

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 5.53	▼ \$ (0.01)	▼ \$ (0.04)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 81.96	▼ \$ (1.95)	▼ \$ (1.5)

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 82.98	▼ \$ (1.74)	▼ \$ (1.5)

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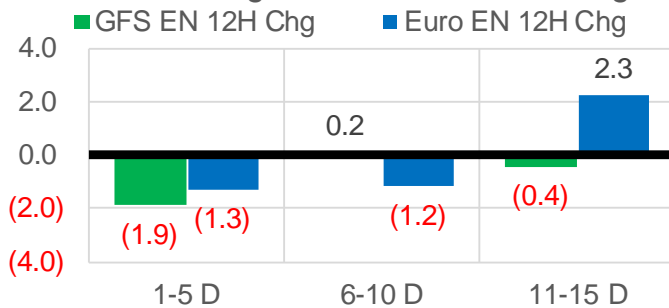
[Nat Gas Options Volume and Open Interest](#)

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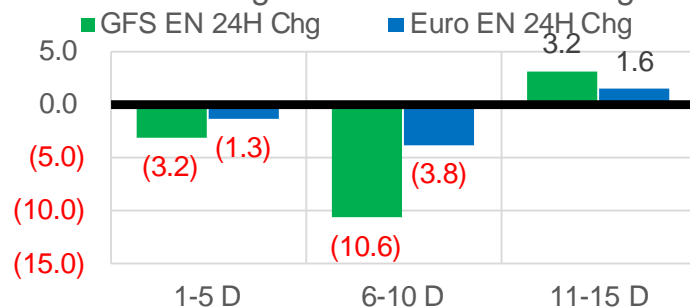
### Vs. 12H Ago

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	94.6	▼ -0.88	▼ -0.18

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	31.0	▲ 0.02	▲ 2.69

	Current	Δ from YD	Δ from 7D Avg
US ResComm	29.1	▲ 1.75	▲ 8.47

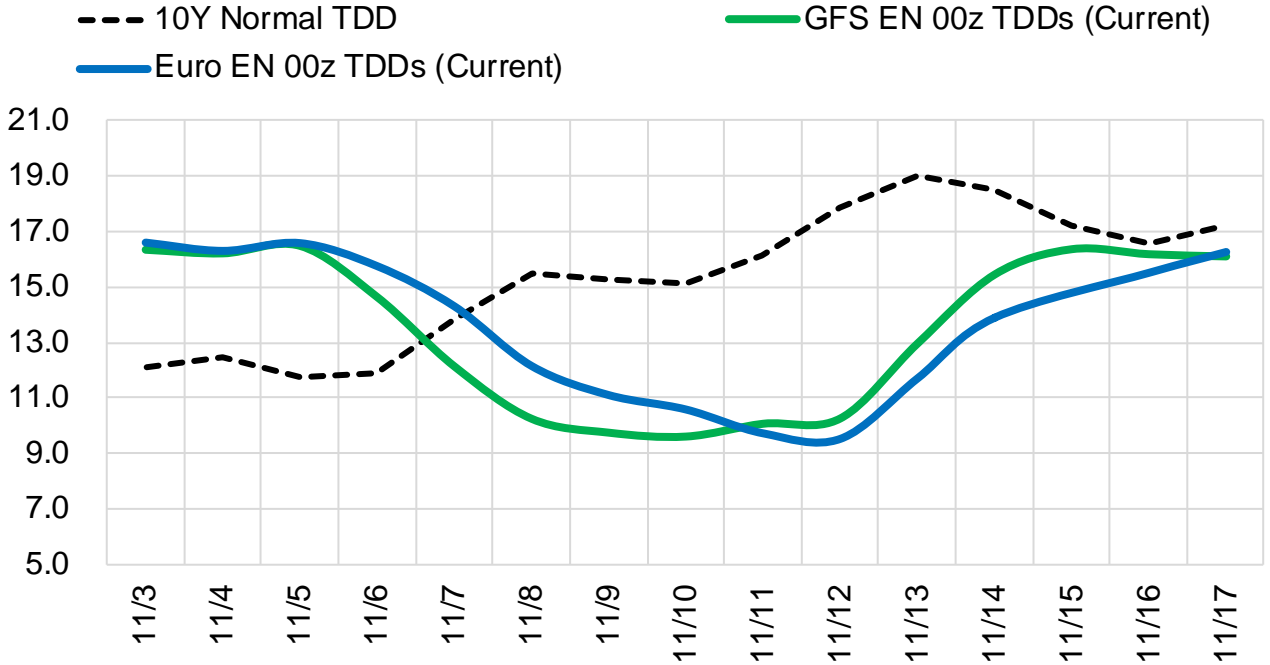
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	5.3	▼ -0.15	▼ -0.13

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	10.4	▼ -0.81	▼ -0.60

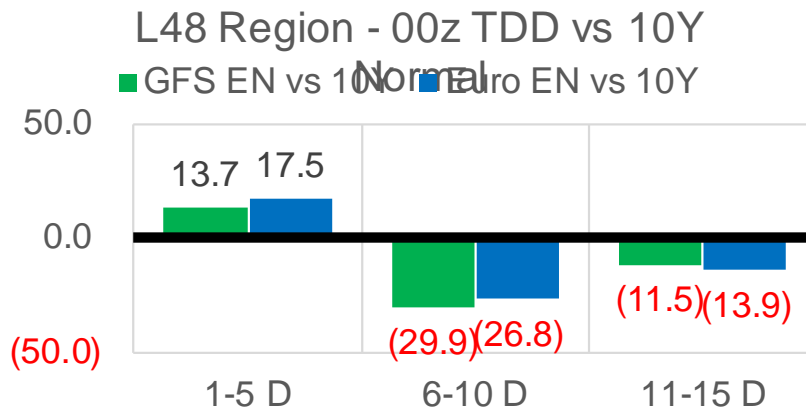
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.5	▲ 0.33	▲ 0.02

