

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 7.23	▲ \$ 0.45	▲ \$ 0.79

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 78.66	▼ \$ (2.29)	▼ \$ (2.5)

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 85.68	▼ \$ (2.68)	▼ \$ (3.1)

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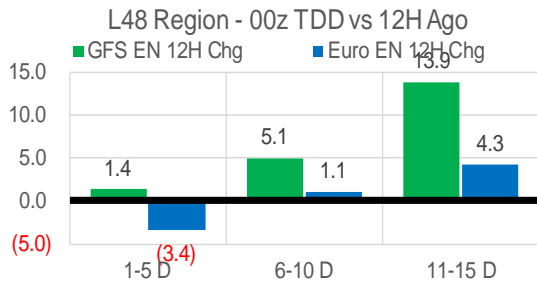
[Supply – Demand Trends](#)

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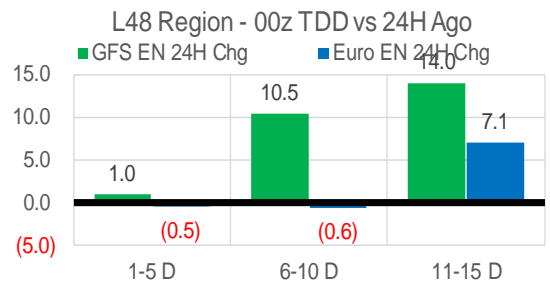
[Nat Gas Futures Open Interest](#)

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### Vs. 12H Ago



### Vs. 24H Ago



	Current	Δ from YD	Δ from 7D Avg
US Dry Production	101.9	▲ 0.35	▲ 0.98

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	28.3	▼ -2.34	▼ -3.27

	Current	Δ from YD	Δ from 7D Avg
US ResComm	30.9	▼ -4.23	▼ -10.63

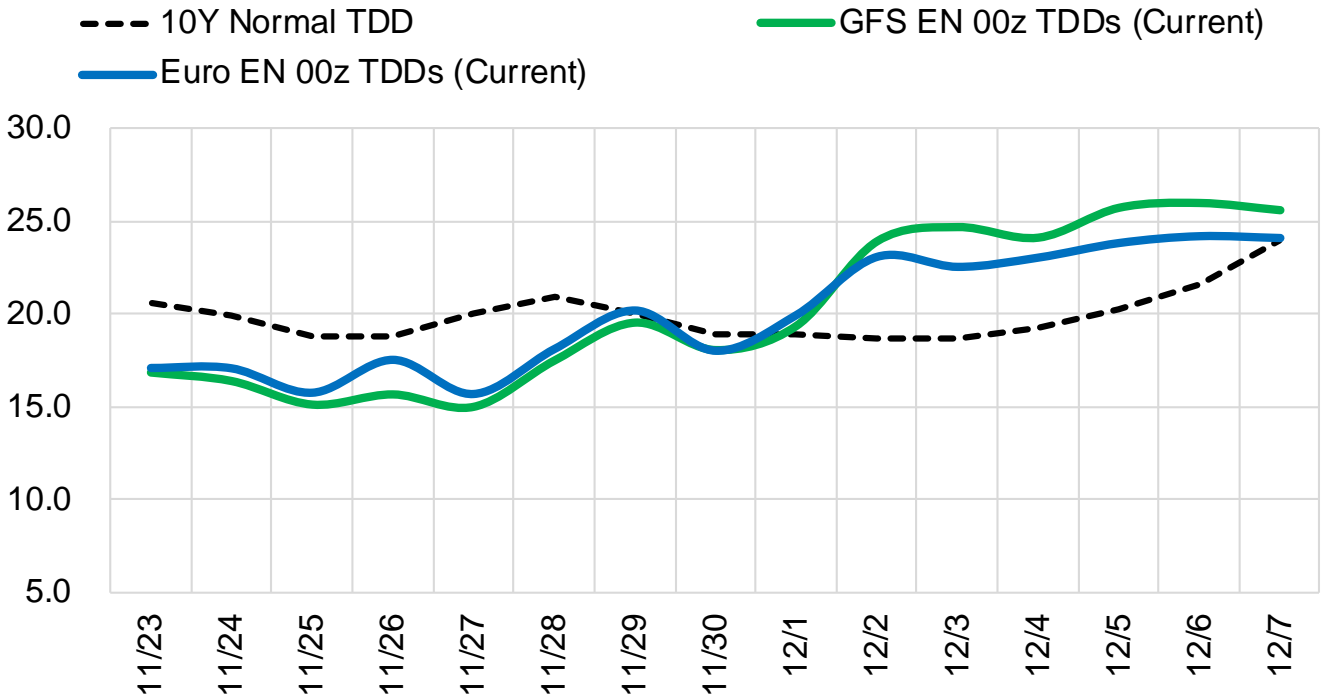
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	5.5	▼ -0.47	▼ -0.99

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	12.1	▼ -0.15	▼ -0.03

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.0	▼ -0.06	▼ -0.23

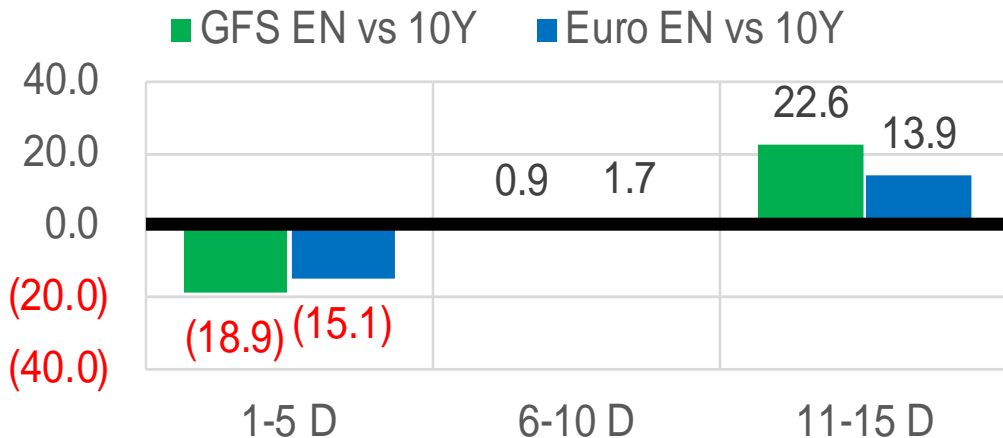
## Short-term Weather Model Outlooks (00z)

