

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 6.04 ▲	\$ 0.11 ▲	\$ 0.07

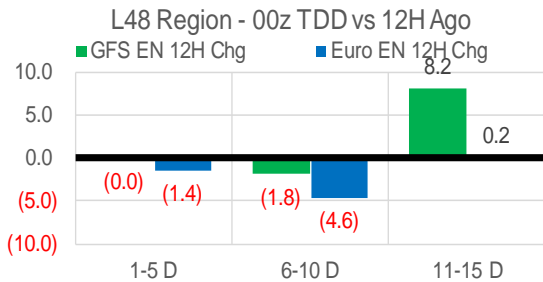
	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 85.39 ▼	\$ (0.48) ▼	\$ (2.3)

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 92.78 ▼	\$ (0.36) ▼	\$ (1.9)

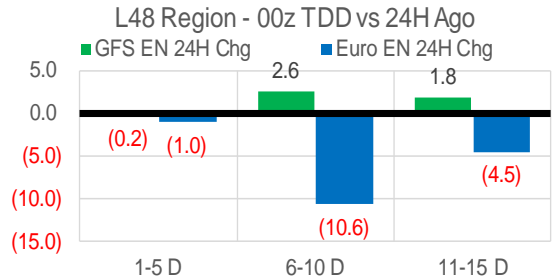
## Page Menu

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## Vs. 12H Ago



## Vs. 24H Ago



	Current	Δ from YD	Δ from 7D Avg
US Dry Production	99.4 ▼	-2.27 ▼	-1.61

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	32.2 ▲	0.31 ▲	2.47

	Current	Δ from YD	Δ from 7D Avg
US ResComm	36.1 ▼	-1.87 ▼	9.01 ▲

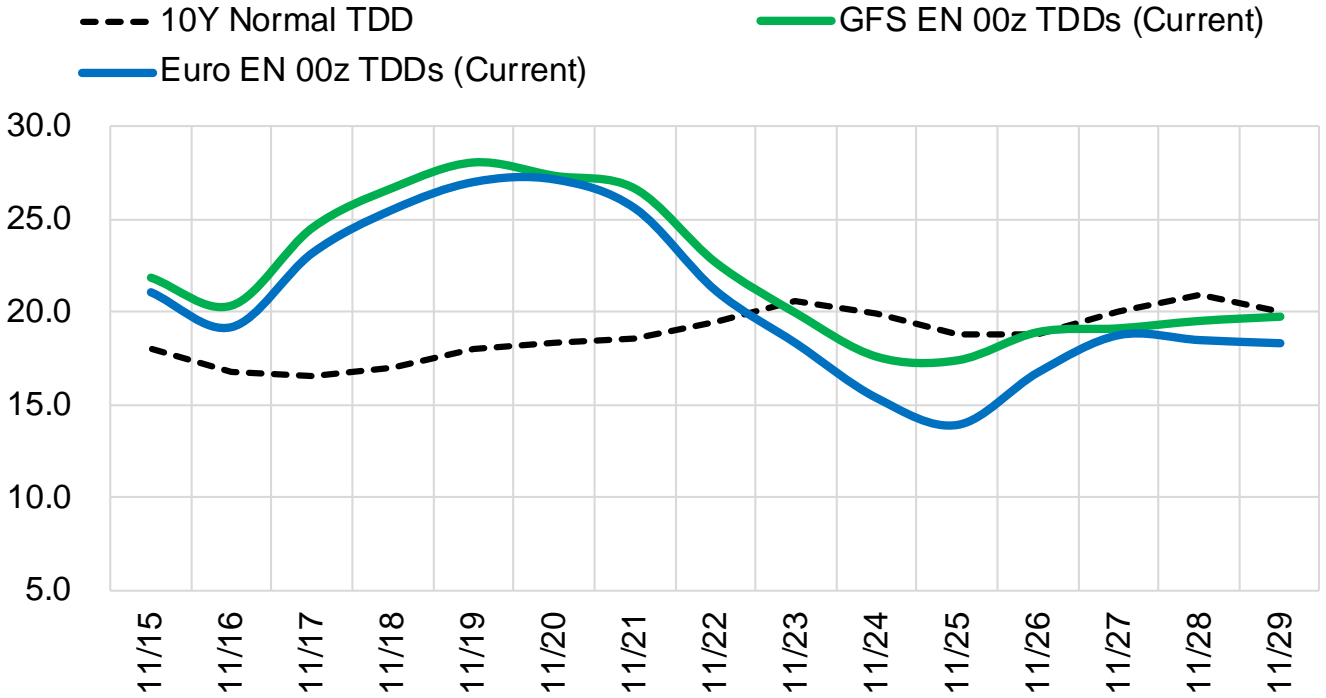
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	6.8 ▲	0.04 ▲	1.38 ▲

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	12.1 ▼	-0.07 ▼	0.42 ▲

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.7 ▲	0.23 ▲	0.17 ▲

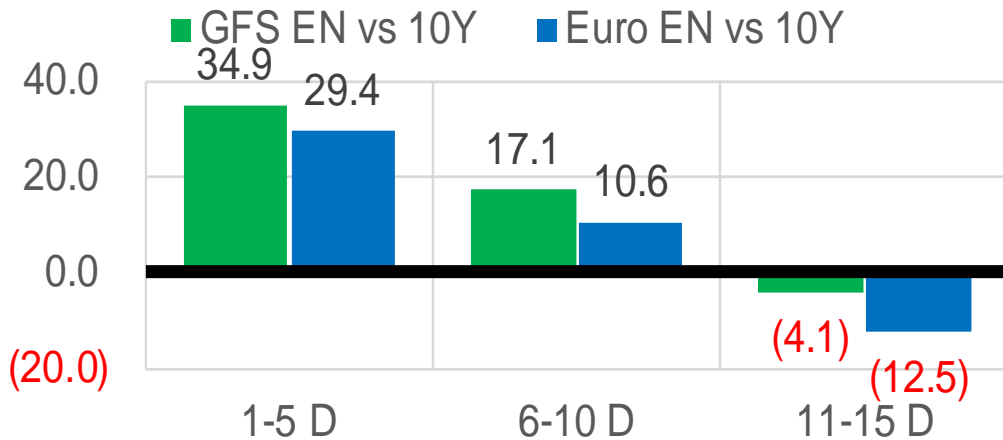
## Short-term Weather Model Outlooks (00z)