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

### L48 Region



## Vs. 10Y Normal



Source: WSI , Bloomberg

## Lower 48 Component Models

### Daily Balances

	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov	2-Nov	3-Nov	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>95.0</b>	<b>95.1</b>	<b>95.2</b>	<b>94.3</b>	<b>93.8</b>	<b>95.5</b>	<b>94.6</b>	▼ -0.9	▼ -0.2
<b>Canadian Imports</b>	<b>5.2</b>	<b>5.5</b>	<b>5.6</b>	<b>5.6</b>	<b>5.2</b>	<b>5.5</b>	<b>5.3</b>	▼ -0.1	▼ -0.1
L48 Power	28.7	27.6	26.4	26.4	29.0	31.0	31.0	▲ 0.0	▲ 2.8
L48 Residential & Commercial	18.2	18.2	18.1	18.9	24.4	27.4	29.1	▲ 1.7	▲ 8.2
L48 Industrial	21.2	21.8	22.3	22.7	23.8	24.1	24.3	▲ 0.2	▲ 1.6
L48 Lease and Plant Fuel	5.2	5.2	5.2	5.1	5.1	5.2	5.1	▼ -0.1	▼ -0.1
L48 Pipeline Distribution	2.5	2.4	2.4	2.4	2.8	3.1	3.2	▲ 0.1	▲ 0.6
<b>L48 Regional Gas Consumption</b>	<b>75.8</b>	<b>75.2</b>	<b>74.3</b>	<b>75.6</b>	<b>85.1</b>	<b>90.8</b>	<b>92.7</b>	▲ 1.9	▲ 13.3
<b>Net LNG Delivered</b>	<b>11.11</b>	<b>11.74</b>	<b>10.90</b>	<b>10.37</b>	<b>11.03</b>	<b>11.25</b>	<b>10.44</b>	▼ -0.8	▼ -0.6
<b>Total Mexican Exports</b>	<b>7.2</b>	<b>6.6</b>	<b>6.6</b>	<b>6.3</b>	<b>4.9</b>	<b>6.1</b>	<b>6.5</b>	▲ 0.3	▲ 0.2
<b>Implied Daily Storage Activity</b>	<b>5.9</b>	<b>7.1</b>	<b>9.0</b>	<b>7.6</b>	<b>-2.0</b>	<b>-7.2</b>	<b>-9.7</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									

### EIA Storage Week Balances

	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	29-Oct	WoW	vs. 4W
<b>Lower 48 Dry Production</b>	<b>93.5</b>	<b>93.8</b>	<b>93.3</b>	<b>93.0</b>	<b>92.8</b>	<b>94.0</b>	▲ 1.2	▲ 0.8
<b>Canadian Imports</b>	<b>5.2</b>	<b>5.7</b>	<b>5.3</b>	<b>5.0</b>	<b>5.6</b>	<b>5.6</b>	▲ 0.0	▲ 0.2
L48 Power	33.3	30.3	32.9	31.7	29.0	29.0	▼ 0.0	▼ -2.0
L48 Residential & Commercial	8.1	8.4	8.2	9.5	13.9	17.7	▲ 3.8	▲ 7.7
L48 Industrial	21.0	20.6	22.2	19.9	18.9	20.0	▲ 1.1	▼ -0.4
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.1	5.1	5.1	▲ 0.1	▲ 0.0
L48 Pipeline Distribution	2.3	2.1	2.2	2.2	2.3	2.5	▲ 0.2	▲ 0.3
<b>L48 Regional Gas Consumption</b>	<b>69.8</b>	<b>66.5</b>	<b>70.6</b>	<b>68.4</b>	<b>69.1</b>	<b>74.3</b>	▲ 5.2	▲ 5.6
<b>Net LNG Exports</b>	<b>9.9</b>	<b>10.3</b>	<b>9.9</b>	<b>10.7</b>	<b>10.8</b>	<b>10.8</b>	▼ 0.0	▲ 0.4
<b>Total Mexican Exports</b>	<b>6.8</b>	<b>6.7</b>	<b>6.6</b>	<b>6.6</b>	<b>6.6</b>	<b>6.9</b>	▲ 0.3	▲ 0.3
<b>Implied Daily Storage Activity</b>	<b>12.2</b>	<b>16.0</b>	<b>11.6</b>	<b>12.2</b>	<b>11.9</b>	<b>7.6</b>	-4.3	
<b>EIA Reported Daily Storage Activity</b>	<b>12.6</b>	<b>16.9</b>	<b>11.6</b>	<b>13.1</b>	<b>12.4</b>			
<b>Daily Model Error</b>	<b>-0.4</b>	<b>-0.9</b>	<b>0.0</b>	<b>-0.9</b>	<b>-0.5</b>			

### Monthly Balances

	2Yr Ago Nov-19	LY Nov-20	Jul-21	Aug-21	Sep-21	Oct-21	MTD Nov-21	MoM	vs. LY
<b>Lower 48 Dry Production</b>	<b>96.2</b>	<b>91.1</b>	<b>93.6</b>	<b>94.1</b>	<b>93.0</b>	<b>93.4</b>	<b>94.4</b>	▲ 1.0	▲ 3.3
<b>Canadian Imports</b>	<b>4.5</b>	<b>4.6</b>	<b>5.2</b>	<b>5.1</b>	<b>5.1</b>	<b>5.4</b>	<b>5.3</b>	▼ 0.0	▲ 0.7
L48 Power	27.5	25.7	39.4	40.1	33.1	30.3	30.3	▲ 0.0	▲ 4.6
L48 Residential & Commercial	32.8	24.4	8.1	7.8	7.7	12.9	27.0	▲ 14.1	▲ 2.6
L48 Industrial	24.9	22.5	21.2	21.7	20.8	20.4	24.1	▲ 3.6	▲ 1.6
L48 Lease and Plant Fuel	5.2	5.0	5.1	5.1	5.1	5.1	5.1	▲ 0.0	▲ 0.2
L48 Pipeline Distribution	3.0	2.7	2.5	2.6	2.2	2.3	3.1	▲ 0.8	▲ 0.4
<b>L48 Regional Gas Consumption</b>	<b>93.5</b>	<b>80.2</b>	<b>76.3</b>	<b>77.3</b>	<b>68.9</b>	<b>71.0</b>	<b>89.6</b>	▲ 18.5	▲ 9.4
<b>Net LNG Exports</b>	<b>7.2</b>	<b>10.1</b>	<b>10.8</b>	<b>10.5</b>	<b>10.3</b>	<b>10.6</b>	<b>10.9</b>	▲ 0.3	▲ 0.8
<b>Total Mexican Exports</b>	<b>5.2</b>	<b>6.1</b>	<b>7.1</b>	<b>6.9</b>	<b>6.7</b>	<b>6.6</b>	<b>5.8</b>	▼ -0.8	▼ -0.2
<b>Implied Daily Storage Activity</b>	<b>-5.1</b>	<b>-0.7</b>	<b>4.6</b>	<b>4.5</b>	<b>12.1</b>	<b>10.5</b>	<b>-6.6</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)

