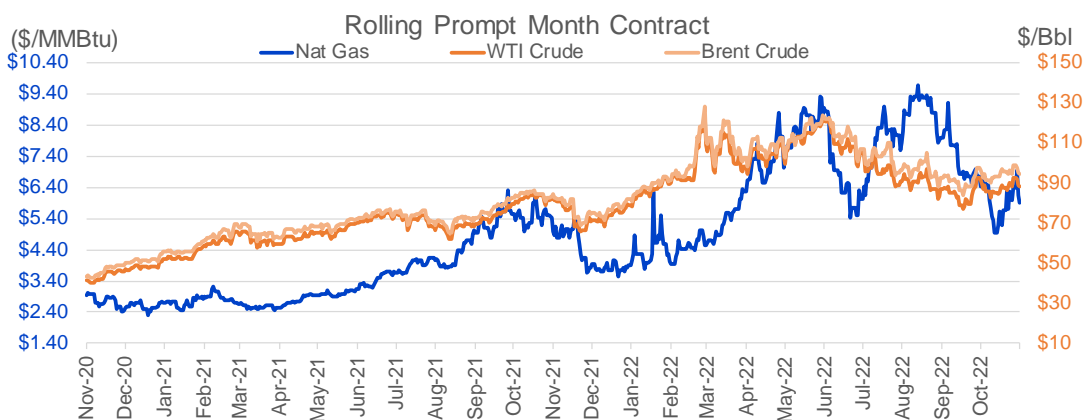
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
12	2022	P	4.50	7178	12	2022	P	4.00	56270
12	2022	C	7.00	6313	12	2022	P	5.00	38383
12	2022	P	5.00	6285	12	2022	P	4.50	31940
12	2022	C	10.00	5723	12	2022	C	10.00	31542
12	2022	C	9.00	5307	12	2022	P	6.00	30371
12	2022	P	4.00	5258	5	2023	P	2.00	30114
12	2022	C	6.50	3084	10	2023	P	3.00	26985
12	2022	P	6.00	2950	12	2022	P	3.50	26145
12	2022	C	8.00	2776	1	2023	P	5.00	24946
12	2022	C	7.50	2609	1	2023	C	10.00	24806
12	2022	P	5.50	2456	3	2023	C	10.00	23943
12	2022	C	6.75	2178	4	2023	P	3.00	23048
1	2023	P	5.00	2045	3	2023	P	4.00	22548
3	2023	C	16.00	2000	4	2023	P	2.00	22544
1	2023	P	4.50	1985	4	2023	P	3.50	21791
1	2023	P	5.50	1819	2	2023	C	10.00	21714
3	2023	C	13.50	1600	10	2023	P	2.00	21460
12	2022	P	4.75	1369	12	2022	P	3.00	20061
1	2023	C	7.00	1212	12	2022	C	8.00	19815
12	2022	C	6.00	1191	10	2023	P	2.50	19700
3	2023	P	4.00	1128	5	2023	P	3.00	19633
12	2022	P	5.25	1099	1	2023	P	3.00	19625
12	2022	P	5.75	1050	12	2022	C	6.00	19600
12	2022	P	4.25	908	12	2022	C	7.00	19530
12	2022	P	4.60	853	10	2023	P	4.00	19226
12	2022	P	5.80	850	3	2023	P	3.00	19205
10	2023	C	6.00	850	12	2022	P	5.50	18980
1	2023	P	6.00	839	6	2023	P	3.00	18940
12	2022	P	5.85	816	3	2023	C	20.00	18920
12	2022	P	6.50	814	6	2023	P	2.00	18834
11	2023	P	3.00	800	6	2023	P	3.50	18675
1	2023	C	17.00	759	4	2023	P	4.00	18605
4	2023	C	8.00	750	1	2023	P	4.00	18411
1	2023	P	6.50	705	12	2022	C	5.00	18383
2	2023	C	7.00	697	5	2023	P	3.50	18210
2	2023	P	3.00	670	8	2023	P	2.00	18127
2	2023	P	3.50	660	9	2023	P	2.00	18078
12	2022	P	5.30	611	8	2023	P	3.00	17991
3	2023	C	6.00	608	7	2023	P	3.00	17990
3	2023	P	3.50	601	7	2023	P	2.00	17927
1	2023	C	9.00	600	9	2023	P	3.00	17890
4	2023	P	3.50	600	10	2023	P	3.50	17308
5	2023	P	3.50	600	5	2023	P	4.00	17126
6	2023	P	3.50	600	9	2023	P	4.00	17106
7	2023	P	3.50	600	6	2023	P	4.00	16993
8	2023	P	3.50	600	8	2023	P	3.50	16861
9	2023	P	3.50	600	7	2023	P	3.50	16729
10	2023	P	3.50	600	9	2023	P	3.50	16719
12	2022	C	13.00	576	2	2023	C	8.00	16528
					12	2022	C	4	16195