### L48 Region



### Vs. 10Y Normal

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



Source: WSI, Bloomberg

## Lower 48 Component Models

### Daily Balances

	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>100.5</b>	<b>101.0</b>	<b>101.0</b>	<b>101.0</b>	<b>101.5</b>	<b>101.7</b>	<b>99.4</b>	▼ -2.3	▼ -1.7
<b>Canadian Imports</b>	<b>4.1</b>	<b>4.5</b>	<b>6.2</b>	<b>6.1</b>	<b>6.5</b>	<b>6.8</b>	<b>6.8</b>	▲ 0.0	▲ 1.1
L48 Power	29.2	28.9	29.3	28.9	29.9	31.9	32.2	▲ 0.3	▲ 2.5
L48 Residential & Commercial	20.9	18.3	23.8	30.2	36.4	38.0	36.1	▼ -1.9	▲ 8.2
L48 Industrial	22.1	21.3	21.5	21.4	21.2	21.0	20.9	▼ -0.1	▼ -0.5
L48 Lease and Plant Fuel	5.6	5.6	5.6	5.6	5.7	5.7	5.5	▼ -0.2	▼ -0.1
L48 Pipeline Distribution	2.9	2.7	3.1	3.4	3.8	4.0	3.9	▼ -0.1	▲ 0.6
<b>L48 Regional Gas Consumption</b>	<b>80.7</b>	<b>76.8</b>	<b>83.3</b>	<b>89.5</b>	<b>97.0</b>	<b>100.5</b>	<b>98.7</b>	▼ -1.9	▲ 10.7
<b>Net LNG Delivered</b>	<b>10.50</b>	<b>11.04</b>	<b>11.88</b>	<b>12.76</b>	<b>11.77</b>	<b>12.18</b>	<b>12.11</b>	▼ -0.1	▲ 0.4
<b>Total Mexican Exports</b>	<b>6.7</b>	<b>6.7</b>	<b>6.5</b>	<b>6.3</b>	<b>6.2</b>	<b>6.4</b>	<b>6.7</b>	▲ 0.2	▲ 0.2
Implied Daily Storage Activity	6.6	11.0	5.5	-1.4	-7.1	-10.7	-11.2		
EIA Reported Daily Storage Activity									
Daily Model Error									

### EIA Storage Week Balances

	LY 12-Nov	14-Oct	21-Oct	28-Oct	LW 4-Nov	Current 11-Nov	WoW	vs. LY
<b>Lower 48 Dry Production</b>	<b>96.5</b>	<b>101.7</b>	<b>100.4</b>	<b>101.1</b>	<b>101.0</b>	<b>100.3</b>	▼ -0.7	▲ 3.8
<b>Canadian Imports</b>	<b>5.1</b>	<b>5.5</b>	<b>6.1</b>	<b>5.3</b>	<b>4.9</b>	<b>4.2</b>	▼ -0.8	▼ -0.9
L48 Power	28.2	30.7	30.9	28.9	29.5	29.0	▼ -0.5	0.8
L48 Residential & Commercial	22.2	14.7	20.9	15.9	17.7	17.8	▲ 0.1	-4.4
L48 Industrial	22.4	20.3	20.0	21.1	21.2	22.3	▲ 1.1	0.0
L48 Lease and Plant Fuel	5.4	5.7	5.6	5.6	5.6	5.6	▼ 0.0	0.2
L48 Pipeline Distribution	2.9	2.8	3.2	2.8	2.8	2.7	▼ -0.1	-0.2
<b>L48 Regional Gas Consumption</b>	<b>81.0</b>	<b>74.1</b>	<b>80.6</b>	<b>74.4</b>	<b>76.9</b>	<b>77.5</b>	▲ 0.6	▼ -3.5
<b>Net LNG Exports</b>	<b>11.2</b>	<b>11.0</b>	<b>11.5</b>	<b>11.4</b>	<b>11.9</b>	<b>11.4</b>	▼ -0.5	▲ 0.2
<b>Total Mexican Exports</b>	<b>6.2</b>	<b>6.6</b>	<b>6.7</b>	<b>6.4</b>	<b>6.3</b>	<b>6.2</b>	▼ -0.1	▼ 0.0
Implied Daily Storage Activity	3.2	15.6	7.7	14.2	10.8	9.3	-1.6	6.1
EIA Reported Daily Storage Activity	3.7	15.9	7.4	15.3	11.3			
Daily Model Error	-0.6	-0.3	0.2	-1.0	-0.4			

### 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>100.6</b>	▼ -0.7	▲ 4.2
<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>4.8</b>	▼ -0.9	▼ -0.5
L48 Power	25.7	29.3	44.8	43.8	37.0	30.2	29.5	▼ -0.7	▲ 0.1
L48 Residential & Commercial	24.4	28.2	8.2	7.8	8.9	16.6	21.5	▲ 4.9	▼ -6.7
L48 Industrial	22.5	23.3	19.4	19.7	20.5	20.6	21.8	▲ 1.2	▼ -1.5
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	2.9	▲ 0.0	▼ -0.4
<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>81.2</b>	▲ 5.3	▼ -8.3
<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>11.6</b>	▲ 0.3	▲ 0.3
<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>	▼ -0.3	▲ 0.2
Implied Daily Storage Activity	-0.7	-5.3	4.8	5.8	13.6	13.2	6.2		
EIA Reported Daily Storage Activity									
Daily Model Error					-0.5				

Source: Bloomberg, analytix.ai

## Daily Average Generation Data

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

	7-Nov	8-Nov	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov	DoD	vs. 7D
NRC Nuclear Daily Output	76.6	77.2	78.2	79.2	79.2	79.2	79.2	0.0	0.9
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	28.3	27.7	26.7	25.7	25.7	25.7	25.7	0.0	-0.9
NRC % Nuclear Cap Utilization	77.9	78.5	79.5	80.5	80.5	80.5	80.5	0.0	0.9

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

	7-Nov	8-Nov	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov	DoD	vs. 7D
CALI Wind	2511	2837	2792	691	689	1518	2069	551	229
TEXAS Wind	8692	8841	8841	12321	17077	8082	17043	8961	6401
US Wind	54238	59162	37047	68086	68805	26070	46456	20385	-5779

### Generation Daily Average - MWh (EIA)

	7-Nov	8-Nov	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov	DoD	vs. 7D
US Wind	54238	59162	37047	68086	68805	26070	46456	20385	-5779
US Solar	10061	9907	7643	10593	8632	11264	10654	-611	970
US Petroleum	1065	1035	1068	983	983	950	938	-11	-76
US Other	10645	9812	8382	10084	9980	8431	8061	-370	-1495
US Coal	69274	67364	43775	65473	68554	59239	56254	-2985	-6026
US Nuke	80517	81337	68591	82886	83117	73377	74597	1221	-3707
US Hydro	24329	24609	23031	24481	25672	21928	22413	486	-1595
<b>US Gas</b>	<b>173533</b>	<b>168550</b>	<b>117577</b>	<b>151708</b>	<b>153695</b>	<b>136187</b>	<b>128078</b>	<b>-8109</b>	<b>-22130</b>

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

## Storage Week Average Generation Data

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

	12-Nov	14-Oct	21-Oct	28-Oct	4-Nov	11-Nov	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	79.8	76.2	74.4	74.1	75.8	77.2	1.4	-0.3
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	25.1	28.7	30.5	30.7	29.1	27.7	-1.4	
NRC % Nuclear Cap Utilization	81.1	77.5	75.6	75.4	77.1	78.5	1.4	

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

	12-Nov	14-Oct	21-Oct	28-Oct	4-Nov	11-Nov	WoW	WoW Bcf/d Impact
CALI Wind	1805	1087	944	1974	1641	2226	585	-0.1
TEXAS Wind	12032	7842	9710	17228	10904	12095	1192	-0.2
US Wind	50985	41063	45195	64747	44699	58205	13506	-2.5
							30%	
						0.1		