	26-Oct	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov	DoD	vs. 7D
NRC Nuclear Daily Output	70.6	70.7	71.5	71.1	71.0	71.1	71.6	0.5	0.6
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	34.2	34.1	33.4	33.7	33.9	33.8	33.3	-0.5	-0.6
NRC % Nuclear Cap Utilization	71.8	71.9	72.7	72.3	72.2	72.3	72.8	0.5	0.6

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

	26-Oct	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov	DoD	vs. 7D
CALI Wind	2314	739	739	485	1946	2725	2224	-501	732
TEXAS Wind	20948	20185	18446	13630	7276	12278	6448	-5830	-9013
US Wind	69731	64064	63086	54599	28405	39861	32389	-7472	-20902

### Generation Daily Average - MWh (EIA)

	26-Oct	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov	DoD	vs. 7D
US Wind	69731	64064	63086	54599	28405	39861	32389	-7472	-20902
US Solar	9987	10413	9171	10654	11213	10475	8966	-1509	-1352
US Petroleum	2264	3356	3204	3306	3114	2737	3517	780	520
US Other	9147	8754	9161	8869	8151	7926	8677	750	9
US Coal	72418	74196	72900	73786	64309	61215	80531	19317	10727
US Nuke	74184	74646	74714	74753	72671	72842	75126	2284	1158
US Hydro	23940	23450	24683	23786	22551	23096	27424	4329	3840
<b>US Gas</b>	<b>153542</b>	<b>148972</b>	<b>145899</b>	<b>146488</b>	<b>137657</b>	<b>122452</b>	<b>162171</b>	<b>39719</b>	<b>19670</b>

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

## Storage Week Average Generation Data

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

	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	29-Oct	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	85.9	85.1	82.1	76.5	73.6	71.6	-2.1	0.4
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	19.0	19.8	22.7	28.3	31.2	33.3	2.1	
NRC % Nuclear Cap Utilization	0.1	0.1	0.1	0.1	0.1	0.1	0.0	

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

	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	29-Oct	WoW	WoW Bcf/d Impact
CALI Wind	1936	2467	1099	2400	1270	2314	1044	-0.2
TEXAS Wind	9780	10364	4890	15396	10729	15462	4733	-0.9
US Wind	43250	43478	20468	49922	43721	49862	6141	-1.1
					-6200.4			
					-12%			

### Generation Weekly Average - MWh (EIA)

	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	29-Oct	WoW	WoW Bcf/d Impact
US Wind	43250	43478	20468	49922	43721	49862	6141	-1.1
US Solar	12185	12957	11295	10530	12209	9946	-2263	0.4
US Petroleum	2594	2712	3901	3224	3092	2815	-278	0.0
US Other	9121	8709	10972	12221	12109	10090	-2019	0.4
US Coal	109062	94792	100713	89841	74011	73356	-655	0.1
US Nuke	88789	88402	83696	77046	73748	73713	-35	0.0
US Hydro	25340	25370	24518	24701	23105	23541	436	-0.1
<b>US Gas</b>	<b>175354</b>	<b>153813</b>	<b>176848</b>	<b>162707</b>	<b>150057</b>	<b>152442</b>	<b>2385</b>	<b>-0.4</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	Aug-21	Sep-21	Oct-21	Nov-21	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
NRC Nuclear Daily Output	79.6	75.9	91.5	87.2	75.5	71.9	74.2	-3.6	-1.8
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	104.9	0.0	0.0
NRC Nuclear Outage	25.3	28.9	13.4	17.7	29.4	32.9	30.7	3.6	1.8
NRC % Nuclear Cap Utilization	80.9	77.2	93.0	88.7	76.8	73.2	75.4	-3.6	-1.8

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

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	Aug-21	Sep-21	Oct-21	Nov-21	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
CALI Wind	1194	1333	2442	2020	1765	2224	1987	458	654
TEXAS Wind	9466	9895	9901	9400	11565	6448	12280	-5118	2385
US Wind	37588	40851	35830	40222	40990	32389	43798	-8601	2946

### Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	Aug-21	Sep-21	Oct-21	Nov-21	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
US Wind	37588	40851	35830	40222	40990	32389	43798	▲11409.0	▲ 2946
US Solar	7495	8152	13787	13379	10974	8966	10621	▲ 1654.4	▲ 2469
US Petroleum	3434	2525	4484	2452	3238	3517	3134	▼ -383	▲ 609
US Other	8339	8430	9928	9008	11055	8677	10953	▲ 2276	▲ 2523
US Coal	84432	83179	137655	110037	82734	80531	80014	▼ -517	▼ -3165
US Nuke	85751	79311	94062	90146	76700	75126	75403	▲ 277	▼ -3908
US Hydro	23674	25603	28532	25661	23887	27424	24265	▼ -3159	▼ -1337
<b>US Gas</b>	<b>150782</b>	<b>157766</b>	<b>210824</b>	<b>173536</b>	<b>158096</b>	<b>162171</b>	<b>156169</b>	<b>▲ 11558</b>	<b>▼ -1597</b>
<b>US Total</b>	<b>401982</b>	<b>405902</b>	<b>534937</b>	<b>464627</b>	<b>410407</b>	<b>399249</b>	<b>407210</b>	<b>▲ 11706</b>	<b>▲ 1307</b>

