

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 3.74	▼ \$ (0.05)	▼ \$ (0.10)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 71.20	▼ \$ (0.09)	▼ \$ (0.5)

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 74.32	▼ \$ (0.07)	▼ \$ (0.8)

### Page Menu

[Short-term Weather Model Outlooks](#)

[Lower 48 Component Models](#)

[Regional S/D Models Storage Projection](#)

[Weather Model Storage Projection](#)

[Supply – Demand Trends](#)

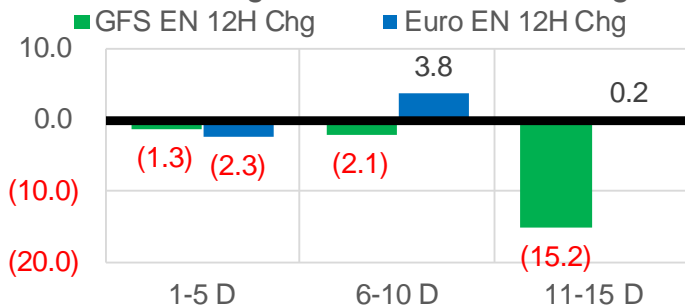
[Nat Gas Options Volume and Open Interest](#)

[Nat Gas Futures Open Interest](#)

[Price Summary](#)

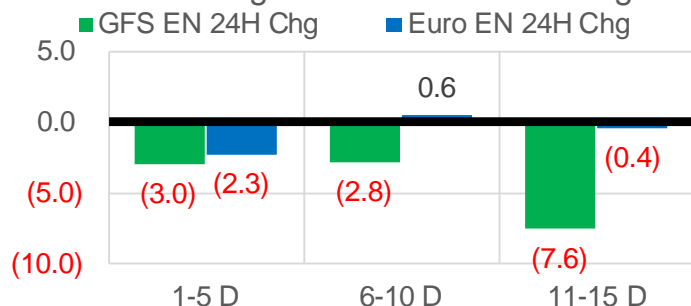
### Vs. 12H Ago

L48 Region - 00z TDD vs 12H Ago



### Vs. 24H Ago

L48 Region - 00z TDD vs 24H Ago



	Current	Δ from YD	Δ from 7D Avg
US Dry Production	89.6	▼ -6.47	▼ -7.02

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	27.8	▼ -1.91	▼ -2.04

	Current	Δ from YD	Δ from 7D Avg
US ResComm	32.4	▼ -2.10	▼ -4.03

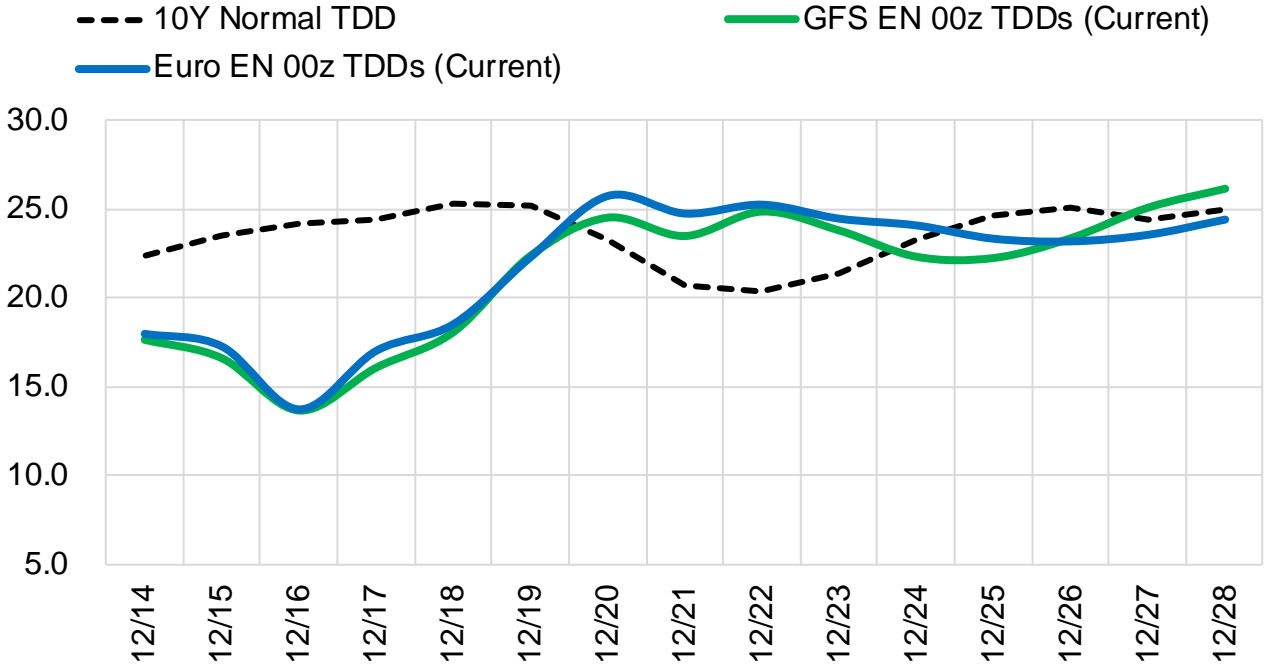
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.6	▼ -0.36	▼ -0.58

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	10.7	▼ -1.07	▼ -1.20

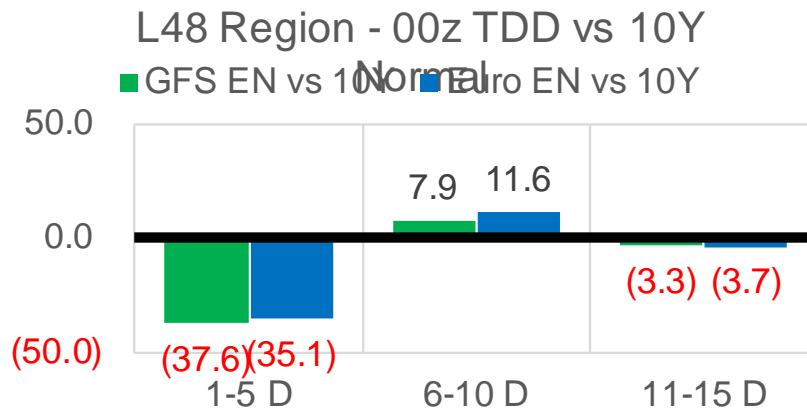
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.2	▲ 0.69	▲ 0.01

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

### L48 Region



### Vs. 10Y Normal



Source: WSI , Bloomberg

## Lower 48 Component Models

### Daily Balances

	8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>96.7</b>	<b>97.0</b>	<b>97.0</b>	<b>96.2</b>	<b>96.5</b>	<b>96.1</b>	<b>92.8</b>	▼-3.3	▼-3.8
<b>Canadian Imports</b>	<b>5.9</b>	<b>5.5</b>	<b>4.7</b>	<b>4.6</b>	<b>4.8</b>	<b>4.9</b>	<b>4.6</b>	▼-0.4	▼-0.5
L48 Power	31.9	30.7	28.2	27.2	27.8	29.7	27.8	▼-1.9	▼-1.5
L48 Residential & Commercial	41.7	37.5	31.5	29.9	36.1	34.5	32.4	▼-2.1	▼-2.8
L48 Industrial	24.8	24.1	23.2	23.1	23.5	23.4	22.3	▼-1.1	▼-1.3
L48 Lease and Plant Fuel	5.2	5.3	5.3	5.2	5.2	5.2	4.8	▼-0.4	▼-0.4
L48 Pipeline Distribution	3.7	3.4	3.0	2.9	3.2	3.2	3.0	▼-0.2	▼-0.2
<b>L48 Regional Gas Consumption</b>	<b>107.4</b>	<b>100.9</b>	<b>91.2</b>	<b>88.2</b>	<b>95.8</b>	<b>96.1</b>	<b>90.4</b>	▼-5.7	▼-6.2
<b>Net LNG Delivered</b>	<b>12.35</b>	<b>11.69</b>	<b>11.82</b>	<b>12.24</b>	<b>12.44</b>	<b>11.81</b>	<b>10.74</b>	▼-1.1	▼-1.3
<b>Total Mexican Exports</b>	<b>6.6</b>	<b>6.5</b>	<b>6.2</b>	<b>6.0</b>	<b>5.8</b>	<b>5.5</b>	<b>6.2</b>	▲0.7	▲0.1
<b>Implied Daily Storage Activity</b>	<b>-23.8</b>	<b>-16.6</b>	<b>-7.4</b>	<b>-5.6</b>	<b>-12.8</b>	<b>-12.4</b>	<b>-10.0</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									

