

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 7.93	▼ \$ (0.30)	▼ \$ (0.53)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 94.96	▼ \$ (3.66)	▼ \$ (2.4)

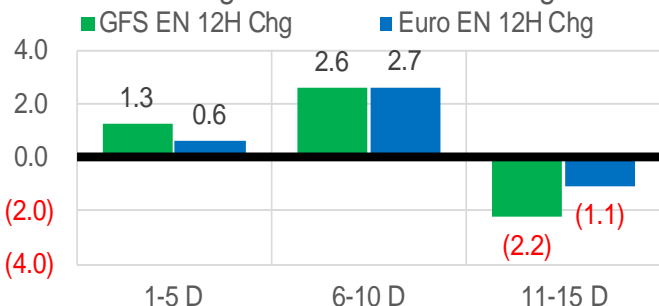
	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 101.02	▼ \$ (8.99)	▼ \$ (6.6)

### Page Menu

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- [Weather Model Storage Projection](#)
- [Supply – Demand Trends](#)
- [Nat Gas Options Volume and Open Interest](#)
- [Nat Gas Futures Open Interest](#)
- [Price Summary](#)

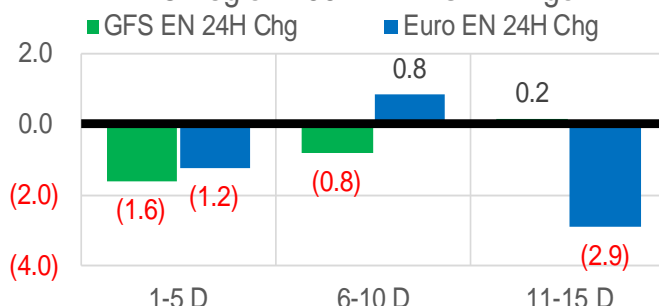
### Vs. 12H Ago

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	95.8	▼ -2.72	▼ -2.11

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	41.4	▲ 0.17	▼ -2.12

	Current	Δ from YD	Δ from 7D Avg
US ResComm	8.2	▲ 0.14	▼ -0.13

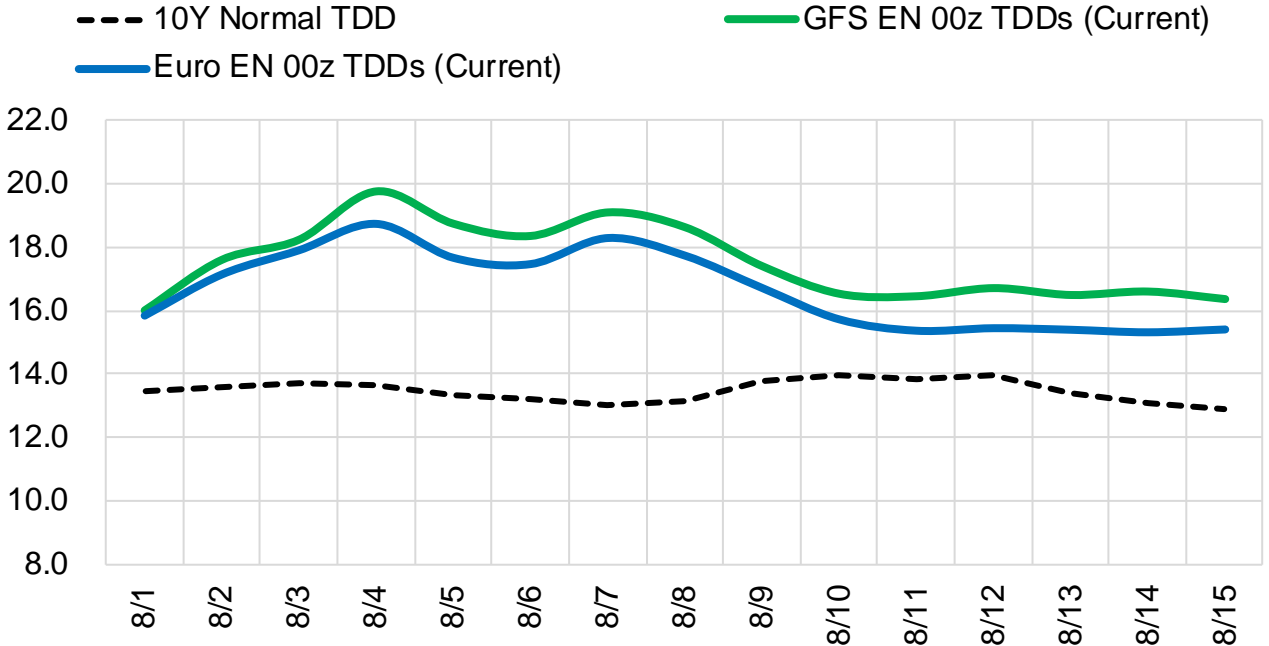
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	5.8	▲ 0.34	▲ 0.08