Source: CME, ICE

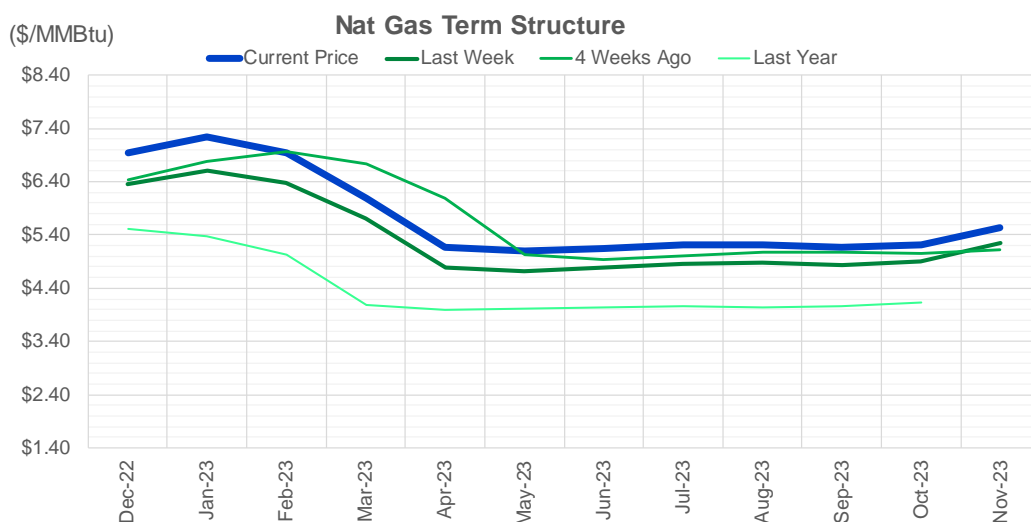
## Nat Gas Futures Open Interest CME and ICE Combined

CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MM			
	Current	Prior	Daily Change		Current	Prior	Daily Change
DEC 22	76333	81603	-5270	DEC 22	89466	88582	885
JAN 23	147090	145119	1971	JAN 23	76486	75499	987
FEB 23	61968	62024	-56	FEB 23	66884	66329	555
MAR 23	98941	99754	-813	MAR 23	61065	61360	-295
APR 23	82177	83145	-968	APR 23	57946	57958	-13
MAY 23	89182	89538	-356	MAY 23	60043	59943	100
JUN 23	24260	23837	423	JUN 23	50026	49587	439
JUL 23	32584	33473	-889	JUL 23	49789	49982	-193
AUG 23	26222	25231	991	AUG 23	47547	47533	14
SEP 23	30214	30025	189	SEP 23	45855	46073	-218
OCT 23	51317	52051	-734	OCT 23	59895	59002	893
NOV 23	21324	21447	-123	NOV 23	47720	47772	-52
DEC 23	29975	30886	-911	DEC 23	43187	43155	32
JAN 24	35487	35957	-470	JAN 24	46350	46410	-60
FEB 24	11954	12082	-128	FEB 24	30467	30648	-181
MAR 24	23741	23484	257	MAR 24	37929	37847	82
APR 24	22271	22178	93	APR 24	30847	30806	41
MAY 24	9973	10002	-29	MAY 24	30150	30035	114
JUN 24	3458	3465	-7	JUN 24	26851	26737	115
JUL 24	4854	4857	-3	JUL 24	25779	25659	120
AUG 24	4515	4527	-12	AUG 24	25195	25084	111
SEP 24	3247	3248	-1	SEP 24	25131	25015	116
OCT 24	9673	9652	21	OCT 24	29731	29679	53
NOV 24	4928	4939	-11	NOV 24	26472	26461	11
DEC 24	8812	8843	-31	DEC 24	30238	30304	-66
JAN 25	18375	18387	-12	JAN 25	24667	24602	65
FEB 25	1816	1814	2	FEB 25	15782	15759	23
MAR 25	6329	6310	19	MAR 25	17766	17731	35
APR 25	6487	6489	-2	APR 25	16572	16539	34
MAY 25	2749	2749	0	MAY 25	15712	15714	-2