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

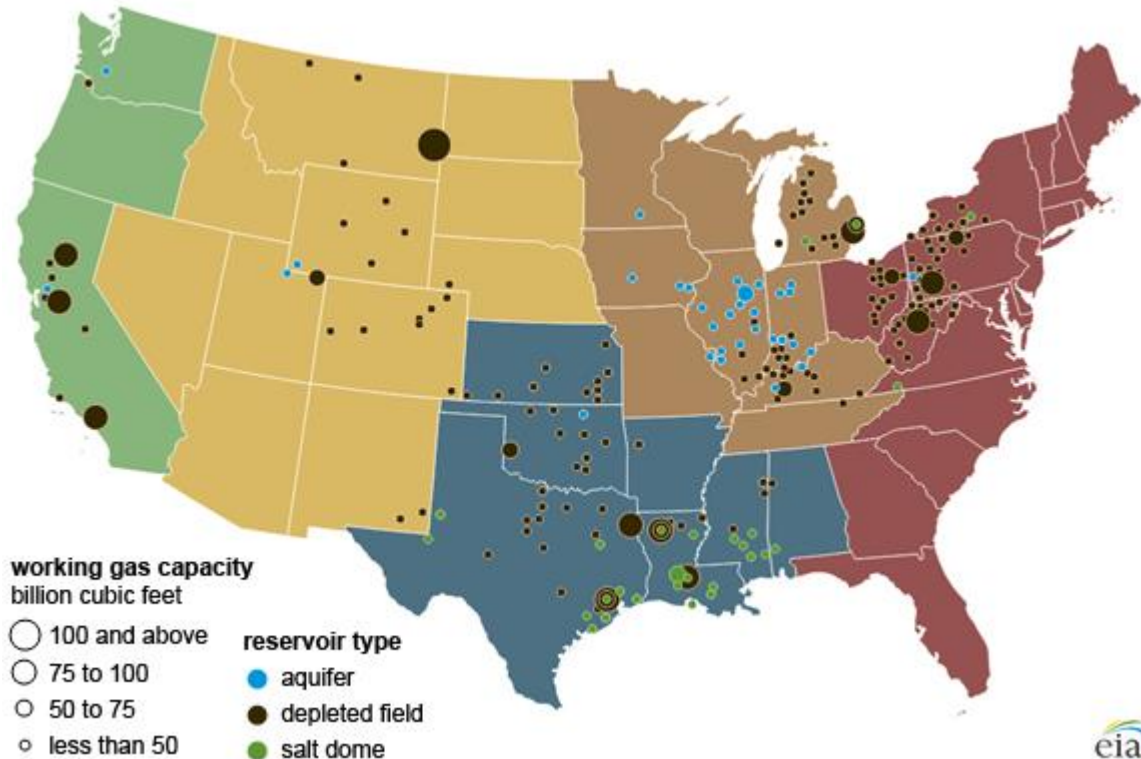
### Regional S/D Models Storage Projection

Week Ending 29-Oct

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	7.3	0.8	8.2	57
East	1.8	0.0	1.8	13
Midwest	1.2	-0.1	1.1	8
Mountain	3.4	-3.1	0.3	2
South Central	0.4	4.3	4.7	33
Pacific	0.4	-0.3	0.1	1

\*Adjustment Factor is calculated based on historical regional deltas

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

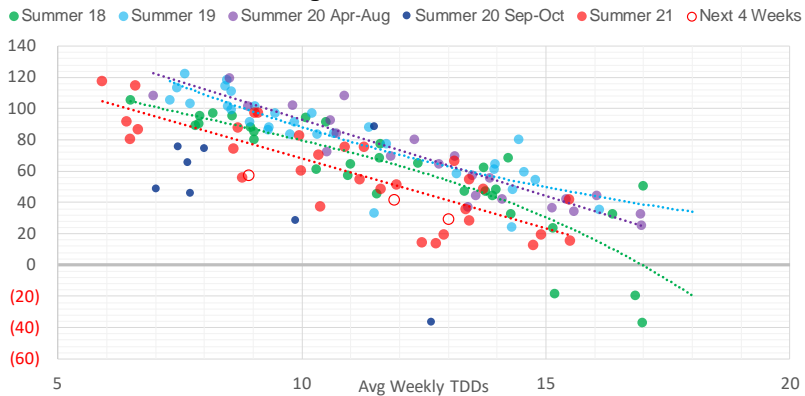


### Weather Model Storage Projection

Next report  
and beyond

Week Ending	GWDDs	Week Storage Projection
29-Oct	8.9	57
05-Nov	13.0	29
12-Nov	11.9	41
19-Nov	#N/A	#N/A

