

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 3.73 ▲	\$ - ▼	\$ (0.05)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 73.79 ▲	\$ - ▲	\$ 2.6

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 75.85 ▼	\$ (1.00) ▲	\$ 1.8

### Page Menu

[Short-term Weather Model Outlooks](#)

[Lower 48 Component Models](#)

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

[Weather Model Storage Projection](#)

[Supply – Demand Trends](#)

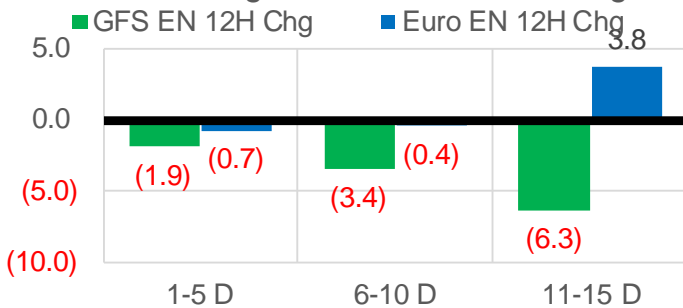
[Nat Gas Options Volume and Open Interest](#)

[Nat Gas Futures Open Interest](#)

[Price Summary](#)

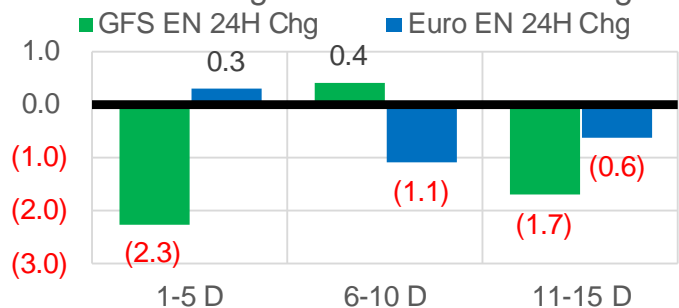
### Vs. 12H Ago

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	97.6 ▲	0.73	1.07

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	25.3 ▼	-2.51	-4.48

	Current	Δ from YD	Δ from 7D Avg
US ResComm	31.3 ▼	-7.31	-9.03

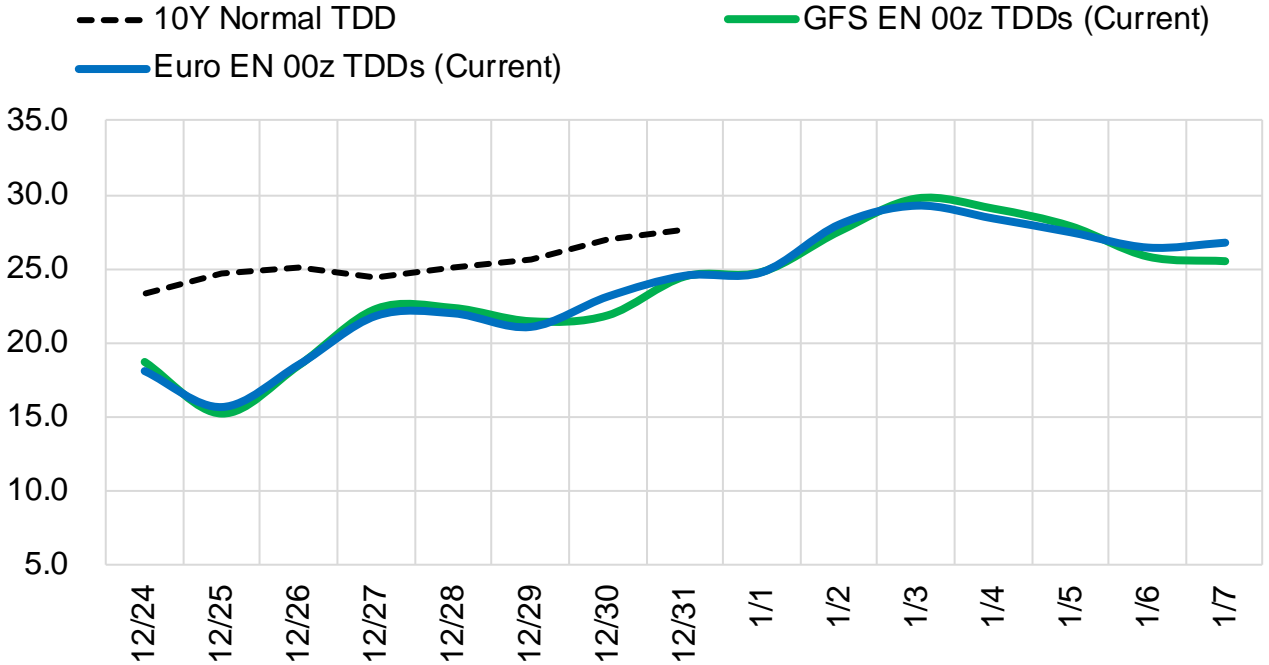
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.2 ▼	-0.74	-0.83

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	12.5 ▼	-0.23	-0.13

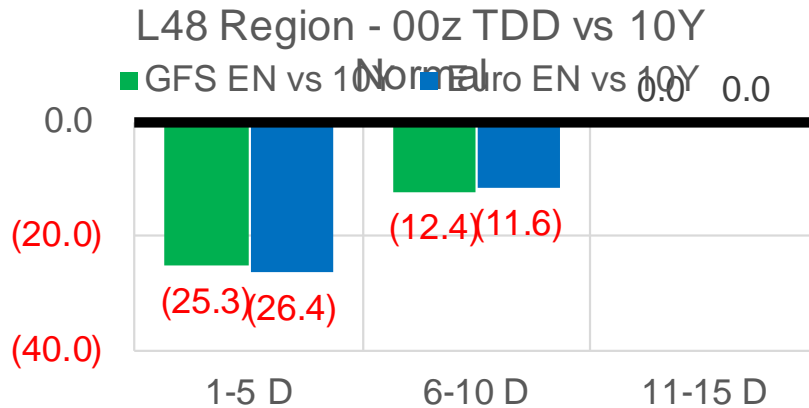
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.7 ▼	-0.38	-0.49