### EIA Storage Week Balances

	5-Nov	12-Nov	19-Nov	26-Nov	3-Dec	10-Dec	WoW	vs. 4W
<b>Lower 48 Dry Production</b>	<b>95.1</b>	<b>95.9</b>	<b>95.1</b>	<b>96.2</b>	<b>96.9</b>	<b>96.8</b>	▼-0.1	▲0.8
<b>Canadian Imports</b>	<b>5.5</b>	<b>5.1</b>	<b>4.9</b>	<b>5.5</b>	<b>5.6</b>	<b>5.3</b>	▼-0.3	▲0.0
L48 Power	29.6	27.5	27.8	29.2	28.8	29.2	▲0.3	▲0.8
L48 Residential & Commercial	24.3	23.6	28.0	33.3	33.3	35.6	▲2.3	▲6.1
L48 Industrial	21.2	21.4	23.1	22.4	22.5	24.2	▲1.7	▲1.8
L48 Lease and Plant Fuel	5.2	5.2	5.2	5.2	5.3	5.3	▼0.0	▲0.0
L48 Pipeline Distribution	2.9	2.7	3.0	3.3	3.3	3.2	▼0.0	▲0.2
<b>L48 Regional Gas Consumption</b>	<b>83.2</b>	<b>80.3</b>	<b>87.0</b>	<b>93.5</b>	<b>93.1</b>	<b>97.4</b>	▲4.3	▲8.9
<b>Net LNG Exports</b>	<b>10.9</b>	<b>11.2</b>	<b>11.1</b>	<b>11.7</b>	<b>11.8</b>	<b>12.0</b>	▲0.2	▲0.6
<b>Total Mexican Exports</b>	<b>6.1</b>	<b>6.2</b>	<b>6.0</b>	<b>6.0</b>	<b>6.4</b>	<b>6.4</b>	▲0.0	▲0.3
<b>Implied Daily Storage Activity</b>	<b>0.4</b>	<b>3.2</b>	<b>-4.2</b>	<b>-9.6</b>	<b>-8.8</b>	<b>-13.8</b>	<b>-5.0</b>	
<b>EIA Reported Daily Storage Activity</b>	<b>1.0</b>	<b>3.7</b>	<b>-3.0</b>	<b>-8.4</b>	<b>-8.4</b>			
<b>Daily Model Error</b>	<b>-0.6</b>	<b>-0.5</b>	<b>-1.2</b>	<b>-1.1</b>	<b>-0.4</b>			

### Monthly Balances

	2Yr Ago Dec-19	LY Dec-20	Aug-21	Sep-21	Oct-21	Nov-21	MTD Dec-21	MoM	vs. LY
<b>Lower 48 Dry Production</b>	<b>95.9</b>	<b>91.6</b>	<b>94.0</b>	<b>93.4</b>	<b>94.0</b>	<b>95.9</b>	<b>96.6</b>	▲0.7	▲5.0
<b>Canadian Imports</b>	<b>4.5</b>	<b>5.8</b>	<b>5.1</b>	<b>5.1</b>	<b>5.4</b>	<b>5.3</b>	<b>5.1</b>	▼-0.2	▼-0.7
L48 Power	29.3	28.0	40.1	33.0	30.2	28.8	28.8	▼0.0	▲0.8
L48 Residential & Commercial	39.1	40.3	7.9	8.7	13.2	29.6	33.5	▲3.9	▼-6.8
L48 Industrial	24.6	23.4	21.5	20.3	20.3	22.3	23.6	▲1.3	▲0.2
L48 Lease and Plant Fuel	5.2	5.0	5.1	5.1	5.1	5.2	5.2	▲0.0	▲0.3
L48 Pipeline Distribution	3.4	3.4	2.6	2.3	2.3	3.1	3.1	▼0.0	▼-0.3
<b>L48 Regional Gas Consumption</b>	<b>101.6</b>	<b>100.0</b>	<b>77.2</b>	<b>69.4</b>	<b>71.3</b>	<b>88.9</b>	<b>94.2</b>	▲5.3	▼-5.8
<b>Net LNG Exports</b>	<b>7.8</b>	<b>11.0</b>	<b>10.5</b>	<b>10.3</b>	<b>10.6</b>	<b>11.4</b>	<b>11.9</b>	▲0.5	▲0.9
<b>Total Mexican Exports</b>	<b>4.9</b>	<b>5.8</b>	<b>6.9</b>	<b>6.7</b>	<b>6.6</b>	<b>6.1</b>	<b>6.3</b>	▲0.2	▲0.5
<b>Implied Daily Storage Activity</b>	<b>-13.8</b>	<b>-19.5</b>	<b>4.6</b>	<b>12.1</b>	<b>10.9</b>	<b>-5.3</b>	<b>-10.7</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									

Source: Bloomberg, analytix.ai

## Daily Average Generation Data

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

	6-Dec	7-Dec	8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	DoD	vs. 7D
NRC Nuclear Daily Output	87.9	87.2	88.5	89.0	88.0	88.0	88.0	0.0	-0.1
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	16.9	17.7	16.4	15.9	16.9	16.9	16.9	0.0	0.1
NRC % Nuclear Cap Utilization	89.4	88.7	90.0	90.5	89.4	89.4	89.4	0.0	-0.1

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

	6-Dec	7-Dec	8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	DoD	vs. 7D
CALI Wind	1177	995	1471	3273	1265	534	1183	649	-270
TEXAS Wind	13906	8370	8254	16815	19964	12023	16870	4848	3648
US Wind	60665	38188	42390	65750	70856	67786	76589	8802	18982

### Generation Daily Average - MWh (EIA)

	6-Dec	7-Dec	8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	DoD	vs. 7D
US Wind	60665	38188	42390	65750	70856	67786	76589	8802	18982
US Solar	7170	5867	6879	7641	6949	8737	9192	456	1985
US Petroleum	3216	4893	4572	3225	2990	2413	2208	-205	-1343
US Other	8241	8413	8571	8497	8448	8105	8076	-29	-303
US Coal	81150	91926	90257	86637	76628	71553	71270	-284	-11755
US Nuke	92410	92882	93999	93844	92063	92253	93982	1728	1073
US Hydro	29343	30508	31018	31880	30999	28242	28377	136	-1954
<b>US Gas</b>	<b>152395</b>	<b>184643</b>	<b>181068</b>	<b>168159</b>	<b>155366</b>	<b>134624</b>	<b>134090</b>	<b>-534</b>	<b>-28619</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	12-Nov	19-Nov	26-Nov	3-Dec	10-Dec	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	72.2	79.8	83.9	86.1	87.8	88.0	0.2	0.0
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	32.7	25.1	21.0	18.8	17.1	16.9	-0.2	
NRC % Nuclear Cap Utilization	0.1	0.1	0.1	0.1	0.1	0.1	0.0	

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

	5-Nov	12-Nov	19-Nov	26-Nov	3-Dec	10-Dec	WoW	WoW Bcf/d Impact
CALI Wind	1669	1805	862	1496	363	1263	901	-0.2
TEXAS Wind	8472	12032	13655	14691	8733	12216	3483	-0.6
US Wind	35306	51002	58367	56260	47212	51469	4257	-0.8
					-9047.9			
					-16%			