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	11.2	▲ 0.22	▲ 0.66

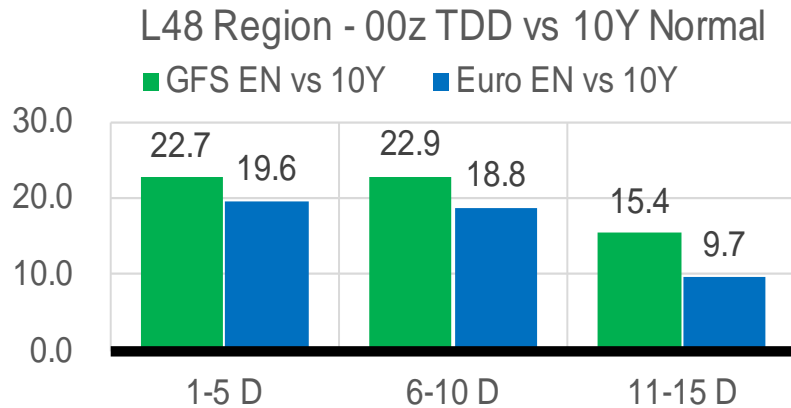
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.7	▼ -0.89	▼ -1.15

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

### L48 Region



## Vs. 10Y Normal



Source: WSI , Bloomberg

## Lower 48 Component Models

### Daily Balances

	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>97.4</b>	<b>97.3</b>	<b>97.6</b>	<b>98.7</b>	<b>98.8</b>	<b>98.6</b>	<b>95.8</b>	▼ -2.7	▼ -2.2
<b>Canadian Imports</b>	<b>5.8</b>	<b>5.8</b>	<b>5.8</b>	<b>5.7</b>	<b>5.5</b>	<b>5.5</b>	<b>5.8</b>	▲ 0.3	▲ 0.1
L48 Power	43.0	43.7	45.2	44.3	41.7	41.3	41.4	▲ 0.2	▼ -1.8
L48 Residential & Commercial	8.5	8.4	8.6	8.3	8.0	8.1	8.2	▲ 0.1	▼ -0.1
L48 Industrial	20.2	20.9	21.9	23.0	24.0	24.6	24.9	▲ 0.3	▲ 2.4
L48 Lease and Plant Fuel	5.3	5.3	5.3	5.4	5.4	5.3	5.2	▼ -0.2	▼ -0.1
L48 Pipeline Distribution	2.7	2.8	2.9	2.8	2.6	2.6	2.6	▲ 0.0	▼ -0.1
<b>L48 Regional Gas Consumption</b>	<b>79.7</b>	<b>81.0</b>	<b>83.9</b>	<b>83.8</b>	<b>81.6</b>	<b>81.9</b>	<b>82.4</b>	▲ 0.4	▲ 0.4
<b>Net LNG Delivered</b>	<b>10.41</b>	<b>10.36</b>	<b>10.60</b>	<b>10.57</b>	<b>10.90</b>	<b>10.97</b>	<b>11.20</b>	▲ 0.2	▲ 0.6
<b>Total Mexican Exports</b>	<b>7.4</b>	<b>7.0</b>	<b>7.2</b>	<b>6.3</b>	<b>6.6</b>	<b>6.6</b>	<b>5.7</b>	▼ -0.9	▼ -1.2
Implied Daily Storage Activity	5.6	4.8	1.8	3.8	5.2	4.6	2.4		
EIA Reported Daily Storage Activity									
Daily Model Error									

