

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 3.76	▼ \$ (0.37)	▼ \$ (0.54)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 68.20	▲ \$ 1.94	▲ \$ 1.5

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 71.86	▲ \$ 1.98	▲ \$ 1.5

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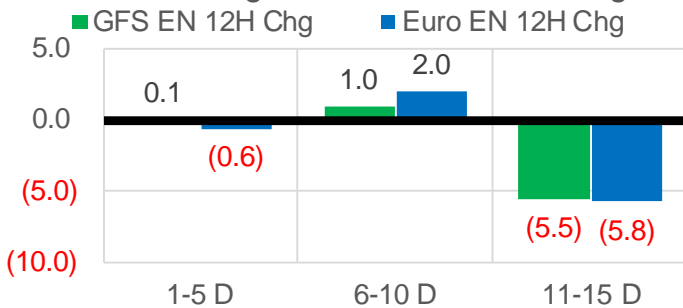
[Nat Gas Options Volume and Open Interest](#)

[Nat Gas Futures Open Interest](#)

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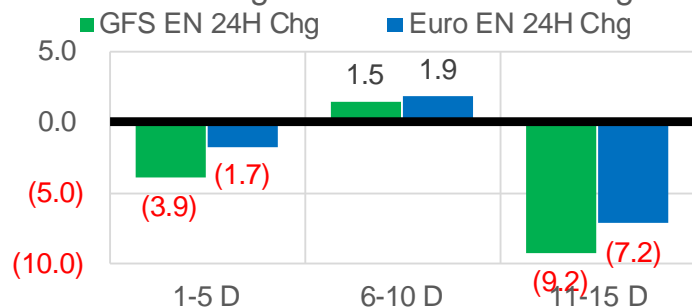
### Vs. 12H Ago

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	96.9	▲ 0.04	▲ 0.33

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	27.1	▲ 1.43	▼ -0.97

	Current	Δ from YD	Δ from 7D Avg
US ResComm	31.0	▲ 1.09	▲ 0.41

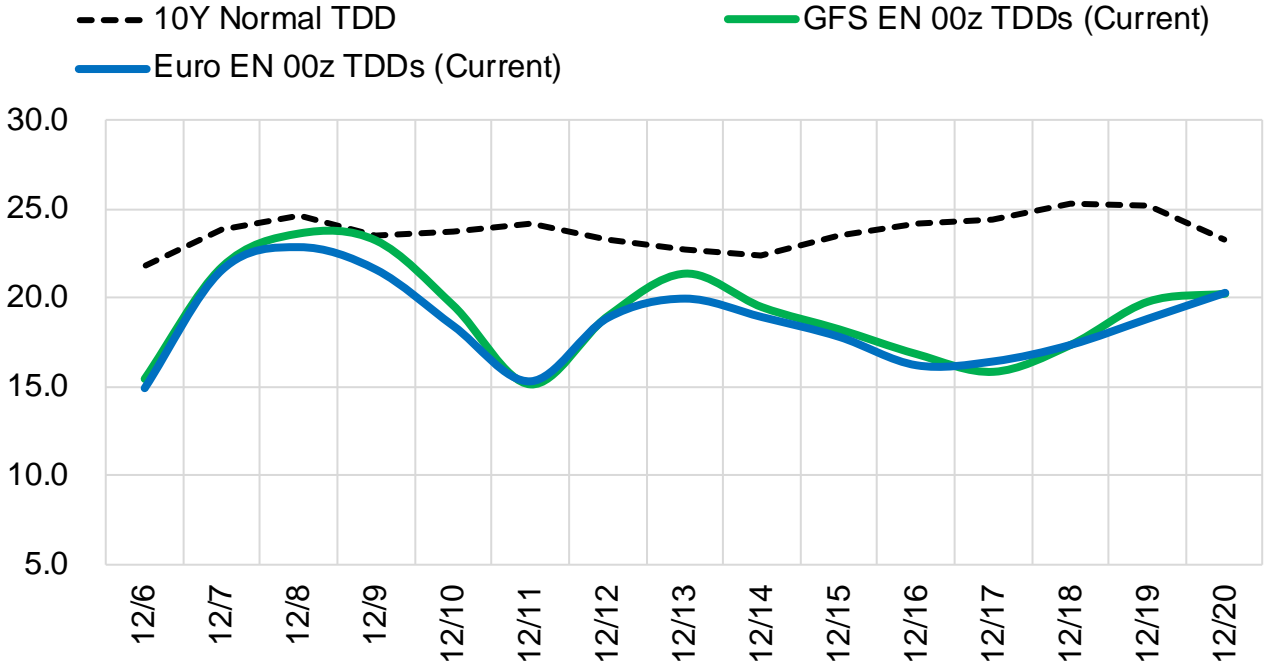
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.8	▼ -0.28	▼ -0.53

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	12.3	▼ -0.13	▲ 0.49

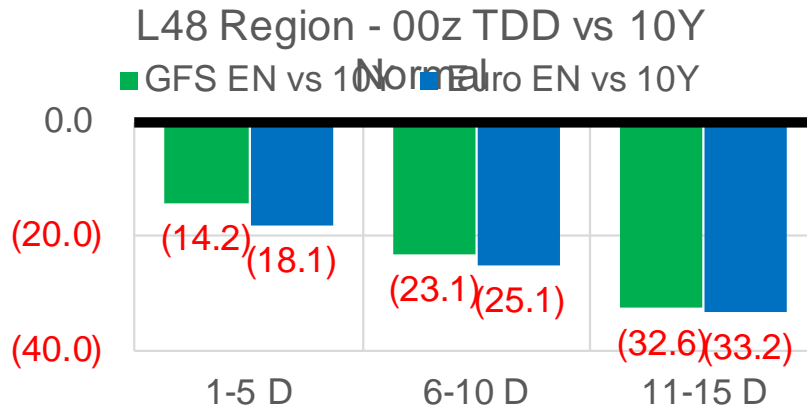
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.3	▲ 0.14	▼ -0.22

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

### L48 Region



## Vs. 10Y Normal



Source: WSI, Bloomberg

## Lower 48 Component Models

### Daily Balances

	30-Nov	1-Dec	2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>95.6</b>	<b>96.2</b>	<b>96.0</b>	<b>96.7</b>	<b>96.7</b>	<b>96.8</b>	<b>96.9</b>	▲ 0.0	▲ 0.5
<b>Canadian Imports</b>	<b>5.8</b>	<b>5.3</b>	<b>4.9</b>	<b>5.0</b>	<b>5.1</b>	<b>5.0</b>	<b>4.8</b>	▼ -0.3	▼ -0.4
L48 Power	30.6	29.1	27.7	27.0	26.0	25.6	27.1	▲ 1.4	▼ -0.6
L48 Residential & Commercial	33.5	29.7	24.6	29.2	31.2	29.9	31.0	▲ 1.1	▲ 1.3
L48 Industrial	22.2	22.2	22.2	23.0	23.6	23.8	24.2	▲ 0.4	▲ 1.3
L48 Lease and Plant Fuel	5.2	5.2	5.2	5.2	5.2	5.3	5.2	▼ 0.0	▲ 0.0
L48 Pipeline Distribution	3.4	2.9	2.6	2.8	2.9	2.8	2.9	▲ 0.1	▲ 0.0
<b>L48 Regional Gas Consumption</b>	<b>95.0</b>	<b>89.2</b>	<b>82.4</b>	<b>87.3</b>	<b>88.9</b>	<b>87.4</b>	<b>90.4</b>	▲ 3.1	▲ 2.1
<b>Net LNG Delivered</b>	<b>11.55</b>	<b>11.22</b>	<b>11.02</b>	<b>12.12</b>	<b>12.41</b>	<b>12.40</b>	<b>12.27</b>	▼ -0.1	▲ 0.5
<b>Total Mexican Exports</b>	<b>6.9</b>	<b>6.6</b>	<b>6.6</b>	<b>6.7</b>	<b>6.1</b>	<b>6.1</b>	<b>6.3</b>	▲ 0.1	▼ -0.2
<b>Implied Daily Storage Activity</b>	<b>-12.0</b>	<b>-5.6</b>	<b>0.9</b>	<b>-4.5</b>	<b>-5.7</b>	<b>-4.1</b>	<b>-7.4</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									

