

### 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](#)

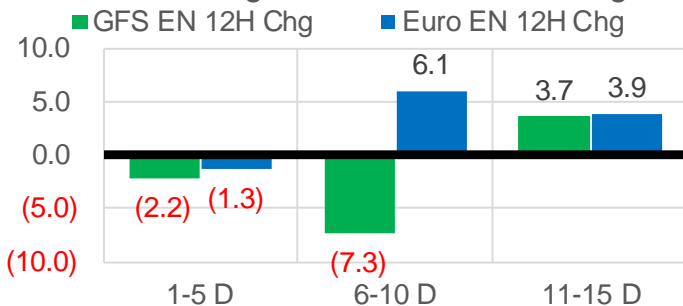
	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 6.12	▼ \$ (0.08)	▲ \$ 0.56

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 81.18	▼ \$ (1.48)	▼ \$ (2.4)

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 83.15	▼ \$ (1.43)	▼ \$ (2.3)

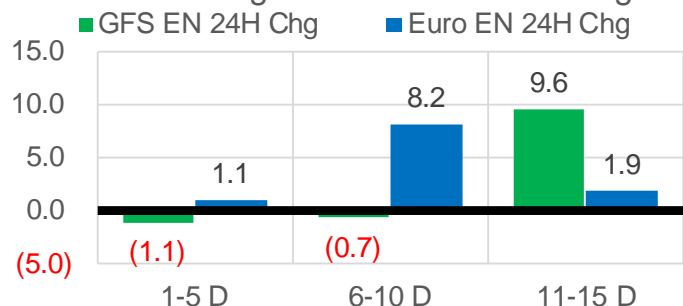
### Vs. 12H Ago

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	94.2	▲ 0.01	▲ 1.07

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	29.0	▼ -0.27	▼ -0.30

	Current	Δ from YD	Δ from 7D Avg
US ResComm	17.5	▼ -1.57	▲ 0.60

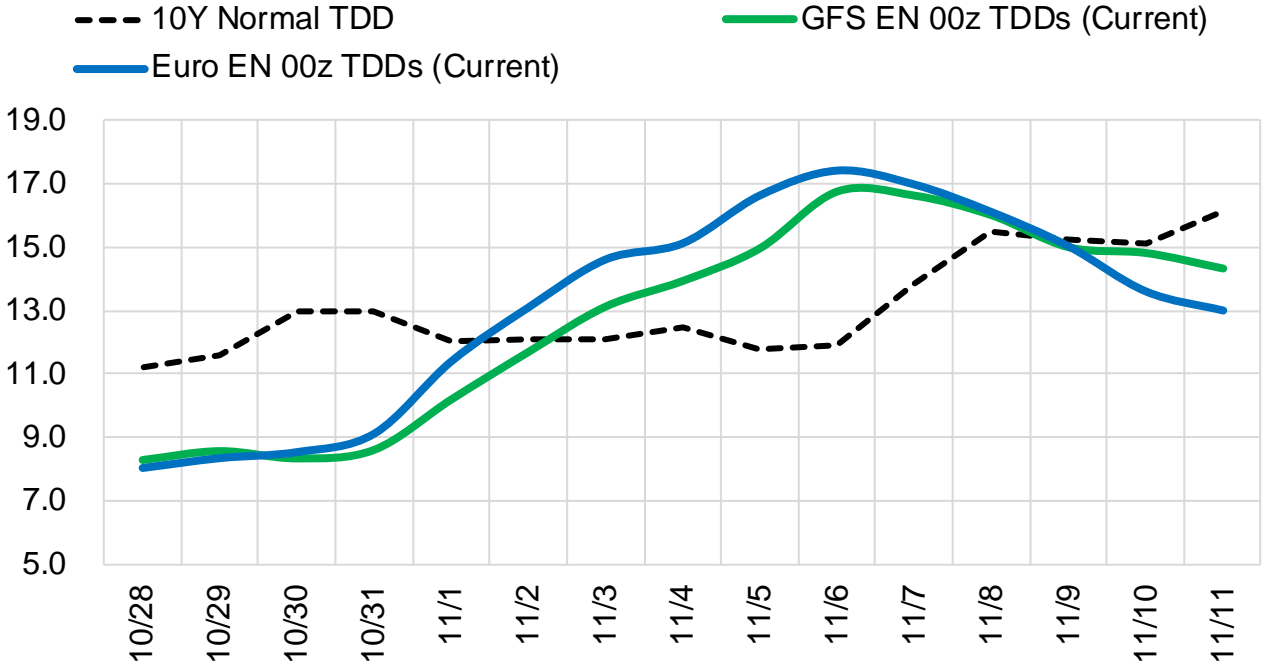
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.9	▼ -0.66	▼ -0.74

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	11.0	▲ 0.13	▲ 0.30

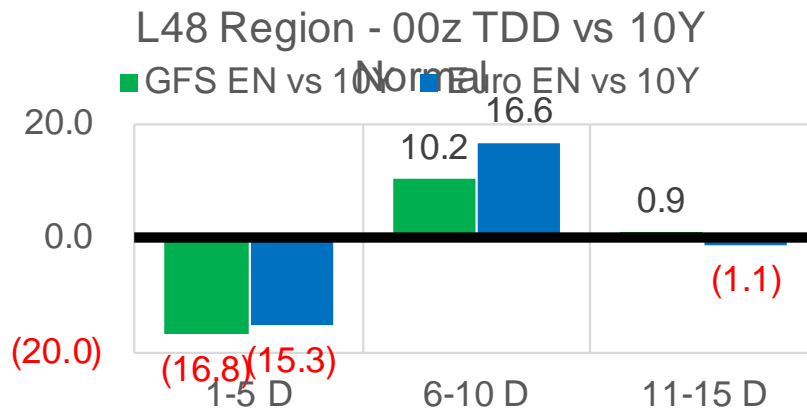
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	7.1	▲ 0.10	▲ 0.34