Source: CME, ICE



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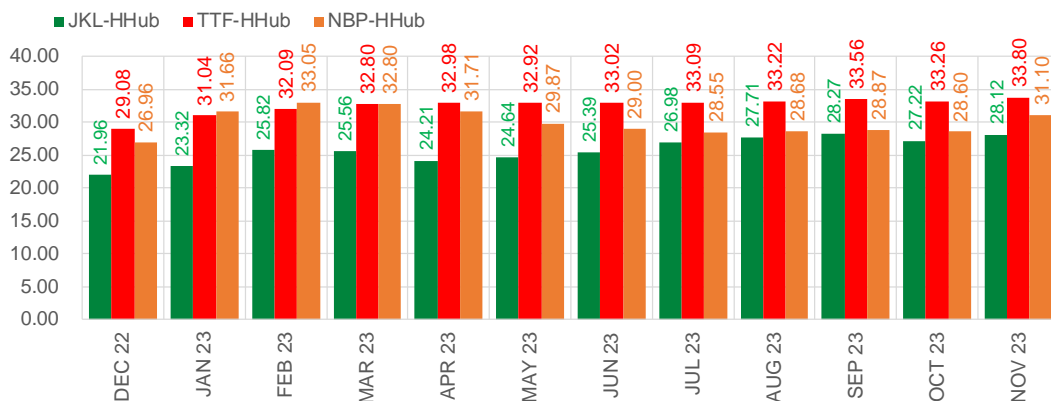
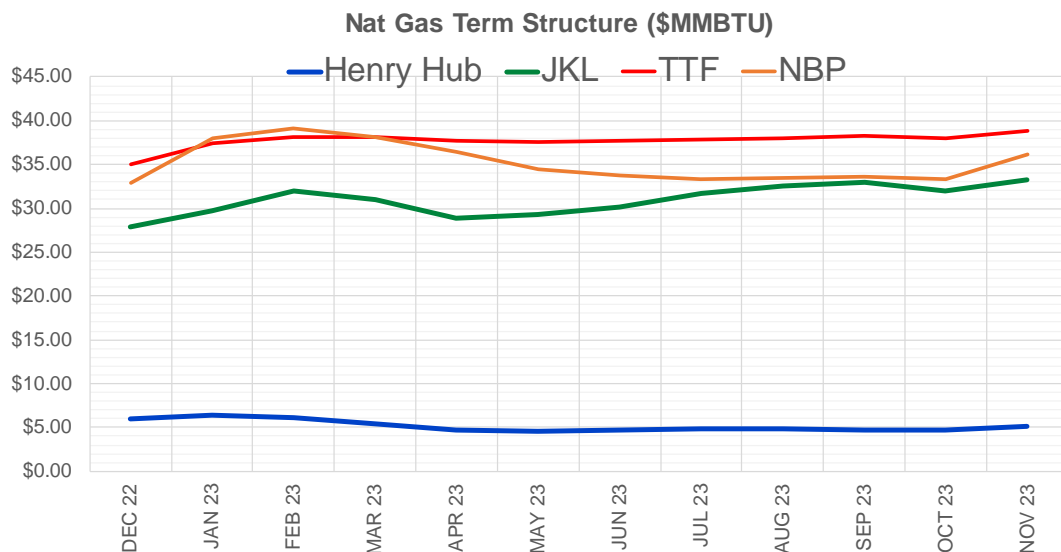