### EIA Storage Week Balances

	29-Oct	5-Nov	12-Nov	19-Nov	26-Nov	3-Dec	WoW	vs. 4W
<b>Lower 48 Dry Production</b>	<b>94.5</b>	<b>95.1</b>	<b>95.9</b>	<b>95.1</b>	<b>96.2</b>	<b>96.9</b>	▲ 0.7	▲ 1.4
<b>Canadian Imports</b>	<b>5.6</b>	<b>5.5</b>	<b>5.1</b>	<b>4.9</b>	<b>5.5</b>	<b>5.6</b>	▲ 0.0	▲ 0.3
L48 Power	29.0	29.6	27.5	27.8	29.2	28.8	▼ -0.4	▲ 0.3
L48 Residential & Commercial	18.0	24.3	23.6	28.0	33.3	33.2	▼ 0.0	▲ 6.0
L48 Industrial	19.6	21.2	21.3	23.1	22.4	22.4	▼ -0.1	▲ 0.3
L48 Lease and Plant Fuel	5.1	5.2	5.2	5.2	5.2	5.3	▲ 0.0	▲ 0.1
L48 Pipeline Distribution	2.5	2.9	2.7	3.0	3.3	3.3	▼ -0.1	▲ 0.3
<b>L48 Regional Gas Consumption</b>	<b>74.2</b>	<b>83.2</b>	<b>80.3</b>	<b>87.0</b>	<b>93.5</b>	<b>92.9</b>	▼ -0.6	▲ 6.9
<b>Net LNG Exports</b>	<b>10.8</b>	<b>10.9</b>	<b>11.2</b>	<b>11.1</b>	<b>11.7</b>	<b>11.8</b>	▲ 0.1	▲ 0.6
<b>Total Mexican Exports</b>	<b>6.9</b>	<b>6.1</b>	<b>6.2</b>	<b>6.1</b>	<b>6.0</b>	<b>6.4</b>	▲ 0.4	▲ 0.3
<b>Implied Daily Storage Activity</b>	<b>8.2</b>	<b>0.4</b>	<b>3.2</b>	<b>-4.2</b>	<b>-9.6</b>	<b>-8.7</b>	<b>0.9</b>	
<b>EIA Reported Daily Storage Activity</b>	<b>9.0</b>	<b>1.0</b>	<b>3.7</b>	<b>-3.0</b>	<b>-8.4</b>			
<b>Daily Model Error</b>	<b>-0.8</b>	<b>-0.6</b>	<b>-0.5</b>	<b>-1.2</b>	<b>-1.1</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>96.5</b>	▲ 0.6	▲ 4.9
<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	27.1	▼ -1.7	▼ -0.9
L48 Residential & Commercial	39.1	40.3	7.9	8.7	13.2	29.5	28.9	▼ -0.6	▼ -11.3
L48 Industrial	24.6	23.4	21.5	20.3	20.3	22.3	23.0	▲ 0.7	▼ -0.4
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	2.8	▼ -0.3	▼ -0.6
<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>87.0</b>	▼ -1.9	▼ -13.0
<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>11.8</b>	▲ 0.4	▲ 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>6.5</b>	▲ 0.3	▲ 0.6
<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>-5.2</b>	<b>-3.8</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)

	28-Nov	29-Nov	30-Nov	1-Dec	2-Dec	3-Dec	4-Dec	DoD	vs. 7D
NRC Nuclear Daily Output	88.3	88.5	87.8	86.8	86.5	87.4	87.4	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	16.6	16.4	17.0	18.1	18.4	17.5	17.5	0.0	0.1
NRC % Nuclear Cap Utilization	89.8	90.0	89.3	88.3	87.9	88.9	88.9	0.0	-0.1

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

	28-Nov	29-Nov	30-Nov	1-Dec	2-Dec	3-Dec	4-Dec	DoD	vs. 7D
CALI Wind	352	269	464	369	263	623	704	82	314
TEXAS Wind	7082	10349	12257	5946	7886	12447	7675	-4772	-1653
US Wind	41807	49428	45422	45656	47349	45523	38852	-6671	-7012

### Generation Daily Average - MWh (EIA)

	28-Nov	29-Nov	30-Nov	1-Dec	2-Dec	3-Dec	4-Dec	DoD	vs. 7D
US Wind	41807	49428	45422	45656	47349	45523	38852	-6671	-7012
US Solar	9042	10543	10185	9218	12016	10287	9201	-1086	-1014
US Petroleum	3539	3235	3964	2306	2963	3276	2798	-478	-416
US Other	8229	8505	8948	8608	8581	8158	7986	-172	-519
US Coal	82163	86307	87557	82813	78513	78031	78431	400	-4133
US Nuke	93399	93372	92512	91851	91591	92126	92072	-54	-403
US Hydro	24079	27823	28458	28222	26996	29954	27383	-2570	-205
<b>US Gas</b>	<b>143956</b>	<b>164753</b>	<b>168505</b>	<b>166005</b>	<b>151901</b>	<b>149896</b>	<b>146527</b>	<b>-3369</b>	<b>-10975</b>

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

## Storage Week Average Generation Data

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

	26-Nov	3-Dec	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	86.1	87.8	1.7	-0.3
NRC Nuclear Max Capacity	104.9	104.9	0.0	
NRC Nuclear Outage	18.8	17.1	-1.7	
NRC % Nuclear Cap Utilization	0.1	0.1	0.0	

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

	26-Nov	3-Dec	WoW	WoW Bcf/d Impact
CALI Wind	1496	363	-1134	0.2
TEXAS Wind	14691	8733	-5958	1.1
US Wind	56259	47211	-9049	1.6
	-2108.0			
	-4%			

### Generation Weekly Average - MWh (EIA)

	26-Nov	3-Dec	WoW	WoW Bcf/d Impact
US Wind	56259	47211	-9049	1.6
US Solar	9086	9970	884	-0.2
US Petroleum	3342	3167	-175	0.0
US Other	8441	8471	29	0.0
US Coal	82301	82289	-11	0.0
US Nuke	91252	92817	1564	-0.3
US Hydro	27835	26763	-1072	0.2
<b>US Gas</b>	<b>148206</b>	<b>154428</b>	<b>6222</b>	<b>-1.1</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				Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	Same 30 days	Same 30 days	Sep-21	Oct-21	Nov-21	Dec-21			
NRC Nuclear Daily Output	87.2	84.1	87.1	75.5	82.7	87.2	85.3	4.4	1.2
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	17.7	20.7	17.8	29.4	22.2	17.7	19.6	-4.4	-1.2
NRC % Nuclear Cap Utilization	88.6	85.6	88.6	76.8	84.1	88.6	86.7	4.5	1.2