### Generation Weekly Average - MWh (EIA)

	12-Nov	14-Oct	21-Oct	28-Oct	4-Nov	11-Nov	WoW	WoW Bcf/d Impact
					LY	Current		
US Wind	50985	41063	45195	64747	44699	58205	13506	-2.5
US Solar	10016	14503	14347	13756	11428	10152	-1276	0.2
US Petroleum	1025	842	1054	933	990	1004	14	0.0
US Other	8202	11273	11285	9085	10014	9650	-364	0.1
US Coal	77960	76322	79517	69841	75078	60370	-14708	2.8
US Nuke	84321	77235	76583	77718	79723	77521	-2202	0.4
US Hydro	26027	20001	19318	19097	21591	22651	1060	-0.2
<b>US Gas</b>	<b>146676</b>	<b>170286</b>	<b>162314</b>	<b>148302</b>	<b>157761</b>	<b>146452</b>	<b>-11309</b>	<b>-2.1</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						
	Same 30 days	Same 30 days	Aug-22	Sep-22	Oct-22	Nov-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	NRC Nuclear Daily Output	76.8	75.4	90.5	86.2	76.1	77.9	76.2	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	28.1	29.5	14.3	18.7	28.8	27.0	28.6	-1.8	-0.8
NRC % Nuclear Cap Utilization	78.1	76.7	92.1	87.7	77.4	79.2	77.5	1.9	0.9

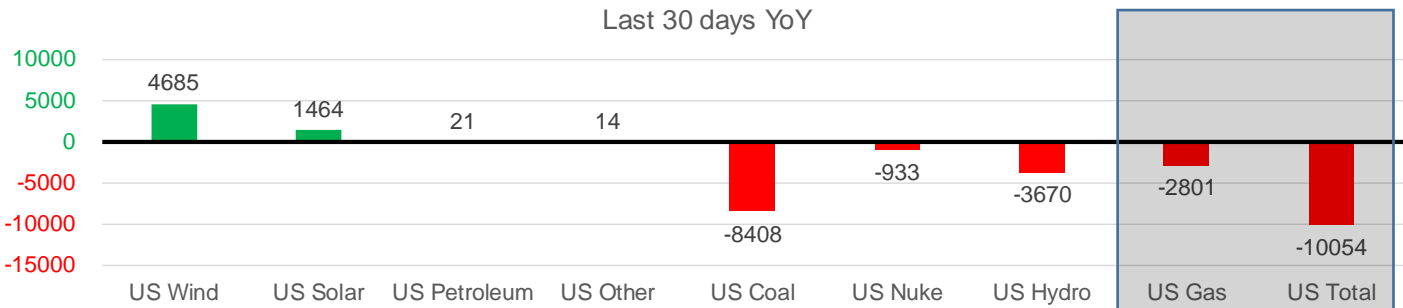
### Wind Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	Aug-22	Sep-22	Oct-22	Nov-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	CALI Wind	1269	1668	2028	1608	1239	2218	1700	979
TEXAS Wind	10055	11666	8440	7993	9916	13896	12943	3980	1277
US Wind	42283	47609	33222	38270	43698	56001	52295	12303	4685

### Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	Aug-22	Sep-22	Oct-22	Nov-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	US Wind	42283	47609	33222	38270	43698	56001	52295	▼-3706.2
US Solar	7402	10452	16962	16163	14158	10343	11916	▲ 1573.6	▲ 1464
US Petroleum	853	970	1251	864	899	984	990	▲ 6	▲ 21
US Other	8908	9544	10597	10512	10500	9406	9558	▲ 152	▲ 14
US Coal	87615	77333	117203	92002	75808	61541	68925	▲ 7384	▼-8408
US Nuke	80373	78743	92976	89062	78133	77479	77810	▲ 332	▼-933
US Hydro	27628	24975	30192	25203	19926	22959	21305	▼-1654	▼-3670
<b>US Gas</b>	<b>145129</b>	<b>153512</b>	<b>233739</b>	<b>200120</b>	<b>162323</b>	<b>144349</b>	<b>150711</b>	<b>▲ 4087</b>	<b>▼-2801</b>
<b>US Total</b>	<b>398983</b>	<b>403363</b>	<b>535696</b>	<b>470764</b>	<b>405765</b>	<b>382903</b>	<b>393309</b>	<b>▲ 11880</b>	<b>▼-10054</b>

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

## Regional S/D Models Storage Projection

Week Ending 11-Nov

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	10.2	-0.6	9.7	68
East	0.3	2.5	2.8	20
Midwest	2.5	0.4	2.9	21
Mountain	4.1	-4.2	0.0	0
South Central	4.0	0.8	4.8	34
Pacific	-0.6	-0.2	-0.8	-6

\*Adjustment Factor is calculated based on historical regional deltas

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

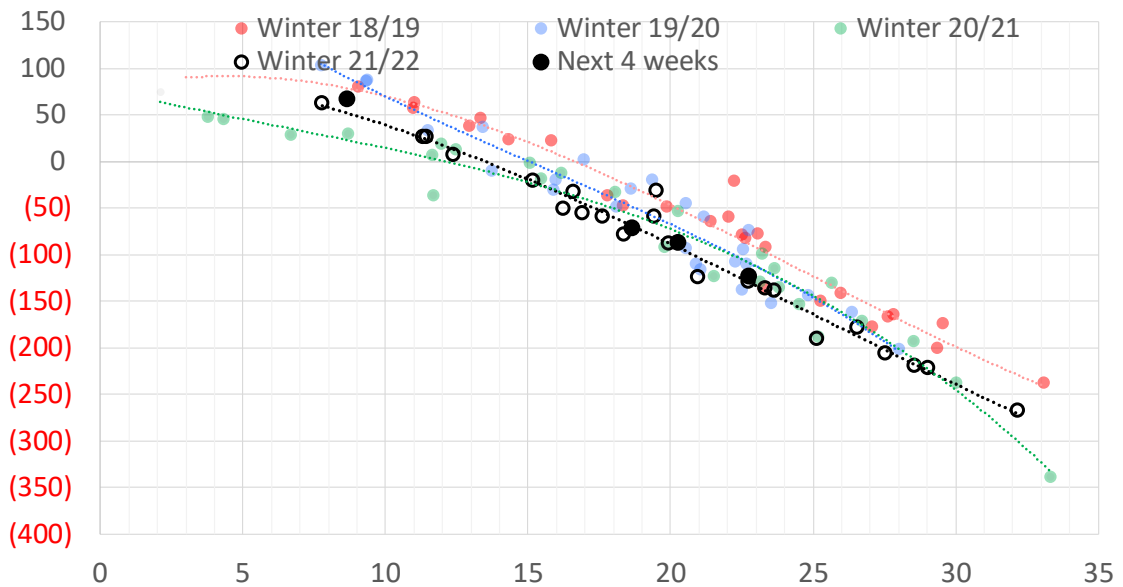


## Weather Model Storage Projection

Next report  
and beyond

Week Ending	GWDDs	Week Storage Projection
11-Nov	8.6	68
18-Nov	20.2	-86
25-Nov	22.7	-123
02-Dec	18.6	-70