### L48 Region



### Vs. 10Y Normal

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



Source: WSI , Bloomberg

## Lower 48 Component Models

### Daily Balances

	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>100.3</b>	<b>100.7</b>	<b>101.1</b>	<b>100.9</b>	<b>101.2</b>	<b>101.5</b>	<b>101.9</b>	▲ 0.3	▲ 0.9
<b>Canadian Imports</b>	<b>7.0</b>	<b>6.7</b>	<b>6.5</b>	<b>6.5</b>	<b>6.4</b>	<b>6.0</b>	<b>5.5</b>	▼ -0.5	▼ -1.0
L48 Power	32.6	31.7	30.4	30.9	31.8	30.7	28.3	▼ -2.3	▼ -3.0
L48 Residential & Commercial	41.5	44.4	44.7	45.8	40.6	35.1	30.9	▼ -4.2	▼ -11.1
L48 Industrial	25.2	25.2	25.1	24.9	24.1	23.4	22.9	▼ -0.5	▼ -1.7
L48 Lease and Plant Fuel	5.6	5.6	5.6	5.6	5.6	5.7	5.7	▼ 0.0	▲ 0.0
L48 Pipeline Distribution	4.3	4.4	4.3	4.4	4.2	3.8	3.4	▼ -0.4	▼ -0.8
<b>L48 Regional Gas Consumption</b>	<b>109.2</b>	<b>111.3</b>	<b>110.2</b>	<b>111.6</b>	<b>106.4</b>	<b>98.7</b>	<b>91.2</b>	▼ -7.4	▼ -16.7
<b>Net LNG Delivered</b>	<b>11.77</b>	<b>12.16</b>	<b>12.38</b>	<b>12.28</b>	<b>12.20</b>	<b>12.21</b>	<b>12.06</b>	▼ -0.1	▼ -0.1
<b>Total Mexican Exports</b>	<b>6.4</b>	<b>6.3</b>	<b>6.2</b>	<b>6.0</b>	<b>6.2</b>	<b>6.1</b>	<b>6.0</b>	▼ -0.1	▼ -0.2
Implied Daily Storage Activity	-20.1	-22.3	-21.1	-22.6	-17.2	-9.4	-1.9		
EIA Reported Daily Storage Activity									
Daily Model Error									

### EIA Storage Week Balances

	LY		LW			Current	WoW	vs. LY
	19-Nov	21-Oct	28-Oct	4-Nov	11-Nov	18-Nov		
<b>Lower 48 Dry Production</b>	<b>95.7</b>	<b>100.3</b>	<b>101.0</b>	<b>101.1</b>	<b>100.4</b>	<b>101.1</b>	▲ 0.7	▲ 5.4
<b>Canadian Imports</b>	<b>4.9</b>	<b>6.1</b>	<b>5.3</b>	<b>4.9</b>	<b>4.2</b>	<b>6.6</b>	▲ 2.4	▲ 1.7
L48 Power	28.5	30.9	28.9	29.5	29.1	31.4	▲ 2.4	3.0
L48 Residential & Commercial	26.3	20.9	15.9	17.6	17.7	35.4	▲ 17.7	9.1
L48 Industrial	24.4	20.0	21.1	21.3	22.9	25.1	▲ 2.2	0.7
L48 Lease and Plant Fuel	5.3	5.6	5.6	5.6	5.6	5.6	▲ 0.0	0.3
L48 Pipeline Distribution	3.2	3.2	2.8	2.8	2.7	3.8	▲ 1.2	0.7
<b>L48 Regional Gas Consumption</b>	<b>87.7</b>	<b>80.6</b>	<b>74.4</b>	<b>77.0</b>	<b>78.0</b>	<b>101.5</b>	▲ 23.5	▲ 13.8
<b>Net LNG Exports</b>	<b>11.1</b>	<b>11.5</b>	<b>11.4</b>	<b>11.9</b>	<b>11.5</b>	<b>12.1</b>	▲ 0.6	▲ 1.0
<b>Total Mexican Exports</b>	<b>6.0</b>	<b>6.7</b>	<b>6.4</b>	<b>6.3</b>	<b>6.3</b>	<b>6.5</b>	▲ 0.2	▲ 0.5
Implied Daily Storage Activity	-4.2	7.6	14.2	10.7	8.9	-12.4	-21.2	-8.2
EIA Reported Daily Storage Activity	-3.0	7.4	15.3	11.3	9.1			
Daily Model Error	-1.2	0.2	-1.1	-0.5	-0.3			

### Monthly Balances

	2Yr Ago	LY		MTD			MoM	vs. LY	
	Nov-20	Nov-21	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22		
<b>Lower 48 Dry Production</b>	<b>91.2</b>	<b>96.4</b>	<b>97.8</b>	<b>98.2</b>	<b>100.5</b>	<b>101.2</b>	<b>100.8</b>	▼ -0.4	▲ 4.4
<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>5.5</b>	▼ -0.2	▲ 0.2
L48 Power	25.7	29.3	44.8	43.8	37.0	30.2	30.4	▲ 0.2	▲ 1.1
L48 Residential & Commercial	24.4	28.2	8.2	7.8	8.9	16.6	28.6	▲ 12.0	▲ 0.4
L48 Industrial	22.5	23.3	19.4	19.7	20.5	20.6	23.8	▲ 3.2	▲ 0.5
L48 Lease and Plant Fuel	5.0	5.4	5.5	5.5	5.5	5.7	5.6	▼ 0.0	▲ 0.2
L48 Pipeline Distribution	2.7	3.3	3.1	3.0	2.8	2.9	3.4	▲ 0.5	▲ 0.1
<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>91.8</b>	▲ 15.9	▲ 2.3
<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>11.8</b>	▲ 0.5	▲ 0.5
<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>6.3</b>	▼ -0.2	▲ 0.2
Implied Daily Storage Activity	-0.7	-5.3	4.8	5.8	13.6	13.1	-3.7		
EIA Reported Daily Storage Activity									
Daily Model Error					-0.5				