	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
<b>Current Price</b>	<b>\$6.944</b>	<b>\$7.244</b>	<b>\$6.936</b>	<b>\$6.087</b>	<b>\$5.157</b>	<b>\$5.089</b>	<b>\$5.150</b>	<b>\$5.216</b>	<b>\$5.225</b>	<b>\$5.167</b>	<b>\$5.219</b>	<b>\$5.533</b>
Last Week	\$6.355	\$6.607	\$6.379	\$5.717	\$4.793	\$4.728	\$4.795	\$4.865	\$4.883	\$4.843	\$4.907	\$5.249
vs. Last Week	\$0.589	\$0.637	\$0.557	\$0.370	\$0.364	\$0.361	\$0.355	\$0.351	\$0.342	\$0.324	\$0.312	\$0.284
4 Weeks Ago	\$6.435	\$6.784	\$6.974	\$6.743	\$6.081	\$5.022	\$4.932	\$5.005	\$5.077	\$5.083	\$5.048	\$5.120
vs. 4 Weeks Ago	\$0.509	\$0.460	-\$0.038	-\$0.656	-\$0.924	\$0.067	\$0.218	\$0.211	\$0.148	\$0.084	\$0.171	\$0.413
Last Year	\$5.427	\$5.505	\$5.367	\$5.029	\$4.081	\$3.983	\$4.010	\$4.050	\$4.055	\$4.034	\$4.061	\$4.135
vs. Last Year	\$1.517	\$1.739	\$1.569	\$1.058	\$1.076	\$1.106	\$1.140	\$1.166	\$1.170	\$1.133	\$1.158	\$1.398

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	3.43	17.01	13.58
TETCO M3	\$/MMBtu	3.05	7.69	4.64
FGT Zone 3	\$/MMBtu	3.10	6.19	3.09
Zone 6 NY	\$/MMBtu	3.10	8.54	5.44
Chicago Citygate	\$/MMBtu	3.48	5.95	2.47
Michcon	\$/MMBtu	3.82	5.41	1.59
Columbia TCO Pool	\$/MMBtu	3.08	5.05	1.97
Ventura	\$/MMBtu	3.80	6.32	2.52
Rockies/Opal	\$/MMBtu	7.41	5.94	-1.47
El Paso Permian Basin	\$/MMBtu	2.63	4.44	1.81
Socal Citygate	\$/MMBtu	9.56	7.82	-1.73
Malin	\$/MMBtu	7.75	7.00	-0.75
Houston Ship Channel	\$/MMBtu	3.69	5.46	1.77
Henry Hub Cash	\$/MMBtu	4.00	5.31	1.31
AECO Cash	C\$/GJ	3.94	4.30	0.36
Station2 Cash	C\$/GJ	2.81	8.51	5.70
Dawn Cash	C\$/GJ	3.85	5.62	1.77