Weather Storage Model - Next 4 Week Forecast

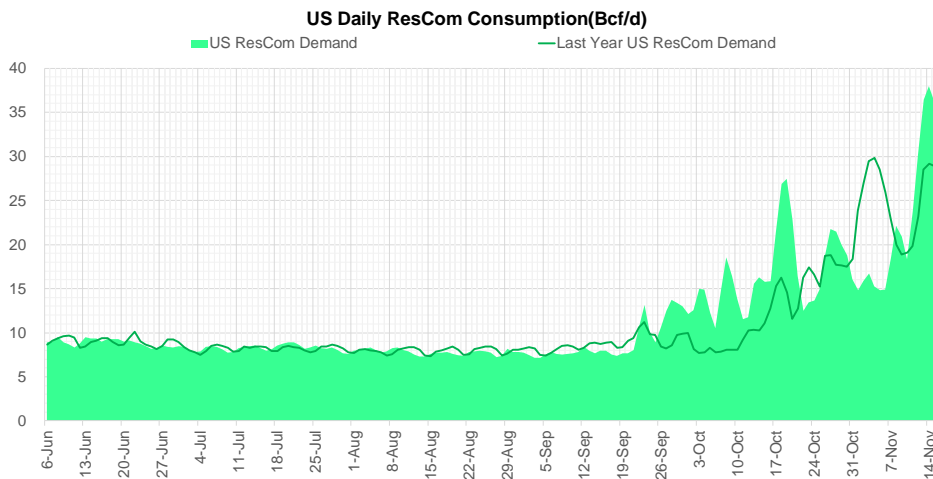
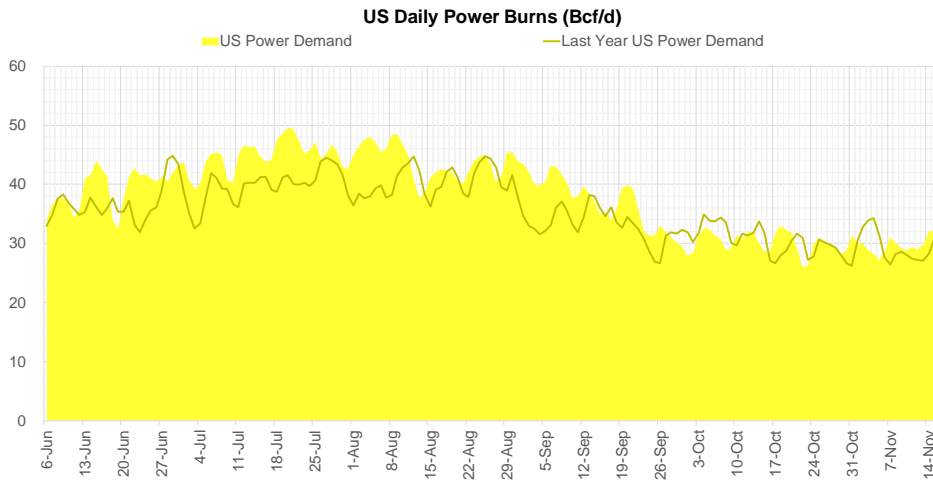
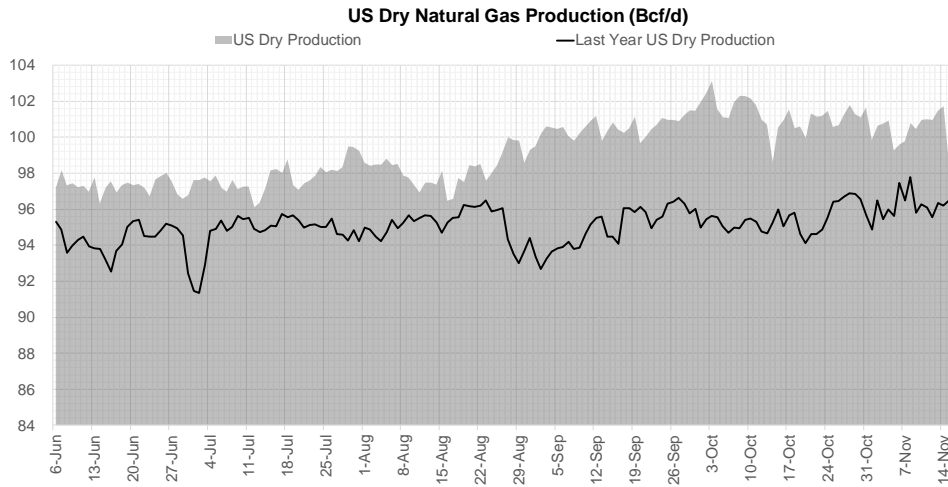


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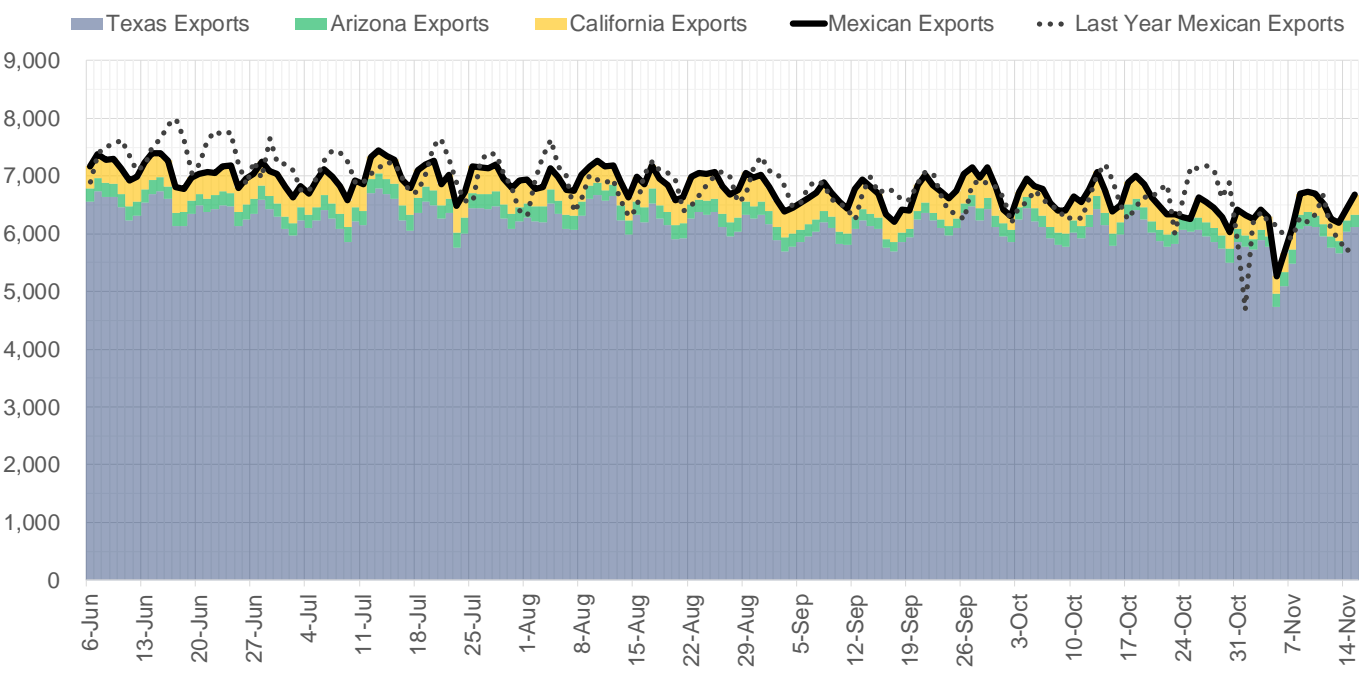
## Supply – Demand Trends