Source: Bloomberg, analytix.ai

## Daily Average Generation Data

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

	15-Nov	16-Nov	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	DoD	vs. 7D
NRC Nuclear Daily Output	82.0	81.6	82.4	82.7	82.8	83.2	84.3	1.1	1.8
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	22.9	23.3	22.5	22.1	22.1	21.7	20.6	-1.1	-1.8
NRC % Nuclear Cap Utilization	83.4	83.0	83.8	84.1	84.2	84.6	85.7	1.2	1.9

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

	15-Nov	16-Nov	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	DoD	vs. 7D
CALI Wind	1495	1489	646	1148	1486	479	339	-141	-785
TEXAS Wind	8006	4332	9096	11935	7609	6589	7365	776	-562
US Wind	24487	26976	38525	39505	35674	35381	29435	-5947	-3990

### Generation Daily Average - MWh (EIA)

	15-Nov	16-Nov	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	DoD	vs. 7D
US Wind	24487	26976	38525	39505	35674	35381	29435	-5947	-3990
US Solar	9258	10513	11984	10278	9779	8913	10355	1442	234
US Petroleum	1162	1344	914	827	612	576	403	-172	-503
US Other	8488	7944	7969	8675	8035	8466	8947	481	684
US Coal	69631	70038	71152	74457	72901	73913	78518	4605	6503
US Nuke	75160	75344	76300	77021	76823	77681	78314	633	1925
US Hydro	26737	25732	26863	26860	24626	23918	26847	2929	1058
<b>US Gas</b>	<b>168574</b>	<b>164358</b>	<b>157878</b>	<b>157369</b>	<b>153763</b>	<b>152315</b>	<b>164428</b>	<b>12113</b>	<b>5385</b>

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

## Storage Week Average Generation Data

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

	19-Nov	21-Oct	28-Oct	4-Nov	11-Nov	18-Nov	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	83.9	74.4	74.1	75.8	77.2	81.2	4.0	-0.8
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	21.0	30.5	30.7	29.1	27.7	23.7	-4.0	
NRC % Nuclear Cap Utilization	85.3	75.6	75.4	77.1	78.5	82.6	4.1	

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

	19-Nov	21-Oct	28-Oct	4-Nov	11-Nov	18-Nov	WoW	WoW Bcf/d Impact
CALI Wind	860	944	1974	1641	2226	1221	-1005	0.2
TEXAS Wind	13655	9710	17228	10904	12095	11139	-956	0.2
US Wind	58369	45195	64748	44699	57824	37916	-19908	3.7
							-34%	
							-0.1	

### Generation Weekly Average - MWh (EIA)

	19-Nov	21-Oct	28-Oct	4-Nov	11-Nov	18-Nov	WoW	WoW Bcf/d Impact
					LY	Current		
US Wind	58369	45195	64748	44699	57824	37916	-19908	3.7
US Solar	10070	14347	13756	11428	10350	10720	370	-0.1
US Petroleum	878	1054	933	990	1023	1067	44	0.0
US Other	7853	11285	9085	10014	9819	8633	-1186	0.2
US Coal	77745	79517	69841	75083	60488	66061	5572	-1.0
US Nuke	88370	76583	77718	79723	77693	76194	-1498	0.3
US Hydro	26231	19318	19097	21591	22692	25194	2502	-0.5
<b>US Gas</b>	<b>146998</b>	<b>162313</b>	<b>148302</b>	<b>157761</b>	<b>146993</b>	<b>152575</b>	<b>5582</b>	<b>1.0</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	79.2	78.7	90.5	86.2	76.1	79.9			
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	25.6	26.1	14.3	18.7	28.8	24.9	26.0	-3.9	-0.1	
NRC % Nuclear Cap Utilization	80.6	80.1	92.1	87.7	77.4	81.3	80.2	3.9	0.1	

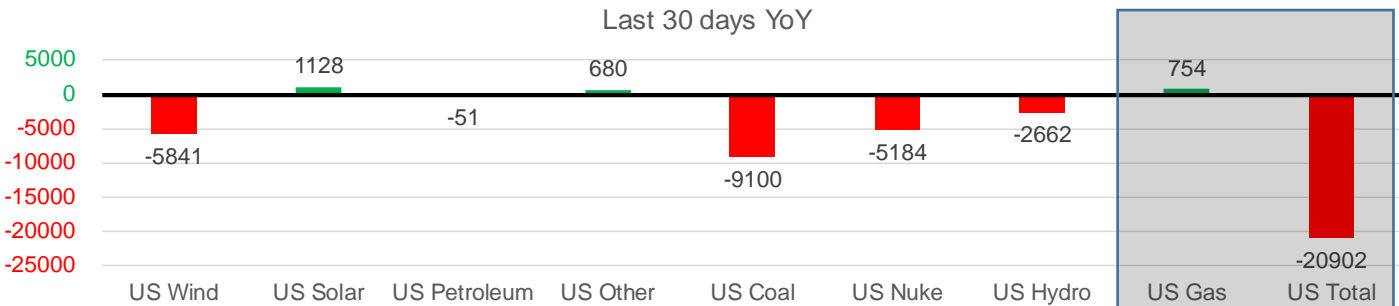
### Wind Generation Monthly Average - MWh (EIA)

	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	1234	1500	2028	1608	1239	1632			
TEXAS Wind	9735	12553	8440	7993	9916	11233	10875	1317	-1678	
US Wind	43316	50602	33222	38270	43698	46408	44761	2710	-5841	

### 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	43316	50602	33222	38270	43698	46408			
US Solar	7200	9828	16962	16163	14198	10423	10955	▲531.8	▲1128	
US Petroleum	901	973	1251	864	899	906	922	▲15	▼-51	
US Other	8951	8576	10597	10512	10517	9223	9256	▲33	▲680	
US Coal	87361	78854	117203	92002	75808	67246	69754	▲2508	▼-9100	
US Nuke	83123	83080	92976	89062	78132	77518	77896	▲378	▼-5184	
US Hydro	29314	26094	30192	25203	19926	24441	23432	▼-1009	▼-2662	
<b>US Gas</b>	<b>140957</b>	<b>153477</b>	<b>233739</b>	<b>200120</b>	<b>162343</b>	<b>153029</b>	<b>154231</b>	<b>▲810</b>	<b>▲754</b>	
<b>US Total</b>	<b>400100</b>	<b>411839</b>	<b>535696</b>	<b>470764</b>	<b>405842</b>	<b>388947</b>	<b>390937</b>	<b>▲3266</b>	<b>▼-20902</b>	