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

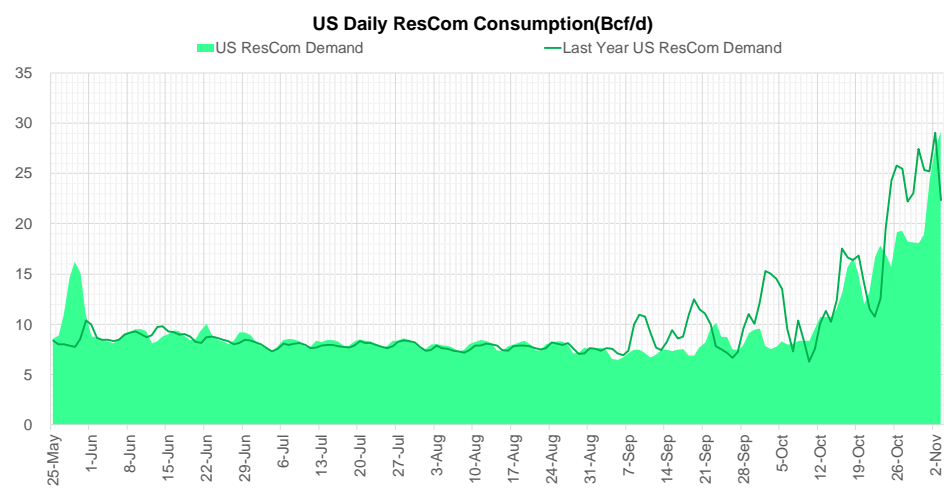
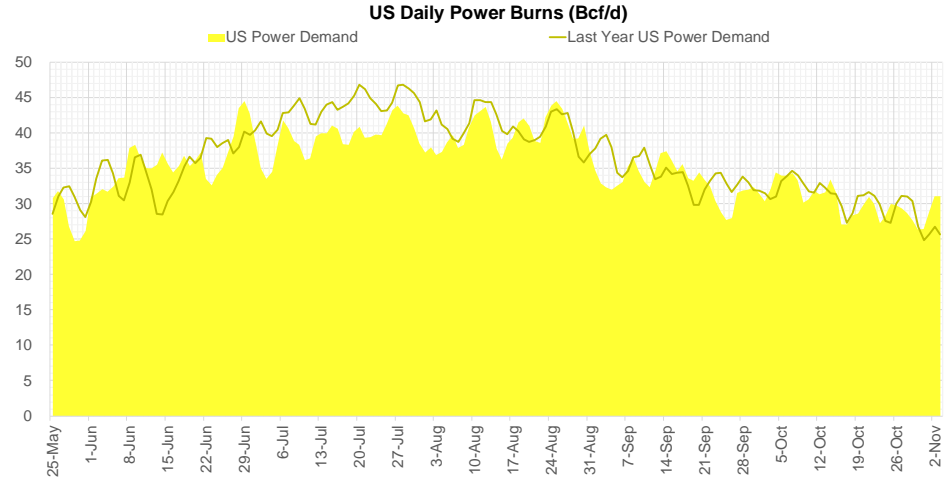
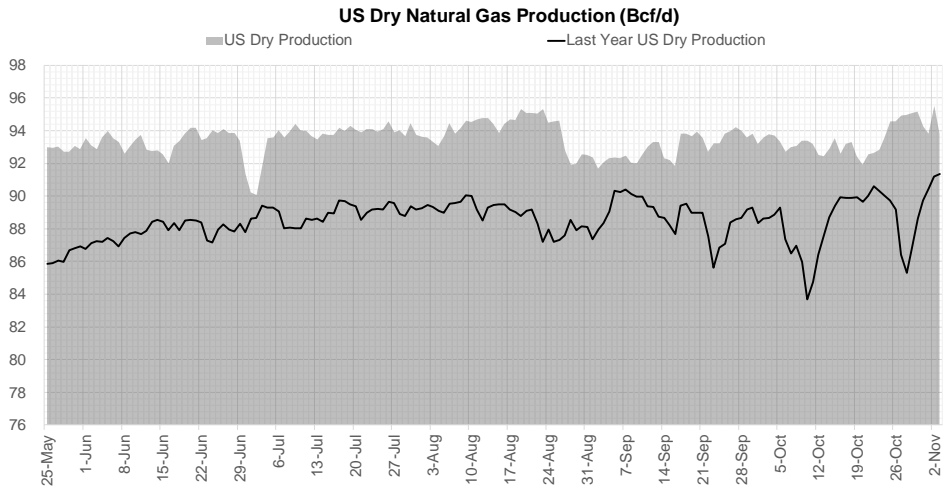


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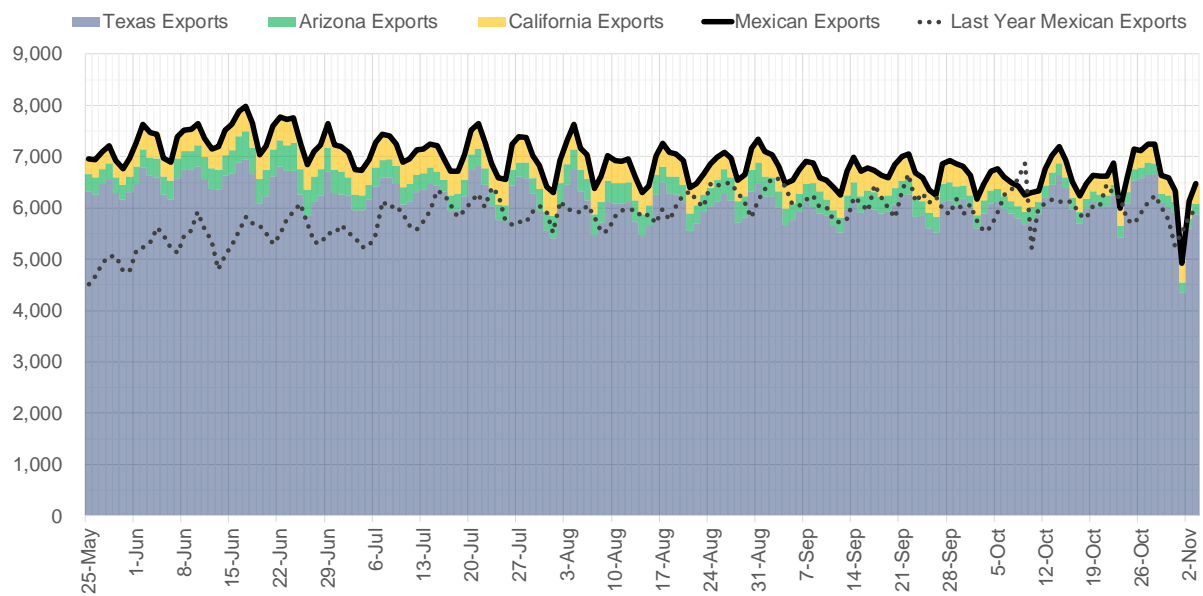
## Supply – Demand Trends



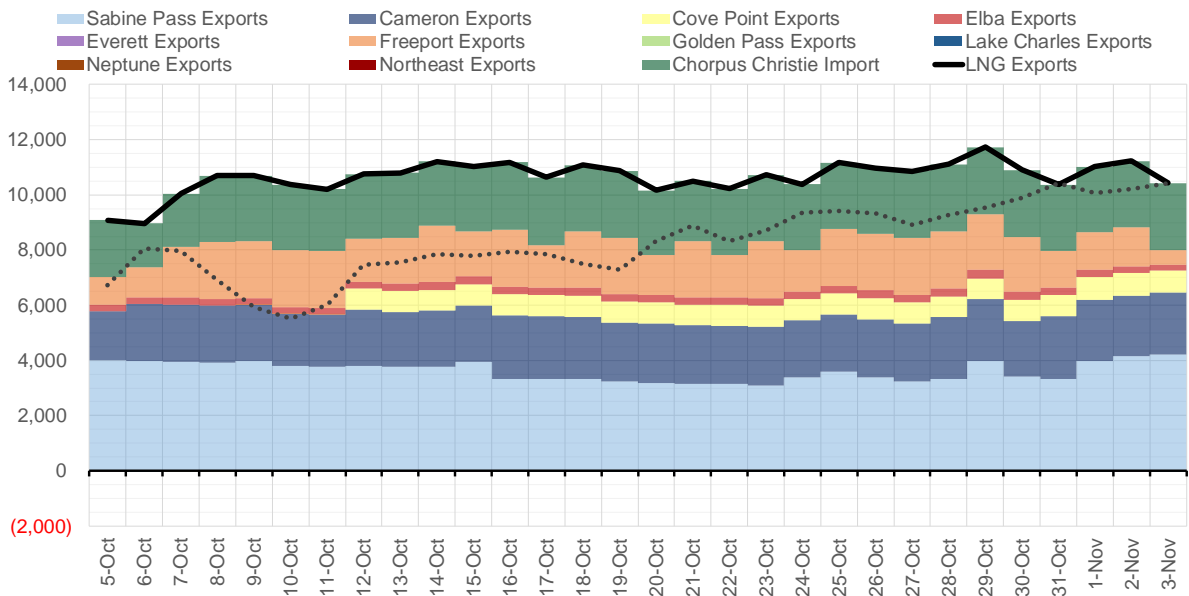
Source: Bloomberg

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

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.