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

### L48 Region



### Vs. 10Y Normal



Source: WSI , Bloomberg

## Lower 48 Component Models

### Daily Balances

	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>96.5</b>	<b>96.3</b>	<b>96.5</b>	<b>96.2</b>	<b>96.7</b>	<b>96.8</b>	<b>97.6</b>	▲ 0.7	▲ 1.1
<b>Canadian Imports</b>	<b>5.1</b>	<b>5.4</b>	<b>5.3</b>	<b>5.0</b>	<b>5.2</b>	<b>4.9</b>	<b>4.2</b>	▼ -0.7	▼ -1.0
L48 Power	28.0	30.0	32.0	31.9	31.0	27.8	25.3	▼ -2.5	▼ -4.8
L48 Residential & Commercial	36.5	44.2	45.6	43.0	41.6	38.6	31.3	▼ -7.3	▼ -10.3
L48 Industrial	22.7	23.0	23.1	23.4	24.4	25.1	25.5	▲ 0.4	▲ 1.9
L48 Lease and Plant Fuel	5.2	5.2	5.2	5.2	5.2	5.3	5.3	▲ 0.0	▲ 0.1
L48 Pipeline Distribution	3.2	3.7	3.9	3.7	3.6	3.3	2.8	▼ -0.5	▼ -0.8
<b>L48 Regional Gas Consumption</b>	<b>95.6</b>	<b>106.2</b>	<b>109.8</b>	<b>107.3</b>	<b>105.9</b>	<b>100.1</b>	<b>90.2</b>	▼ -9.9	▼ -13.9
<b>Net LNG Delivered</b>	<b>12.64</b>	<b>13.09</b>	<b>12.87</b>	<b>12.91</b>	<b>12.54</b>	<b>12.76</b>	<b>12.52</b>	▼ -0.2	▼ -0.3
<b>Total Mexican Exports</b>	<b>6.2</b>	<b>6.0</b>	<b>6.2</b>	<b>6.0</b>	<b>6.4</b>	<b>6.1</b>	<b>5.7</b>	▼ -0.4	▼ -0.5
<b>Implied Daily Storage Activity</b>	<b>-12.9</b>	<b>-23.5</b>	<b>-27.0</b>	<b>-25.0</b>	<b>-23.0</b>	<b>-17.1</b>	<b>-6.7</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									

### EIA Storage Week Balances

	19-Nov	26-Nov	3-Dec	10-Dec	17-Dec	24-Dec	WoW	vs. 4W
<b>Lower 48 Dry Production</b>	<b>95.1</b>	<b>96.2</b>	<b>96.9</b>	<b>96.7</b>	<b>96.5</b>	<b>96.5</b>	▲ 0.0	▼ -0.1
<b>Canadian Imports</b>	<b>4.9</b>	<b>5.5</b>	<b>5.6</b>	<b>5.3</b>	<b>4.6</b>	<b>5.0</b>	▲ 0.5	▼ -0.2
L48 Power	27.8	29.2	28.8	29.1	28.5	29.8	▲ 1.3	▲ 0.9
L48 Residential & Commercial	28.0	33.3	33.2	35.6	31.6	40.3	▲ 8.8	▲ 6.9
L48 Industrial	23.1	22.4	22.5	23.6	23.6	23.5	▼ 0.0	▲ 0.5
L48 Lease and Plant Fuel	5.2	5.2	5.3	5.2	5.2	5.2	▲ 0.0	▼ 0.0
L48 Pipeline Distribution	3.0	3.3	3.3	3.2	3.0	3.5	▲ 0.5	▲ 0.3
<b>L48 Regional Gas Consumption</b>	<b>87.0</b>	<b>93.5</b>	<b>93.1</b>	<b>96.8</b>	<b>91.8</b>	<b>102.4</b>	▲ 10.5	▲ 8.6
<b>Net LNG Exports</b>	<b>11.1</b>	<b>11.7</b>	<b>11.8</b>	<b>12.0</b>	<b>11.9</b>	<b>12.7</b>	▲ 0.8	▲ 0.8
<b>Total Mexican Exports</b>	<b>6.0</b>	<b>6.0</b>	<b>6.4</b>	<b>6.4</b>	<b>6.2</b>	<b>6.2</b>	▼ 0.0	▼ -0.1
<b>Implied Daily Storage Activity</b>	<b>-4.2</b>	<b>-9.6</b>	<b>-8.8</b>	<b>-13.2</b>	<b>-8.9</b>	<b>-19.7</b>	<b>-10.8</b>	
<b>EIA Reported Daily Storage Activity</b>	<b>-3.0</b>	<b>-8.4</b>	<b>-8.4</b>	<b>-12.6</b>	<b>-7.9</b>			
<b>Daily Model Error</b>	<b>-1.2</b>	<b>-1.1</b>	<b>-0.4</b>	<b>-0.7</b>	<b>-1.0</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>93.5</b>	<b>94.0</b>	<b>95.9</b>	<b>96.5</b>	▲ 0.6	▲ 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>5.0</b>	▼ -0.3	▼ -0.8
L48 Power	29.3	28.0	40.1	33.0	30.2	28.7	29.0	▲ 0.3	▲ 1.1
L48 Residential & Commercial	39.1	40.3	7.9	8.7	13.2	29.6	35.1	▲ 5.5	▼ -5.2
L48 Industrial	24.6	23.4	21.5	20.3	20.3	22.3	23.5	▲ 1.1	▲ 0.1
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	3.2	▲ 0.1	▼ -0.2
<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>96.0</b>	▲ 7.1	▼ -4.0
<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>12.1</b>	▲ 0.7	▲ 1.1
<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>-12.9</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)

	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	DoD	vs. 7D
NRC Nuclear Daily Output	92.0	92.4	92.3	91.0	91.6	92.5	92.1	-0.3	0.2
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	12.9	12.5	12.5	13.9	13.3	12.4	12.7	0.3	-0.2
NRC % Nuclear Cap Utilization	93.5	93.9	93.9	92.5	93.1	94.0	93.7	-0.4	0.2

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

	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	DoD	vs. 7D
CALI Wind	1855	737	706	755	703	610	974	364	79
TEXAS Wind	10166	13399	17351	8377	5371	6709	6709	0	-3519
US Wind	58030	45102	52089	46993	43099	42831	44043	1212	-3981

### Generation Daily Average - MWh (EIA)

	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	DoD	vs. 7D
US Wind	58030	45102	52089	46993	43099	42831	44043	1212	-3981
US Solar	7455	9871	6640	6660	7730	4706	8079	3373	902
US Petroleum	2866	3282	3459	3507	4188	4042	3601	-441	44
US Other	8429	7751	8045	7718	8566	8680	8533	-147	335
US Coal	77505	82220	80841	84494	90359	93124	93350	226	8593
US Nuke	96882	97494	97176	96259	97313	97898	97729	-169	558
US Hydro	30913	32428	31427	31090	35862	34872	31057	-3815	-1708
<b>US Gas</b>	<b>151919</b>	<b>157195</b>	<b>141625</b>	<b>156936</b>	<b>189765</b>	<b>189614</b>	<b>173790</b>	<b>-15824</b>	<b>9281</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	26-Nov	3-Dec	10-Dec	17-Dec	24-Dec	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	83.9	86.1	87.8	88.0	90.0	92.1	2.0	-0.4
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	21.0	18.8	17.1	16.9	14.9	12.8	-2.0	
NRC % Nuclear Cap Utilization	0.1	0.1	0.1	0.1	0.1	0.1	0.0	

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

	19-Nov	26-Nov	3-Dec	10-Dec	17-Dec	24-Dec	WoW	WoW Bcf/d Impact
CALI Wind	862	1496	363	1263	1709	780	-929	0.2
TEXAS Wind	13655	14691	8733	12216	16176	9232	-6944	1.2
US Wind	58367	56260	47210	51470	68300	45457	-22843	4.1
					16829.8			
					33%			