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

### Regional S/D Models Storage Projection

Week Ending 18-Nov

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-11.5	-0.7	-12.2	-85
East	-4.7	2.2	-2.5	-18
Midwest	-3.0	0.2	-2.9	-20
Mountain	2.9	-4.1	-1.2	-9
South Central	-5.3	1.2	-4.0	-28
Pacific	-1.3	-0.2	-1.5	-10

\*Adjustment Factor is calculated based on historical regional deltas

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

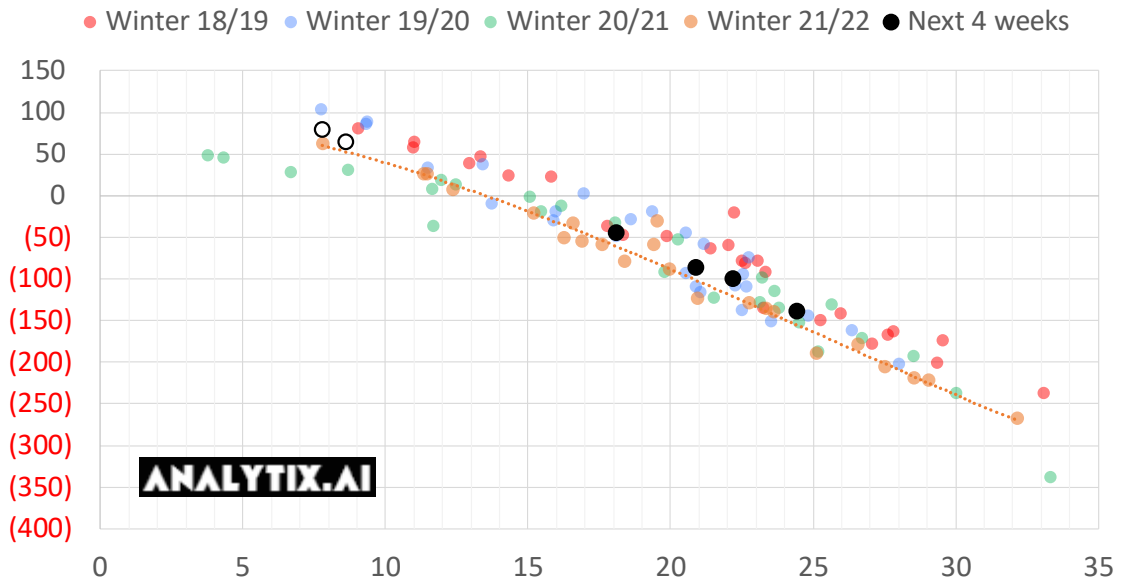


### Weather Model Storage Projection

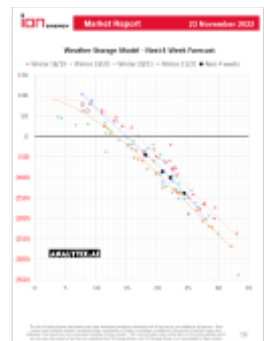
Next report  
and beyond

Week Ending	GWDDs	Week Storage Projection
18-Nov	20.9	-85
25-Nov	22.2	-99
02-Dec	18.1	-44
09-Dec	24.4	-138

### Weather Storage Model - Next 4 Week Forecast

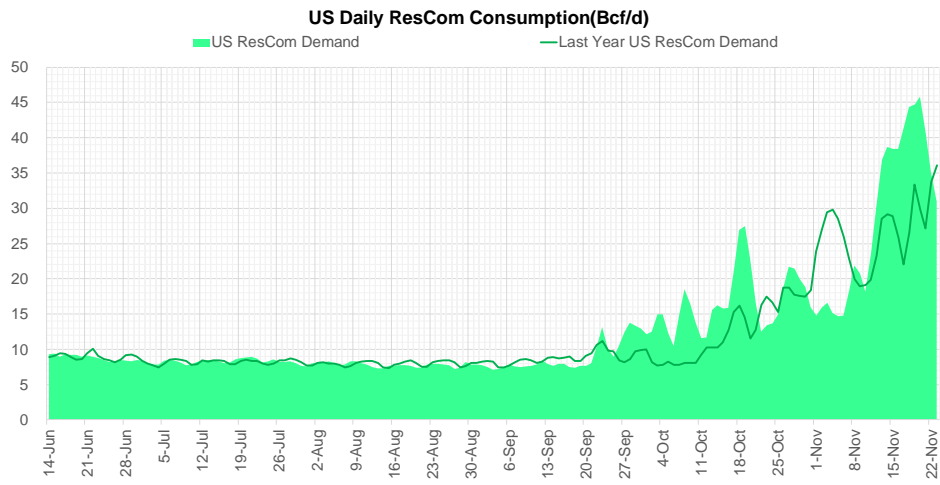
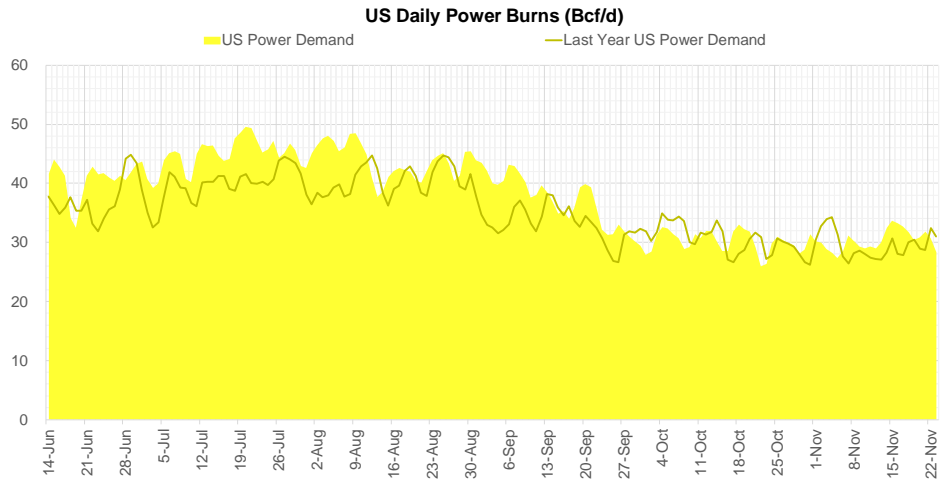
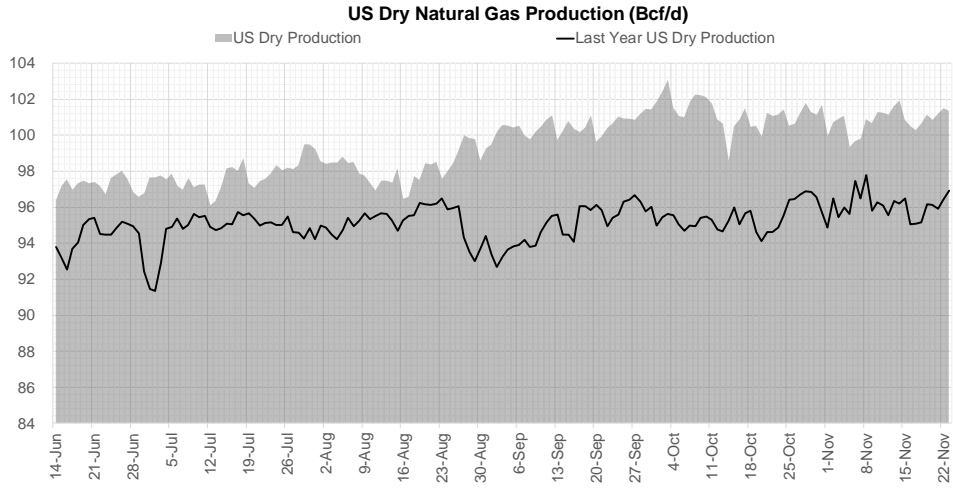