### EIA Storage Week Balances

	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	WoW	vs. 4W
<b>Lower 48 Dry Production</b>	<b>96.9</b>	<b>97.1</b>	<b>97.0</b>	<b>96.3</b>	<b>96.9</b>	<b>97.2</b>	▲ 0.3	▲ 0.4
<b>Canadian Imports</b>	<b>5.6</b>	<b>5.7</b>	<b>5.6</b>	<b>6.0</b>	<b>6.2</b>	<b>5.9</b>	▼ -0.2	▲ 0.0
L48 Power	37.1	39.6	41.0	42.8	45.5	44.6	▼ -0.9	▲ 2.4
L48 Residential & Commercial	9.1	8.5	8.4	8.4	8.7	8.6	▼ -0.2	▲ 0.1
L48 Industrial	20.4	20.3	20.1	20.5	22.1	20.4	▼ -1.7	▼ -0.3
L48 Lease and Plant Fuel	5.2	5.3	5.3	5.2	5.3	5.3	▲ 0.0	▲ 0.0
L48 Pipeline Distribution	2.5	2.6	2.6	2.7	2.9	2.8	▼ -0.1	▲ 0.1
<b>L48 Regional Gas Consumption</b>	<b>74.3</b>	<b>76.3</b>	<b>77.3</b>	<b>79.7</b>	<b>84.4</b>	<b>81.7</b>	▼ -2.7	▲ 2.3
<b>Net LNG Exports</b>	<b>10.6</b>	<b>10.6</b>	<b>11.2</b>	<b>11.1</b>	<b>10.8</b>	<b>10.7</b>	▼ 0.0	▼ -0.2
<b>Total Mexican Exports</b>	<b>7.0</b>	<b>7.0</b>	<b>6.9</b>	<b>7.0</b>	<b>7.1</b>	<b>6.9</b>	▼ -0.2	▼ -0.1
Implied Daily Storage Activity	10.5	8.8	7.2	4.5	0.8	3.8	3.1	
EIA Reported Daily Storage Activity	11.7	8.6	8.3	4.6	2.1			
Daily Model Error	-1.2	0.2	-1.1	-0.1	-1.4			

### Monthly Balances

	2Yr Ago Aug-20	LY Aug-21	Mar-22	Apr-22	May-22	Jun-22	MTD Jul-22	MoM	vs. LY
<b>Lower 48 Dry Production</b>	<b>88.8</b>	<b>93.8</b>	<b>93.3</b>	<b>94.9</b>	<b>95.8</b>	<b>97.0</b>	<b>97.0</b>	▲ 0.1	▲ 3.3
<b>Canadian Imports</b>	<b>4.9</b>	<b>5.1</b>	<b>5.2</b>	<b>5.8</b>	<b>5.1</b>	<b>5.7</b>	<b>5.9</b>	▲ 0.2	▲ 0.8
L48 Power	41.0	40.4	25.5	25.1	29.7	36.8	43.4	▲ 6.6	▲ 3.0
L48 Residential & Commercial	7.7	7.9	31.3	22.5	12.4	9.0	8.5	▼ -0.5	▲ 0.6
L48 Industrial	20.8	21.0	19.7	20.1	19.8	20.6	20.9	▲ 0.2	▼ -0.2
L48 Lease and Plant Fuel	4.8	5.1	5.2	5.2	5.3	5.2	5.3	▲ 0.0	▲ 0.2
L48 Pipeline Distribution	2.5	2.6	2.9	2.6	2.4	2.5	2.8	▲ 0.3	▲ 0.2
<b>L48 Regional Gas Consumption</b>	<b>76.9</b>	<b>77.0</b>	<b>84.6</b>	<b>75.6</b>	<b>69.6</b>	<b>74.2</b>	<b>80.7</b>	▲ 6.6	▲ 3.7
<b>Net LNG Exports</b>	<b>4.0</b>	<b>10.5</b>	<b>12.9</b>	<b>12.3</b>	<b>12.5</b>	<b>11.2</b>	<b>10.9</b>	▼ -0.2	▲ 0.5
<b>Total Mexican Exports</b>	<b>6.0</b>	<b>6.9</b>	<b>6.5</b>	<b>6.7</b>	<b>7.0</b>	<b>7.1</b>	<b>6.9</b>	▼ -0.2	▲ 0.1
Implied Daily Storage Activity	6.7	4.6	-5.4	6.2	11.9	10.2	4.4		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