### Generation Weekly Average - MWh (EIA)

	19-Nov	26-Nov	3-Dec	10-Dec	17-Dec	24-Dec	WoW	WoW Bcf/d Impact
US Wind	58367	56260	47210	51470	68300	45457	-22843	4.1
US Solar	10068	9086	9918	7402	7539	7395	-144	0.0
US Petroleum	2555	3342	3166	3441	2701	3669	968	-0.2
US Other	7849	8442	8483	8435	8531	8261	-270	0.0
US Coal	77863	82301	82287	82743	77026	88248	11222	-2.0
US Nuke	88331	91252	92816	92983	95055	97371	2316	-0.4
US Hydro	26216	27837	26777	29626	30251	32542	2291	-0.4
<b>US Gas</b>	<b>145263</b>	<b>148208</b>	<b>155286</b>	<b>159459</b>	<b>148750</b>	<b>168959</b>	<b>20209</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	92.6	88.4	87.1	75.5	82.7	89.8	89.5			
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	12.3	16.4	17.8	29.4	22.2	15.0	15.4	-7.1	-1.1		
NRC % Nuclear Cap Utilization	94.2	90.0	88.6	76.8	84.1	91.3	91.0	7.2	1.0		

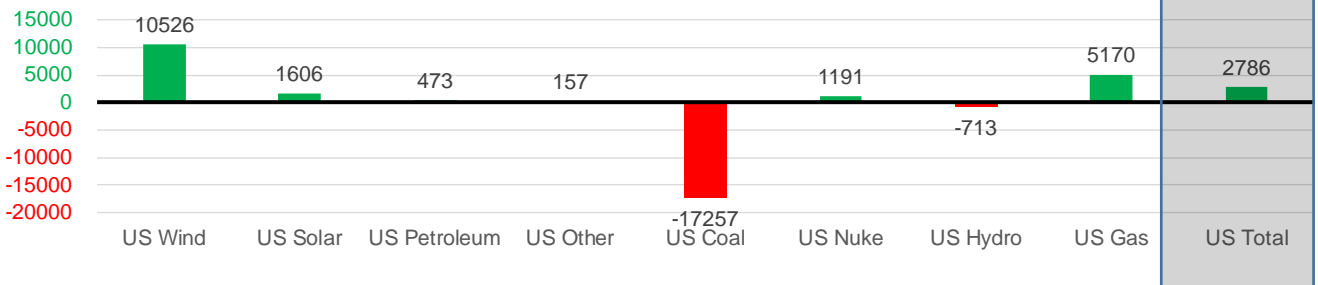
### Wind Generation Monthly Average - MWh (EIA)

	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	1018	1077	1964	1765	1252	1161	1024			
TEXAS Wind	9108	10192	9213	11565	11869	11829	11557	-39	1365		
US Wind	38059	42423	39362	43142	49974	53902	52949	3928	10526		

### 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	38059	42423	39362	43142	49974	53902	52949			
US Solar	4226	6506	13345	11059	9690	7668	8113	▲ 444.8	▲ 1606		
US Petroleum	2841	2783	2517	3239	3045	3231	3256	▲ 25	▲ 473		
US Other	8321	8273	9021	11109	8435	8431	8430	▼ -1	▲ 157		
US Coal	96174	100003	109915	84433	80848	82944	82746	▼ -198	▼ -17257		
US Nuke	99020	93430	90072	77089	87404	94960	94622	▼ -338	▲ 1191		
US Hydro	29000	30455	25622	24078	26593	30552	29741	▼ -811	▼ -713		
<b>US Gas</b>	<b>155738</b>	<b>152451</b>	<b>173566</b>	<b>159046</b>	<b>151462</b>	<b>159765</b>	<b>157620</b>	▼ -1831	▲ 5170		
<b>US Total</b>	<b>433546</b>	<b>434832</b>	<b>463578</b>	<b>413354</b>	<b>417925</b>	<b>441570</b>	<b>437618</b>	▼ -2710	▲ 2786		

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

### Regional S/D Models Storage Projection

Week Ending 24-Dec

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-19.9	1.0	-18.9	-132
East	-6.7	2.1	-4.5	-32
Midwest	-7.0	0.2	-6.8	-48
Mountain	1.9	-3.4	-1.5	-10
South Central	-7.4	2.9	-4.5	-32
Pacific	-0.7	-0.8	-1.5	-11

\*Adjustment Factor is calculated based on historical regional deltas

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

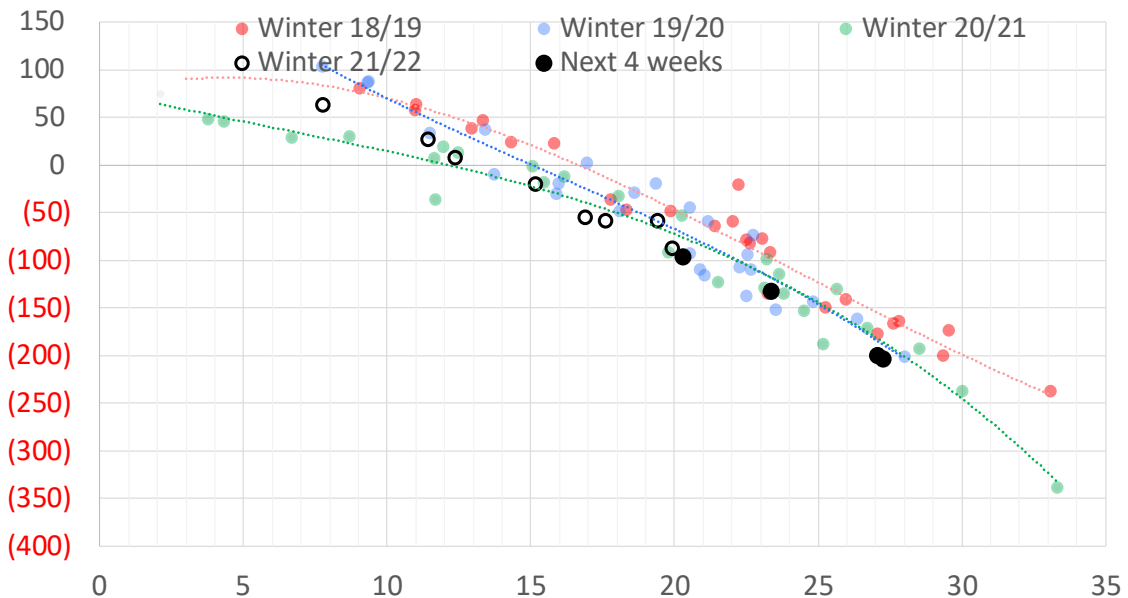


### Weather Model Storage Projection

Next report  
and beyond

Week Ending	GWDDs	Week Storage Projection
24-Dec	23	-132
31-Dec	20	-96
07-Jan	27	-199
14-Jan	27	-203