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

#### L48 Region



### Vs. 10Y Normal



Source: WSI , Bloomberg

## Lower 48 Component Models

### Daily Balances

	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>92.2</b>	<b>92.4</b>	<b>93.2</b>	<b>94.0</b>	<b>93.9</b>	<b>94.2</b>	<b>94.2</b>	▲ 0.0	▲ 0.9
<b>Canadian Imports</b>	<b>5.7</b>	<b>5.7</b>	<b>5.7</b>	<b>5.7</b>	<b>5.6</b>	<b>5.6</b>	<b>4.9</b>	▼ -0.7	▼ -0.7
L48 Power	30.0	27.3	28.0	29.7	29.6	29.2	29.0	▼ -0.3	▼ 0.0
L48 Residential & Commercial	16.3	17.8	17.0	15.7	19.0	19.0	17.5	▼ -1.6	▼ 0.0
L48 Industrial	17.9	18.3	18.6	18.7	19.2	19.5	19.7	▲ 0.2	▲ 1.0
L48 Lease and Plant Fuel	5.0	5.0	5.1	5.1	5.1	5.1	5.1	▼ 0.0	▲ 0.0
L48 Pipeline Distribution	2.5	2.4	2.4	2.4	2.6	2.6	2.5	▼ -0.1	▼ 0.0
<b>L48 Regional Gas Consumption</b>	<b>71.7</b>	<b>70.9</b>	<b>71.1</b>	<b>71.7</b>	<b>75.5</b>	<b>75.5</b>	<b>73.7</b>	▼ -1.8	▲ 1.0
<b>Net LNG Delivered</b>	<b>10.24</b>	<b>10.73</b>	<b>10.39</b>	<b>11.18</b>	<b>10.97</b>	<b>10.86</b>	<b>11.00</b>	▲ 0.1	▲ 0.3
<b>Total Mexican Exports</b>	<b>6.9</b>	<b>6.1</b>	<b>6.5</b>	<b>7.1</b>	<b>7.2</b>	<b>7.0</b>	<b>7.1</b>	▲ 0.1	▲ 0.3
<b>Implied Daily Storage Activity</b>	<b>9.0</b>	<b>10.4</b>	<b>10.8</b>	<b>9.8</b>	<b>5.7</b>	<b>6.4</b>	<b>7.3</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									

### EIA Storage Week Balances

	17-Sep	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	WoW	vs. 4W
<b>Lower 48 Dry Production</b>	<b>92.0</b>	<b>93.0</b>	<b>93.3</b>	<b>92.9</b>	<b>92.6</b>	<b>92.4</b>	▼ -0.2	▼ -0.5
<b>Canadian Imports</b>	<b>5.0</b>	<b>5.2</b>	<b>5.7</b>	<b>5.3</b>	<b>4.9</b>	<b>5.6</b>	▲ 0.6	▲ 0.3
L48 Power	35.0	33.3	30.3	32.9	31.7	29.0	▼ -2.7	▼ -3.0
L48 Residential & Commercial	7.1	8.1	8.4	8.2	9.5	13.9	▲ 4.3	▲ 5.3
L48 Industrial	20.8	20.6	20.2	21.9	19.7	18.1	▼ -1.6	▼ -2.5
L48 Lease and Plant Fuel	5.0	5.1	5.1	5.1	5.0	5.0	▼ 0.0	▼ 0.0
L48 Pipeline Distribution	2.3	2.3	2.1	2.2	2.2	2.3	▲ 0.1	▲ 0.1
<b>L48 Regional Gas Consumption</b>	<b>70.3</b>	<b>69.3</b>	<b>66.0</b>	<b>70.2</b>	<b>68.2</b>	<b>68.3</b>	▲ 0.1	▼ -0.1
<b>Net LNG Exports</b>	<b>10.2</b>	<b>9.9</b>	<b>10.3</b>	<b>9.9</b>	<b>10.7</b>	<b>10.8</b>	▲ 0.1	▲ 0.6
<b>Total Mexican Exports</b>	<b>6.6</b>	<b>6.8</b>	<b>6.7</b>	<b>6.5</b>	<b>6.6</b>	<b>6.6</b>	▼ 0.0	▼ -0.1
<b>Implied Daily Storage Activity</b>	<b>9.9</b>	<b>12.2</b>	<b>16.0</b>	<b>11.6</b>	<b>12.0</b>	<b>12.3</b>	<b>0.3</b>	
<b>EIA Reported Daily Storage Activity</b>	<b>10.9</b>	<b>12.6</b>	<b>16.9</b>	<b>11.6</b>	<b>13.1</b>			
<b>Daily Model Error</b>	<b>-1.0</b>	<b>-0.4</b>	<b>-0.9</b>	<b>0.0</b>	<b>-1.1</b>			

### Monthly Balances

	2Yr Ago Oct-19	LY Oct-20	Jun-21	Jul-21	Aug-21	Sep-21	MTD Oct-21	MoM	vs. LY
<b>Lower 48 Dry Production</b>	<b>95.1</b>	<b>88.3</b>	<b>93.3</b>	<b>93.3</b>	<b>92.5</b>	<b>92.3</b>	<b>92.8</b>	▲ 0.5	▲ 4.5
<b>Canadian Imports</b>	<b>4.6</b>	<b>4.3</b>	<b>4.9</b>	<b>5.2</b>	<b>5.1</b>	<b>5.1</b>	<b>5.3</b>	▲ 0.2	▲ 1.1
L48 Power	30.3	30.8	35.9	39.4	40.2	33.1	30.6	▼ -2.5	▼ -0.1
L48 Residential & Commercial	15.3	15.3	8.8	8.1	7.7	7.6	12.3	▲ 4.6	▼ -3.0
L48 Industrial	23.5	22.6	20.5	20.9	20.4	20.2	19.6	▼ -0.5	▼ -2.9
L48 Lease and Plant Fuel	5.1	4.8	5.0	5.1	5.0	5.0	5.1	▲ 0.0	▲ 0.2
L48 Pipeline Distribution	2.4	2.5	2.4	2.5	2.5	2.2	2.3	▲ 0.1	▼ -0.2
<b>L48 Regional Gas Consumption</b>	<b>76.6</b>	<b>75.9</b>	<b>72.7</b>	<b>76.0</b>	<b>75.8</b>	<b>68.2</b>	<b>69.9</b>	▲ 1.7	▼ -6.0
<b>Net LNG Exports</b>	<b>6.7</b>	<b>8.0</b>	<b>10.2</b>	<b>10.8</b>	<b>10.5</b>	<b>10.3</b>	<b>10.5</b>	▲ 0.2	▲ 2.5
<b>Total Mexican Exports</b>	<b>5.4</b>	<b>6.0</b>	<b>7.4</b>	<b>7.1</b>	<b>6.9</b>	<b>6.7</b>	<b>6.6</b>	▼ -0.1	▲ 0.6
<b>Implied Daily Storage Activity</b>	<b>11.1</b>	<b>2.7</b>	<b>7.8</b>	<b>4.6</b>	<b>4.5</b>	<b>12.2</b>	<b>11.1</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)