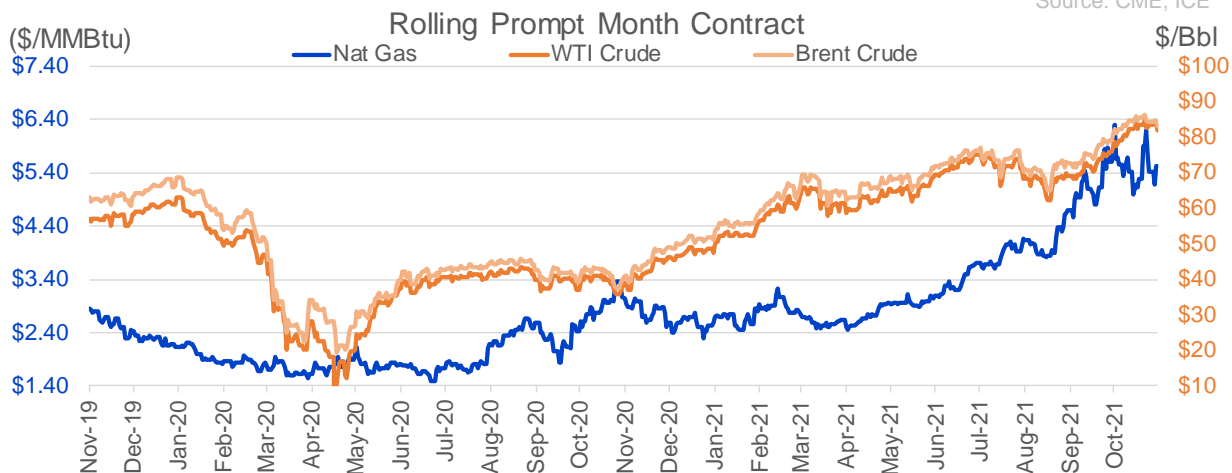
## Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

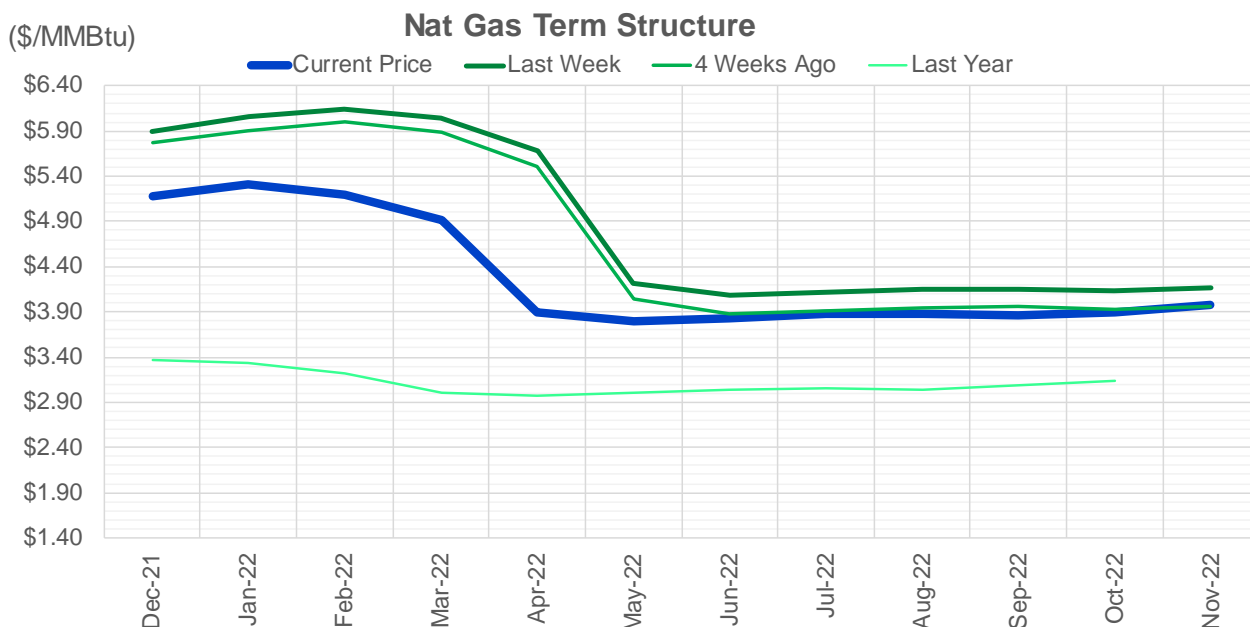
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
12	2021	P	4.00	3590	12	2021	P	2.75	54603
12	2021	C	7.00	3464	12	2021	P	4.00	51359
12	2021	P	4.50	3156	12	2021	P	3.00	40230
12	2021	C	8.00	3135	12	2021	P	2.50	39420
3	2022	C	10.00	2810	12	2021	P	3.50	34507
12	2021	P	5.50	2560	3	2022	C	10.00	30596
12	2021	P	5.40	2170	3	2022	C	8.00	24313
12	2021	C	6.00	1912	12	2021	P	5.00	23427
12	2021	P	4.75	1842	3	2022	C	5.00	23113
4	2022	C	8.00	1753	1	2022	P	3.00	23089
5	2022	P	2.50	1750	1	2022	P	2.75	22906
12	2021	P	5.00	1533	12	2021	C	4.00	22527
12	2021	P	4.25	1525	12	2021	P	4.25	21996
6	2022	C	5.00	1475	1	2022	C	6.00	21138
1	2022	C	10.00	1358	12	2021	C	6.00	20829
12	2021	C	6.50	1304	4	2022	C	3.00	19710
1	2022	P	3.75	1260	1	2022	P	3.50	18991
1	2022	C	20.00	1207	3	2022	P	2.50	18561
12	2021	C	5.50	1149	12	2021	C	7.00	18221
1	2022	C	8.00	1088	3	2022	P	3.50	18131
2	2022	C	10.00	1074	12	2021	C	8.00	18105
3	2022	P	3.50	1020	1	2022	C	5.00	18095
12	2021	C	7.50	1007	3	2022	P	3.00	18014
4	2022	C	7.00	1006	1	2022	P	4.00	17837
1	2022	C	5.90	1000	3	2022	P	4.00	17686
12	2021	C	6.60	908	2	2022	C	5.00	16863
12	2021	C	8.50	907	12	2021	P	2.00	16834
12	2021	C	6.25	901	12	2021	P	4.50	15785
3	2022	C	6.00	844	3	2022	C	4.00	15631
3	2022	C	15.00	826	2	2022	P	3.50	15575
3	2022	C	20.00	826	4	2022	P	2.50	15514
4	2022	C	5.00	825	12	2022	C	5.00	15232
12	2021	C	10.00	819	4	2022	C	5.00	15115
1	2022	P	4.25	819	1	2022	C	4.00	14408
10	2022	C	5.00	800	2	2022	P	4.00	14230
5	2022	C	5.00	775	1	2022	C	7.00	13991
7	2022	C	5.00	775	5	2022	C	3.00	13733
8	2022	C	5.00	775	3	2022	C	7.00	13590
9	2022	C	5.00	775	2	2022	C	6.00	13513
1	2022	C	9.00	767	1	2022	C	10.00	13473
2	2022	C	8.00	756	3	2022	P	5.00	13463
1	2022	P	3.25	703	6	2022	C	3.00	13438
6	2022	P	3.05	700	12	2022	C	4.50	13367
1	2022	C	7.00	690	3	2022	C	9.00	13317
12	2021	C	5.75	688	12	2022	C	5.25	13263
1	2022	C	15.00	668	7	2022	C	3.00	13230
3	2022	P	4.50	658	8	2022	C	3.00	13226
3	2022	C	8.00	650	9	2022	C	3.00	13225
1	2022	C	6.50	639	3	2022	C	3.00	13177
					10	2022	C	3	13114