Weather Storage Model - Next 4 Week Forecast

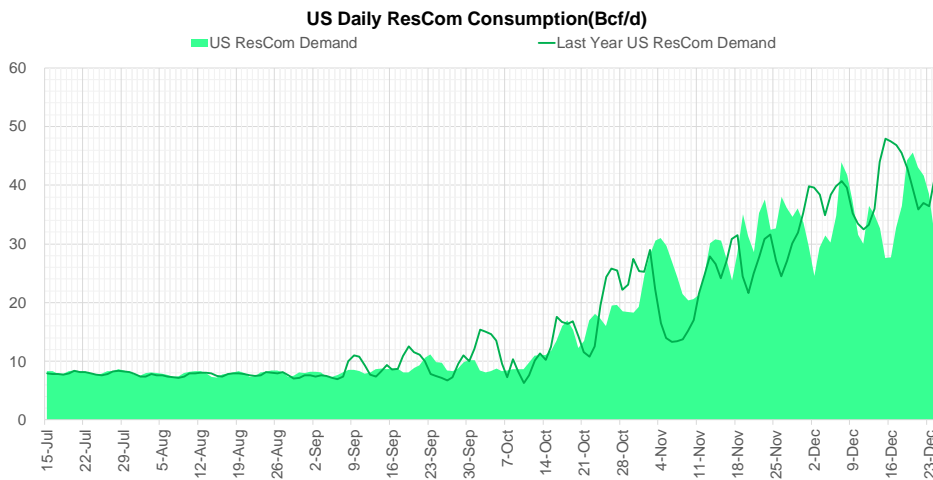
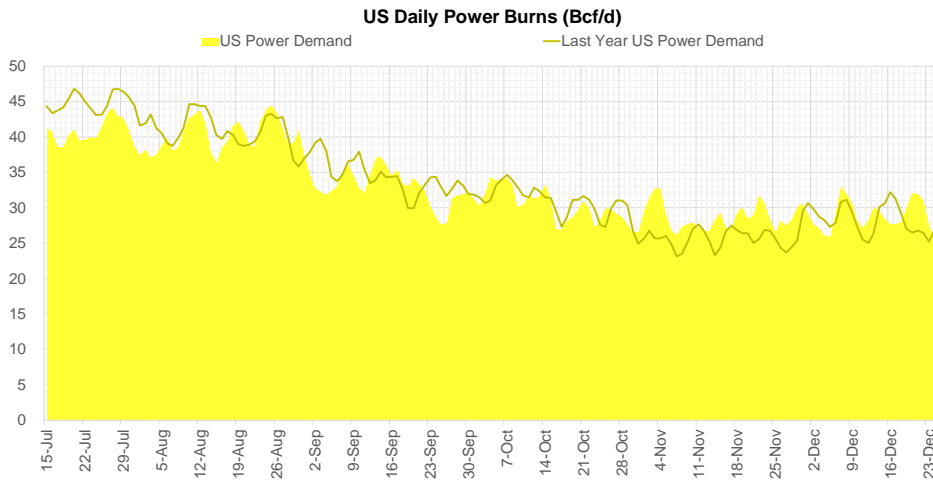
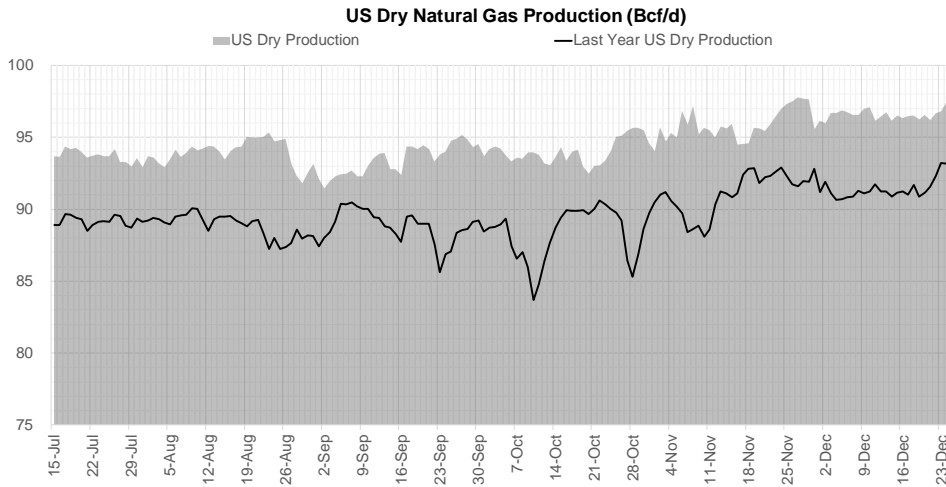