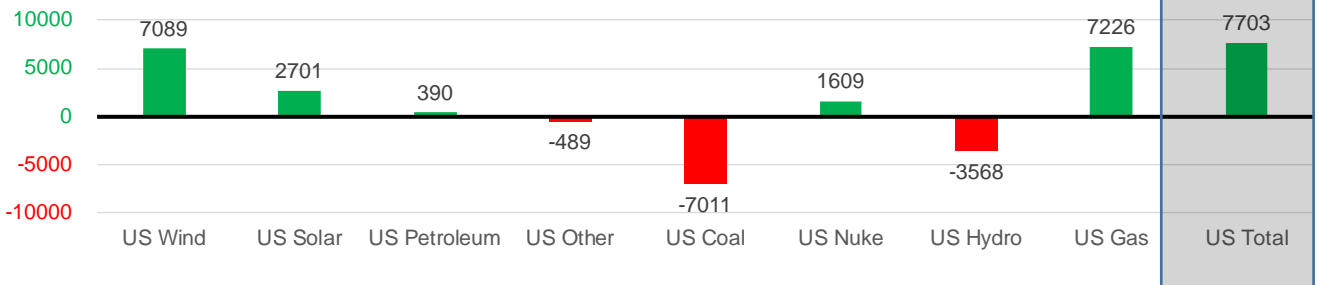
### Wind Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD				Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	Same 30 days	Same 30 days	Sep-21	Oct-21	Nov-21	Dec-21			
CALI Wind	737	1157	1964	1765	1252	561	1048	-691	-108
TEXAS Wind	8641	10501	9213	11565	11869	8217	12049	-3652	1548
US Wind	37399	45058	39362	43118	49974	42514	52147	-7460	7089

### 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	Sep-21	Oct-21	Nov-21	Dec-21			
US Wind	37399	45058	39362	43118	49974	42514	52147	▲ 9632.9	▲ 7089
US Solar	4871	7050	13345	11056	9647	9854	9751	▼ -103.5	▲ 2701
US Petroleum	2306	2504	2517	3239	3046	2823	2895	▲ 71	▲ 390
US Other	7976	8644	9021	11109	8434	8217	8155	▼ -62	▼ -489
US Coal	100669	86884	109915	84411	80844	79109	79873	▲ 765	-7011
US Nuke	94967	88494	90072	77089	87404	91964	90104	▼ -1860	▲ 1609
US Hydro	27723	30474	25622	24078	26587	27887	26906	▼ -981	▼ -3568
<b>US Gas</b>	<b>149995</b>	<b>140179</b>	<b>173566</b>	<b>159042</b>	<b>151344</b>	<b>151231</b>	<b>147406</b>	<b>▲ 7462</b>	<b>7226</b>
<b>US Total</b>	<b>425871</b>	<b>409764</b>	<b>463578</b>	<b>413298</b>	<b>417727</b>	<b>412987</b>	<b>417467</b>	<b>▲ 5290</b>	<b>7703</b>

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

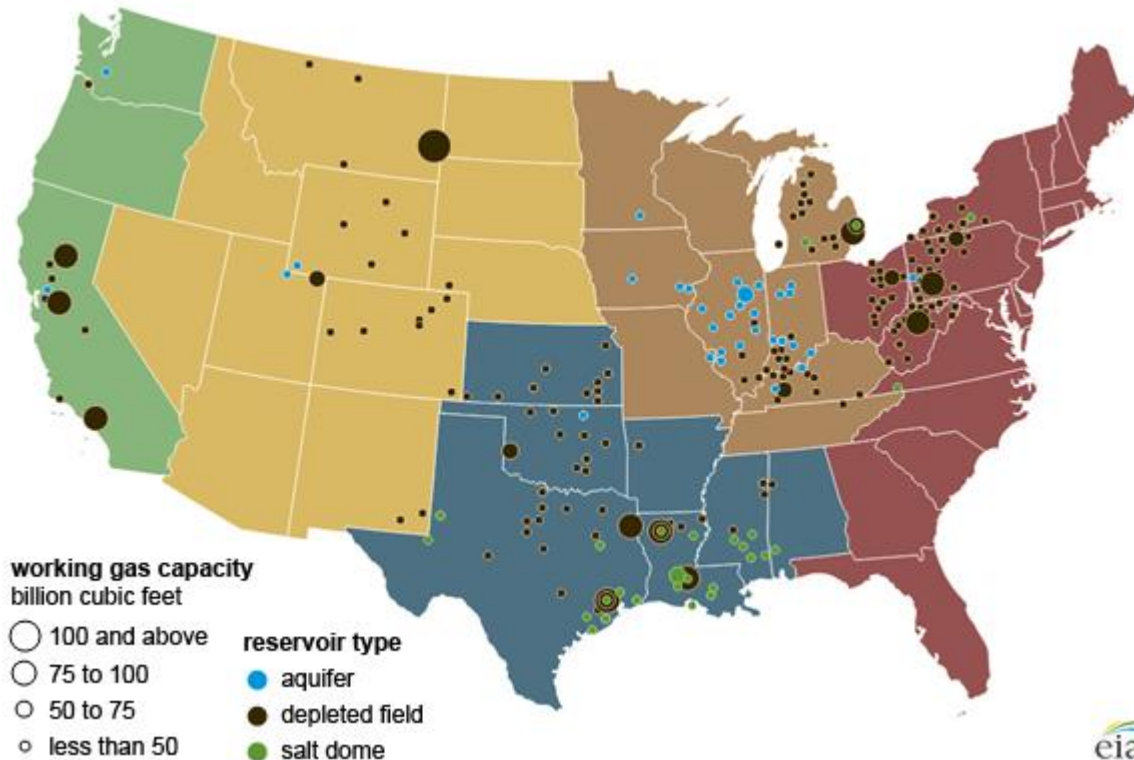
### Regional S/D Models Storage Projection

Week Ending 3-Dec

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-8.9	1.2	-7.7	-54
East	-5.4	1.7	-3.7	-26
Midwest	-3.5	0.3	-3.3	-23
Mountain	3.3	-3.6	-0.3	-2
South Central	-4.3	2.9	-1.3	-9
Pacific	0.9	-0.1	0.8	6

\*Adjustment Factor is calculated based on historical regional deltas

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

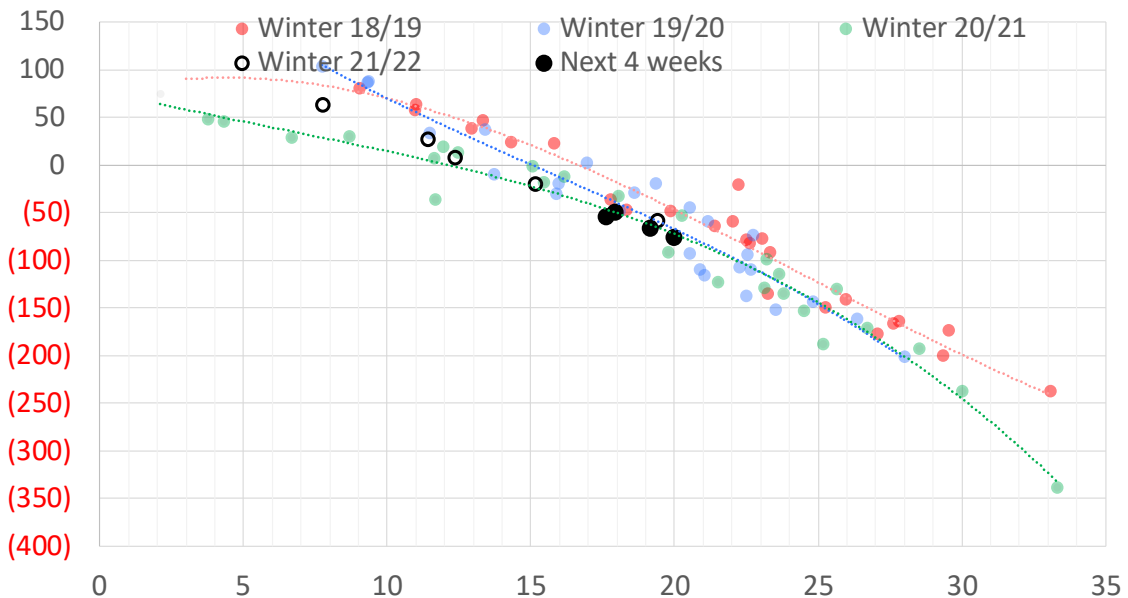


### Weather Model Storage Projection

Next report  
and beyond

Week Ending	GWDDs	Week Storage Projection
03-Dec	18	-54
10-Dec	19	-66
17-Dec	18	-48
24-Dec	20	-75