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	146797	148599	-1802	DEC 21	90860	92219	-1359
JAN 22	209349	212525	-3176	JAN 22	88505	88833	-328
FEB 22	76099	77229	-1130	FEB 22	69553	69603	-50
MAR 22	160473	158145	2328	MAR 22	77968	77343	626
APR 22	113307	113235	72	APR 22	79208	79315	-107
MAY 22	124475	124668	-193	MAY 22	71252	71102	150
JUN 22	41148	41126	22	JUN 22	55631	55548	83
JUL 22	37530	36582	948	JUL 22	57548	57621	-73
AUG 22	30484	29754	730	AUG 22	56585	56440	146
SEP 22	33424	33780	-356	SEP 22	57244	57079	166
OCT 22	85598	85015	583	OCT 22	62553	62205	348
NOV 22	34258	34376	-118	NOV 22	49214	49202	12
DEC 22	27487	26929	558	DEC 22	52065	52093	-28
JAN 23	31117	31279	-162	JAN 23	40355	40174	181
FEB 23	11105	10938	167	FEB 23	33166	32953	213
MAR 23	18583	17902	681	MAR 23	35640	35381	259
APR 23	15832	15775	57	APR 23	36217	36023	194
MAY 23	9116	9249	-133	MAY 23	35339	35044	296
JUN 23	7590	7643	-53	JUN 23	31449	31193	257
JUL 23	5037	5053	-16	JUL 23	31648	31388	260
AUG 23	4155	4181	-26	AUG 23	32619	32348	271
SEP 23	5412	5436	-24	SEP 23	30628	30362	265
OCT 23	6669	6703	-34	OCT 23	34556	34299	257
NOV 23	4120	4055	65	NOV 23	33083	32895	188
DEC 23	4401	4332	69	DEC 23	30679	30492	187
JAN 24	1882	1885	-3	JAN 24	18464	18438	26
FEB 24	1141	1141	0	FEB 24	14184	14181	3
MAR 24	4407	4406	1	MAR 24	18936	18929	7
APR 24	3449	3449	0	APR 24	13182	13314	-133
MAY 24	1828	1828	0	MAY 24	13829	13891	-62





	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
<b>Current Price</b>	<b>\$5.186</b>	<b>\$5.305</b>	<b>\$5.202</b>	<b>\$4.912</b>	<b>\$3.893</b>	<b>\$3.799</b>	<b>\$3.836</b>	<b>\$3.880</b>	<b>\$3.882</b>	<b>\$3.865</b>	<b>\$3.895</b>	<b>\$3.984</b>
Last Week	\$5.898	\$6.056	\$6.149	\$6.039	\$5.688	\$4.220	\$4.080	\$4.115	\$4.154	\$4.156	\$4.134	\$4.163
vs. Last Week	-\$0.712	-\$0.751	-\$0.947	-\$1.127	-\$1.795	-\$0.421	-\$0.244	-\$0.235	-\$0.272	-\$0.291	-\$0.239	-\$0.179
4 Weeks Ago	\$5.766	\$5.906	\$5.999	\$5.888	\$5.505	\$4.042	\$3.880	\$3.911	\$3.950	\$3.955	\$3.935	\$3.963
vs. 4 Weeks Ago	-\$0.580	-\$0.601	-\$0.797	-\$0.976	-\$1.612	-\$0.243	-\$0.044	-\$0.031	-\$0.068	-\$0.090	-\$0.040	\$0.021
Last Year	\$3.244	\$3.375	\$3.332	\$3.219	\$3.002	\$2.967	\$3.001	\$3.045	\$3.057	\$3.045	\$3.080	\$3.140
vs. Last Year	\$1.942	\$1.930	\$1.870	\$1.693	\$0.891	\$0.832	\$0.835	\$0.835	\$0.825	\$0.820	\$0.815	\$0.844