Go to larger image





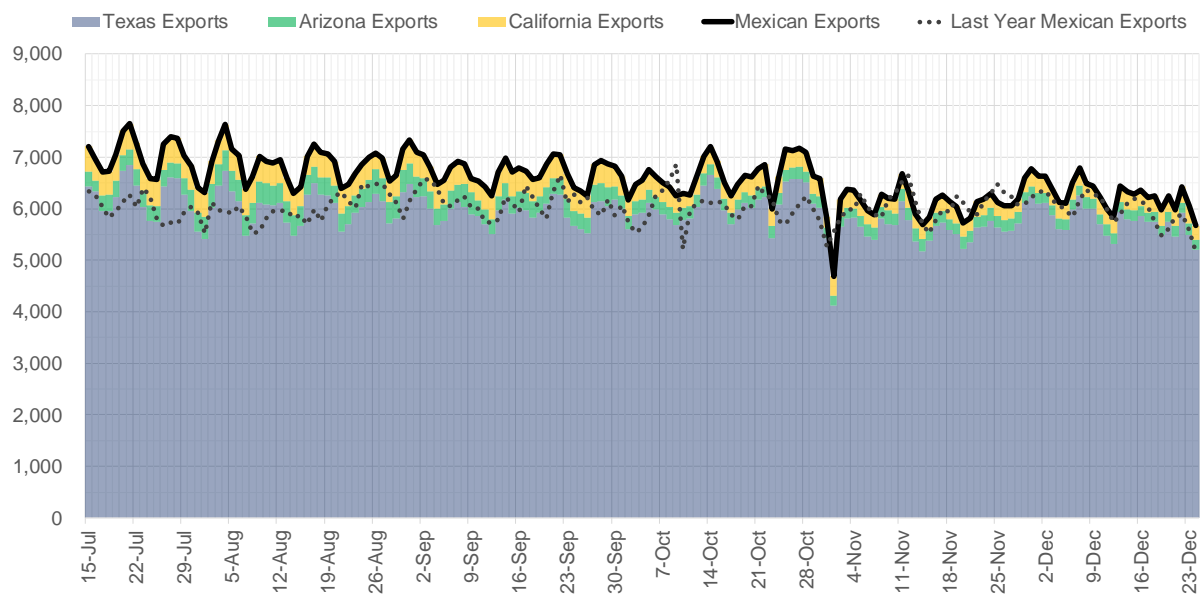
## Supply – Demand Trends



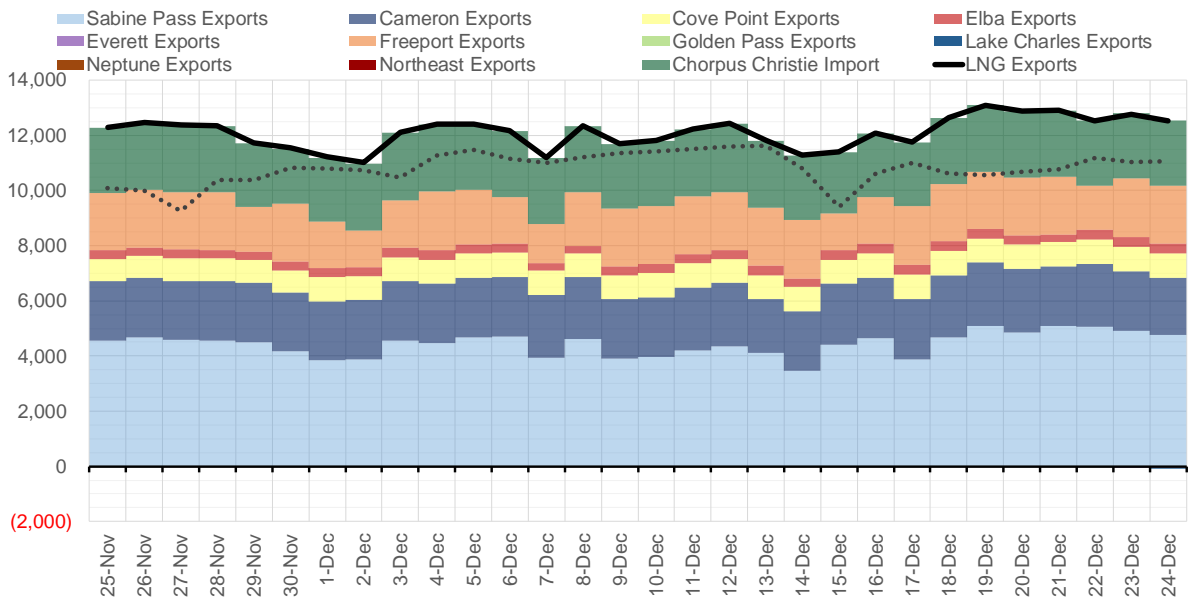
Source: Bloomberg

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### Mexican Exports (MMcf/d)



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



Source: Bloomberg

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.

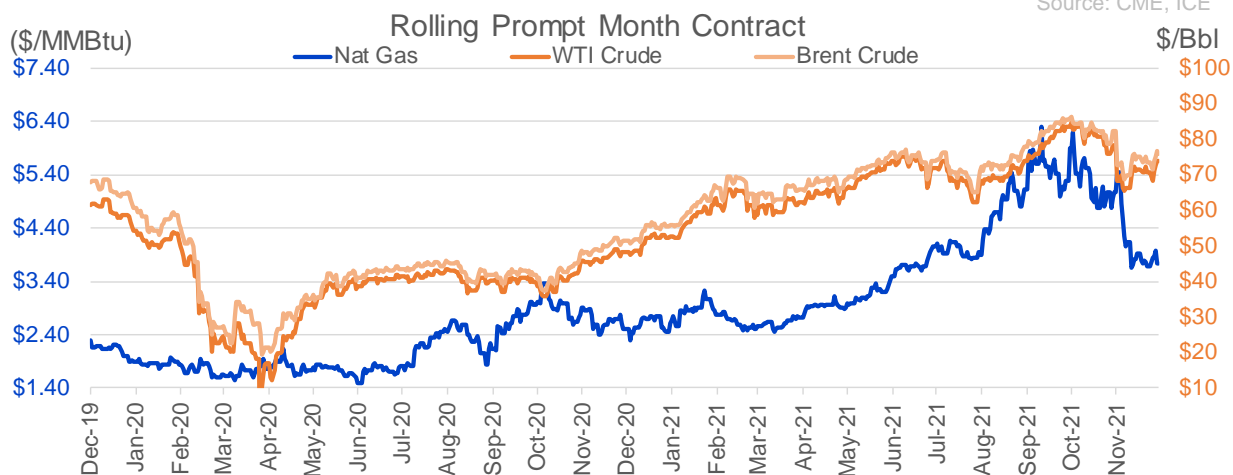
## Nat Gas Options Volume and Open Interest CME and ICE Combined

CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
1	2022	C	4.50	3711	3	2022	C	10.00	36263
3	2022	C	5.00	3652	1	2022	C	4.00	31142
1	2022	C	4.25	3147	3	2022	C	5.00	28997
1	2022	P	3.50	3043	1	2022	P	3.00	27390
1	2022	C	4.00	2236	1	2022	P	4.00	26968
1	2022	C	4.40	2025	3	2022	C	8.00	25863
3	2022	C	4.00	1836	1	2022	C	5.00	24599
1	2022	P	3.75	1522	1	2022	C	4.50	23895
1	2022	C	5.00	1521	2	2022	C	5.00	23567
2	2022	C	4.50	1399	1	2022	P	2.75	23374
2	2022	P	3.50	1274	1	2022	C	6.00	23208
2	2022	C	8.00	1262	3	2022	C	4.00	21607
2	2022	C	4.25	1234	3	2022	C	6.00	20367
1	2022	C	3.75	1202	12	2022	C	5.00	20297
1	2022	P	3.25	1095	3	2022	P	2.50	20088
2	2022	P	3.25	1074	4	2022	C	5.00	19784
1	2022	C	3.80	999	4	2022	C	3.00	19710
2	2022	C	4.00	973	1	2022	P	3.50	19411
1	2022	P	3.15	971	2	2022	C	4.00	18464
2	2022	C	6.00	907	1	2022	C	10.00	18356
2	2022	C	3.70	904	2	2022	C	6.00	18065
1	2022	P	3.60	901	1	2022	P	3.25	17881
4	2022	C	4.00	857	2	2022	P	3.50	17700
2	2022	C	5.00	817	3	2022	P	4.00	17649
1	2022	P	3.00	794	1	2022	C	7.00	17572
2	2022	C	4.75	760	3	2022	P	3.00	17364
1	2022	C	3.90	699	3	2022	P	3.50	17072
11	2022	C	8.00	600	3	2022	C	7.00	16803
11	2022	P	3.75	600	5	2022	C	5.00	16300
1	2022	P	3.65	592	2	2022	P	4.00	15938
1	2022	P	3.20	547	6	2022	C	5.00	15392
1	2022	C	4.35	530	4	2022	P	2.50	15242
2	2022	C	3.65	529	10	2022	C	5.00	15238
1	2022	C	4.05	515	2	2022	C	4.50	15081
1	2022	P	3.70	486	2	2022	P	3.00	14504
1	2022	P	3.40	453	10	2022	C	6.00	14475
1	2022	P	3.85	432	2	2022	C	5.50	14120
2	2022	P	3.00	431	1	2022	C	4.25	14051
4	2022	C	4.25	425	2	2022	C	10.00	13953
4	2022	P	3.25	400	5	2022	C	3.00	13733
6	2022	C	4.50	400	1	2022	P	3.80	13607
1	2022	C	5.25	384	3	2022	P	5.00	13508
4	2022	C	6.00	361	1	2022	C	8.00	13463
2	2022	C	5.50	355	6	2022	C	3.00	13438
6	2022	C	4.00	350	10	2022	P	2.00	13294
10	2022	P	3.00	325	12	2022	C	4.50	13274
4	2022	C	4.50	303	7	2022	C	3.00	13230
3	2022	P	3.40	289	8	2022	C	3.00	13226
1	2022	C	3.70	281	9	2022	C	3.00	13225
					3	2022	C	3	13178