### Generation Weekly Average - MWh (EIA)

	5-Nov	12-Nov	19-Nov	26-Nov	3-Dec	10-Dec	WoW	WoW Bcf/d Impact
US Wind	35306	51002	58367	56260	47212	51469	4257	-0.8
US Solar	9994	10015	10068	9086	9897	7891	-2006	0.4
US Petroleum	3517	2532	2555	3342	3167	3441	274	0.0
US Other	9302	8205	7849	8442	8482	8308	-174	0.0
US Coal	80024	77955	77863	82301	82273	82606	332	-0.1
US Nuke	76091	84337	88331	91252	92817	92927	111	0.0
US Hydro	25818	25422	26206	27837	26777	29611	2834	-0.5
<b>US Gas</b>	<b>160442</b>	<b>145215</b>	<b>145263</b>	<b>148208</b>	<b>155282</b>	<b>158933</b>	<b>3651</b>	<b>-0.7</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						
	Same 30 days	Same 30 days	Sep-21	Oct-21	Nov-21	Dec-21	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	NRC Nuclear Daily Output	89.6	86.5	87.1	75.5	82.7	88.1	87.2	5.4
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	15.3	18.4	17.8	29.4	22.2	16.8	17.7	-5.4	-0.7
NRC % Nuclear Cap Utilization	91.1	88.0	88.6	76.8	84.1	89.6	88.7	5.5	0.7

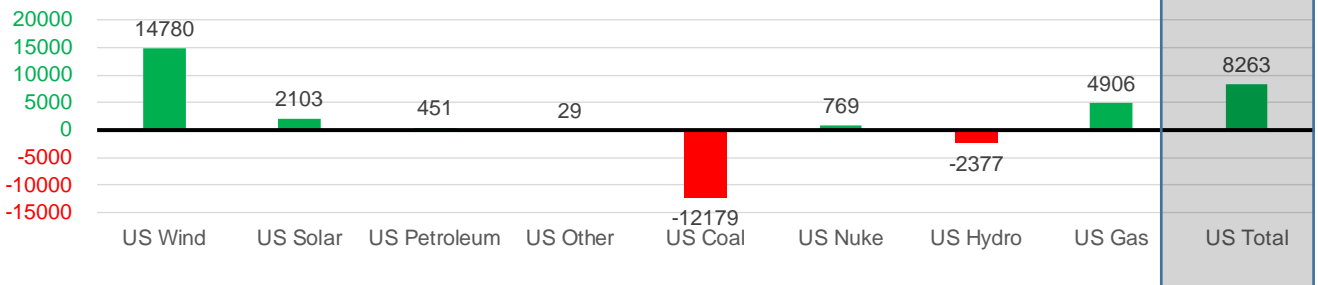
### Wind Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	Sep-21	Oct-21	Nov-21	Dec-21	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	CALI Wind	1045	1192	1964	1765	1252	1059	1071	-194
TEXAS Wind	9085	10045	9213	11565	11869	12996	13184	1127	3139
US Wind	38376	41786	39362	43142	49974	58693	56566	8719	14780

### Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	Sep-21	Oct-21	Nov-21	Dec-21	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	US Wind	38376	41786	39362	43142	49974	58693	56566	▼-2126.5
US Solar	4473	6890	13345	11059	9687	8431	8992	▲561.0	▲2103
US Petroleum	2307	2626	2517	3239	3045	2956	3077	▲121	▲451
US Other	7949	8264	9021	11109	8435	8298	8293	▼-5	▲29
US Coal	96563	92446	109915	84433	80848	78666	80268	▲1602	▼-12179
US Nuke	96858	91283	90072	77089	87404	92871	92052	▼-819	▲769
US Hydro	28049	30485	25622	24078	26590	29066	28107	▼-958	▼-2377
<b>US Gas</b>	<b>150234</b>	<b>145868</b>	<b>173566</b>	<b>159045</b>	<b>151462</b>	<b>151796</b>	<b>150774</b>	▼-1625	▲4906
<b>US Total</b>	<b>424928</b>	<b>420085</b>	<b>463578</b>	<b>413350</b>	<b>417920</b>	<b>430764</b>	<b>428347</b>	▼-1123	▲8263

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

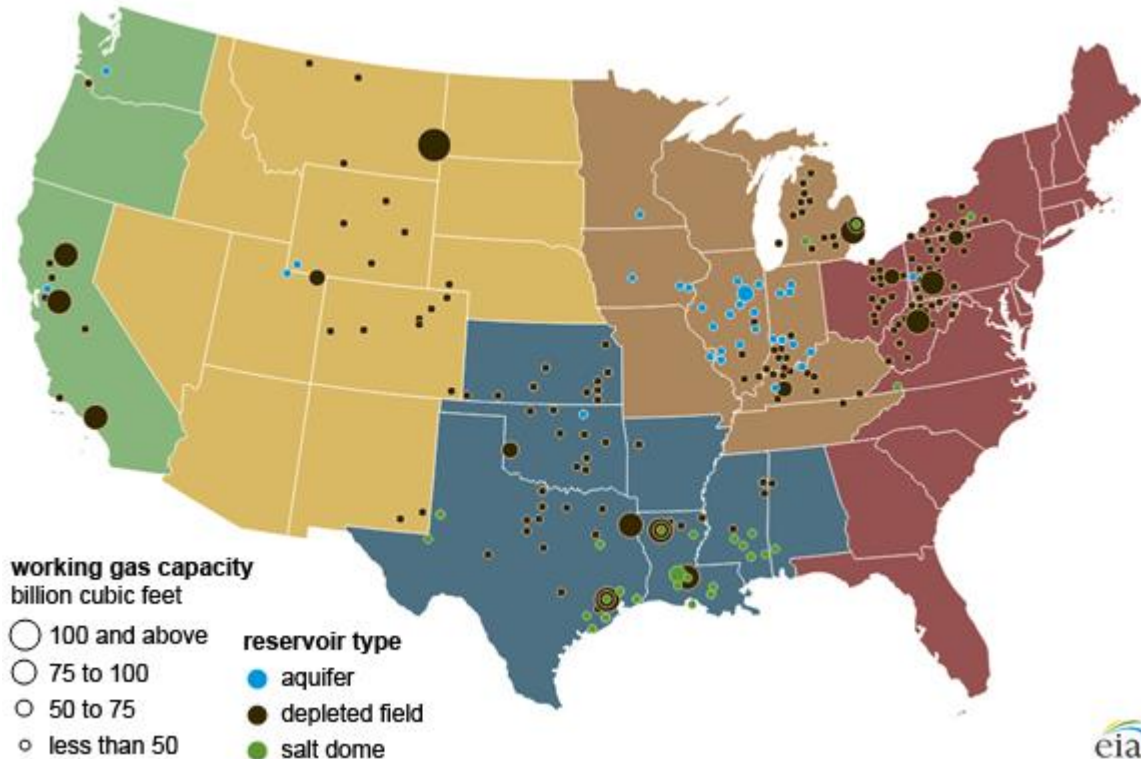
## Regional S/D Models Storage Projection

Week Ending 10-Dec

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-14.0	1.0	-13.0	-91
East	-6.4	1.8	-4.6	-32
Midwest	-5.5	0.2	-5.3	-37
Mountain	2.2	-3.5	-1.2	-9
South Central	-4.3	2.7	-1.6	-11
Pacific	0.0	-0.3	-0.3	-2