	20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	DoD	vs. 7D
NRC Nuclear Daily Output	72.3	72.8	72.3	71.9	72.2	71.8	70.6	-1.2	-1.6
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	32.6	32.1	32.6	33.0	32.7	33.1	34.2	1.2	1.6
NRC % Nuclear Cap Utilization	73.5	74.0	73.5	73.1	73.4	73.0	71.8	-1.2	-1.6

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

	20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	DoD	vs. 7D
CALI Wind	433	463	2340	3802	2898	3363	2314	-1048	98
TEXAS Wind	8536	5406	10682	17522	11586	8865	20948	12083	10515
US Wind	47052	33441	29824	35489	39792	46564	69808	23243	31114

### Generation Daily Average - MWh (EIA)

	20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	DoD	vs. 7D
US Wind	47052	33441	29824	35489	39792	46564	69808	23243	31114
US Solar	11497	10532	10089	11061	8803	8257	9982	1725	-58
US Petroleum	3224	3517	3671	2446	2375	2387	2264	-123	-673
US Other	11977	12459	12494	10802	9750	9505	9176	-329	-1988
US Coal	74625	76239	80711	67154	62958	75964	70656	-5308	-2286
US Nuke	73384	73401	72921	72308	72379	74786	74184	-603	987
US Hydro	24736	25802	24492	21672	20538	25505	23935	-1570	144
<b>US Gas</b>	<b>157048</b>	<b>171106</b>	<b>169194</b>	<b>135292</b>	<b>137337</b>	<b>170361</b>	<b>152351</b>	<b>-18010</b>	<b>-4372</b>

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

## Storage Week Average Generation Data

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

	17-Sep	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	86.7	85.9	85.1	82.1	76.5	73.6	-2.9	0.5
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	18.2	19.0	19.8	22.7	28.3	31.2	2.9	
NRC % Nuclear Cap Utilization	0.1	0.1	0.1	0.1	0.1	0.1	0.0	

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

	17-Sep	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	WoW	WoW Bcf/d Impact
CALI Wind	2083	1936	2467	1099	2400	1270	-1130	0.2
TEXAS Wind	9541	9780	10364	4890	15396	10729	-4667	0.8
US Wind	42378	43250	43478	20468	49917	43722	-6195	1.1
					29449.5			
					144%			

### Generation Weekly Average - MWh (EIA)

	17-Sep	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	WoW	WoW Bcf/d Impact
US Wind	42378	43250	43478	20468	49917	43722	-6195	1.1
US Solar	14057	12185	12957	11295	10530	12072	1543	-0.3
US Petroleum	2470	2594	2712	3901	3224	3092	-132	0.0
US Other	9273	9121	8709	10972	12221	12037	-184	0.0
US Coal	115066	109062	94792	100713	89001	72077	-16924	3.0
US Nuke	89490	88789	88402	83696	77046	73748	-3297	0.6
US Hydro	24138	25340	25370	24518	24701	23112	-1589	0.3
<b>US Gas</b>	<b>182116</b>	<b>175354</b>	<b>153813</b>	<b>176848</b>	<b>162483</b>	<b>149143</b>	<b>-13340</b>	<b>2.4</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	Jul-21	Aug-21	Sep-21	Oct-21	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
NRC Nuclear Daily Output	80.2	77.3	90.1	91.5	87.2	75.9	76.5	-11.3	-0.8
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	24.7	27.6	14.8	13.4	17.7	28.9	28.4	11.3	0.8
NRC % Nuclear Cap Utilization	81.5	78.6	91.6	93.0	88.7	77.2	77.8	-11.4	-0.8

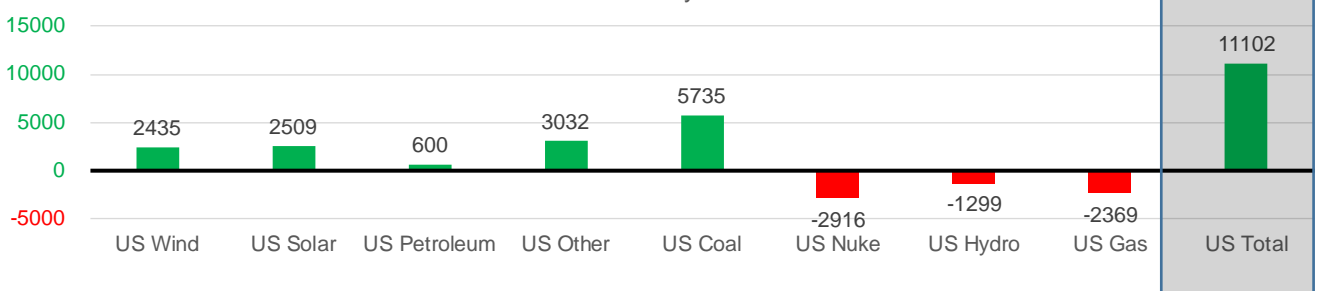
### Wind Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	Jul-21	Aug-21	Sep-21	Oct-21	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
CALI Wind	1456	1382	2338	2442	2020	1883	1852	-137	470
TEXAS Wind	9404	9717	7217	9901	9400	11736	11704	2336	1987
US Wind	38047	38744	29217	35830	40222	41423	41178	1201	2435

### Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	Jul-21	Aug-21	Sep-21	Oct-21	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
US Wind	38047	38744	29217	35830	40222	41423	41178	▼ -244.6	▲ 2435
US Solar	7981	8529	14140	13787	13379	10908	11038	▲ 129.5	▲ 2509
US Petroleum	3779	2619	4233	4484	2452	3185	3219	▲ 34	▲ 600
US Other	8557	8158	9326	9928	9008	11311	11189	▼ -121	▲ 3032
US Coal	87939	78752	137228	137655	110037	83260	84488	▲ 1227	▲ 5735
US Nuke	86395	80649	92911	94062	90146	77013	77732	▲ 719	▼ -2916
US Hydro	22974	25309	29941	28532	25661	23940	24010	▲ 69	▼ -1299
<b>US Gas</b>	<b>157953</b>	<b>163167</b>	<b>207823</b>	<b>210824</b>	<b>173536</b>	<b>160306</b>	<b>160797</b>	<b>▲ 1813</b>	<b>▼ -2369</b>
<b>US Total</b>	<b>413853</b>	<b>405721</b>	<b>524834</b>	<b>534937</b>	<b>464627</b>	<b>414802</b>	<b>416823</b>	<b>▲ 3871</b>	<b>▲ 11102</b>

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

### Regional S/D Models Storage Projection

Week Ending 22-Oct

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	12.0	1.0	13.0	91
East	3.3	0.3	3.6	25
Midwest	3.4	-0.4	3.0	21
Mountain	3.4	-3.0	0.4	3
South Central	1.0	4.4	5.4	38
Pacific	0.9	-0.4	0.6	4

\*Adjustment Factor is calculated based on historical regional deltas

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

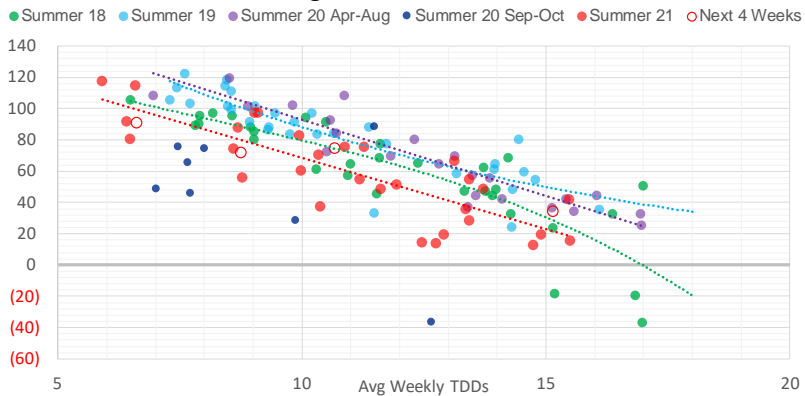


### Weather Model Storage Projection

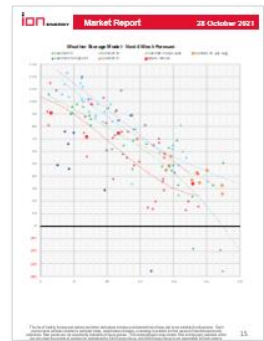
Next report  
and beyond

Week Ending	GWDDs	Week Storage Projection
22-Oct	6.6	91
29-Oct	8.8	72
05-Nov	10.7	75
12-Nov	15.2	34

**Weather Storage Model - Next 4 Week Forecast**

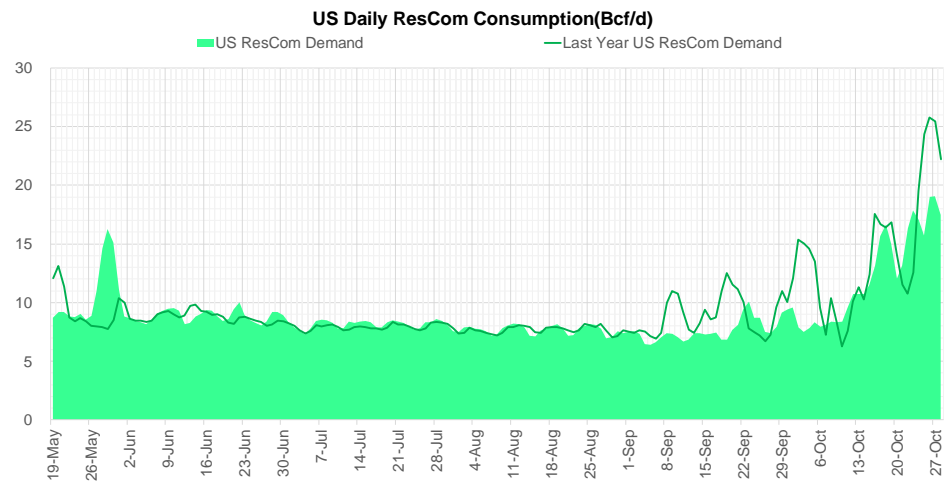
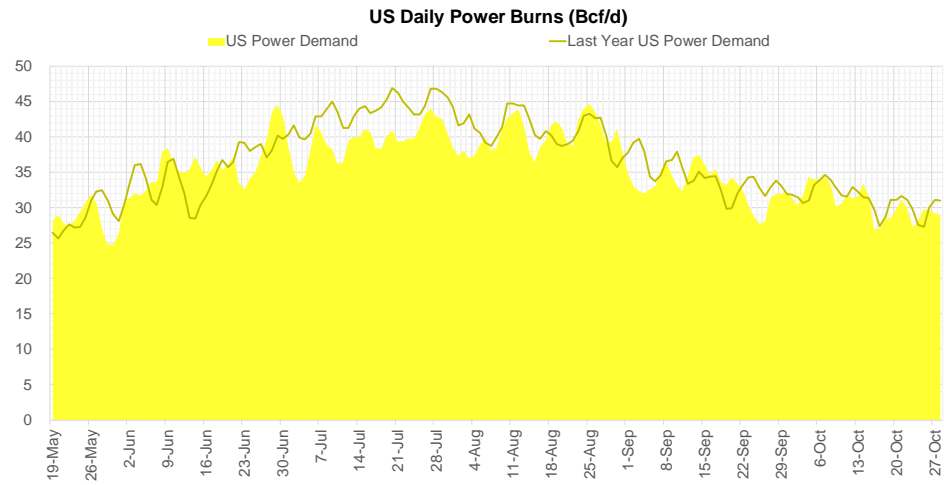
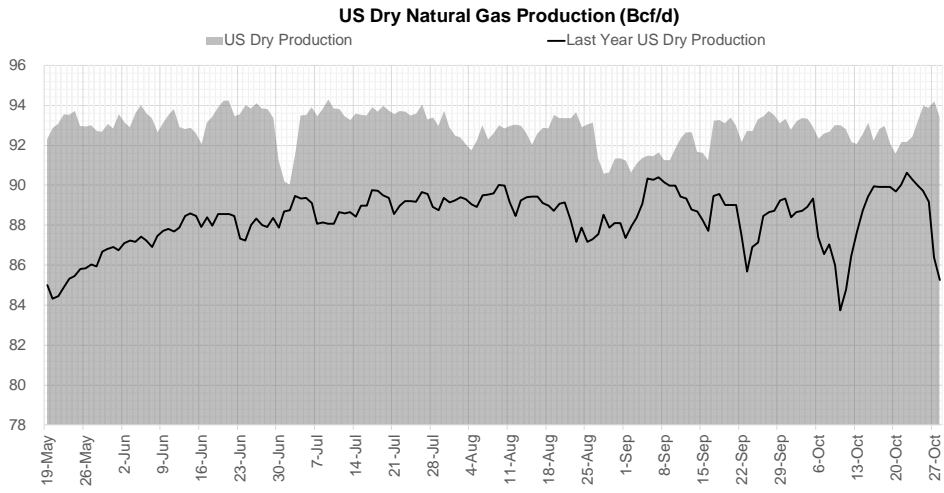