Source: CME, ICE

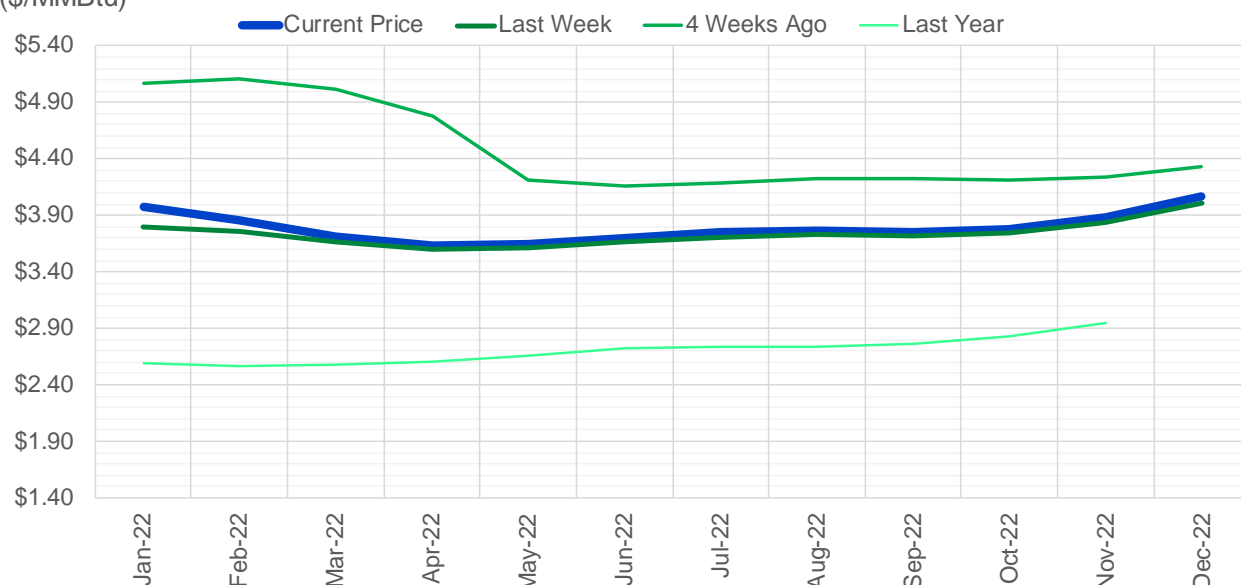
## Nat Gas Futures Open Interest CME and ICE Combined

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	21727	34841	-13114	JAN 22	75983	75811	172
FEB 22	138387	133437	4950	FEB 22	76259	76276	-17
MAR 22	249308	249317	-9	MAR 22	90769	87896	2873
APR 22	82804	83683	-879	APR 22	73976	72489	1488
MAY 22	111045	110725	320	MAY 22	69127	69047	80
JUN 22	52465	52431	34	JUN 22	54366	54311	55
JUL 22	42297	42340	-43	JUL 22	58708	58776	-68
AUG 22	31726	31839	-113	AUG 22	55438	55151	287
SEP 22	46367	46234	133	SEP 22	56084	55901	183
OCT 22	72439	71235	1204	OCT 22	62712	62747	-36
NOV 22	34936	34534	402	NOV 22	50521	50423	98
DEC 22	35491	35452	39	DEC 22	59420	59163	257
JAN 23	38997	39072	-75	JAN 23	46504	46391	113
FEB 23	11914	12086	-172	FEB 23	36397	36294	103
MAR 23	27231	27412	-181	MAR 23	40678	40623	55
APR 23	19588	19616	-28	APR 23	40018	39983	35
MAY 23	12674	12701	-27	MAY 23	35944	35906	38
JUN 23	10096	10155	-59	JUN 23	32783	32314	469
JUL 23	7552	7507	45	JUL 23	31912	31821	91
AUG 23	4815	4795	20	AUG 23	32886	32808	78
SEP 23	7329	7296	33	SEP 23	31342	31242	100
OCT 23	11916	11942	-26	OCT 23	35794	35802	-8
NOV 23	6225	6186	39	NOV 23	35271	35288	-16
DEC 23	8848	8865	-17	DEC 23	33182	32607	576
JAN 24	6988	6974	14	JAN 24	23733	23769	-36
FEB 24	1658	1646	12	FEB 24	16531	16538	-6
MAR 24	9400	9207	193	MAR 24	22408	22416	-8
APR 24	4497	4434	63	APR 24	15776	15779	-2
MAY 24	2059	2059	0	MAY 24	16245	16207	38
JUN 24	929	929	0	JUN 24	16451	16466	-15



(\$/MMBtu)

### Nat Gas Term Structure



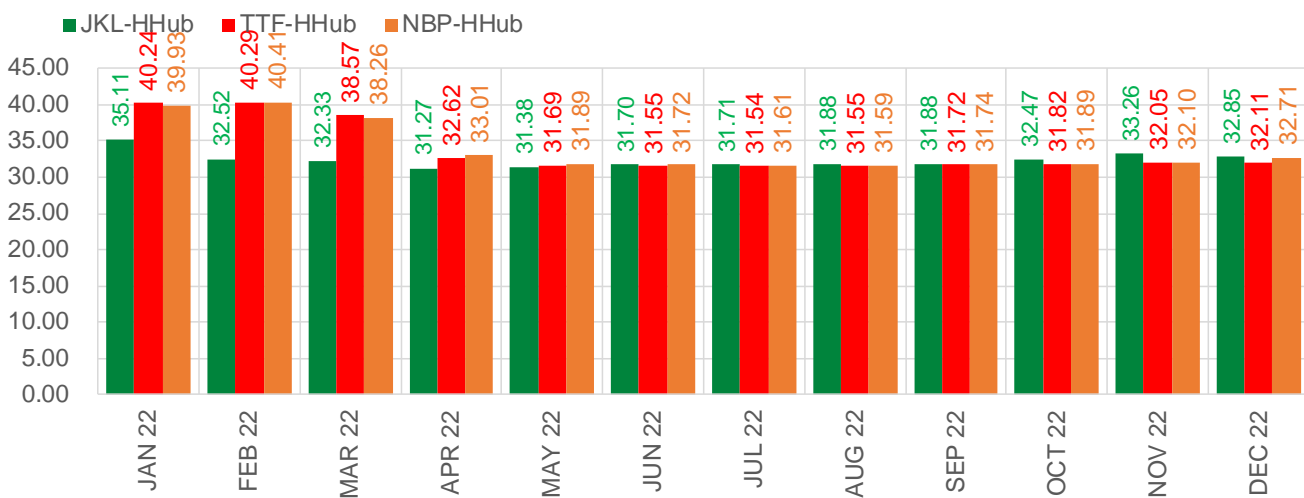
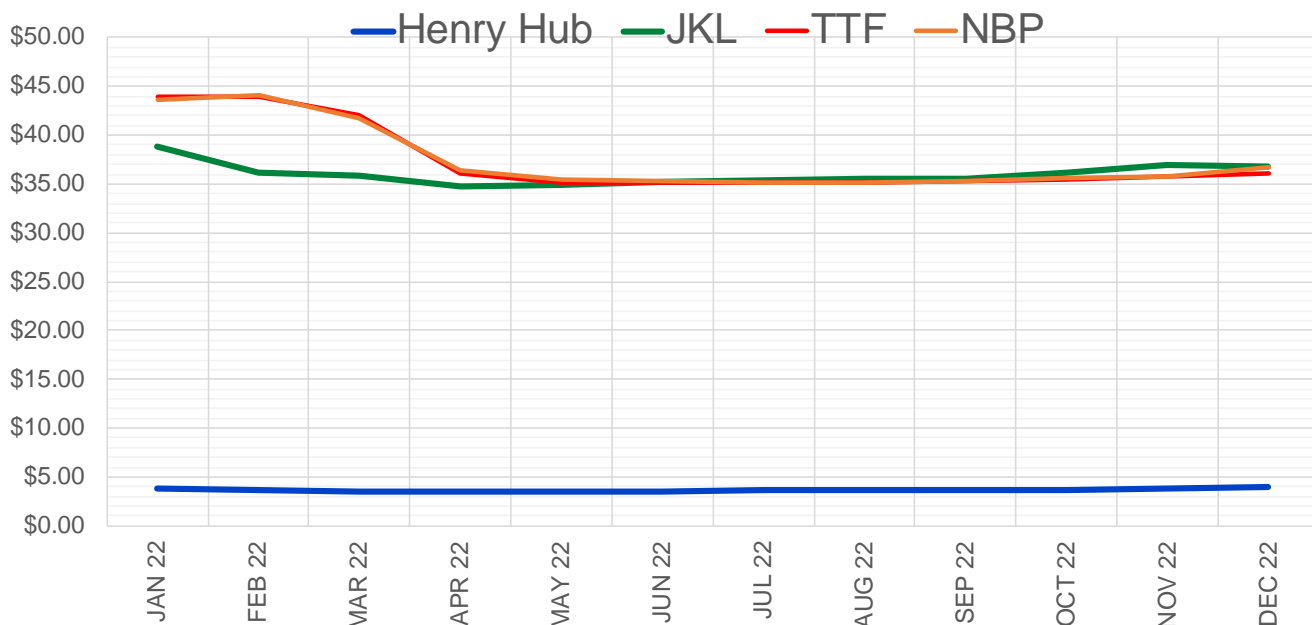
	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
<b>Current Price</b>	<b>\$3.976</b>	<b>\$3.860</b>	<b>\$3.713</b>	<b>\$3.635</b>	<b>\$3.649</b>	<b>\$3.697</b>	<b>\$3.750</b>	<b>\$3.765</b>	<b>\$3.752</b>	<b>\$3.783</b>	<b>\$3.886</b>	<b>\$4.066</b>
Last Week	\$3.802	\$3.761	\$3.668	\$3.602	\$3.614	\$3.660	\$3.711	\$3.727	\$3.714	\$3.745	\$3.842	\$4.013
vs. Last Week	\$0.174	\$0.099	\$0.045	\$0.033	\$0.035	\$0.037	\$0.039	\$0.038	\$0.038	\$0.038	\$0.044	\$0.053
4 Weeks Ago	\$5.068	\$5.114	\$5.017	\$4.781	\$4.215	\$4.156	\$4.184	\$4.226	\$4.229	\$4.211	\$4.244	\$4.331
vs. 4 Weeks Ago	-\$1.092	-\$1.254	-\$1.304	-\$1.146	-\$0.566	-\$0.459	-\$0.434	-\$0.461	-\$0.477	-\$0.428	-\$0.358	-\$0.265
Last Year	\$2.608	\$2.588	\$2.571	\$2.585	\$2.602	\$2.654	\$2.718	\$2.742	\$2.735	\$2.764	\$2.827	\$2.951
vs. Last Year	\$1.368	\$1.272	\$1.142	\$1.050	\$1.047	\$1.043	\$1.032	\$1.023	\$1.017	\$1.019	\$1.059	\$1.115