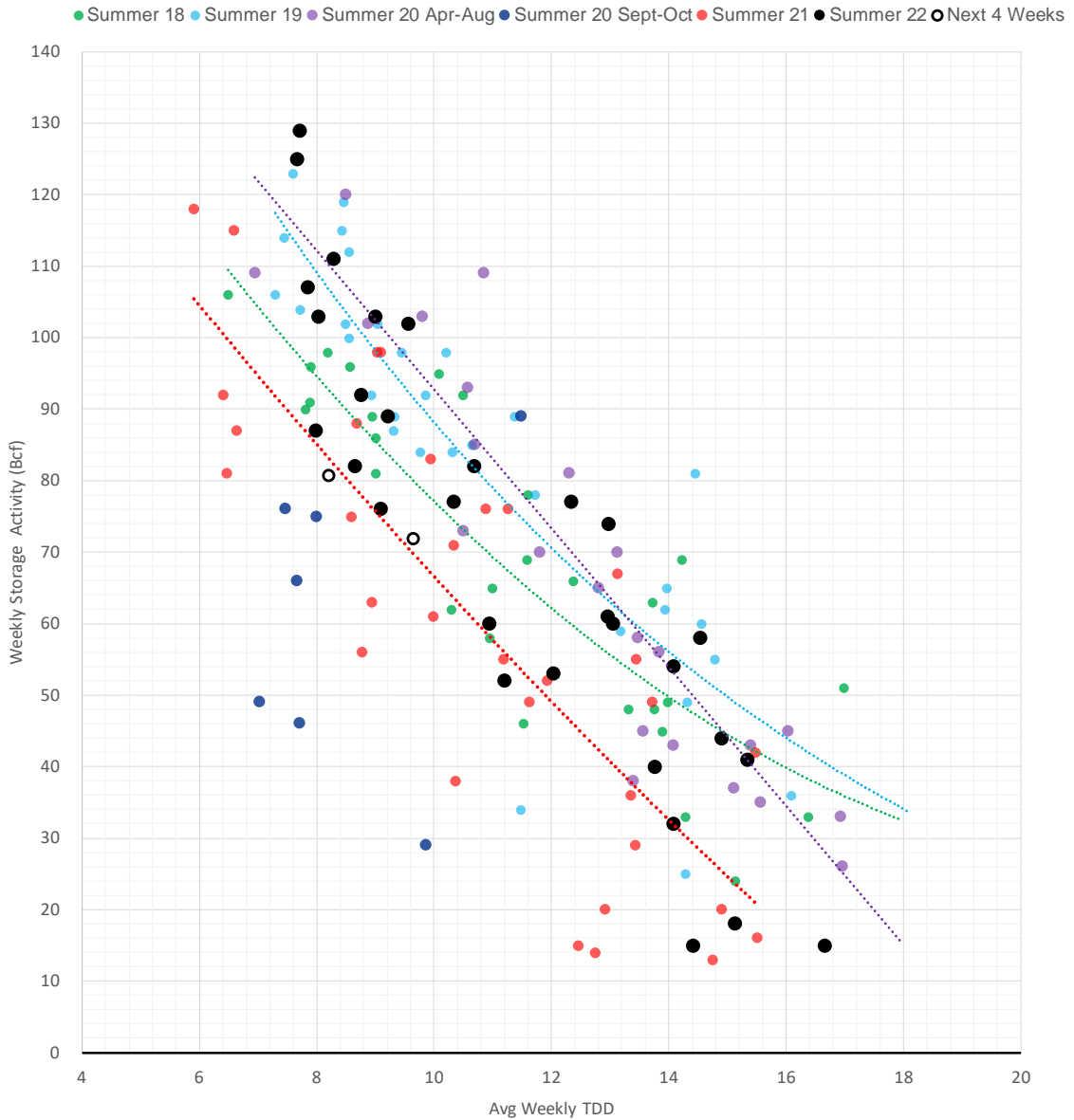
Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 0.000
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 0.000	▲ 0.000	▲ 0.000
NatGas Oct21/Jan22	\$/MMBtu	-1.817	▲ 0.000	▲ 0.000	▼ -1.046
NatGas Apr22/Oct22	\$/MMBtu	1.532	▲ 0.000	▲ 0.000	▲ 1.520
WTI Crude	\$/Bbl	88.91	▲ 0.540	▼ -0.440	▲ 4.760
Brent Crude	\$/Bbl	95.36	▲ 0.710	▲ 1.070	▲ 10.580
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	377.07	▲ 14.960	▼ -16.010	▲ 126.260
Propane, Mt. Bel	cents/Gallon	0.88	▲ 0.007	▲ 0.020	▼ -0.535
Ethane, Mt. Bel	cents/Gallon	0.40	▲ 0.017	▼ -0.023	▼ -0.013
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.000
Coal, PRB	\$/MMBtu	0.70			
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▲ 0.000
Coal, ILB	\$/MMBtu	1.32			