## Daily Average Generation Data

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

	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	DoD	vs. 7D
NRC Nuclear Daily Output	89.6	90.8	90.0	90.0	90.4	90.5	90.5	0.0	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	15.3	14.1	14.8	14.8	14.4	14.4	14.4	0.0	-0.2
NRC % Nuclear Cap Utilization	91.1	92.3	91.6	91.6	92.0	92.0	92.0	0.0	0.2

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

	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	DoD	vs. 7D
CALI Wind	2048	2118	2252	2252	2252	2103	1542	-561	-629
TEXAS Wind	22879	15754	15346	15346	15346	11674	10484	-1190	-5574
US Wind	63443	38783	36656	36656	36656	29082	29203	121	-11010

EIA 930 data is not being updated. EIA experiencing some issues.

### Generation Daily Average - MWh (EIA)

	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	DoD	vs. 7D
Genscape Wind	50725	39228	37864	37267	37351	28445	28445	0	-10035
US Solar	19728	17023	16944	16944	16944	17550	17318	-232	-204
US Petroleum	1333	1138	1298	1298	1298	1074	741	-333	-499
US Other	9775	10545	10142	10142	10142	10396	9926	-470	-264
US Coal	119543	130367	128289	128289	128289	122320	113782	-8537	-12401
US Nuke	90696	92938	92134	92134	92134	92724	92503	-221	376
US Hydro	39690	28628	31140	31140	31140	32025	29959	-2066	-2335
<b>US Gas</b>	<b>220700</b>	<b>243277</b>	<b>229554</b>	<b>229554</b>	<b>229554</b>	<b>243438</b>	<b>222732</b>	<b>-20707</b>	<b>-9948</b>

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

## Storage Week Average Generation Data

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

	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	89.0	88.9	90.6	91.2	90.5	90.1	-0.4	0.1
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	15.9	16.0	14.2	13.7	14.4	14.8	0.4	
NRC % Nuclear Cap Utilization	90.5	90.4	92.2	92.7	92.0	91.6	-0.4	

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

	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	WoW	WoW Bcf/d Impact
CALI Wind	2048	2048	2048	2048	2048	2145	98	0.0
TEXAS Wind	22879	22879	22879	22879	22879	18633	-4247	0.8
US Wind	63443	63443	63443	63443	63443	48440	-15003	2.7
							-24%	

### Generation Weekly Average - MWh (EIA)

	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	WoW	WoW Bcf/d Impact
Genscape Wind	50581	45558	42730	34294	40237	44926	4688	<b>-0.8</b>
US Solar	19728	19728	19728	19728	19728	18148	-1580	<b>0.3</b>
US Petroleum	1333	1333	1333	1333	1333	1290	-43	<b>0.0</b>
US Other	9775	9775	9775	9775	9775	10042	267	0.0
US Coal	119543	119543	119543	119543	119543	124838	5295	-1.0
US Nuke	90696	90696	90696	90696	90696	91633	937	<b>-0.2</b>
US Hydro	39690	39690	39690	39690	39690	34445	-5245	0.9
<b>US Gas</b>	<b>220700</b>	<b>220700</b>	<b>220700</b>	<b>220700</b>	<b>220700</b>	<b>227720</b>	<b>7020</b>	<b>1.3</b>

EIA 930 data is not being updated. EIA experiencing some issues.

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	Apr-22	May-22	Jun-22	Jul-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	NRC Nuclear Daily Output	91.3	90.1	73.4	81.7	88.5	89.5	90.6	1.0
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	13.6	14.8	31.5	23.2	16.3	15.3	14.3	-1.0	-0.5
NRC % Nuclear Cap Utilization	92.8	91.6	74.6	83.0	90.0	91.1	92.1	1.0	0.5