Go to larger image





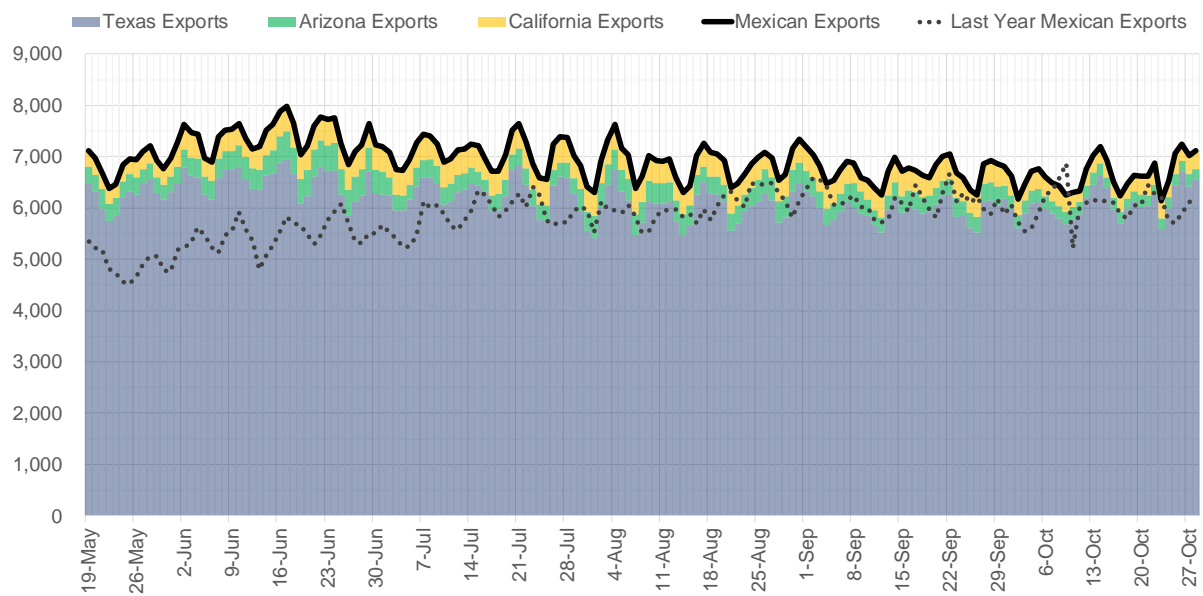
## Supply – Demand Trends



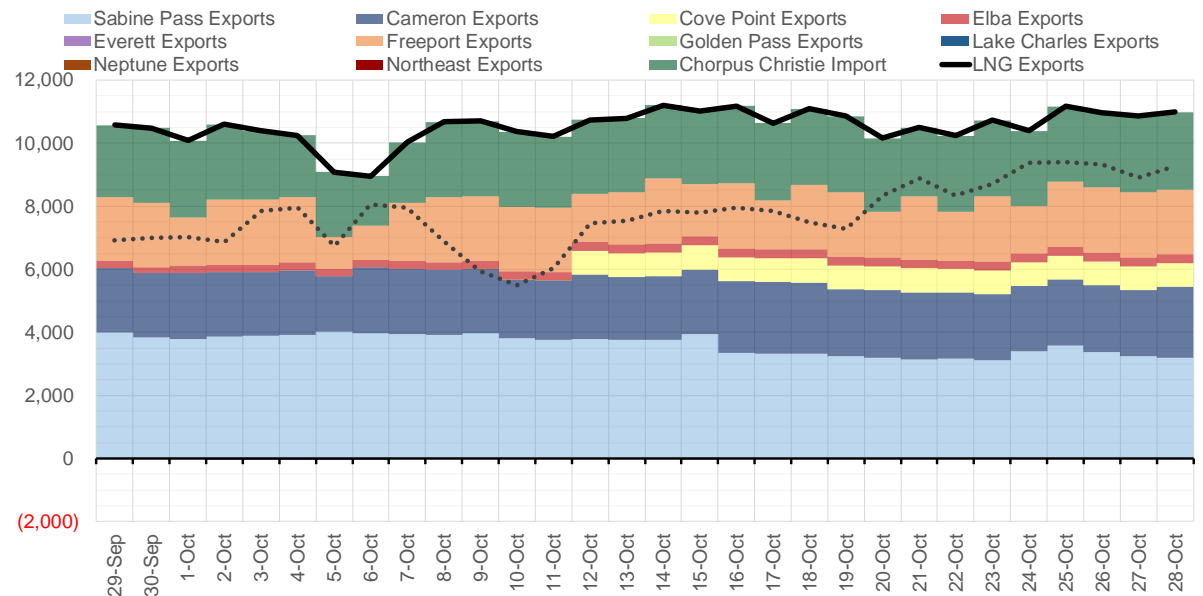
Source: Bloomberg

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.