\*Adjustment Factor is calculated based on historical regional deltas

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

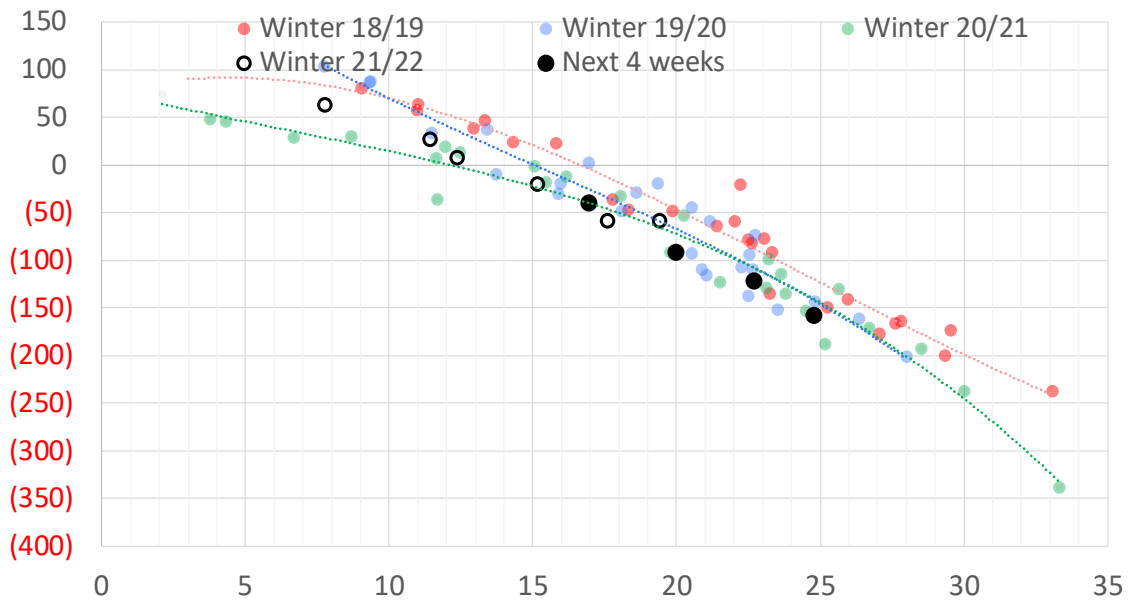


## Weather Model Storage Projection

Next report  
and beyond

Week Ending	GWDDs	Week Storage Projection
10-Dec	20	-91
17-Dec	17	-39
24-Dec	23	-122
31-Dec	25	-157

Weather Storage Model - Next 4 Week Forecast

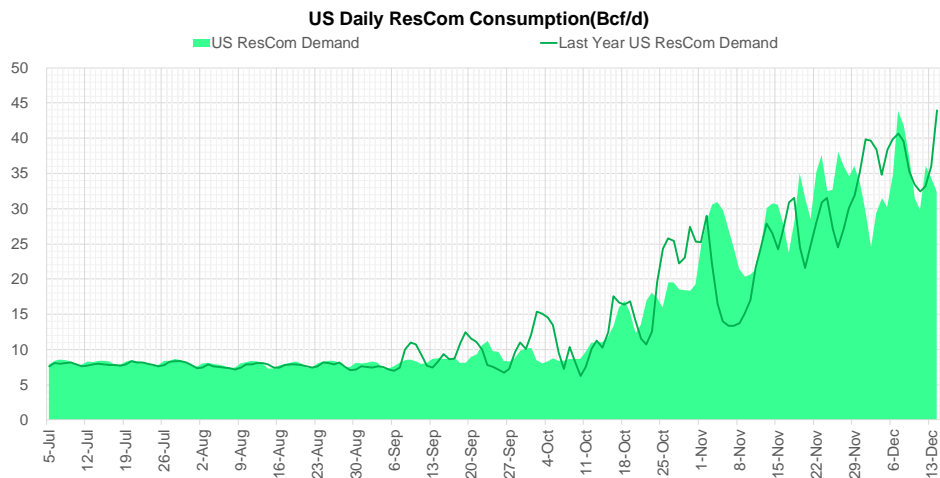
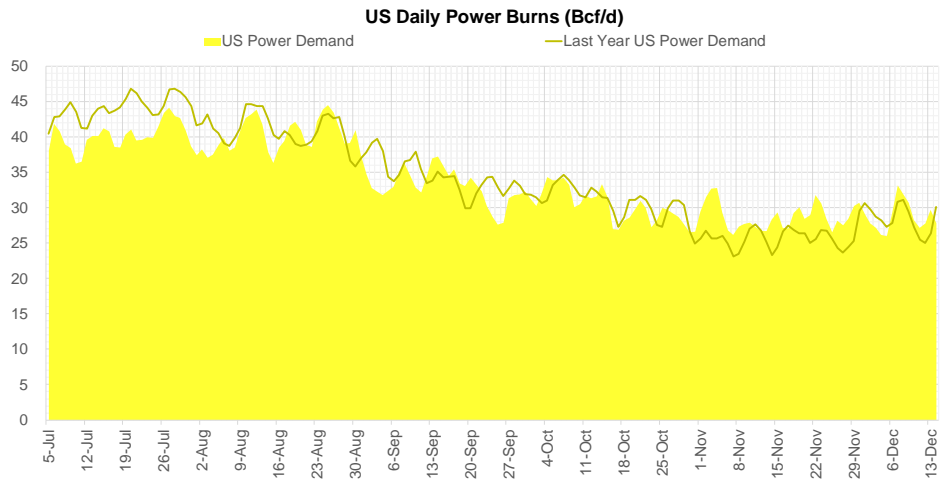
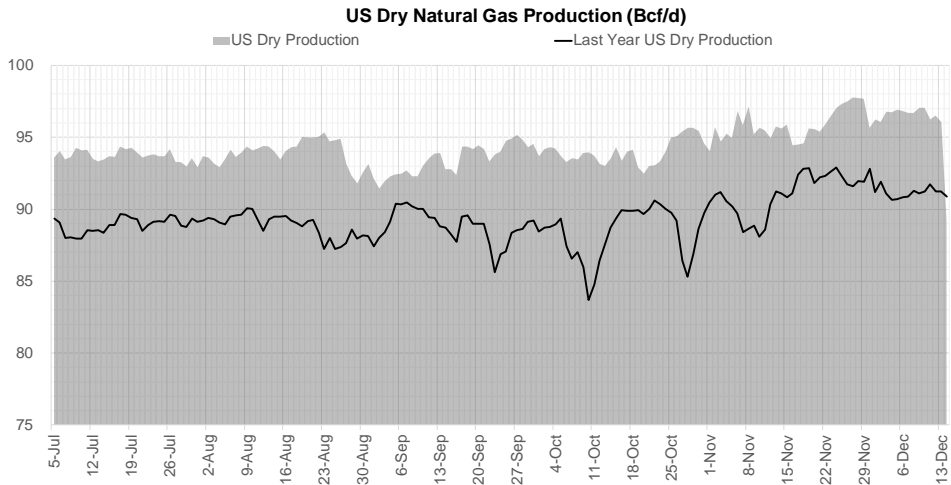