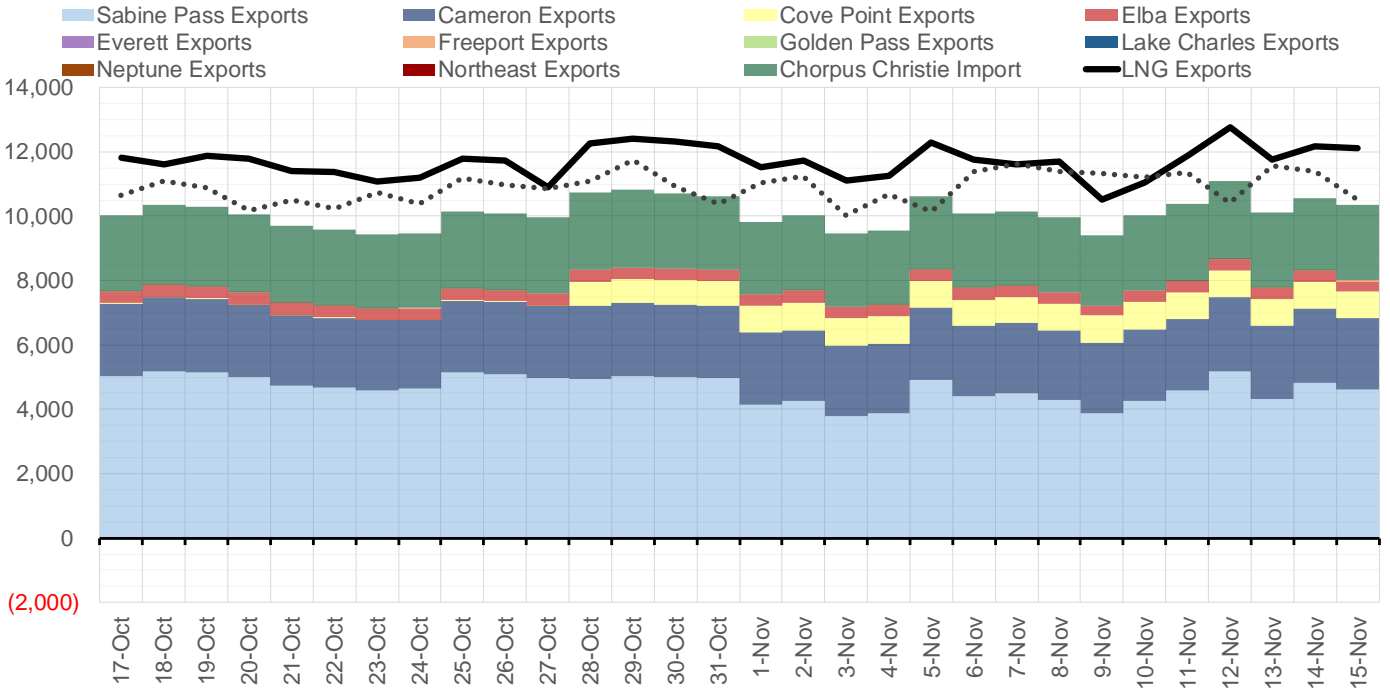
Source: Bloomberg

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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

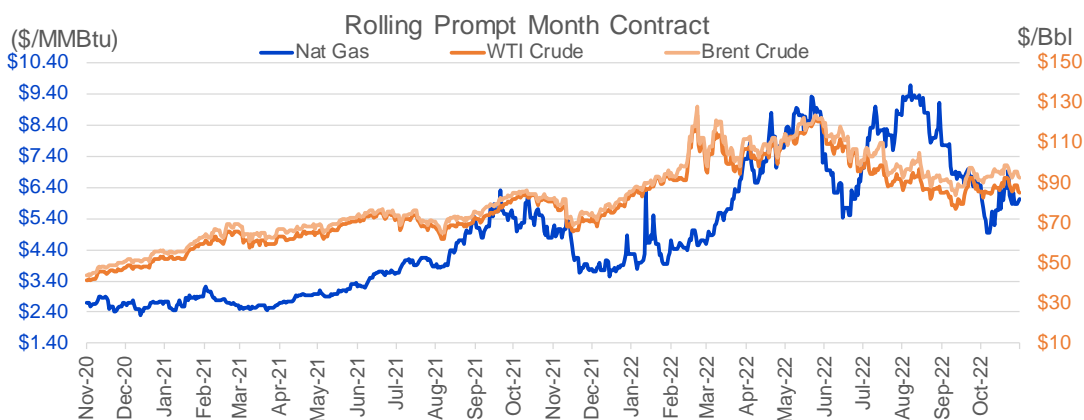
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
12	2022	C	10.00	6069	12	2022	P	4.00	47699
12	2022	P	5.00	5124	12	2022	P	5.00	43015
12	2022	C	6.50	4896	5	2023	P	2.00	31267
12	2022	P	6.00	4860	12	2022	P	4.50	30975
12	2022	C	7.00	4675	12	2022	C	10.00	30432
12	2022	P	4.50	3588	12	2022	P	6.00	28791
1	2023	C	7.00	3435	10	2023	P	3.00	27975
1	2023	P	5.00	3037	1	2023	P	5.00	26291
12	2022	P	6.50	2671	12	2022	P	3.50	26078
1	2023	P	3.25	2503	3	2023	C	10.00	25430
12	2022	C	8.50	2349	4	2023	P	3.00	25358
12	2022	C	8.00	2316	1	2023	C	10.00	24866
1	2023	P	4.50	2251	4	2023	P	2.00	23617
3	2023	C	10.00	1963	3	2023	P	4.00	23483
12	2022	P	4.00	1908	12	2022	C	6.00	22803
12	2022	P	5.50	1711	10	2023	P	2.00	22763
3	2023	P	3.00	1650	12	2022	C	8.00	22064
1	2023	C	10.00	1586	4	2023	P	3.50	21806
12	2022	C	7.50	1555	5	2023	P	3.00	21593
1	2023	P	3.75	1508	2	2023	C	10.00	21325
3	2023	P	2.75	1313	10	2023	P	2.50	21130
2	2023	C	10.00	1198	6	2023	P	3.00	20940
1	2023	P	4.00	1180	12	2022	C	7.00	20541
12	2022	P	5.25	1167	7	2023	P	3.00	20065
3	2023	P	5.00	1105	12	2022	P	3.00	20059
4	2023	P	2.75	1100	12	2022	P	4.75	19954
5	2023	P	2.75	1100	6	2023	P	2.00	19924
6	2023	P	2.75	1100	8	2023	P	3.00	19901
10	2023	P	2.50	1100	9	2023	P	3.00	19825
12	2022	P	4.75	1024	10	2023	P	4.00	19776
1	2023	P	3.00	1024	12	2022	P	5.50	19424
12	2022	C	9.00	1020	1	2023	P	4.00	19334
3	2023	C	8.00	1000	8	2023	P	2.00	19187
12	2022	C	6.00	935	9	2023	P	2.00	19138
12	2022	C	6.25	901	4	2023	P	4.00	19030
4	2023	P	3.00	900	1	2023	P	3.00	19015
7	2023	P	2.50	850	7	2023	P	2.00	18987
8	2023	P	2.50	850	3	2023	C	20.00	18920
9	2023	P	2.50	850	3	2023	P	3.00	18825
2	2023	P	3.00	839	6	2023	P	3.50	18560
2	2023	P	3.50	822	12	2022	C	5.00	18369
1	2023	P	5.50	780	5	2023	P	3.50	18145
12	2022	C	8.25	755	5	2023	P	4.00	17606
12	2022	C	11.00	727	9	2023	P	4.00	17236
12	2022	P	7.00	720	6	2023	P	4.00	17223
12	2022	P	8.25	700	10	2023	P	3.50	17158
12	2022	C	7.25	663	8	2023	P	3.50	16736
3	2023	P	5.50	660	7	2023	P	3.50	16604
5	2023	P	3.00	650	9	2023	P	3.50	16594
					2	2023	C	8	16544