Weather Storage Model - Next 4 Week Forecast

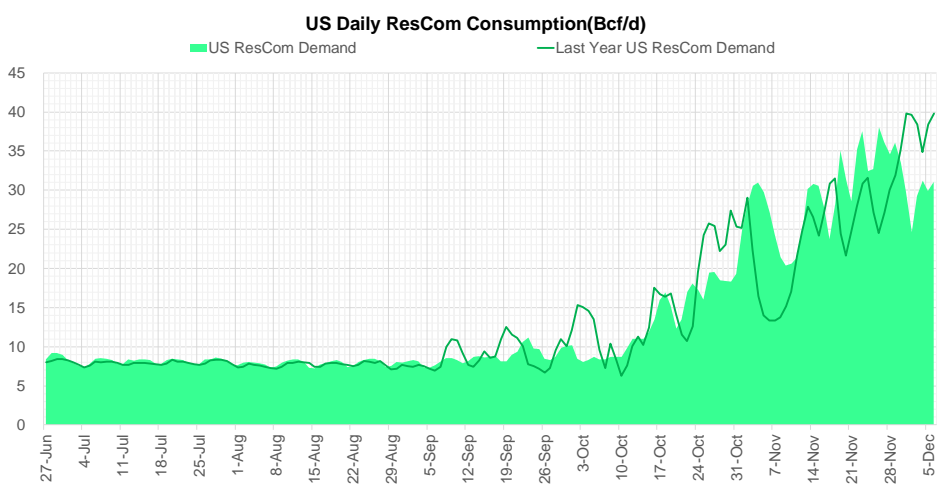
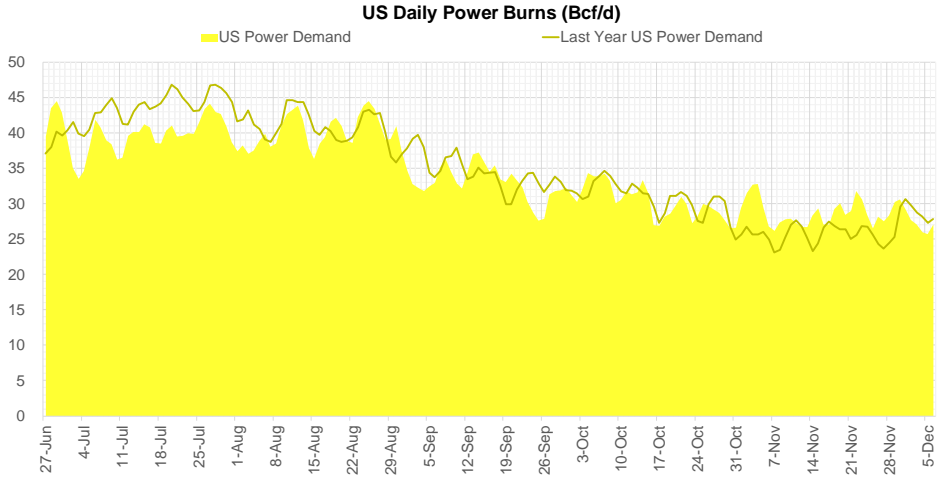
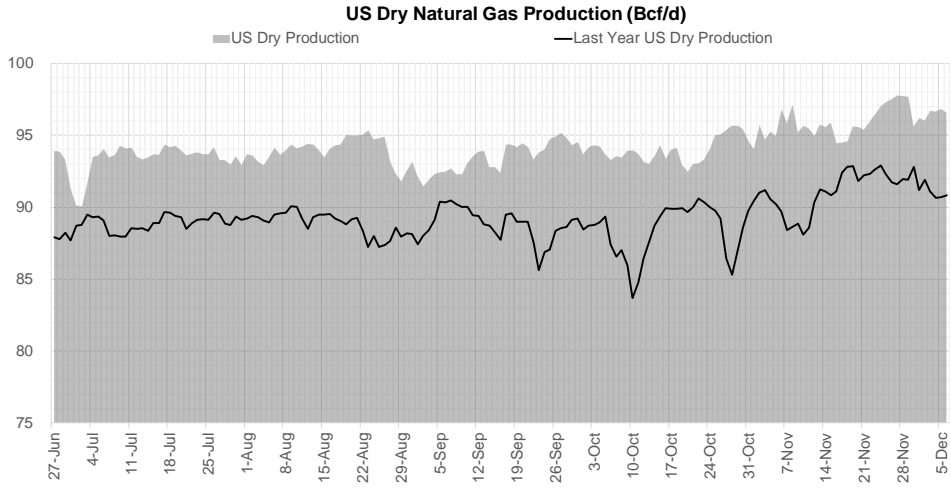


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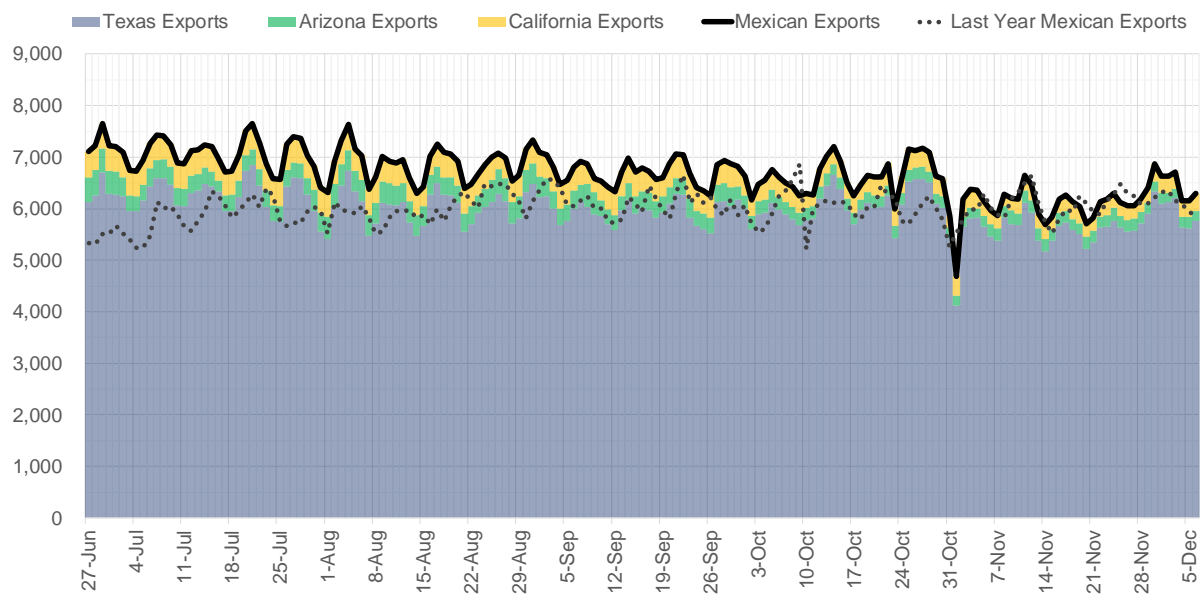
## Supply – Demand Trends