Go to larger image





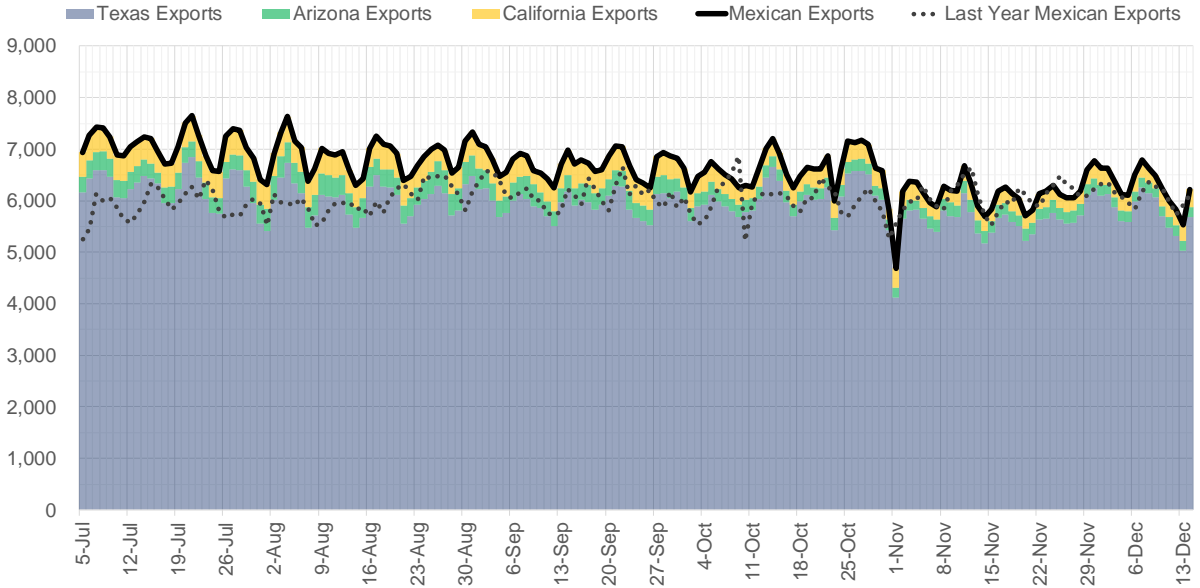
## Supply – Demand Trends



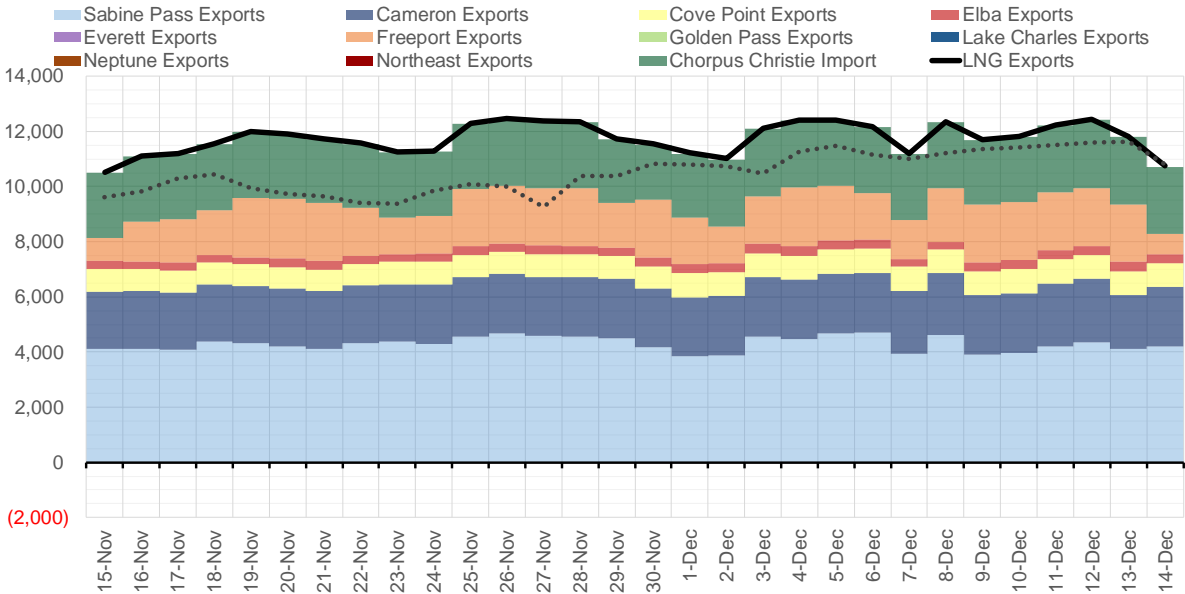
Source: Bloomberg

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 (MMcf/d)



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



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.

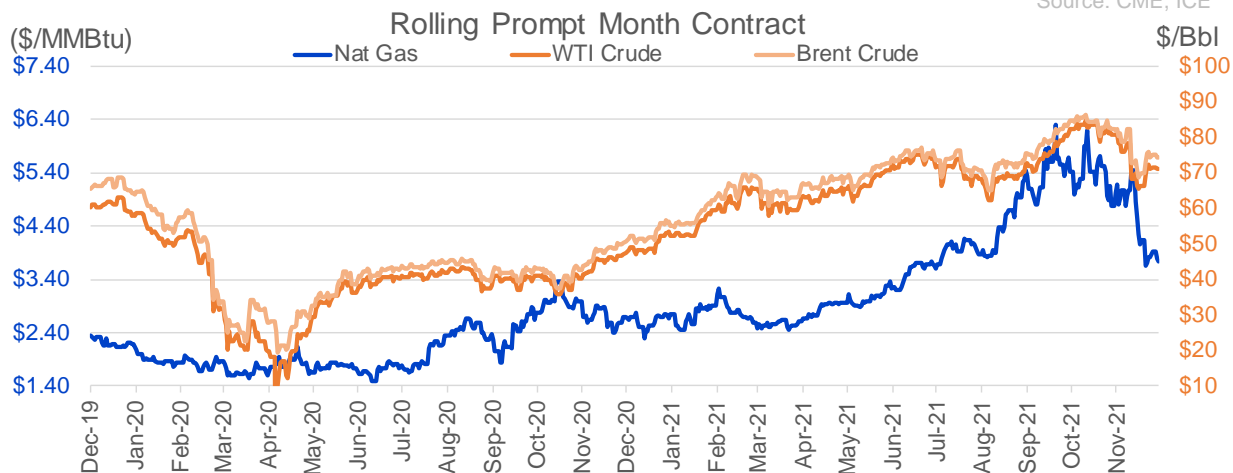
## Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