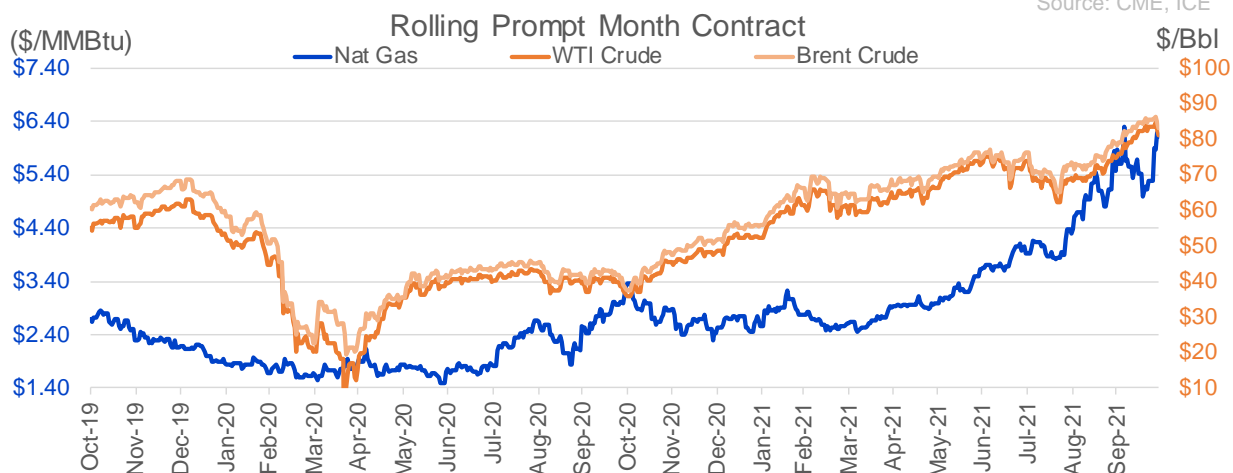
## Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

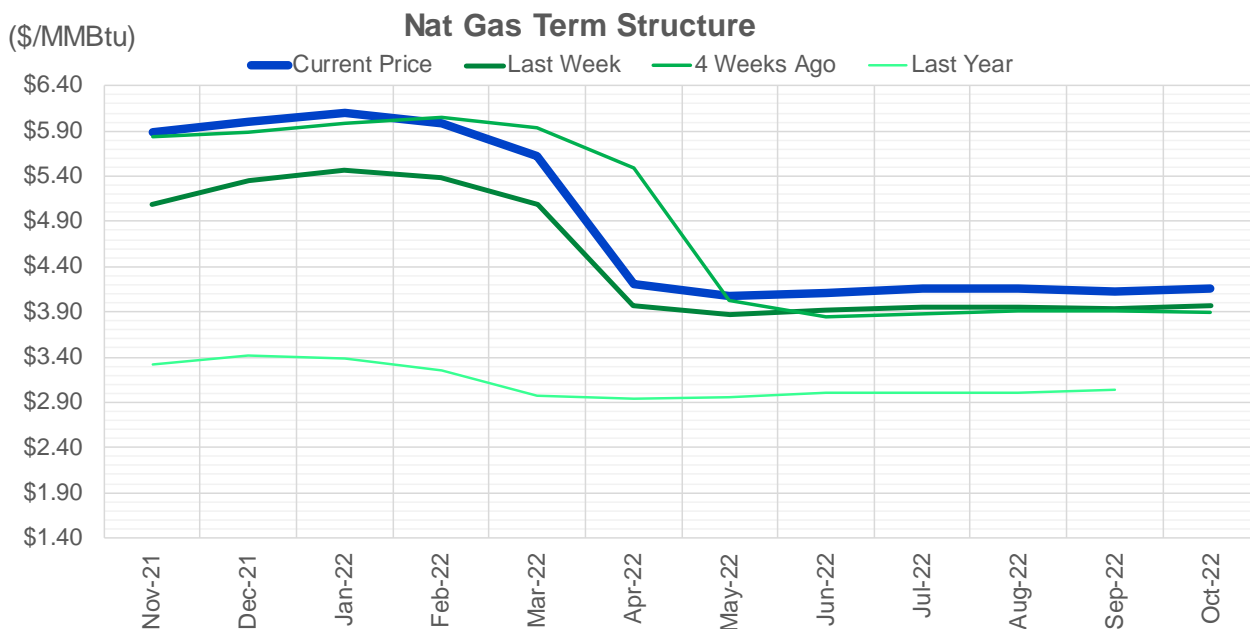
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
12	2021	P	5.00	7017	12	2021	P	2.75	54603
12	2021	P	4.00	5889	12	2021	P	3.00	42320
12	2021	C	8.50	5391	12	2021	P	4.00	41561
12	2021	C	7.50	4784	12	2021	P	2.50	39421
12	2021	P	3.75	4018	12	2021	P	3.50	33663
12	2021	P	4.50	3924	3	2022	C	10.00	29901
12	2021	C	6.50	3117	3	2022	C	8.00	25127
12	2021	P	3.50	3059	1	2022	P	3.00	23596
12	2021	P	4.75	2752	1	2022	P	2.75	22906
3	2022	C	15.00	2725	12	2021	C	4.00	22527
12	2021	C	8.00	2713	3	2022	C	5.00	22368
1	2022	P	4.00	2713	1	2022	C	6.00	20624
12	2021	P	5.50	2677	4	2022	C	3.00	19710
12	2021	P	4.25	2590	12	2021	P	5.00	19495
12	2021	C	9.00	2543	12	2021	C	6.00	19270
4	2022	C	8.00	2328	1	2022	P	3.50	19170
1	2022	C	9.00	2247	3	2022	P	2.50	18386
12	2021	C	7.00	2201	1	2022	C	5.00	17836
1	2022	C	8.00	2160	3	2022	P	3.50	17803
2	2022	C	15.00	1872	12	2021	C	8.00	16958
1	2022	P	3.50	1724	12	2021	P	2.00	16879
1	2022	C	10.00	1718	3	2022	P	4.00	16867
1	2022	C	8.50	1712	12	2021	P	4.50	16862
12	2021	C	8.25	1611	2	2022	C	5.00	16814
3	2022	P	4.50	1590	1	2022	P	4.00	16423
1	2022	C	6.25	1540	12	2021	C	7.00	15713
1	2022	C	6.75	1537	3	2022	P	3.00	15633
3	2022	P	4.00	1415	3	2022	C	4.00	15631
1	2022	C	15.00	1289	4	2022	P	2.50	15489
3	2022	C	10.00	1273	2	2022	P	3.50	15375
1	2022	C	6.10	1235	12	2022	C	5.00	15182
1	2022	C	6.20	1203	1	2022	C	4.00	14416
1	2022	P	5.00	1168	2	2022	P	4.00	14332
2	2022	C	10.00	1142	4	2022	C	5.00	14289
2	2022	C	20.00	1131	3	2022	C	7.00	13948
12	2021	C	11.00	1104	2	2022	C	6.00	13748
12	2021	C	10.00	1082	5	2022	C	3.00	13733
2	2022	C	12.00	1002	6	2022	C	3.00	13438
3	2022	C	5.75	1000	3	2022	P	5.00	13418
1	2022	P	4.25	997	12	2022	C	5.25	13263
12	2021	C	6.00	937	7	2022	C	3.00	13230
1	2022	P	5.50	867	8	2022	C	3.00	13226
3	2022	C	9.00	829	9	2022	C	3.00	13225
3	2022	C	20.00	824	3	2022	C	3.00	13177
1	2022	P	4.50	766	12	2022	C	4.50	13142
1	2022	P	5.35	750	10	2022	C	3.00	13114
3	2022	C	8.00	725	12	2021	P	3.75	13032
12	2021	P	5.25	718	1	2022	C	7.00	13027
1	2022	P	6.00	703	2	2022	C	4.00	13019
					12	2021	C	5	12798.5