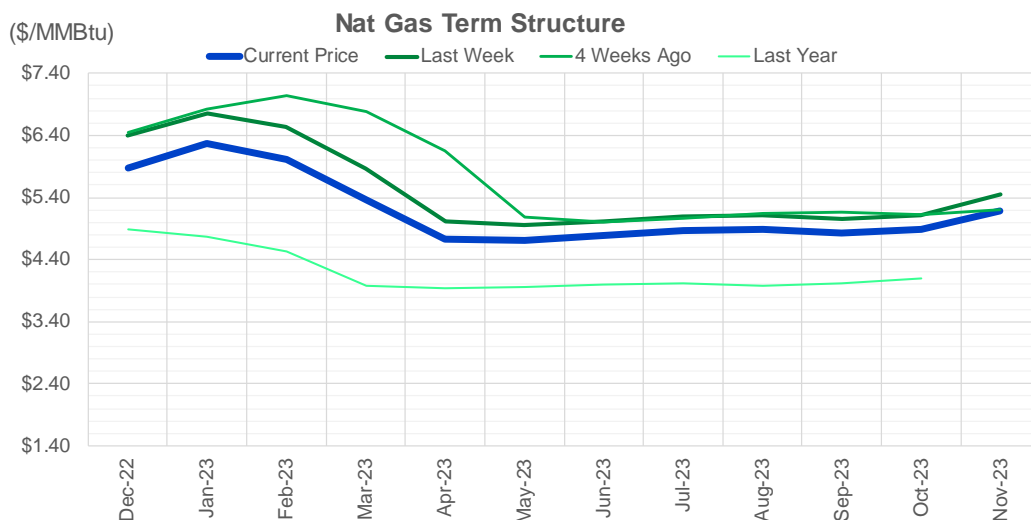
Source: CME, ICE

## 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	57274	62606	-5332	DEC 22	88469	89210	-741
JAN 23	161652	158730	2922	JAN 23	75602	76669	-1067
FEB 23	64010	64167	-157	FEB 23	68217	67295	922
MAR 23	97476	96290	1186	MAR 23	60819	61301	-482
APR 23	85461	83368	2093	APR 23	58392	57487	906
MAY 23	91103	91542	-439	MAY 23	59280	59354	-74
JUN 23	24668	24114	554	JUN 23	49075	49430	-355
JUL 23	32159	31851	308	JUL 23	50309	50096	213
AUG 23	27060	27716	-656	AUG 23	48108	47859	249
SEP 23	30582	30317	265	SEP 23	46366	46108	258
OCT 23	49621	49952	-331	OCT 23	61214	60638	576
NOV 23	20306	20812	-506	NOV 23	48417	48128	289
DEC 23	28209	28607	-398	DEC 23	43495	43533	-39
JAN 24	34257	34395	-138	JAN 24	46464	46557	-93
FEB 24	12061	12056	5	FEB 24	30631	30623	8
MAR 24	23720	23729	-9	MAR 24	38561	38490	72
APR 24	22465	22585	-120	APR 24	31580	31532	48
MAY 24	10205	10160	45	MAY 24	30773	30746	27
JUN 24	3487	3495	-8	JUN 24	27237	27182	55
JUL 24	4908	4898	10	JUL 24	26226	26172	55
AUG 24	4562	4557	5	AUG 24	25386	25344	42
SEP 24	3267	3264	3	SEP 24	25553	25493	60
OCT 24	10132	10111	21	OCT 24	29734	29518	216
NOV 24	4914	4886	28	NOV 24	26538	26485	52
DEC 24	8726	8751	-25	DEC 24	30323	30301	23
JAN 25	19193	19170	23	JAN 25	26041	25056	985
FEB 25	1838	1817	21	FEB 25	15727	15704	23
MAR 25	6401	6377	24	MAR 25	17665	17838	-173
APR 25	6602	6502	100	APR 25	16477	16435	42
MAY 25	2749	2749	0	MAY 25	15758	15672	85

Source: CME, ICE



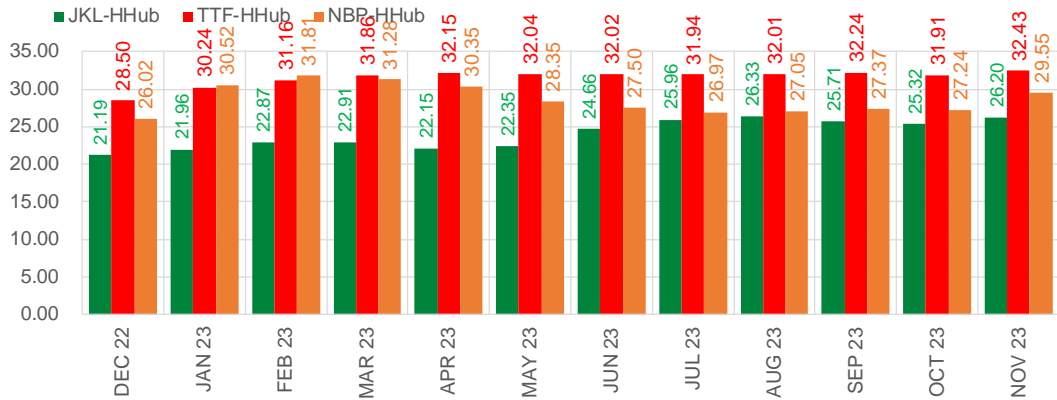
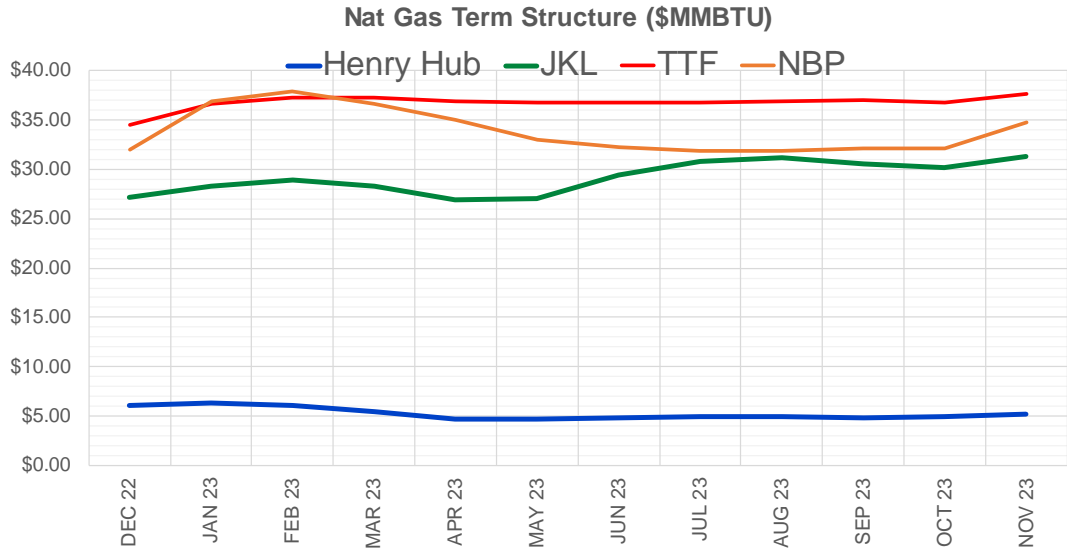