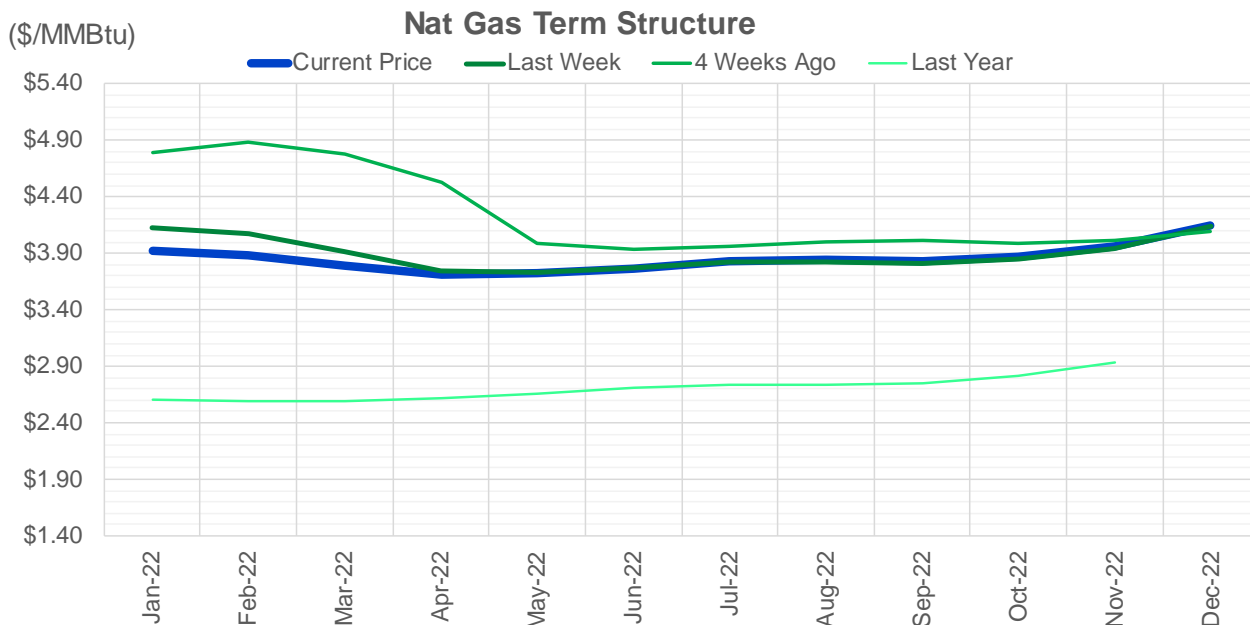
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
1	2022	C	4.00	6187	3	2022	C	10.00	34912
1	2022	C	4.50	4660	1	2022	P	3.00	27992
2	2022	C	4.50	4032	1	2022	P	4.00	27127
1	2022	C	4.25	3974	3	2022	C	8.00	25767
1	2022	P	3.75	3838	1	2022	C	4.00	25688
1	2022	P	3.50	2001	1	2022	C	5.00	25139
1	2022	C	5.50	1749	3	2022	C	5.00	24433
3	2022	C	6.00	1726	1	2022	C	6.00	23850
1	2022	P	4.00	1690	1	2022	P	2.75	23364
2	2022	C	4.25	1659	2	2022	C	5.00	22671
1	2022	C	4.75	1651	1	2022	P	3.50	20493
1	2022	P	3.60	1415	12	2022	C	5.00	20297
1	2022	C	5.25	1402	4	2022	C	5.00	20242
2	2022	C	4.75	1283	3	2022	P	2.50	19886
3	2022	C	10.00	1237	4	2022	C	3.00	19710
4	2022	C	5.00	1201	3	2022	C	6.00	19561
3	2022	C	4.50	1180	1	2022	C	10.00	18358
4	2022	C	4.00	1111	3	2022	C	4.00	18316
2	2022	C	5.00	1083	1	2022	C	4.50	18150
3	2022	P	2.75	1083	1	2022	C	7.00	17764
3	2022	P	4.00	1078	3	2022	P	3.00	17667
4	2022	P	2.25	1075	2	2022	P	3.50	17430
1	2022	P	3.25	1050	2	2022	C	6.00	17385
1	2022	C	5.00	1028	1	2022	P	3.25	17288
2	2022	P	3.50	1008	3	2022	P	3.50	17126
4	2022	P	4.00	1000	3	2022	P	4.00	16900
3	2022	P	3.00	874	2	2022	C	4.00	16811
1	2022	P	3.70	870	2	2022	P	4.00	15793
2	2022	P	3.25	862	5	2022	C	5.00	15498
1	2022	C	3.75	803	4	2022	P	2.50	15492
1	2022	C	6.00	786	3	2022	C	7.00	15460
2	2022	C	4.00	749	6	2022	C	5.00	15392
3	2022	P	3.50	742	2	2022	C	10.00	13963
2	2022	P	3.00	683	5	2022	C	3.00	13733
3	2022	P	2.50	637	2	2022	P	3.00	13666
1	2022	P	3.35	605	3	2022	P	5.00	13506
2	2022	P	3.05	547	1	2022	C	8.00	13469
12	2022	C	6.00	525	2	2022	C	5.50	13455
3	2022	P	3.25	523	6	2022	C	3.00	13438
12	2022	C	5.00	500	10	2022	P	2.00	13297
1	2022	P	3.00	466	1	2022	C	5.50	13286
1	2022	C	4.05	441	12	2022	C	4.50	13274
2	2022	P	3.75	441	7	2022	C	3.00	13230
1	2022	P	3.40	421	8	2022	C	3.00	13226
2	2022	P	4.00	389	9	2022	C	3.00	13225
2	2022	C	6.00	387	3	2022	C	3.00	13178
1	2022	P	3.90	384	8	2022	C	5.00	13168
1	2022	C	3.90	383	5	2022	P	3.00	13128
1	2022	P	3.80	353	10	2022	C	3.00	13114
					12	2022	C	5.25	13113

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
JAN 22	105733	132616	-26883	JAN 22	96870	101148	-4278
FEB 22	98795	89451	9344	FEB 22	74689	73434	1256
MAR 22	233017	218055	14962	MAR 22	89479	89854	-375
APR 22	88826	91601	-2775	APR 22	72248	72669	-421
MAY 22	115095	115341	-246	MAY 22	71202	71130	72
JUN 22	49189	49345	-156	JUN 22	54074	53835	239
JUL 22	40021	40124	-103	JUL 22	58092	57818	274
AUG 22	32348	31785	563	AUG 22	55388	55205	182
SEP 22	47170	46145	1025	SEP 22	56313	56271	42
OCT 22	75359	78232	-2873	OCT 22	63955	63792	163
NOV 22	34686	34557	129	NOV 22	50145	49807	338
DEC 22	33011	32944	67	DEC 22	58483	58127	356
JAN 23	41410	42421	-1011	JAN 23	45989	45864	125
FEB 23	11660	11893	-233	FEB 23	35759	35550	209
MAR 23	26312	25986	326	MAR 23	40437	40232	205
APR 23	19081	18498	583	APR 23	41124	40081	1043
MAY 23	13119	13110	9	MAY 23	35781	35736	45
JUN 23	9791	9609	182	JUN 23	32248	32158	90
JUL 23	7465	7377	88	JUL 23	31659	31546	113
AUG 23	4652	4638	14	AUG 23	32613	32604	8
SEP 23	7382	7303	79	SEP 23	31205	31085	120
OCT 23	11405	11040	365	OCT 23	35682	35621	61
NOV 23	5962	5917	45	NOV 23	35005	33976	1029
DEC 23	8862	8813	49	DEC 23	32399	32470	-71
JAN 24	6951	6635	316	JAN 24	22735	22742	-7
FEB 24	1469	1469	0	FEB 24	16085	16071	14
MAR 24	9067	9067	0	MAR 24	21990	21974	16
APR 24	4422	4422	0	APR 24	15476	15475	1
MAY 24	2057	2052	5	MAY 24	15933	15909	25
JUN 24	928	928	0	JUN 24	16301	16301	0