Go to larger image





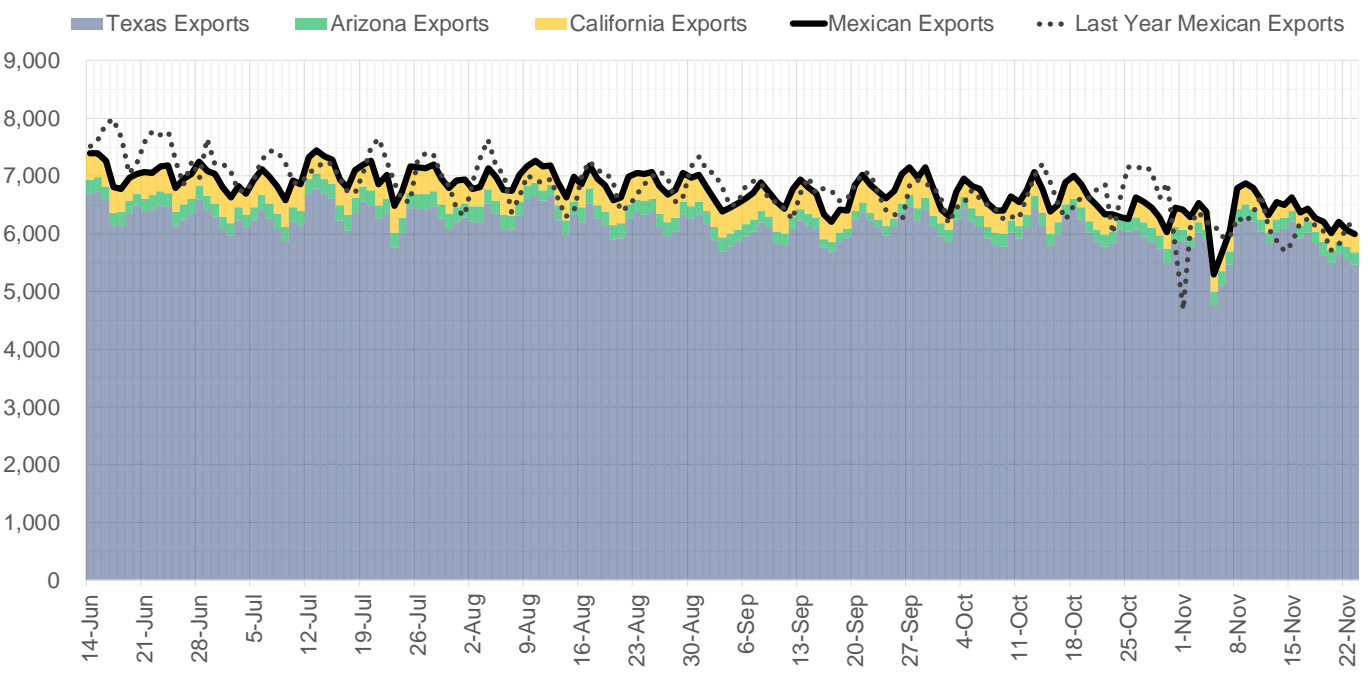
## Supply – Demand Trends



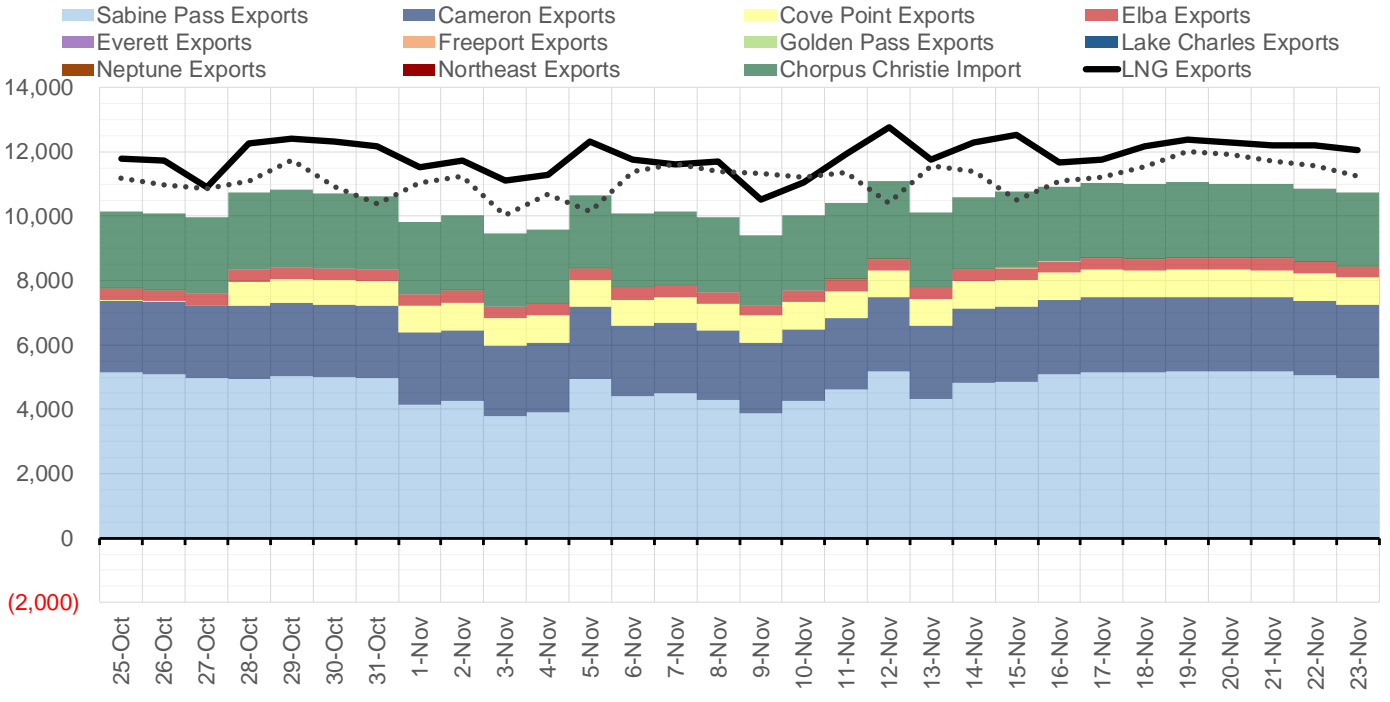
Source: Bloomberg

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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

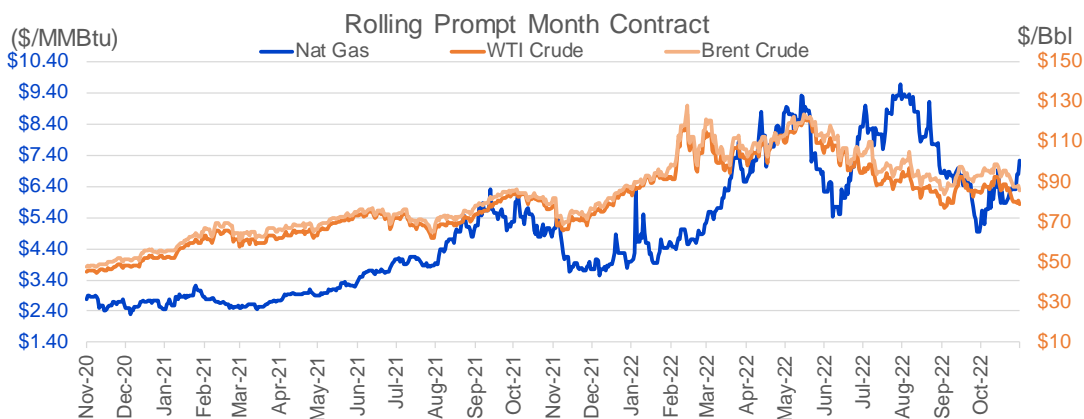
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
2	2023	C	12.00	7250	12	2022	P	4.00	49614
3	2023	P	4.00	5503	12	2022	P	5.00	43687
12	2022	C	8.00	5262	12	2022	P	6.00	32774
12	2022	P	6.00	5141	10	2023	P	3.00	31455
12	2022	C	7.00	5098	5	2023	P	2.00	31139
2	2023	C	9.00	4925	12	2022	C	10.00	30830
2	2023	C	15.00	4608	12	2022	P	4.50	30584
12	2022	P	6.50	4200	4	2023	P	3.00	28268
1	2023	C	10.00	3949	12	2022	P	3.50	28224
3	2023	P	5.00	3750	3	2023	P	4.00	28111
12	2022	C	9.00	3243	3	2023	C	10.00	27786
12	2022	C	7.50	2646	1	2023	C	10.00	26939
1	2023	P	5.00	2130	1	2023	P	5.00	26727
3	2023	P	3.00	1912	12	2022	P	4.75	26310
1	2023	C	12.00	1616	5	2023	P	3.00	23978
3	2023	C	8.00	1579	12	2022	C	8.00	23883
2	2023	P	3.50	1488	4	2023	P	2.00	23717
1	2023	P	4.50	1477	10	2023	P	2.50	23630
1	2023	C	15.00	1440	10	2023	P	2.00	23538
12	2022	C	8.75	1308	3	2023	P	3.00	23253