	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
<b>Current Price</b>	<b>\$5.879</b>	<b>\$6.263</b>	<b>\$6.022</b>	<b>\$5.369</b>	<b>\$4.728</b>	<b>\$4.712</b>	<b>\$4.787</b>	<b>\$4.868</b>	<b>\$4.880</b>	<b>\$4.824</b>	<b>\$4.879</b>	<b>\$5.176</b>
Last Week	\$6.400	\$6.754	\$6.529	\$5.873	\$5.018	\$4.961	\$5.025	\$5.094	\$5.106	\$5.055	\$5.111	\$5.446
vs. Last Week	-\$0.521	-\$0.491	-\$0.507	-\$0.504	-\$0.290	-\$0.249	-\$0.238	-\$0.226	-\$0.226	-\$0.231	-\$0.232	-\$0.270
4 Weeks Ago	\$6.453	\$6.827	\$7.043	\$6.793	\$6.144	\$5.088	\$4.999	\$5.070	\$5.145	\$5.155	\$5.122	\$5.196
vs. 4 Weeks Ago	-\$0.574	-\$0.564	-\$1.021	-\$1.424	-\$1.416	-\$0.376	-\$0.212	-\$0.202	-\$0.265	-\$0.331	-\$0.243	-\$0.020
Last Year	\$4.791	\$4.880	\$4.775	\$4.529	\$3.986	\$3.929	\$3.960	\$4.005	\$4.009	\$3.987	\$4.014	\$4.092
vs. Last Year	\$1.088	\$1.383	\$1.247	\$0.840	\$0.742	\$0.783	\$0.827	\$0.863	\$0.871	\$0.837	\$0.865	\$1.084

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	6.70	17.59	10.89
TETCO M3	\$/MMBtu	5.75	8.45	2.70
FGT Zone 3	\$/MMBtu	6.00	7.05	1.05
Zone 6 NY	\$/MMBtu	6.00	9.31	3.31
Chicago Citygate	\$/MMBtu	6.19	6.87	0.68
Michcon	\$/MMBtu	5.95	6.26	0.31
Columbia TCO Pool	\$/MMBtu	5.51	5.94	0.43
Ventura	\$/MMBtu	6.44	7.35	0.91
Rockies/Opal	\$/MMBtu	8.50	6.93	-1.57
El Paso Permian Basin	\$/MMBtu	4.76	5.43	0.67
Socal Citygate	\$/MMBtu	8.80	8.86	0.06
Malin	\$/MMBtu	8.54	7.99	-0.55
Houston Ship Channel	\$/MMBtu	3.73	6.24	2.52
Henry Hub Cash	\$/MMBtu	6.05	6.16	0.11
AECO Cash	C\$/GJ	4.60	5.06	0.46
Station2 Cash	C\$/GJ	4.49	9.45	4.96
Dawn Cash	C\$/GJ	6.01	6.41	0.40

Source: CME, Bloomberg

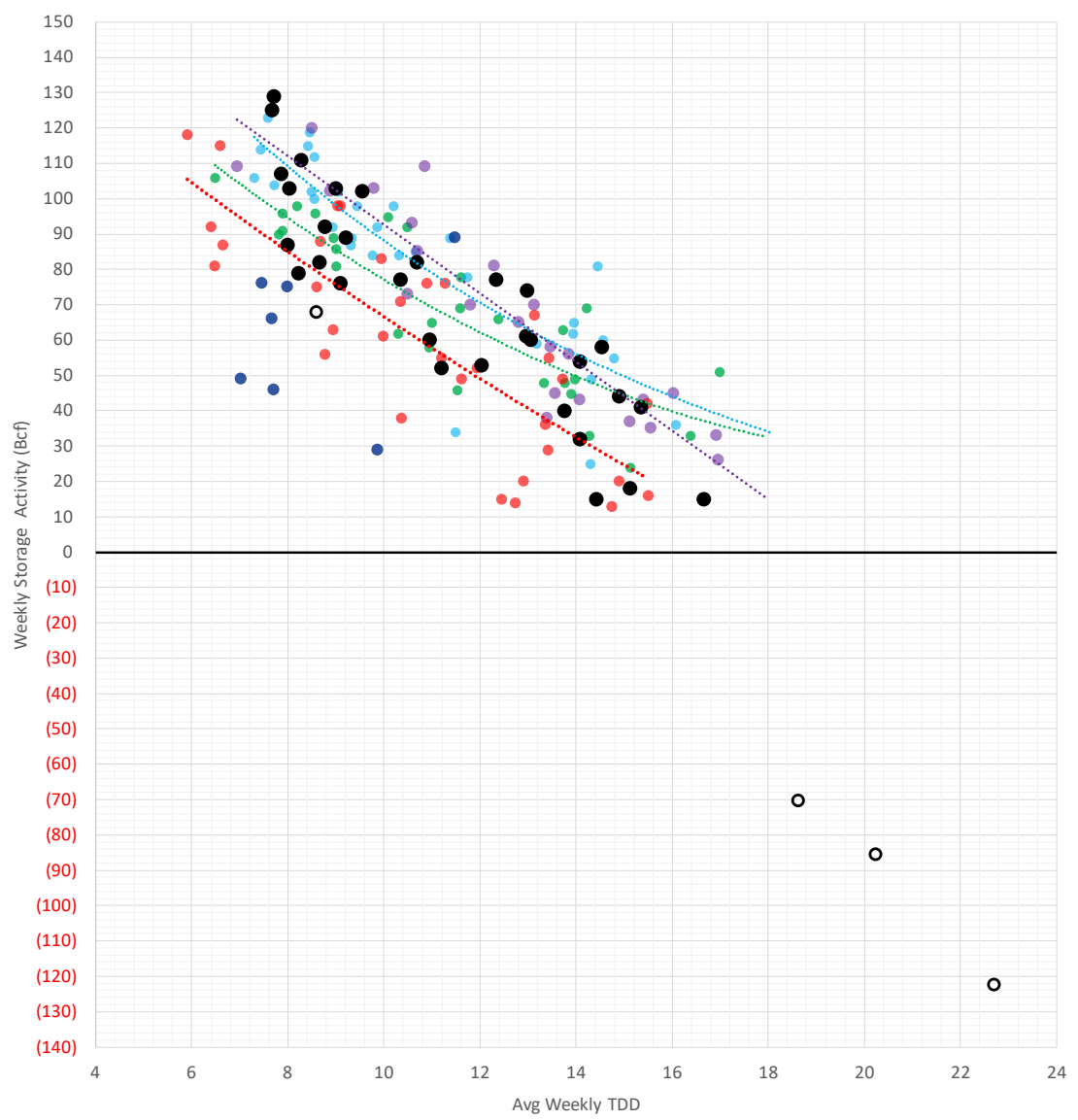
	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 0.000
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 0.000	▲ 0.000	▲ 0.000
NatGas Oct21/Jan22	\$/MMBtu	-1.817	▲ 0.000	▲ 0.000	▼ -1.080
NatGas Apr22/Oct22	\$/MMBtu	1.532	▲ 0.000	▲ 0.000	▲ 1.523
WTI Crude	\$/Bbl	85.87	▼ -5.920	▲ 0.410	▲ 4.990
Brent Crude	\$/Bbl	93.14	▼ -4.780	▲ 1.520	▲ 11.090
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	354.40	▼ -23.710	▼ -54.120	▲ 114.590
Propane, Mt. Bel	cents/Gallon	0.87	▼ -0.022	▲ 0.043	▼ -0.420
Ethane, Mt. Bel	cents/Gallon	0.40	▼ -0.018	▼ -0.007	▼ -0.002
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>	\$6.041	\$6.371	\$6.106	\$5.430	\$4.728	\$4.705	\$4.787	\$4.878	\$4.888	\$4.821	\$4.876	\$5.178
<b>JKL</b>	\$27.230	\$28.335	\$28.980	\$28.340	\$26.880	\$27.055	\$29.445	\$30.835	\$31.220	\$30.530	\$30.195	\$31.380
<b>JKL-HHub</b>	\$21.189	\$21.964	\$22.874	\$22.910	\$22.152	\$22.350	\$24.658	\$25.957	\$26.332	\$25.709	\$25.319	\$26.202
<b>TTF</b>	\$34.536	\$36.610	\$37.265	\$37.291	\$36.878	\$36.740	\$36.808	\$36.814	\$36.899	\$37.056	\$36.781	\$37.608
<b>TTF-HHub</b>	\$28.495	\$30.239	\$31.159	\$31.861	\$32.150	\$32.035	\$32.021	\$31.936	\$32.011	\$32.235	\$31.905	\$32.430
<b>NBP</b>	\$32.059	\$36.892	\$37.917	\$36.709	\$35.081	\$33.053	\$32.291	\$31.844	\$31.940	\$32.189	\$32.114	\$34.727
<b>NBP-HHub</b>	\$26.018	\$30.521	\$31.811	\$31.279	\$30.353	\$28.348	\$27.504	\$26.966	\$27.052	\$27.368	\$27.238	\$29.549