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

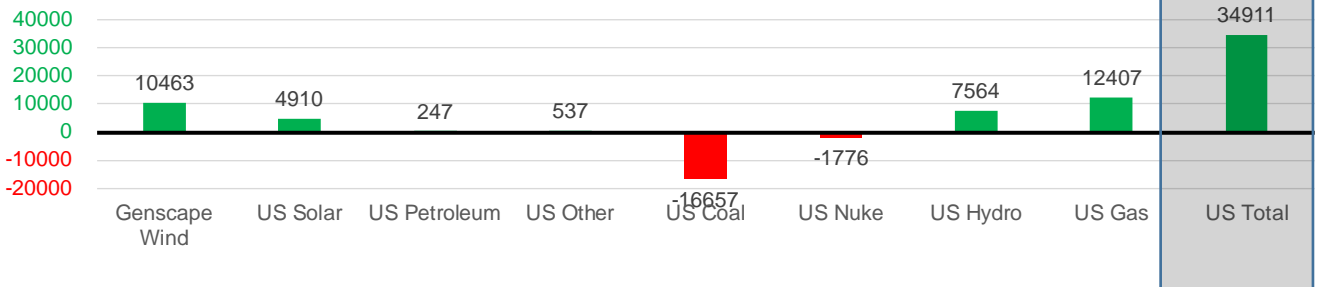
	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	Apr-22	May-22	Jun-22	Jul-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	CALI Wind	2540	2374	3218	3361	2724	2048	2022	-676
TEXAS Wind	8884	7445	16384	16756	19072	22879	20275	3807	12830
US Wind	29654	29674	64240	56462	54014	63443	55373	9428	25699

### Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	Apr-22	May-22	Jun-22	Jul-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
	Genscape Wind	29976	28726	63684	56803	47280	39323	39189	-134.9
US Solar	12369	14136	16265	18186	19216	19728	19046	-682.1	4910
US Petroleum	1638	1008	979	518	1204	1222	1255	78	247
US Other	9948	9336	7373	7724	8994	9222	9255	333	77
US Coal	121896	136952	77400	85273	109706	116657	116657	0	-57
US Nuke	93481	92939	77317	85496	91073	91073	91073	0	76
US Hydro	32592	29673	28877	31369	38153	39690	37238	-2452	7564
<b>US Gas</b>	<b>233030</b>	<b>210892</b>	<b>132665</b>	<b>157565</b>	<b>204668</b>	<b>220700</b>	<b>223299</b>	<b>-2030</b>	<b>12407</b>
<b>US Total</b>	<b>532453</b>	<b>524586</b>	<b>405650</b>	<b>443965</b>	<b>530484</b>	<b>566968</b>	<b>559497</b>	<b>-3926</b>	<b>34911</b>

EIA 930 data is not being updated. EIA experiencing some issues.

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

## Regional S/D Models Storage Projection

Week Ending 29-Jul

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	4.9	-0.5	4.4	31
East	-0.3	2.4	2.0	14
Midwest	3.0	-0.6	2.4	17
Mountain	4.4	-4.4	0.0	0
South Central	-3.1	2.9	-0.2	-1
Pacific	0.9	-0.8	0.1	1

\*Adjustment Factor is calculated based on historical regional deltas

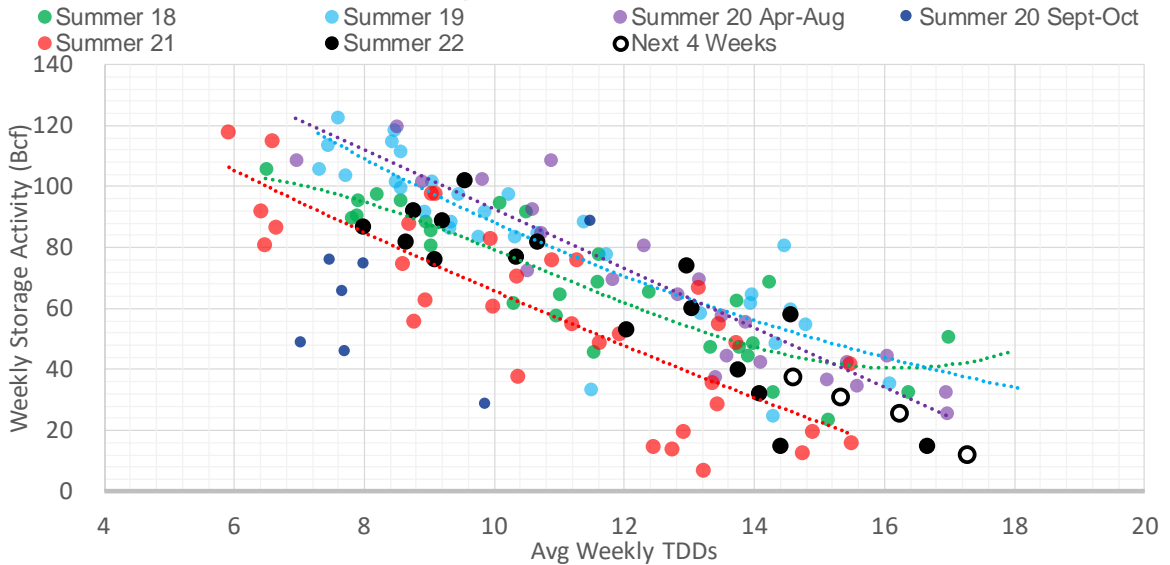
U.S. underground natural gas storage facilities by type (July 2015)