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 21	540	3080	-2540	DEC 21	82477	81498	979
JAN 22	167328	176276	-8948	JAN 22	91769	90931	838
FEB 22	218018	225557	-7539	FEB 22	95288	94323	966
MAR 22	75323	74953	370	MAR 22	69596	69436	161
APR 22	155534	153580	1954	APR 22	76974	76944	30
MAY 22	113413	114017	-604	MAY 22	78743	78441	302
JUN 22	125377	120106	5271	JUN 22	71344	71507	-163
JUL 22	41966	40182	1784	JUL 22	55545	55377	168
AUG 22	38623	38411	212	AUG 22	57428	57590	-162
SEP 22	29751	29704	47	SEP 22	56283	56119	164
OCT 22	34261	33516	745	OCT 22	57210	57069	141
NOV 22	84987	84164	823	NOV 22	62503	62434	69
DEC 22	34745	34897	-152	DEC 22	48979	48913	66
JAN 23	25687	25619	68	JAN 23	52165	52133	33
FEB 23	30069	29860	209	FEB 23	39743	39573	170
MAR 23	10580	10824	-244	MAR 23	32632	32534	98
APR 23	17969	17142	827	APR 23	35096	34987	109
MAY 23	15567	15354	213	MAY 23	35382	35300	82
JUN 23	9006	9026	-20	JUN 23	34711	34428	283
JUL 23	7118	7130	-12	JUL 23	30923	30695	228
AUG 23	4861	4795	66	AUG 23	31140	30920	220
SEP 23	4056	4029	27	SEP 23	32097	31850	248
OCT 23	5063	4899	164	OCT 23	30094	29919	176
NOV 23	6497	6108	389	NOV 23	33996	33739	257
DEC 23	3598	3453	145	DEC 23	32759	32883	-124
JAN 24	4318	4260	58	JAN 24	28036	28226	-190
FEB 24	1890	1715	175	FEB 24	18106	18172	-66
MAR 24	1169	1171	-2	MAR 24	13868	13943	-76
APR 24	4663	4655	8	APR 24	18650	18612	39
MAY 24	3531	3502	29	MAY 24	13148	13123	25





	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
<b>Current Price</b>	\$5.882	\$6.003	\$6.093	\$5.980	\$5.623	\$4.209	\$4.082	\$4.114	\$4.153	\$4.154	\$4.132	\$4.161
Last Week	\$5.088	\$5.350	\$5.465	\$5.379	\$5.095	\$3.976	\$3.872	\$3.911	\$3.954	\$3.957	\$3.938	\$3.971
vs. Last Week	\$0.794	\$0.653	\$0.628	\$0.601	\$0.528	\$0.233	\$0.210	\$0.203	\$0.199	\$0.197	\$0.194	\$0.190
4 Weeks Ago	\$5.841	\$5.880	\$5.985	\$6.058	\$5.929	\$5.484	\$4.026	\$3.844	\$3.872	\$3.911	\$3.914	\$3.893
vs. 4 Weeks Ago	\$0.041	\$0.123	\$0.108	-\$0.078	-\$0.306	-\$1.275	\$0.056	\$0.270	\$0.281	\$0.243	\$0.218	\$0.268
Last Year	\$3.019	\$3.311	\$3.424	\$3.376	\$3.247	\$2.973	\$2.933	\$2.962	\$3.002	\$3.012	\$2.999	\$3.032
vs. Last Year	\$2.863	\$2.692	\$2.669	\$2.604	\$2.376	\$1.236	\$1.149	\$1.152	\$1.151	\$1.142	\$1.133	\$1.129