## Weather Storage Model - Next 4 Week Forecast

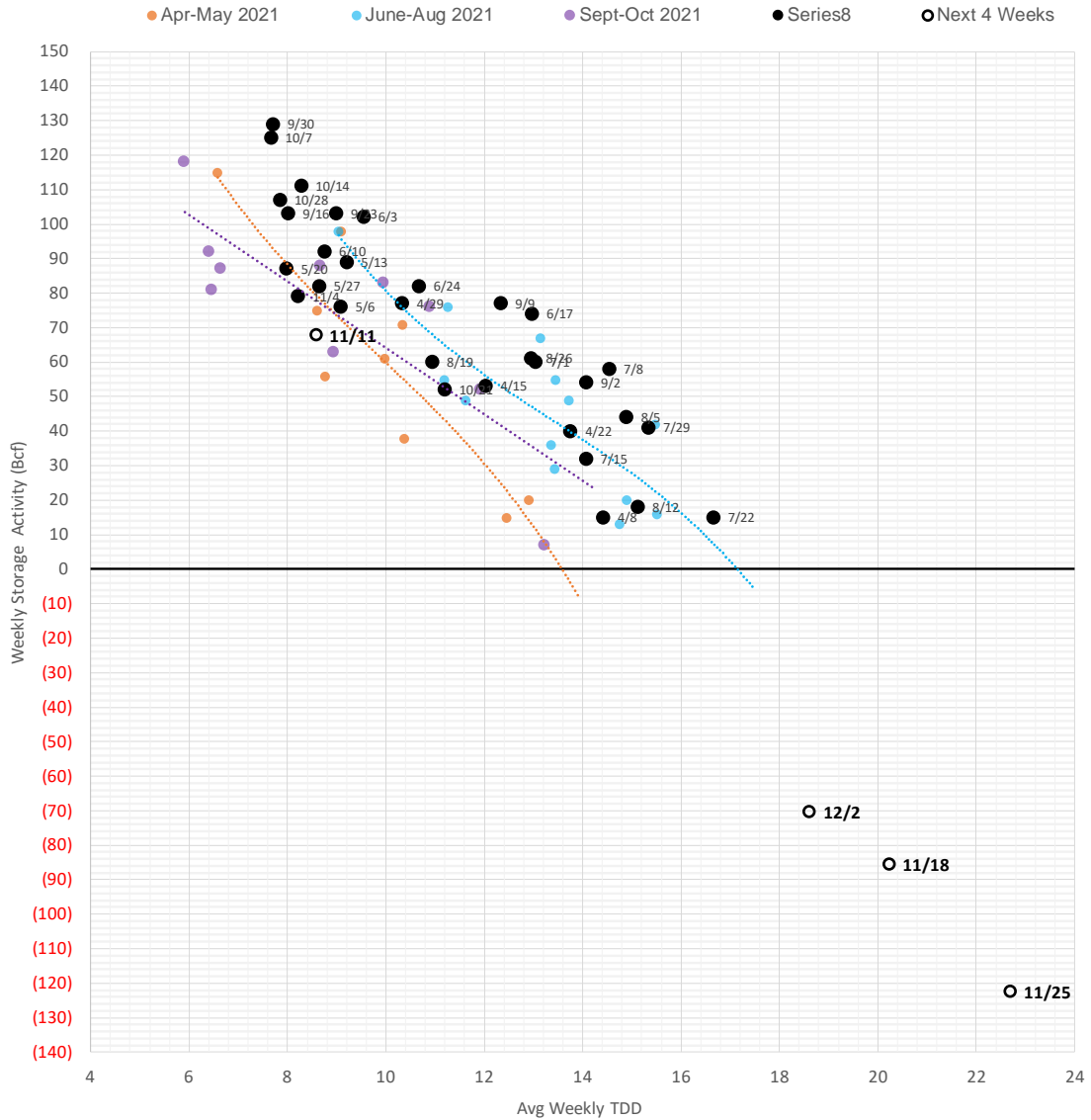
● Summer 18 ● Summer 19 ● Summer 20 Apr-Aug ● Summer 20 Sept-Oct ● Summer 21 ● Summer 22 ○ Next 4 Weeks



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## Weather Storage Model - Next 4 Week Forecast



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