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	5.75	7.66	1.91
TETCO M3	\$/MMBtu	5.21	5.42	0.21
FGT Zone 3	\$/MMBtu	5.23	5.98	0.75
Zone 6 NY	\$/MMBtu	5.23	5.59	0.36
Chicago Citygate	\$/MMBtu	5.31	5.94	0.63
Michcon	\$/MMBtu	5.29	5.70	0.41
Columbia TCO Pool	\$/MMBtu	5.01	5.25	0.24
Ventura	\$/MMBtu	5.18	6.01	0.83
Rockies/Opal	\$/MMBtu	5.25	5.60	0.35
El Paso Permian Basin	\$/MMBtu	4.88	5.61	0.73
Socal Citygate	\$/MMBtu	6.03	6.45	0.42
Malin	\$/MMBtu	5.30	6.39	1.09
Houston Ship Channel	\$/MMBtu	5.28	5.81	0.53
Henry Hub Cash	\$/MMBtu	5.33	5.74	0.41
AECO Cash	C\$/GJ	4.56	4.88	0.32
Station2 Cash	C\$/GJ	4.44	6.50	2.06
Dawn Cash	C\$/GJ	5.27	5.72	0.45

Source: CME, Bloomberg

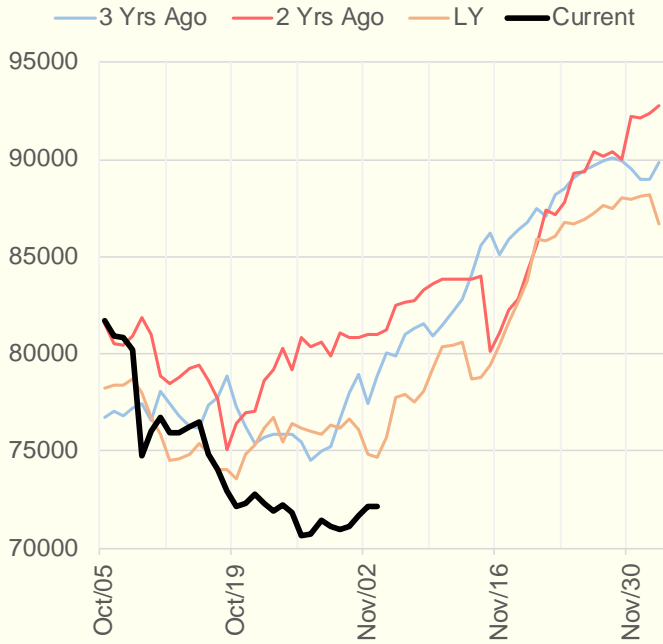
	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 2.189
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 0.320	▼ -0.110	▲ 0.291
NatGas Oct21/Jan22	\$/MMBtu	-0.201	▼ -0.453	▼ -0.882	▼ -0.519
NatGas Apr22/Oct22	\$/MMBtu	-0.024	▲ 0.024	▲ 0.084	▼ -0.042
WTI Crude	\$/Bbl	83.91	▼ -0.740	▲ 4.980	▲ 46.250
Brent Crude	\$/Bbl	84.72	▼ -1.680	▲ 2.160	▲ 45.010
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	250.82	▼ -6.910	▲ 1.460	▲ 138.110
Propane, Mt. Bel	cents/Gallon	1.41	▼ -0.041	▼ -0.102	▲ 0.859
Ethane, Mt. Bel	cents/Gallon	0.43	▼ -0.010	▼ -0.037	▲ 0.204
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

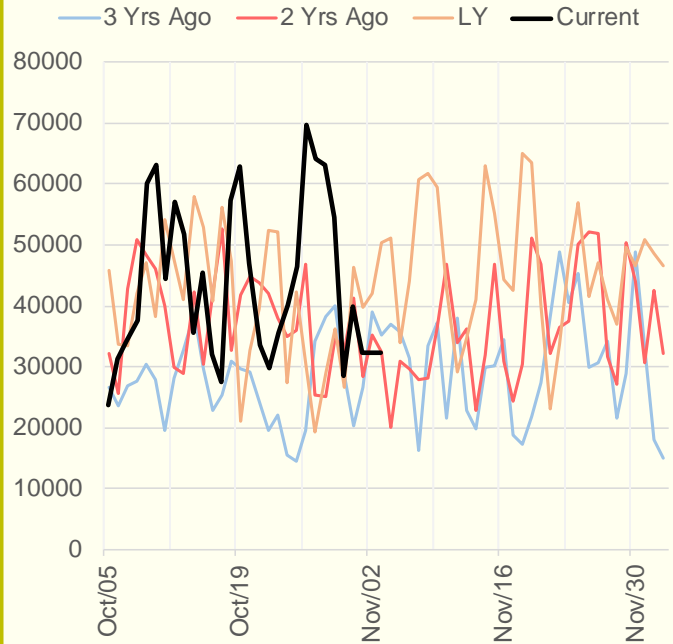


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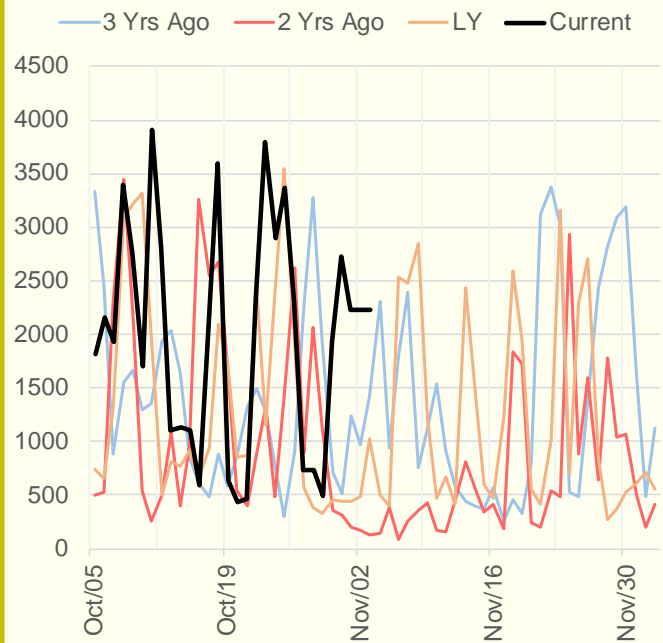
### NRC Nuclear Daily Output



### US Wind



### CALI Wind



### TEXAS Wind