## Weather Model Storage Projection

Next report and beyond		
Week Ending	GWDDs	Week Storage Projection
29-Jul	15.3	31
05-Aug	16.3	26
12-Aug	17.3	12
19-Aug	14.6	37

### Weather Storage Model - Next 4 Week Forecast

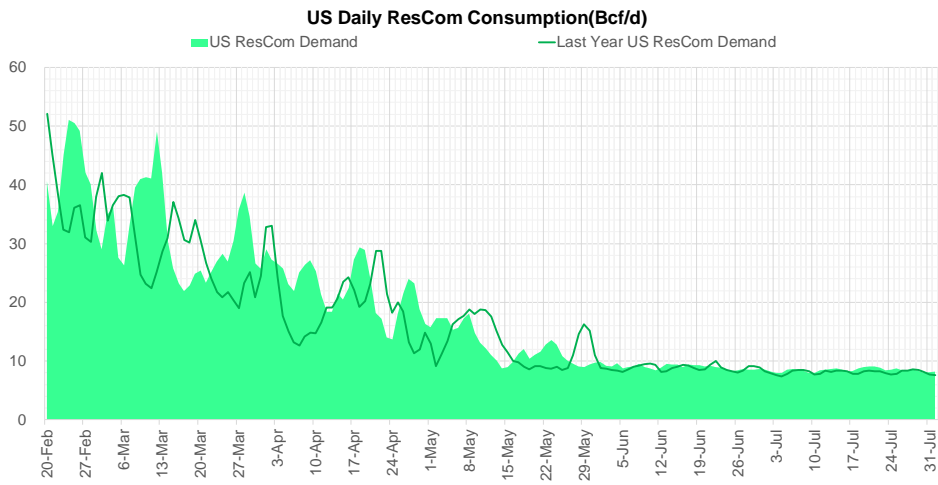
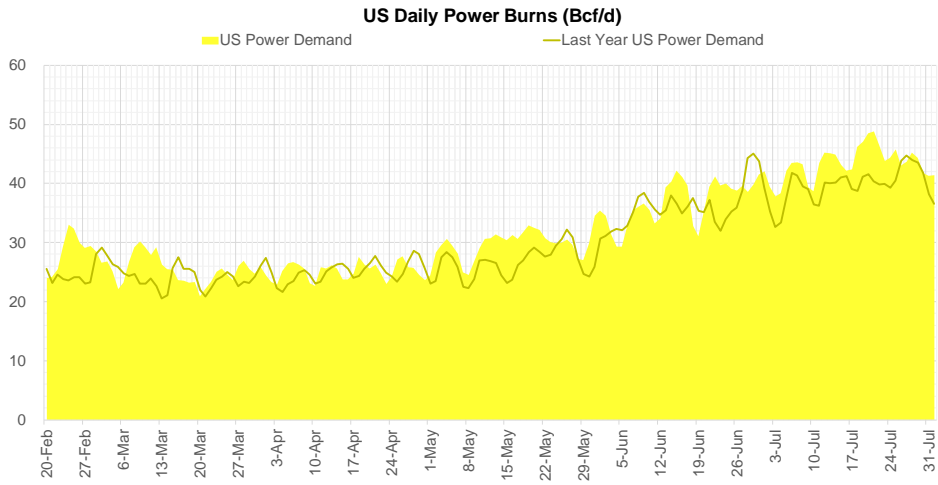
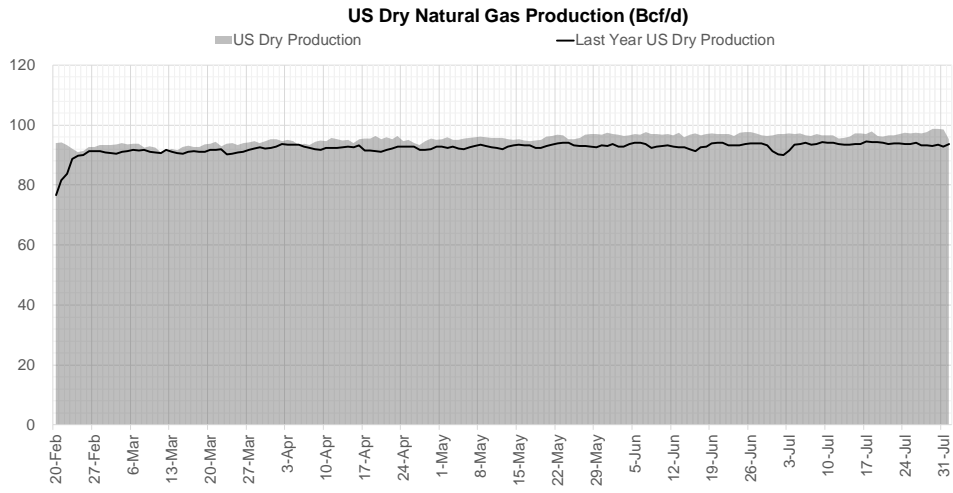