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	6.04	24.82	18.78
TETCO M3	\$/MMBtu	2.69	6.46	3.77
FGT Zone 3	\$/MMBtu	2.60	3.88	1.28
Zone 6 NY	\$/MMBtu	2.60	8.46	5.86
Chicago Citygate	\$/MMBtu	3.34	4.18	0.84
Michcon	\$/MMBtu	3.37	3.58	0.21
Columbia TCO Pool	\$/MMBtu	3.17	3.34	0.18
Ventura	\$/MMBtu	3.35	4.85	1.50
Rockies/Opal	\$/MMBtu	7.50	4.00	-3.50
El Paso Permian Basin	\$/MMBtu	2.50	3.86	1.36
Socal Citygate	\$/MMBtu	7.35	5.67	-1.68
Malin	\$/MMBtu	6.75	4.97	-1.79
Houston Ship Channel	\$/MMBtu	3.15	3.97	0.82
Henry Hub Cash	\$/MMBtu	3.55	3.68	0.13
AECO Cash	C\$/GJ	3.47	3.13	-0.35
Station2 Cash	C\$/GJ	3.63	5.45	1.82
Dawn Cash	C\$/GJ	3.58	3.71	0.13

Source: CME, Bloomberg

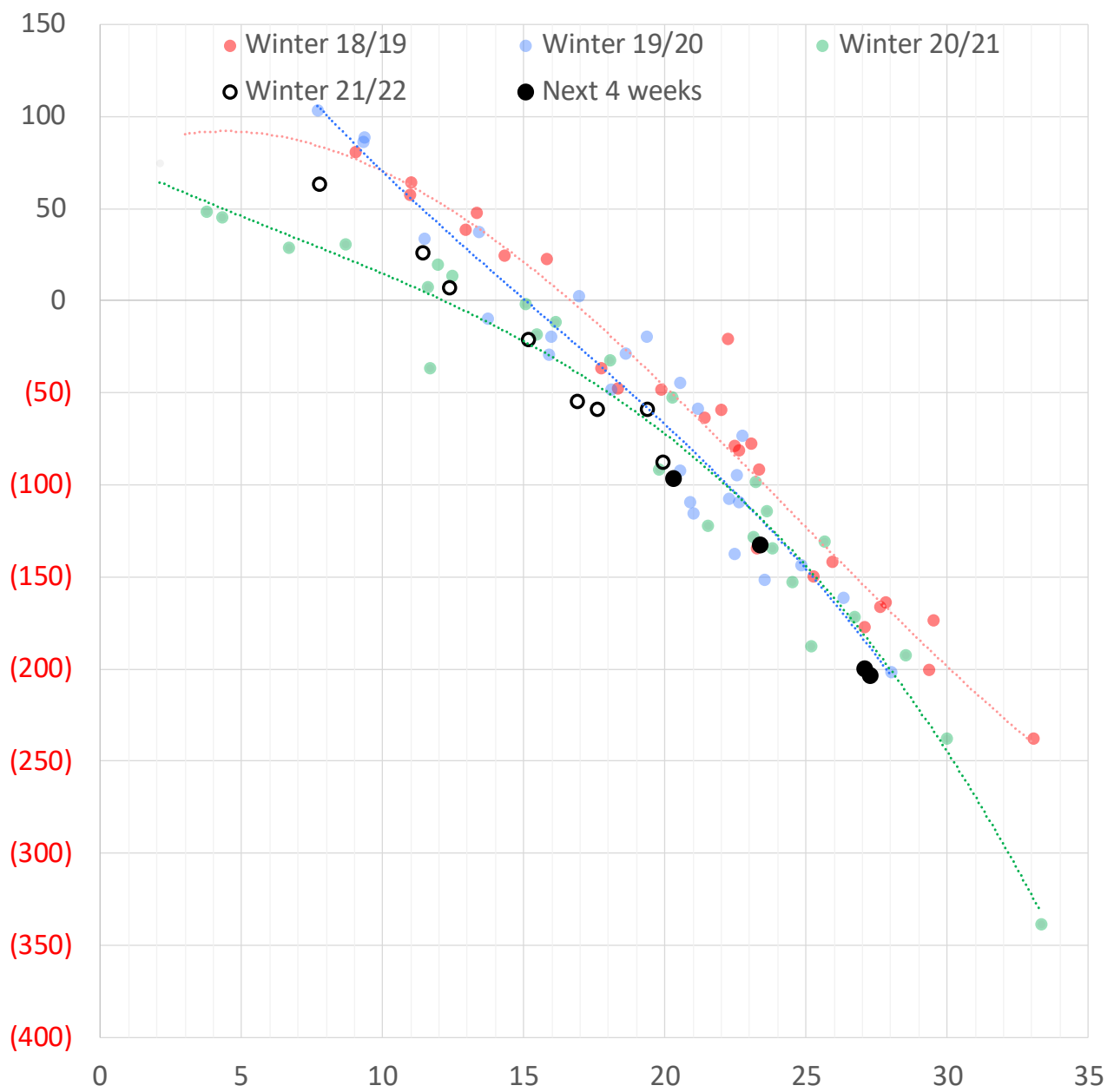
	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 2.174
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 0.000	▲ 0.000	▲ 0.294
NatGas Oct21/Jan22	\$/MMBtu	-2.110	▼ -0.035	▼ -1.383	▼ -2.400
NatGas Apr22/Oct22	\$/MMBtu	0.182	▲ 0.033	▲ 0.153	▲ 0.140
WTI Crude	\$/Bbl	73.79	▲ 1.410	▼ -4.600	▲ 25.560
Brent Crude	\$/Bbl	76.85	▲ 1.830	▼ -5.370	▲ 25.560
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	233.14	▲ 6.510	▼ -5.160	▲ 84.140
Propane, Mt. Bel	cents/Gallon	1.03	▼ -0.005	▼ -0.243	▲ 0.390
Ethane, Mt. Bel	cents/Gallon	0.33	▲ 0.000	▼ -0.070	▲ 0.134
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
Henry Hub	\$3.731	\$3.630	\$3.514	\$3.469	\$3.500	\$3.552	\$3.609	\$3.627	\$3.617	\$3.651	\$3.754	\$3.935
JKL	\$38.840	\$36.150	\$35.845	\$34.735	\$34.880	\$35.255	\$35.320	\$35.510	\$35.500	\$36.125	\$37.010	\$36.785
JKL-HHHub	\$35.109	\$32.520	\$32.331	\$31.266	\$31.380	\$31.703	\$31.711	\$31.883	\$31.883	\$32.474	\$33.256	\$32.850
TTF	\$43.970	\$43.923	\$42.079	\$36.085	\$35.186	\$35.101	\$35.151	\$35.180	\$35.339	\$35.474	\$35.800	\$36.041
TTF-HHHub	\$40.239	\$40.293	\$38.565	\$32.616	\$31.686	\$31.549	\$31.542	\$31.553	\$31.722	\$31.823	\$32.046	\$32.106
NBP	\$43.658	\$44.039	\$41.774	\$36.477	\$35.393	\$35.274	\$35.216	\$35.216	\$35.353	\$35.541	\$35.849	\$36.644
NBP-HHHub	\$39.927	\$40.409	\$38.260	\$33.008	\$31.893	\$31.722	\$31.607	\$31.589	\$31.736	\$31.890	\$32.095	\$32.709