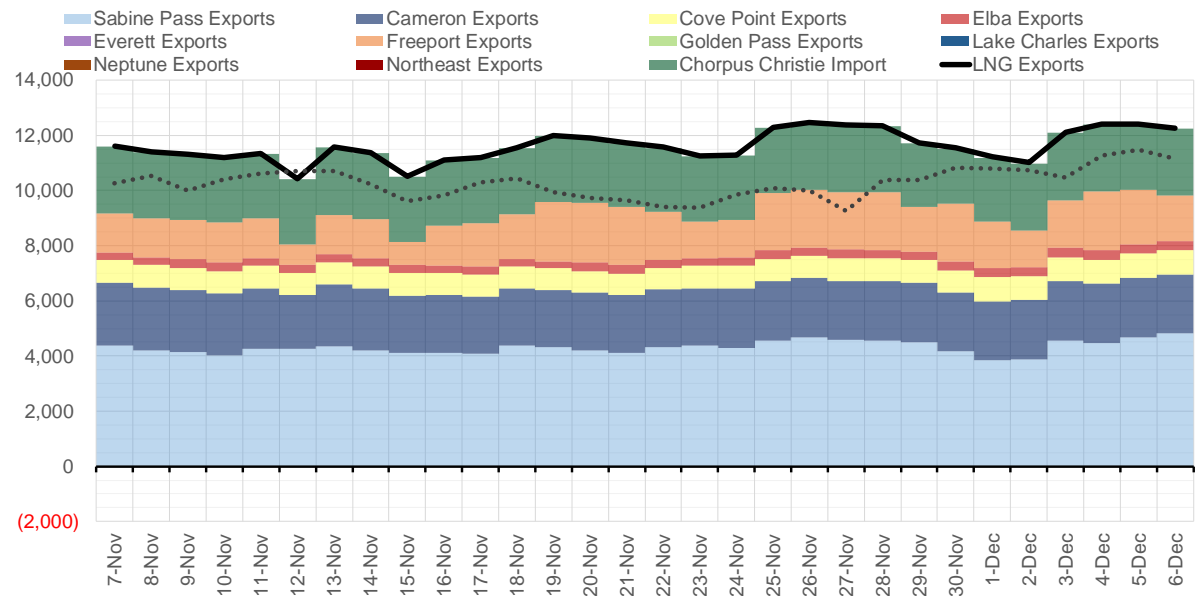
Source: Bloomberg

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

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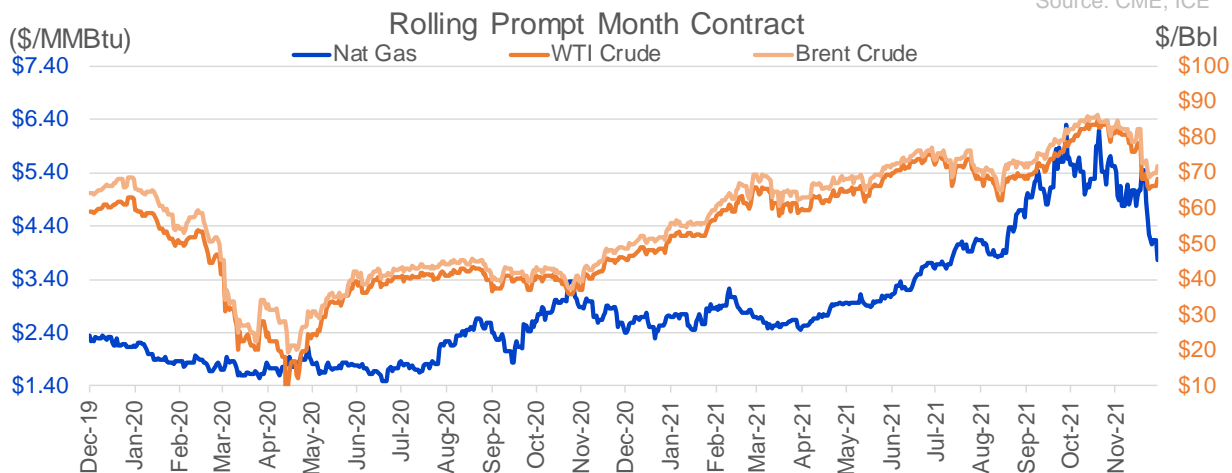
## Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

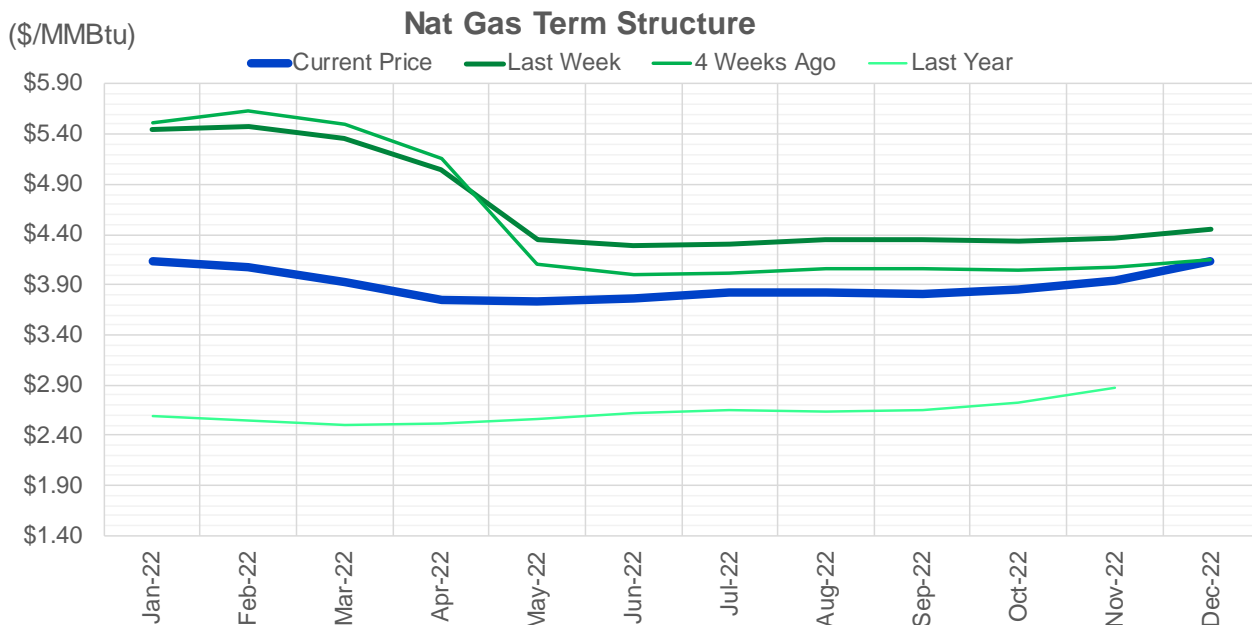
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
1	2022	C	4.50	8691	3	2022	C	10.00	34491
2	2022	C	5.00	4667	1	2022	P	4.00	27029
1	2022	C	5.00	3947	3	2022	C	8.00	24971
1	2022	C	4.40	3127	1	2022	C	6.00	24112
2	2022	C	5.50	3046	3	2022	C	5.00	23516
1	2022	C	5.50	2950	1	2022	P	2.75	23328
2	2022	P	3.50	2497	1	2022	P	3.00	22720
1	2022	C	4.60	2432	1	2022	C	5.00	22266
2	2022	C	6.00	2336	3	2022	P	2.50	20778
2	2022	P	4.00	2333	12	2022	C	5.00	20449
3	2022	C	5.00	2185	1	2022	P	3.50	19754
2	2022	C	6.50	2127	4	2022	C	3.00	19710
10	2022	P	2.50	2000	2	2022	C	5.00	19617
1	2022	P	3.75	1992	3	2022	P	3.00	19414
1	2022	P	3.50	1975	3	2022	C	6.00	19219
2	2022	C	7.00	1821	1	2022	C	7.00	18231
1	2022	C	7.00	1794	1	2022	C	10.00	17897
1	2022	C	6.00	1755	4	2022	C	5.00	17170
1	2022	P	4.00	1746	3	2022	P	4.00	16636
2	2022	C	4.75	1593	3	2022	P	3.50	16236
1	2022	C	5.25	1559	2	2022	P	3.50	15911
1	2022	C	6.50	1540	3	2022	C	4.00	15571
3	2022	C	4.50	1528	4	2022	P	2.50	15389
10	2022	P	3.00	1350	2	2022	P	4.00	15348
1	2022	P	3.65	1317	2	2022	C	6.00	15315
1	2022	C	4.75	1238	3	2022	C	7.00	14838
3	2022	P	3.00	1141	5	2022	C	5.00	14783
1	2022	C	4.15	1130	1	2022	C	4.00	14419
2	2022	C	4.50	1130	1	2022	P	3.25	14245
3	2022	P	3.50	1080	6	2022	C	5.00	13957
2	2022	C	5.25	1062	5	2022	C	3.00	13733
3	2022	C	5.50	1042	1	2022	C	8.00	13572
1	2022	C	8.00	1026	3	2022	P	5.00	13558
2	2022	C	8.00	1001	1	2022	C	5.50	13480
10	2022	P	2.00	1000	2	2022	C	4.00	13447
1	2022	P	4.25	982	6	2022	C	3.00	13438
5	2022	C	6.00	905	12	2022	C	4.50	13392
1	2022	C	4.25	653	12	2022	C	5.25	13263
2	2022	P	3.75	637	7	2022	C	3.00	13230
2	2022	C	20.00	627	8	2022	C	3.00	13226
1	2022	C	5.75	611	9	2022	C	3.00	13225
4	2022	C	6.00	609	3	2022	C	3.00	13177
1	2022	P	3.40	605	10	2022	C	3.00	13114
1	2022	P	3.00	566	2	2022	C	10.00	13077
1	2022	C	10.00	553	1	2022	P	4.50	12963
3	2022	C	20.00	548	5	2022	P	3.00	12853
3	2022	C	4.25	540	1	2022	C	6.10	12532
3	2022	C	6.50	518	4	2022	P	3.00	12438
1	2022	C	5.40	504	3	2022	C	5.50	12344
					1	2022	P	2.5	11820