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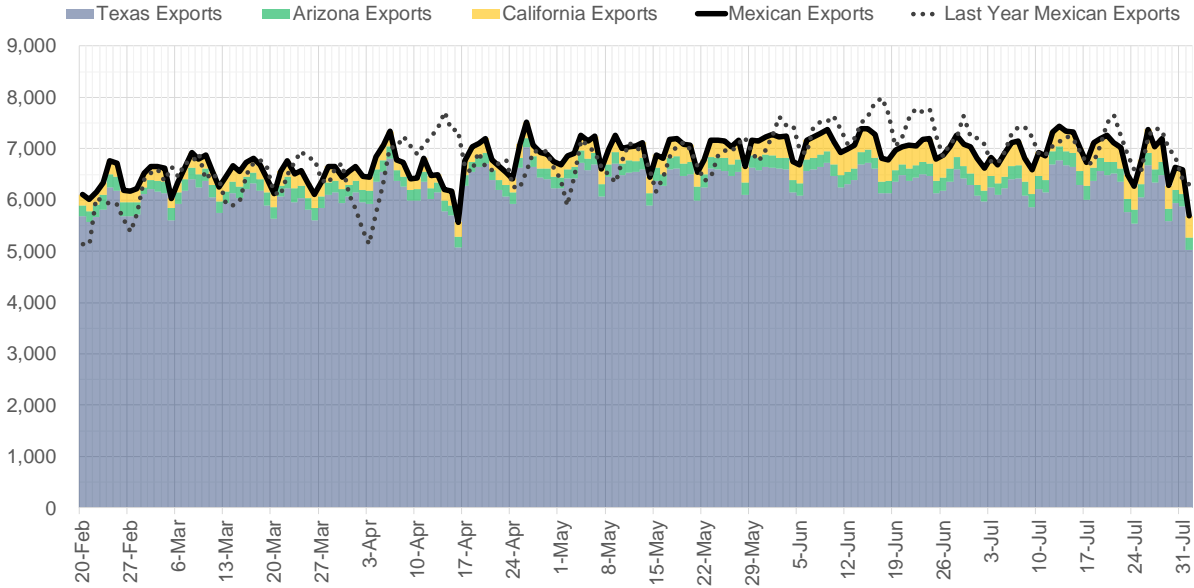
## Supply – Demand Trends