1	2023	C	7.50	1280	12	2022	C	6.00	23230
1	2023	C	8.00	1243	6	2023	P	3.00	23200
5	2023	P	2.50	1200	5	2023	C	6.00	23174
2	2023	P	5.00	1186	7	2023	P	3.00	22135
12	2022	C	7.10	1165	8	2023	P	3.00	21796
12	2022	P	6.25	1154	9	2023	P	3.00	21745
12	2022	P	5.50	1141	4	2023	P	3.50	21731
2	2023	C	8.00	1105	2	2023	C	12.00	21189
9	2023	C	5.00	1100	1	2023	P	4.00	20782
10	2023	C	6.00	1025	2	2023	C	10.00	20365
3	2023	P	3.50	1001	12	2022	P	3.00	20309
4	2023	C	5.00	1000	12	2022	C	7.00	20110
5	2023	C	7.00	1000	10	2023	P	4.00	19984
5	2023	C	7.50	1000	6	2023	P	2.00	19979
3	2023	C	10.00	923	8	2023	P	2.00	19975
12	2022	P	5.75	918	9	2023	P	2.00	19813
2	2023	C	10.00	863	7	2023	P	2.00	19775
1	2023	C	8.50	817	5	2023	P	2.50	19601
3	2023	C	15.00	801	3	2023	C	20.00	19357
12	2022	C	7.25	790	4	2023	P	4.00	19103
12	2022	C	7.75	777	12	2022	P	5.50	19023
3	2023	C	12.00	750	4	2023	P	2.75	18780
6	2023	C	5.00	750	2	2023	C	9.00	18546
3	2023	P	2.75	740	6	2023	P	2.50	18501
12	2022	P	5.95	605	6	2023	P	3.50	18435
1	2023	P	7.00	579	4	2023	P	2.50	18303
3	2023	P	5.50	569	12	2022	C	5.00	18112
6	2023	P	3.00	555	9	2023	P	2.50	18095
4	2023	P	3.00	550	5	2023	P	4.00	18014
					5	2023	P	3.5	17970