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	240290	245784	-5494	JAN 22	101151	101914	-763
FEB 22	82391	82424	-33	FEB 22	72481	71270	1211
MAR 22	165764	166581	-817	MAR 22	83909	82978	932
APR 22	113848	116268	-2420	APR 22	74739	75405	-666
MAY 22	126425	127612	-1187	MAY 22	71438	71711	-273
JUN 22	48636	48536	100	JUN 22	53955	53820	136
JUL 22	43177	43024	153	JUL 22	56613	56283	330
AUG 22	33555	33842	-287	AUG 22	54909	54721	188
SEP 22	39067	39098	-31	SEP 22	56194	56109	85
OCT 22	81965	82881	-916	OCT 22	63170	63333	-163
NOV 22	34651	34519	132	NOV 22	48455	48342	113
DEC 22	28756	28979	-223	DEC 22	51266	51206	60
JAN 23	46153	43897	2256	JAN 23	43704	43106	598
FEB 23	12241	11837	404	FEB 23	34373	34113	259
MAR 23	27467	27048	419	MAR 23	38895	38551	344
APR 23	19445	19176	269	APR 23	39602	39435	167
MAY 23	13080	12704	376	MAY 23	35367	35268	99
JUN 23	9610	9600	10	JUN 23	31886	31824	62
JUL 23	7268	7194	74	JUL 23	31570	31498	73
AUG 23	5096	5049	47	AUG 23	32499	32403	95
SEP 23	6673	6652	21	SEP 23	30941	30848	94
OCT 23	11095	10918	177	OCT 23	35105	34962	143
NOV 23	5967	5950	17	NOV 23	33993	33932	61
DEC 23	8373	8348	25	DEC 23	31447	31385	62
JAN 24	5551	5505	46	JAN 24	21717	21652	65
FEB 24	1464	1464	0	FEB 24	15745	15676	69
MAR 24	9096	9051	45	MAR 24	20878	20826	52
APR 24	4704	4543	161	APR 24	14889	14823	66
MAY 24	2050	2050	0	MAY 24	15751	15720	31
JUN 24	927	927	0	JUN 24	16150	16105	45