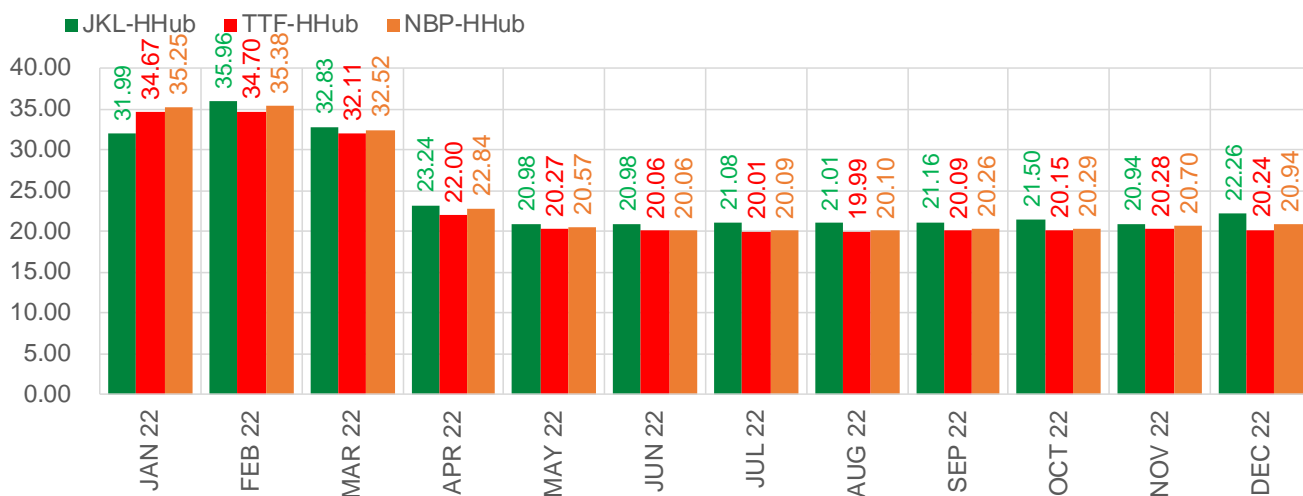
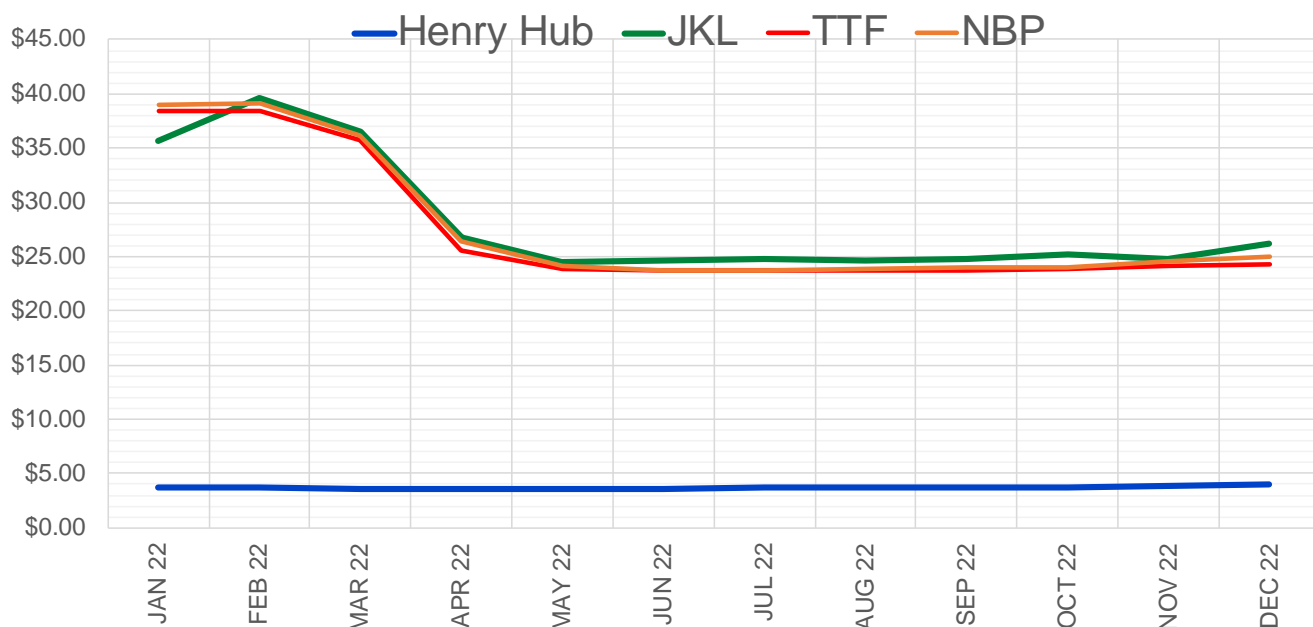
	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
<b>Current Price</b>	<b>\$3.925</b>	<b>\$3.889</b>	<b>\$3.788</b>	<b>\$3.714</b>	<b>\$3.725</b>	<b>\$3.769</b>	<b>\$3.824</b>	<b>\$3.843</b>	<b>\$3.834</b>	<b>\$3.866</b>	<b>\$3.967</b>	<b>\$4.147</b>
Last Week	\$4.132	\$4.073	\$3.921	\$3.751	\$3.727	\$3.766	\$3.817	\$3.829	\$3.815	\$3.851	\$3.948	\$4.136
vs. Last Week	-\$0.207	-\$0.184	-\$0.133	-\$0.037	-\$0.002	\$0.003	\$0.007	\$0.014	\$0.019	\$0.015	\$0.019	\$0.011
4 Weeks Ago	\$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. 4 Weeks Ago	-\$0.866	-\$0.991	-\$0.987	-\$0.815	-\$0.261	-\$0.160	-\$0.136	-\$0.162	-\$0.175	-\$0.121	-\$0.047	\$0.055
Last Year	\$2.591	\$2.603	\$2.597	\$2.596	\$2.612	\$2.658	\$2.716	\$2.740	\$2.731	\$2.751	\$2.811	\$2.935
vs. Last Year	\$1.334	\$1.286	\$1.191	\$1.118	\$1.113	\$1.111	\$1.108	\$1.103	\$1.103	\$1.115	\$1.156	\$1.212

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	4.63	16.58	11.95
TETCO M3	\$/MMBtu	3.37	6.10	2.73
FGT Zone 3	\$/MMBtu	3.45	3.77	0.32
Zone 6 NY	\$/MMBtu	3.45	7.36	3.91
Chicago Citygate	\$/MMBtu	3.92	3.97	0.05
Michcon	\$/MMBtu	3.76	3.42	-0.34
Columbia TCO Pool	\$/MMBtu	3.41	3.25	-0.16
Ventura	\$/MMBtu	3.50	4.55	1.05
Rockies/Opal	\$/MMBtu	5.58	3.80	-1.78
El Paso Permian Basin	\$/MMBtu	3.55	3.72	0.17
Socal Citygate	\$/MMBtu	8.95	4.91	-4.04
Malin	\$/MMBtu	4.94	4.29	-0.65
Houston Ship Channel	\$/MMBtu	3.45	3.91	0.46
Henry Hub Cash	\$/MMBtu	3.64	3.54	-0.10
AECO Cash	C\$/GJ	3.29	2.41	-0.88
Station2 Cash	C\$/GJ	3.01	4.85	1.84
Dawn Cash	C\$/GJ	3.99	3.59	-0.40

Source: CME, Bloomberg

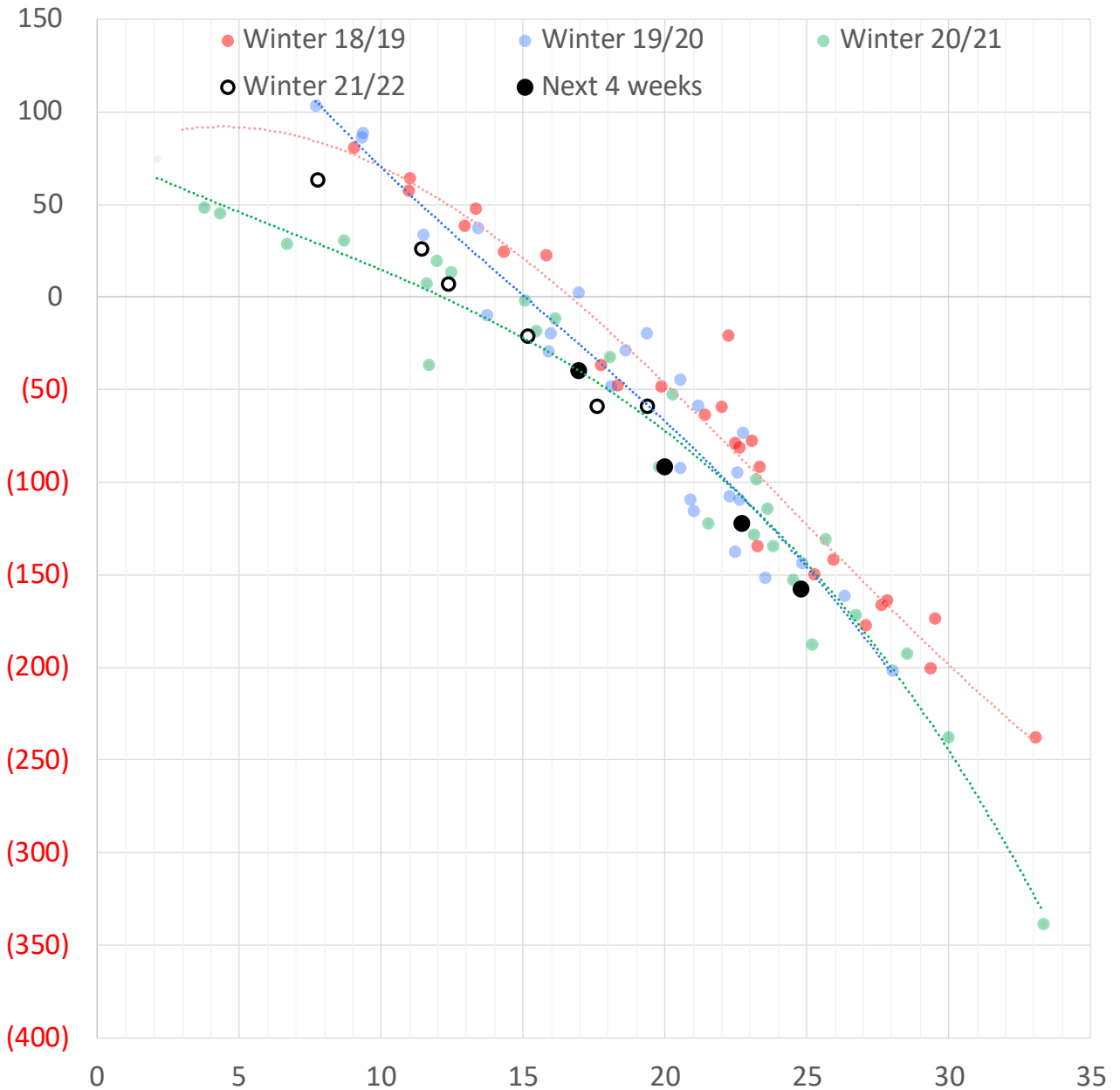
	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 2.192
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 0.000	▲ 0.000	▲ 0.305
NatGas Oct21/Jan22	\$/MMBtu	-2.047	▲ 0.137	▼ -1.310	▼ -2.321
NatGas Apr22/Oct22	\$/MMBtu	0.165	▲ 0.020	▲ 0.156	▲ 0.140
WTI Crude	\$/Bbl	71.29	▲ 1.800	▼ -9.590	▲ 24.300
Brent Crude	\$/Bbl	74.39	▲ 1.310	▼ -7.660	▲ 24.100
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	223.28	▲ 6.160	▼ -16.530	▲ 77.840
Propane, Mt. Bel	cents/Gallon	1.04	▲ 0.037	▼ -0.251	▲ 0.451
Ethane, Mt. Bel	cents/Gallon	0.34	▲ 0.009	▼ -0.068	▲ 0.139
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			