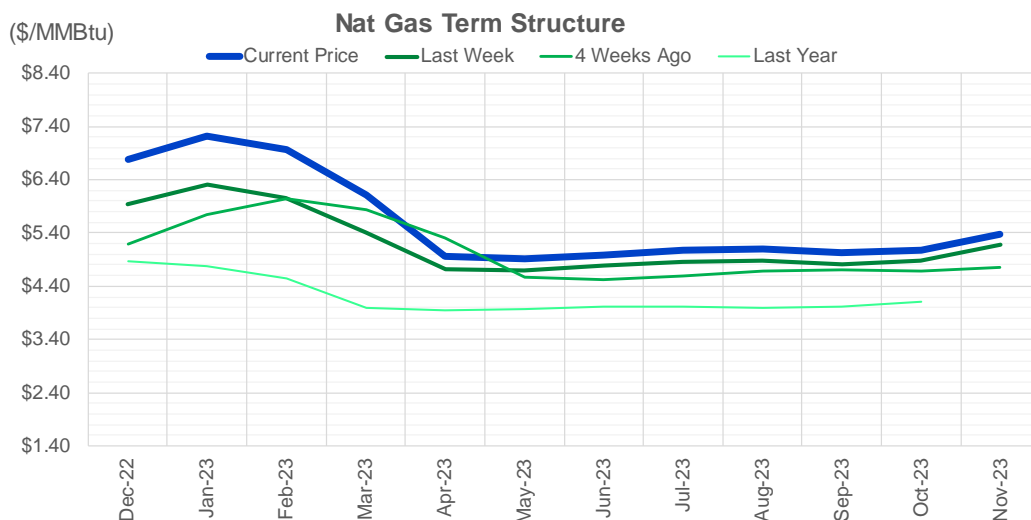
Source: CME, ICE

## 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	16240	24794	-8554	DEC 22	77503	81572	-4069
JAN 23	167353	170337	-2984	JAN 23	80752	76492	4260
FEB 23	65543	64676	867	FEB 23	67695	68090	-395
MAR 23	112251	109437	2814	MAR 23	65539	64685	854
APR 23	98949	97545	1404	APR 23	59926	59922	4
MAY 23	89845	90534	-689	MAY 23	61541	61047	495
JUN 23	28045	27598	447	JUN 23	51258	51060	198
JUL 23	30759	31054	-295	JUL 23	51933	51880	53
AUG 23	27893	27681	212	AUG 23	50161	49722	439
SEP 23	34131	34055	76	SEP 23	48675	48224	451
OCT 23	47334	47165	169	OCT 23	63781	63277	504
NOV 23	19742	19789	-47	NOV 23	48802	49350	-547
DEC 23	29562	28564	998	DEC 23	45282	44521	761
JAN 24	34574	33668	906	JAN 24	47415	47555	-140
FEB 24	12121	12033	88	FEB 24	31534	31488	46
MAR 24	24758	24487	271	MAR 24	39521	39392	128
APR 24	23592	23301	291	APR 24	32937	32867	70
MAY 24	10283	10045	238	MAY 24	31883	31638	245
JUN 24	3594	3584	10	JUN 24	28066	27939	128
JUL 24	4870	4911	-41	JUL 24	27260	26975	285
AUG 24	4483	4608	-125	AUG 24	26412	26118	295
SEP 24	3668	3416	252	SEP 24	26198	25928	270
OCT 24	9948	9867	81	OCT 24	30911	30691	220
NOV 24	4899	4908	-9	NOV 24	27141	26971	170
DEC 24	8751	8753	-2	DEC 24	31254	31097	157
JAN 25	18573	18574	-1	JAN 25	26075	26001	75
FEB 25	1847	1846	1	FEB 25	15989	15897	92
MAR 25	6293	6144	149	MAR 25	17834	17512	322
APR 25	6777	6754	23	APR 25	16862	16475	387
MAY 25	2764	2764	0	MAY 25	15751	15715	37

Source: CME, ICE



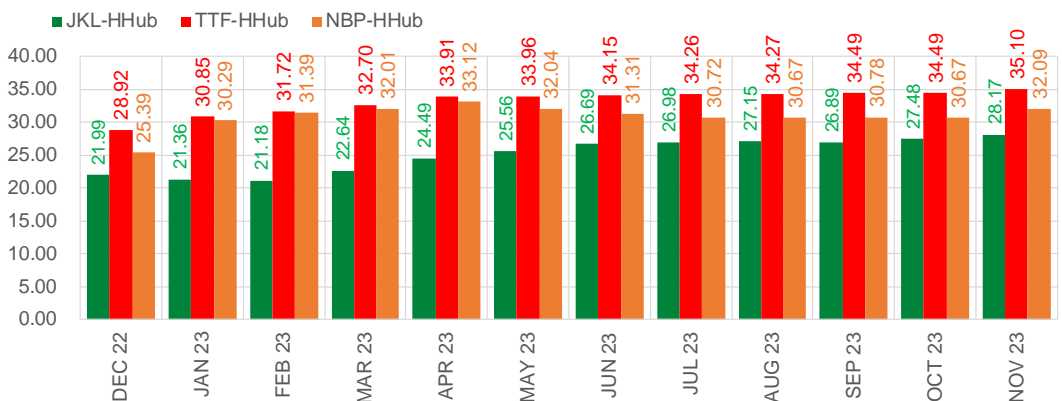
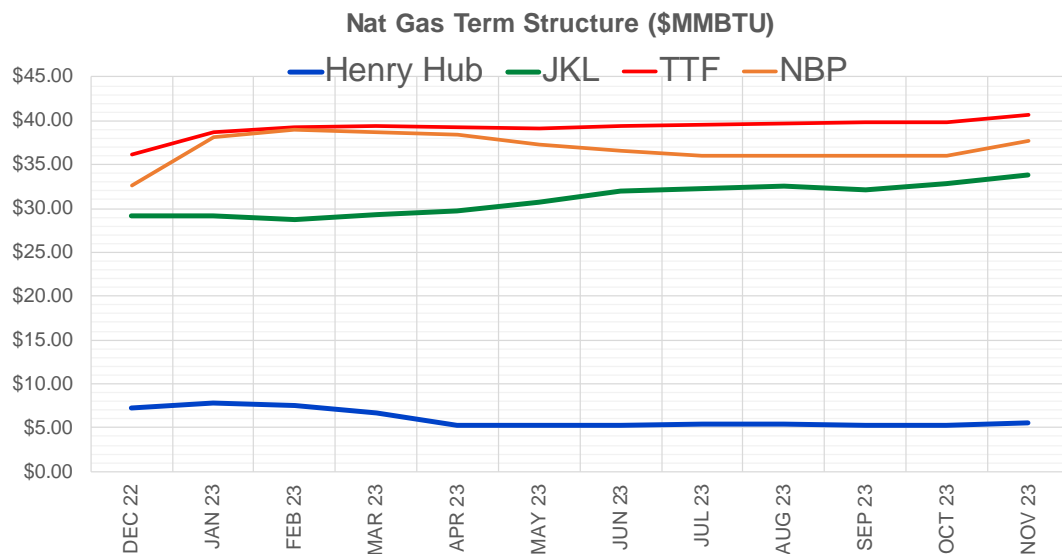