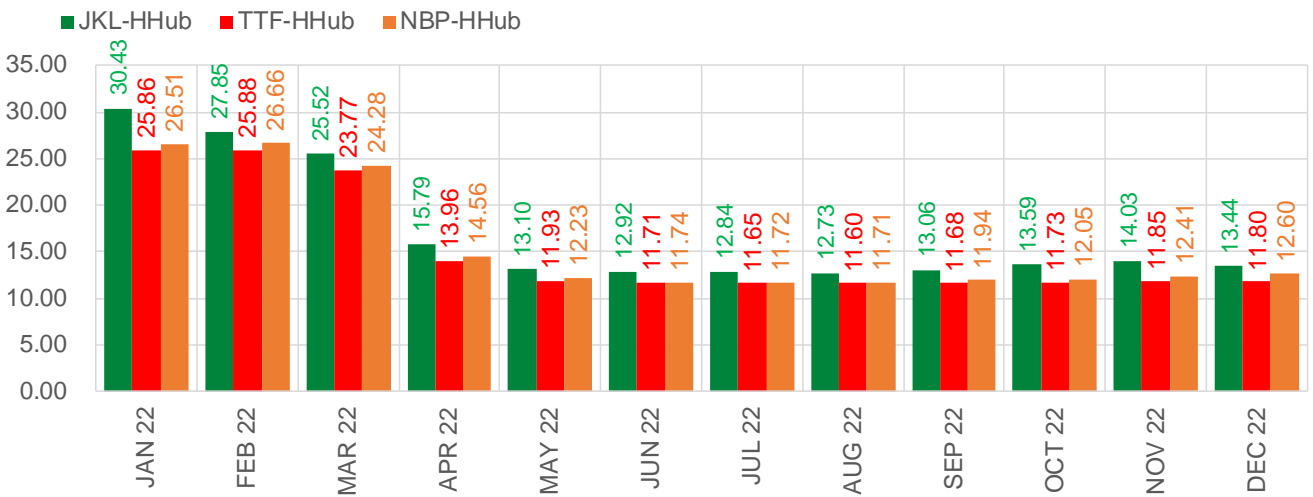
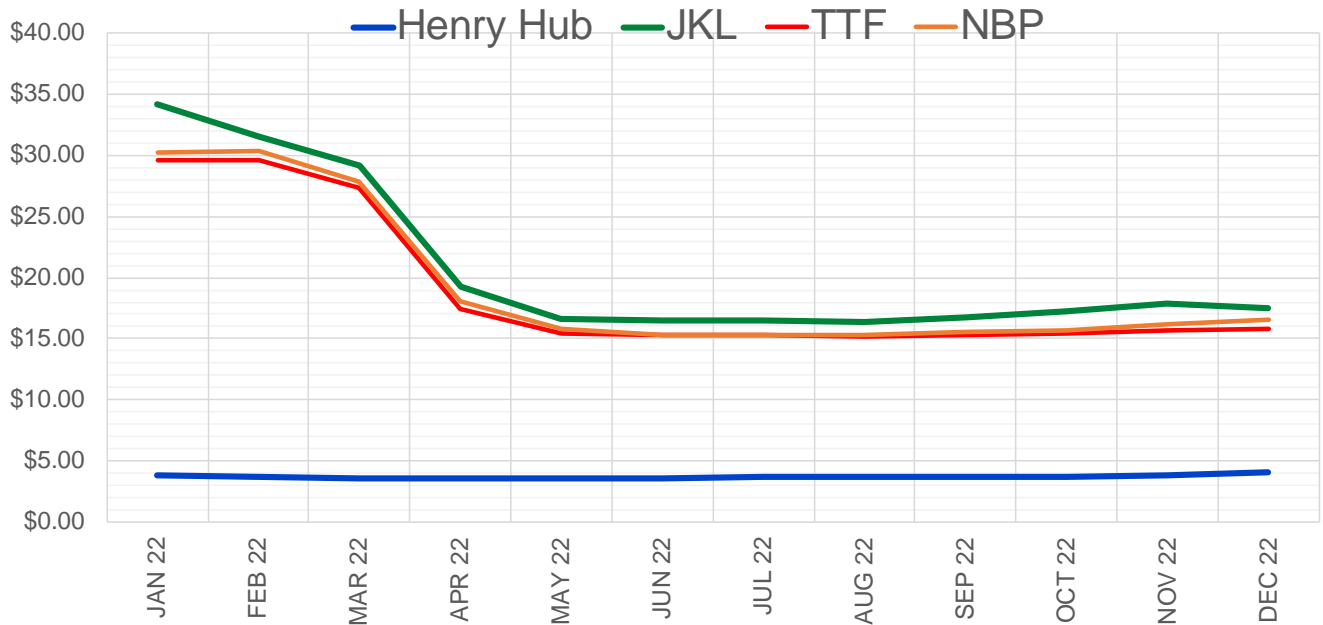
	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
<b>Current Price</b>	<b>\$4.132</b>	<b>\$4.073</b>	<b>\$3.921</b>	<b>\$3.751</b>	<b>\$3.727</b>	<b>\$3.766</b>	<b>\$3.817</b>	<b>\$3.829</b>	<b>\$3.815</b>	<b>\$3.851</b>	<b>\$3.948</b>	<b>\$4.136</b>
Last Week	\$5.447	\$5.477	\$5.364	\$5.044	\$4.352	\$4.285	\$4.310	\$4.346	\$4.350	\$4.330	\$4.367	\$4.454
vs. Last Week	-\$1.315	-\$1.404	-\$1.443	-\$1.293	-\$0.625	-\$0.519	-\$0.493	-\$0.517	-\$0.535	-\$0.479	-\$0.419	-\$0.318
4 Weeks Ago	\$5.516	\$5.626	\$5.494	\$5.161	\$4.102	\$3.996	\$4.021	\$4.060	\$4.065	\$4.045	\$4.072	\$4.146
vs. 4 Weeks Ago	-\$1.384	-\$1.553	-\$1.573	-\$1.410	-\$0.375	-\$0.230	-\$0.204	-\$0.231	-\$0.250	-\$0.194	-\$0.124	-\$0.010
Last Year	\$2.575	\$2.586	\$2.551	\$2.508	\$2.517	\$2.563	\$2.623	\$2.645	\$2.635	\$2.659	\$2.732	\$2.871
vs. Last Year	\$1.557	\$1.487	\$1.370	\$1.243	\$1.210	\$1.203	\$1.194	\$1.184	\$1.180	\$1.192	\$1.216	\$1.265

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	4.56	12.36	7.80
TETCO M3	\$/MMBtu	3.50	7.23	3.73
FGT Zone 3	\$/MMBtu	3.70	5.56	1.86
Zone 6 NY	\$/MMBtu	3.70	7.66	3.96
Chicago Citygate	\$/MMBtu	3.73	5.59	1.86
Michcon	\$/MMBtu	3.76	5.09	1.33
Columbia TCO Pool	\$/MMBtu	3.45	4.93	1.48
Ventura	\$/MMBtu	3.69	5.68	1.99
Rockies/Opal	\$/MMBtu	3.84	5.32	1.48
El Paso Permian Basin	\$/MMBtu	3.46	4.87	1.41
Socal Citygate	\$/MMBtu	5.15	6.42	1.27
Malin	\$/MMBtu	3.92	6.14	2.22
Houston Ship Channel	\$/MMBtu	3.94	5.54	1.61
Henry Hub Cash	\$/MMBtu	3.81	5.27	1.46
AECO Cash	C\$/GJ	2.85	4.41	1.56
Station2 Cash	C\$/GJ	2.66	7.45	4.79
Dawn Cash	C\$/GJ	4.02	5.29	1.27