### Nat Gas Term Structure (\$MMBTU)



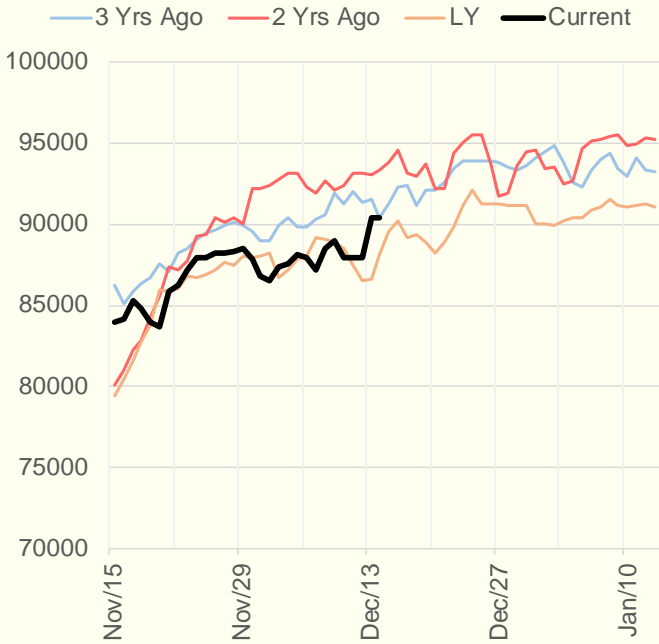
	JAN 22	FEB 22	MAR 22	APR 22	MAY 22	JUN 22	JUL 22	AUG 22	SEP 22	OCT 22	NOV 22	DEC 22
<b>Henry Hub</b>	\$3.742	\$3.711	\$3.617	\$3.545	\$3.577	\$3.619	\$3.669	\$3.689	\$3.687	\$3.719	\$3.821	\$3.995
<b>JKL</b>	\$35.730	\$39.670	\$36.450	\$26.785	\$24.555	\$24.595	\$24.745	\$24.695	\$24.845	\$25.220	\$24.760	\$26.250
JKL-HHub	\$31.988	\$35.959	\$32.833	\$23.240	\$20.978	\$20.976	\$21.076	\$21.006	\$21.158	\$21.501	\$20.939	\$22.255
<b>TTF</b>	\$38.415	\$38.411	\$35.731	\$25.544	\$23.843	\$23.674	\$23.676	\$23.674	\$23.779	\$23.870	\$24.104	\$24.238
TTF-HHub	\$34.673	\$34.700	\$32.114	\$21.999	\$20.266	\$20.055	\$20.007	\$19.985	\$20.092	\$20.151	\$20.283	\$20.243
<b>NBP</b>	\$38.987	\$39.091	\$36.132	\$26.386	\$24.144	\$23.676	\$23.757	\$23.791	\$23.947	\$24.008	\$24.522	\$24.938
NBP-HHub	\$35.245	\$35.380	\$32.515	\$22.841	\$20.567	\$20.057	\$20.088	\$20.102	\$20.260	\$20.289	\$20.701	\$20.943

## Weather Storage Model - Next 4 Week Forecast

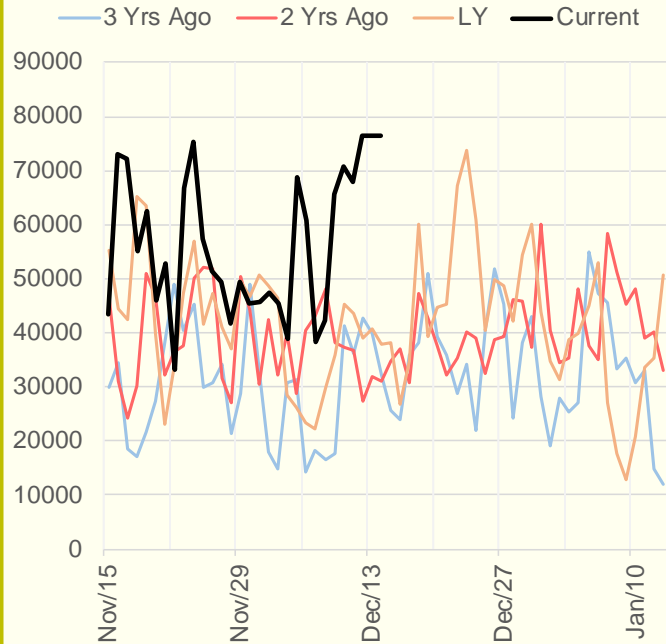




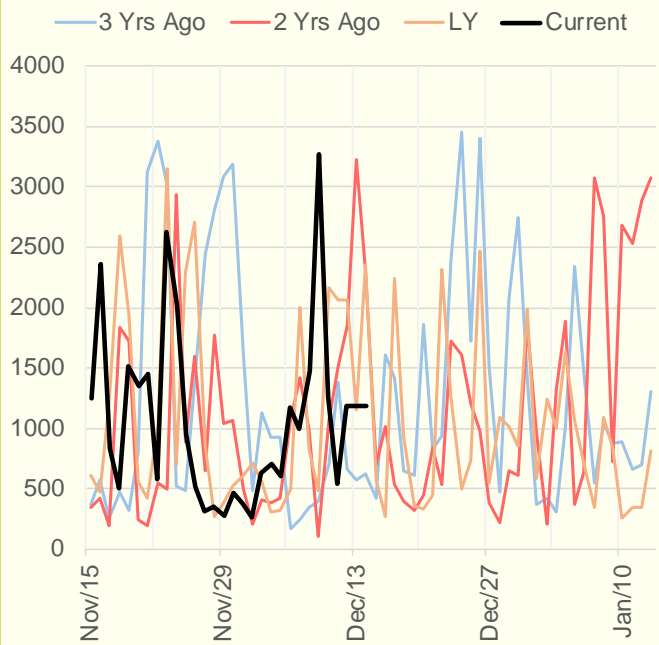
### NRC Nuclear Daily Output



### US Wind



### CALI Wind



### TEXAS Wind