	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
<b>Current Price</b>	<b>\$6.776</b>	<b>\$7.223</b>	<b>\$6.962</b>	<b>\$6.111</b>	<b>\$4.966</b>	<b>\$4.917</b>	<b>\$4.995</b>	<b>\$5.077</b>	<b>\$5.089</b>	<b>\$5.032</b>	<b>\$5.076</b>	<b>\$5.369</b>
Last Week	\$5.933	\$6.299	\$6.050	\$5.410	\$4.726	\$4.706	\$4.784	\$4.868	\$4.877	\$4.817	\$4.870	\$5.175
vs. Last Week	\$0.843	\$0.924	\$0.912	\$0.701	\$0.240	\$0.211	\$0.211	\$0.209	\$0.212	\$0.215	\$0.206	\$0.194
4 Weeks Ago	\$5.199	\$5.753	\$6.034	\$5.847	\$5.312	\$4.576	\$4.527	\$4.602	\$4.685	\$4.706	\$4.673	\$4.749
vs. 4 Weeks Ago	\$1.577	\$1.470	\$0.928	\$0.264	-\$0.346	\$0.341	\$0.468	\$0.475	\$0.404	\$0.326	\$0.403	\$0.620
Last Year	\$4.789	\$4.861	\$4.769	\$4.555	\$3.998	\$3.940	\$3.970	\$4.013	\$4.017	\$3.996	\$4.022	\$4.102
vs. Last Year	\$1.987	\$2.362	\$2.193	\$1.556	\$0.968	\$0.977	\$1.025	\$1.064	\$1.072	\$1.036	\$1.054	\$1.267

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	8.40	17.01	8.61
TETCO M3	\$/MMBtu	5.85	7.65	1.80
FGT Zone 3	\$/MMBtu	7.00	6.60	-0.40
Zone 6 NY	\$/MMBtu	7.00	8.19	1.19
Chicago Citygate	\$/MMBtu	5.82	6.38	0.56
Michcon	\$/MMBtu	5.92	5.75	-0.17
Columbia TCO Pool	\$/MMBtu	5.71	5.44	-0.27
Ventura	\$/MMBtu	5.79	7.11	1.32
Rockies/Opal	\$/MMBtu	8.77	6.39	-2.38
El Paso Permian Basin	\$/MMBtu	5.05	4.86	-0.19
Socal Citygate	\$/MMBtu	9.52	8.28	-1.24
Malin	\$/MMBtu	10.30	7.70	-2.60
Houston Ship Channel	\$/MMBtu	5.40	5.34	-0.06
Henry Hub Cash	\$/MMBtu	6.18	5.54	-0.64
AECO Cash	C\$/GJ	5.02	4.60	-0.42
Station2 Cash	C\$/GJ	1.95	8.85	6.90
Dawn Cash	C\$/GJ	6.33	5.94	-0.39

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	▼ -1.011
NatGas Apr22/Oct22	\$/MMBtu	1.532	▲ 0.000	▲ 0.000	▲ 1.516
WTI Crude	\$/Bbl	80.95	▼ -5.970	▼ -4.370	▲ 2.450
Brent Crude	\$/Bbl	88.36	▼ -5.500	▼ -5.160	▲ 6.050
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	347.13	▼ -17.000	▼ -49.590	▲ 108.700
Propane, Mt. Bel	cents/Gallon	0.86	▼ -0.019	▲ 0.007	▼ -0.413
Ethane, Mt. Bel	cents/Gallon	0.40	▼ 0.000	▼ -0.003	▼ 0.000
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>	\$7.225	\$7.841	\$7.598	\$6.682	\$5.298	\$5.210	\$5.278	\$5.347	\$5.355	\$5.288	\$5.334	\$5.590
<b>JKL</b>	\$29.215	\$29.205	\$28.780	\$29.325	\$29.790	\$30.770	\$31.970	\$32.325	\$32.500	\$32.180	\$32.815	\$33.755
<b>JKL-HHHub</b>	\$21.990	\$21.364	\$21.182	\$22.643	\$24.492	\$25.560	\$26.692	\$26.978	\$27.145	\$26.892	\$27.481	\$28.165
<b>TTF</b>	\$36.144	\$38.693	\$39.322	\$39.383	\$39.204	\$39.167	\$39.424	\$39.604	\$39.623	\$39.773	\$39.822	\$40.689
<b>TTF-HHHub</b>	\$28.919	\$30.852	\$31.724	\$32.701	\$33.906	\$33.957	\$34.146	\$34.257	\$34.268	\$34.485	\$34.488	\$35.099
<b>NBP</b>	\$32.614	\$38.127	\$38.989	\$38.688	\$38.414	\$37.245	\$36.586	\$36.064	\$36.026	\$36.072	\$36.005	\$37.683
<b>NBP-HHHub</b>	\$25.389	\$30.286	\$31.391	\$32.006	\$33.116	\$32.035	\$31.308	\$30.717	\$30.671	\$30.784	\$30.671	\$32.093

### Weather Storage Model - Next 4 Week Forecast

● Winter 18/19 ● Winter 19/20 ● Winter 20/21 ● Winter 21/22 ● Next 4 weeks