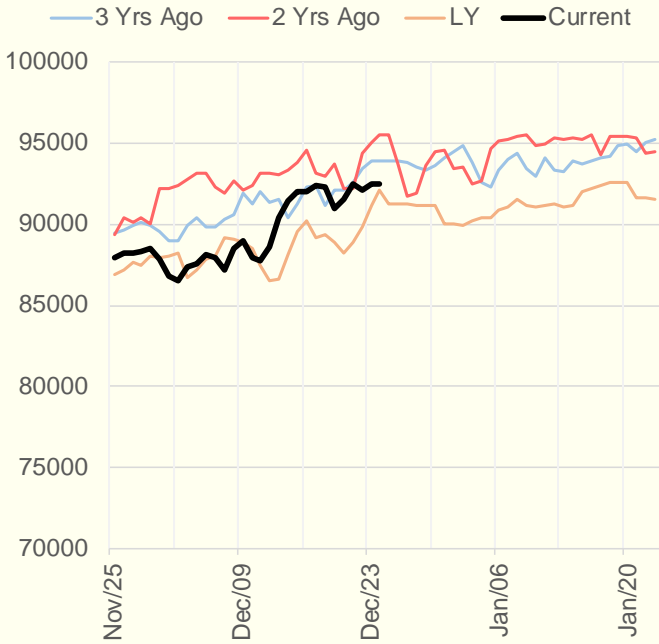
### Weather Storage Model - Next 4 Week Forecast



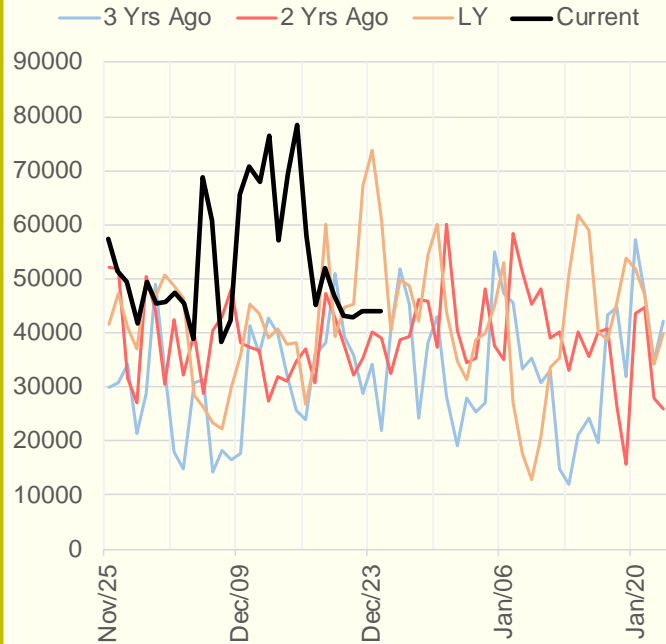
The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are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



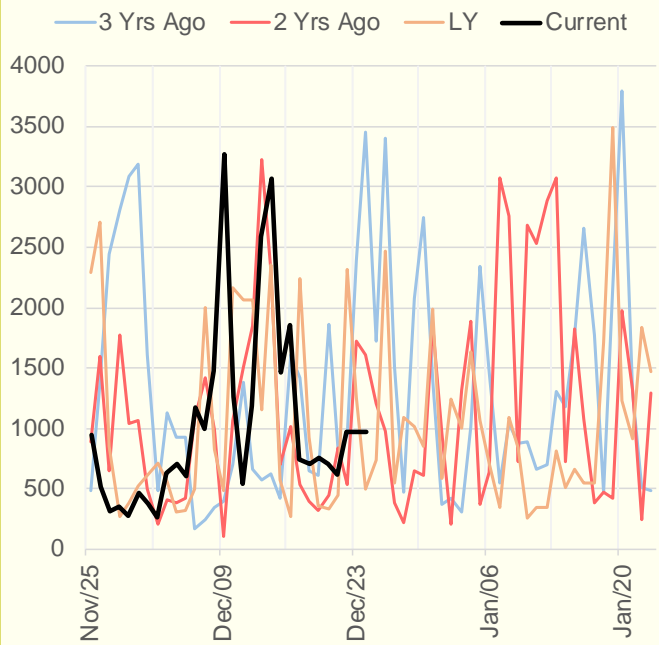
### NRC Nuclear Daily Output



### US Wind



### CALI Wind



### TEXAS Wind