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	5.97	7.35	1.38
TETCO M3	\$/MMBtu	5.49	4.83	-0.66
FGT Zone 3	\$/MMBtu	5.52	5.33	-0.19
Zone 6 NY	\$/MMBtu	5.52	4.83	-0.69
Chicago Citygate	\$/MMBtu	5.85	5.06	-0.79
Michcon	\$/MMBtu	5.77	4.93	-0.85
Columbia TCO Pool	\$/MMBtu	5.34	4.57	-0.77
Ventura	\$/MMBtu	5.80	5.26	-0.54
Rockies/Opal	\$/MMBtu	5.90	4.85	-1.06
El Paso Permian Basin	\$/MMBtu	5.42	4.87	-0.55
Socal Citygate	\$/MMBtu	7.00	5.61	-1.39
Malin	\$/MMBtu	6.05	5.43	-0.62
Houston Ship Channel	\$/MMBtu	5.71	5.05	-0.66
Henry Hub Cash	\$/MMBtu	5.86	4.96	-0.91
AECO Cash	C\$/GJ	5.27	4.28	-0.99
Station2 Cash	C\$/GJ	0.28	5.94	5.66
Dawn Cash	C\$/GJ	5.81	4.98	-0.83

Source: CME, Bloomberg

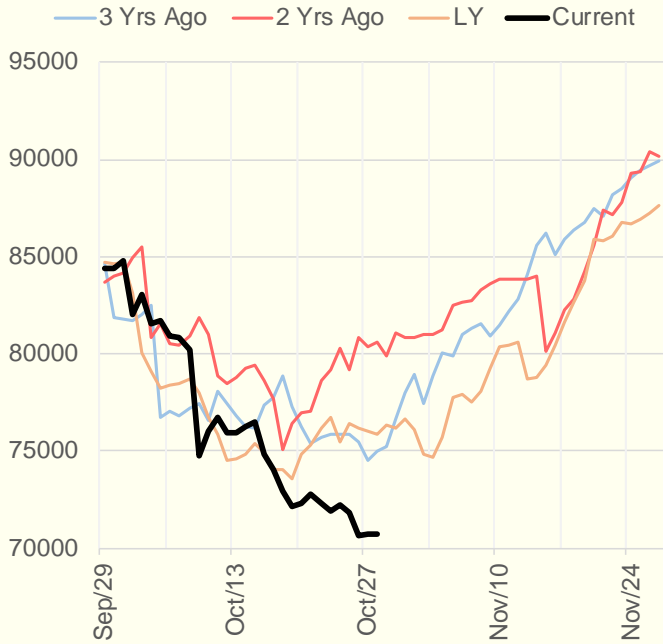
	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 2.190
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 1.032	▲ 0.725	▲ 0.300
NatGas Oct21/Jan22	\$/MMBtu	0.436	▲ 0.715	▲ 0.602	▲ 0.135
NatGas Apr22/Oct22	\$/MMBtu	-0.061	▼ -0.046	▲ 0.003	▼ -0.093
WTI Crude	\$/Bbl	82.66	▼ -1.210	▲ 7.830	▲ 45.270
Brent Crude	\$/Bbl	84.58	▼ -1.240	▲ 5.940	▲ 45.460
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	251.48	▼ -7.750	▲ 20.730	▲ 140.060
Propane, Mt. Bel	cents/Gallon	1.45	▼ -0.024	▲ 0.157	▲ 0.925
Ethane, Mt. Bel	cents/Gallon	0.44	▲ 0.005	▲ 0.047	▲ 0.221
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			

### Weather Storage Model - Next 4 Week Forecast

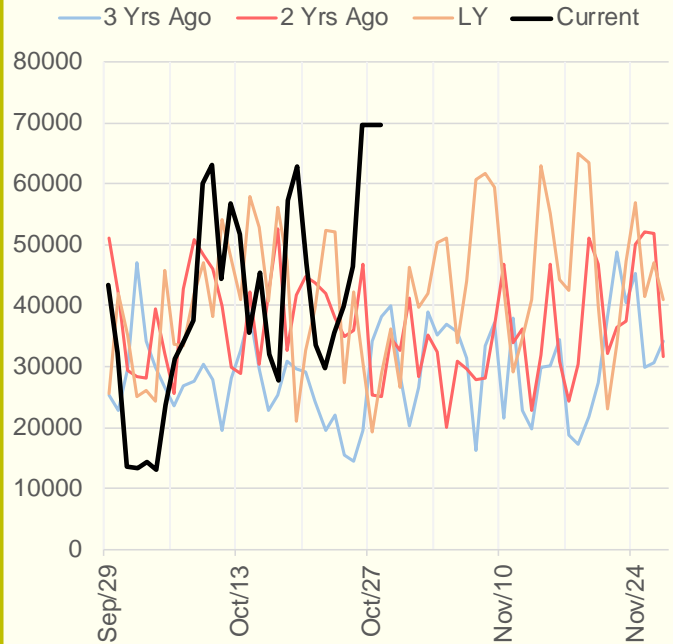


The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are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

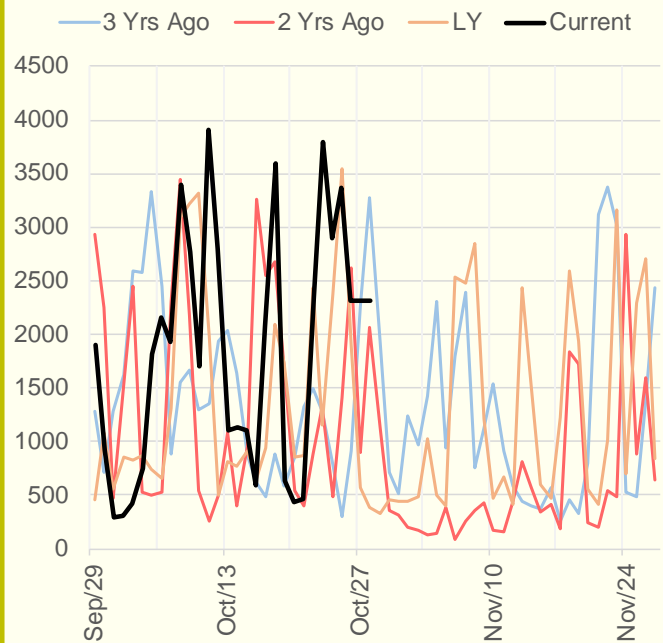
### NRC Nuclear Daily Output



### US Wind



### CALI Wind



### TEXAS Wind