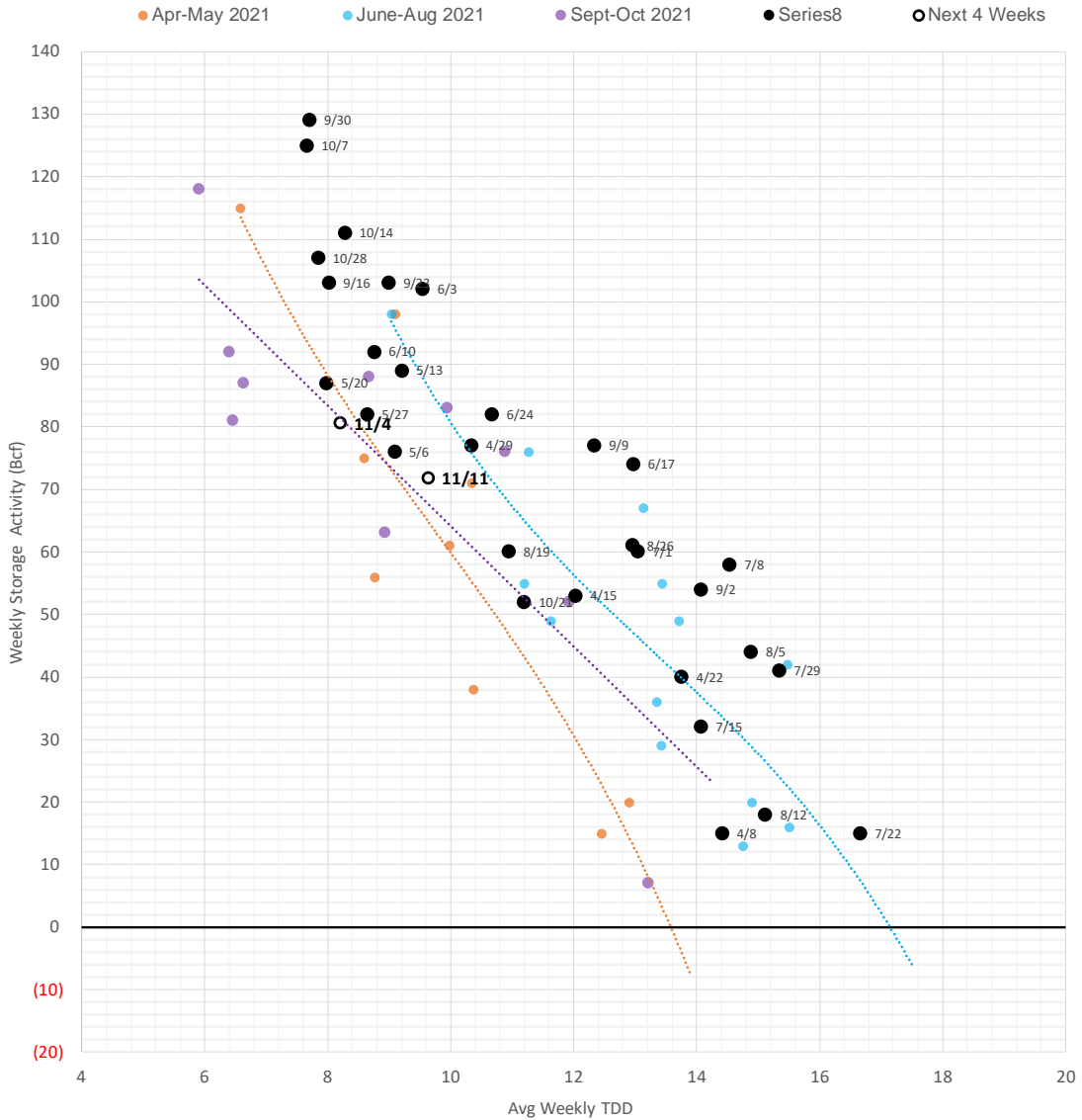
	DEC 22	JAN 23	FEB 23	MAR 23	APR 23	MAY 23	JUN 23	JUL 23	AUG 23	SEP 23	OCT 23	NOV 23
<b>Henry Hub</b>	\$5.917	\$6.350	\$6.100	\$5.371	\$4.669	\$4.609	\$4.697	\$4.777	\$4.771	\$4.723	\$4.770	\$5.094
<b>JKL</b>	\$27.880	\$29.665	\$31.920	\$30.930	\$28.875	\$29.245	\$30.090	\$31.760	\$32.485	\$32.990	\$31.990	\$33.215
<b>JKL-HHub</b>	\$21.963	\$23.315	\$25.820	\$25.559	\$24.206	\$24.636	\$25.393	\$26.983	\$27.714	\$28.267	\$27.220	\$28.121
<b>TTF</b>	\$34.997	\$37.394	\$38.187	\$38.175	\$37.652	\$37.529	\$37.718	\$37.866	\$37.992	\$38.287	\$38.034	\$38.896
<b>TTF-HHub</b>	\$29.080	\$31.044	\$32.087	\$32.804	\$32.983	\$32.920	\$33.021	\$33.089	\$33.221	\$33.564	\$33.264	\$33.802
<b>NBP</b>	\$32.879	\$38.008	\$39.145	\$38.167	\$36.377	\$34.481	\$33.699	\$33.328	\$33.446	\$33.595	\$33.367	\$36.192
<b>NBP-HHub</b>	\$26.962	\$31.658	\$33.045	\$32.796	\$31.708	\$29.872	\$29.002	\$28.551	\$28.675	\$28.872	\$28.597	\$31.098

## Weather Storage Model - Next 4 Week Forecast





### Weather Storage Model - Next 4 Week Forecast



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