Source: CME, Bloomberg

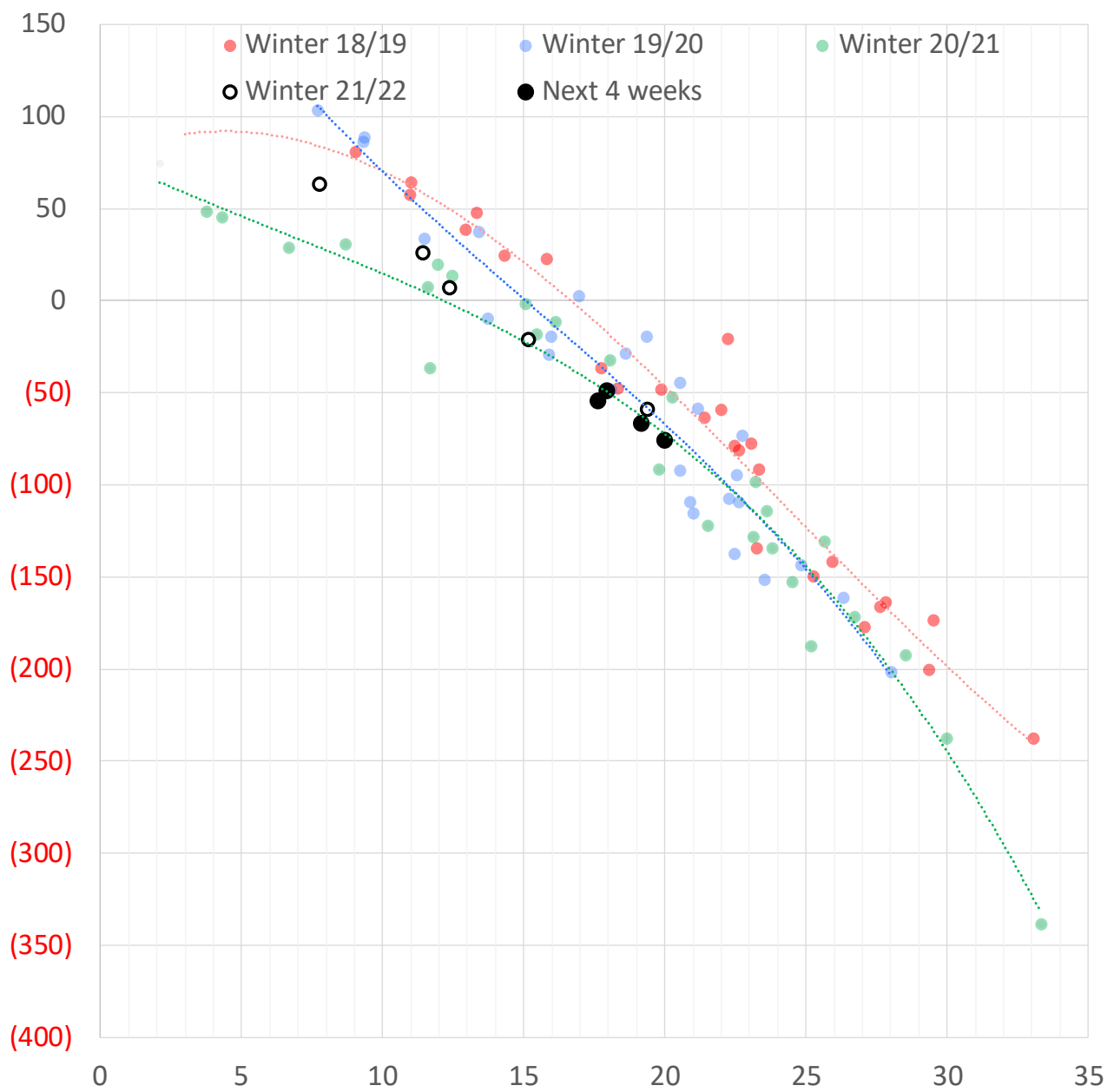
	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 2.188
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 0.000	▲ 0.000	▲ 0.288
NatGas Oct21/Jan22	\$/MMBtu	-1.709	▼ -1.345	▼ -1.494	▼ -2.025
NatGas Apr22/Oct22	\$/MMBtu	0.100	▲ 0.085	▲ 0.130	▲ 0.043
WTI Crude	\$/Bbl	66.26	▼ -1.890	▼ -15.010	▲ 20.000
Brent Crude	\$/Bbl	69.88	▼ -2.840	▼ -12.860	▲ 20.630
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	209.84	▲ 0.390	▼ -35.720	▲ 69.540
Propane, Mt. Bel	cents/Gallon	0.99	▼ -0.278	▼ -0.381	▲ 0.405
Ethane, Mt. Bel	cents/Gallon	0.35	▼ -0.050	▼ -0.074	▲ 0.165
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>	\$3.762	\$3.730	\$3.606	\$3.517	\$3.519	\$3.564	\$3.622	\$3.634	\$3.624	\$3.669	\$3.790	\$4.009
<b>JKL</b>	\$34.190	\$31.580	\$29.130	\$19.310	\$16.615	\$16.480	\$16.460	\$16.365	\$16.685	\$17.260	\$17.815	\$17.450
<b>JKL-HHub</b>	\$30.428	\$27.850	\$25.524	\$15.793	\$13.096	\$12.916	\$12.838	\$12.731	\$13.061	\$13.591	\$14.025	\$13.441
<b>TTF</b>	\$29.620	\$29.606	\$27.373	\$17.480	\$15.446	\$15.273	\$15.274	\$15.234	\$15.307	\$15.401	\$15.643	\$15.812
<b>TTF-HHub</b>	\$25.858	\$25.876	\$23.767	\$13.963	\$11.927	\$11.709	\$11.652	\$11.600	\$11.683	\$11.732	\$11.853	\$11.803
<b>NBP</b>	\$30.275	\$30.392	\$27.885	\$18.078	\$15.748	\$15.301	\$15.342	\$15.340	\$15.563	\$15.714	\$16.202	\$16.606
<b>NBP-HHub</b>	\$26.513	\$26.662	\$24.279	\$14.561	\$12.229	\$11.737	\$11.720	\$11.706	\$11.939	\$12.045	\$12.412	\$12.597

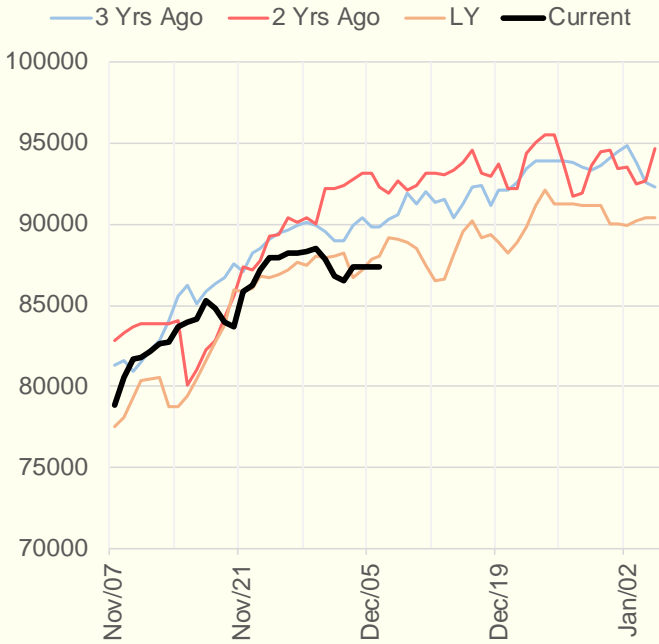
## Weather Storage Model - Next 4 Week Forecast



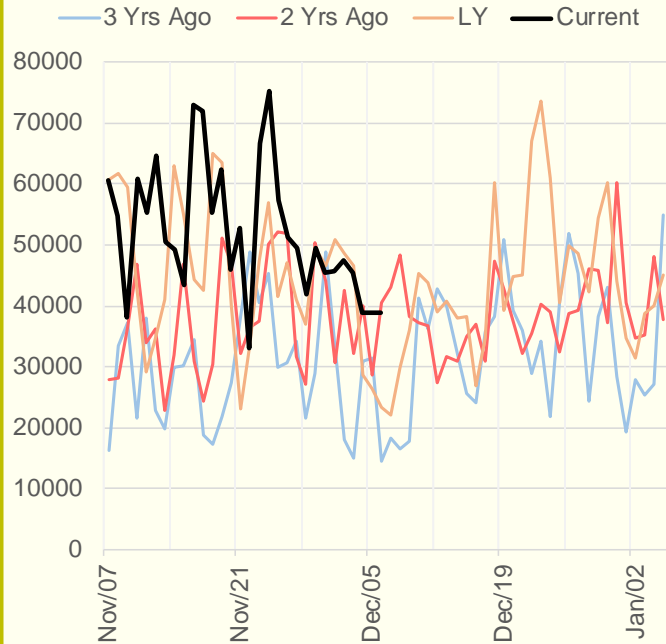
The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are 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.



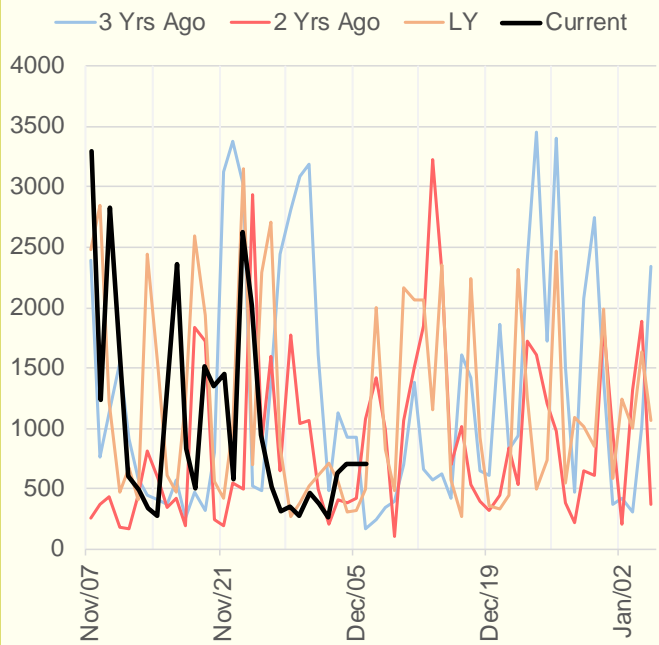
### NRC Nuclear Daily Output



### US Wind



### CALI Wind



### TEXAS Wind