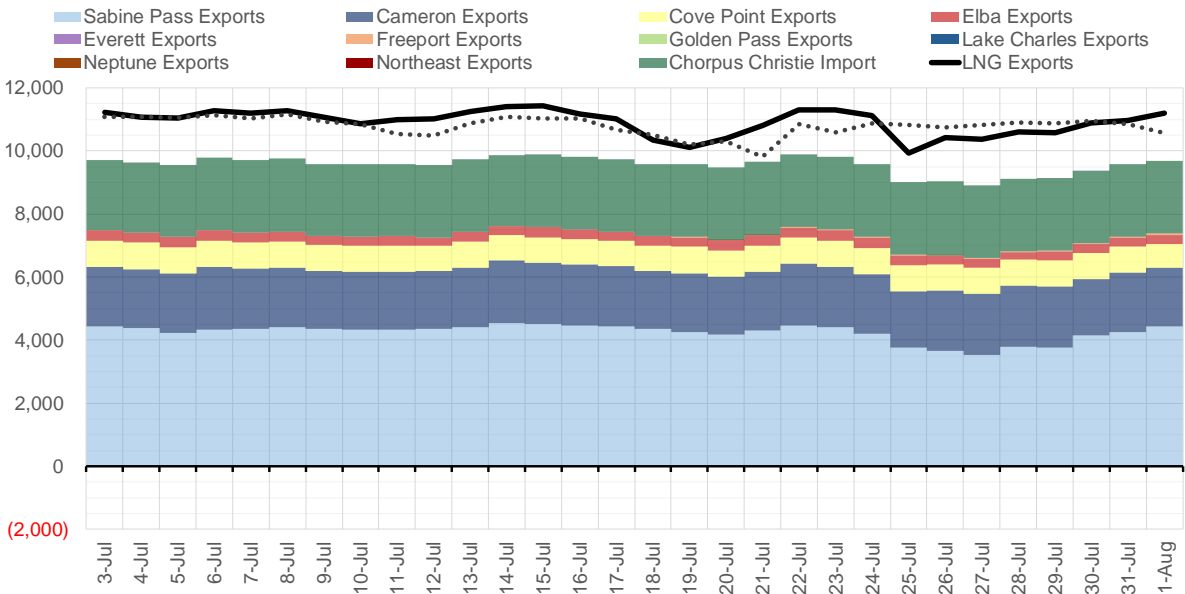
Source: Bloomberg

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### 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 and ICE Combined

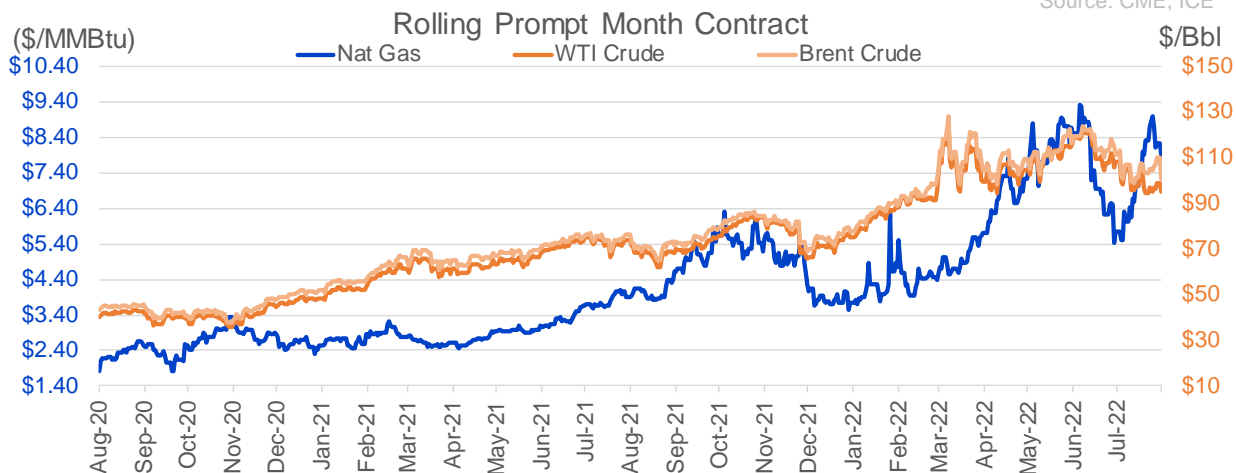
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
11	2022	P	4.00	4018	10	2022	C	6.00	36014
9	2022	P	6.00	3536	10	2022	P	3.00	34456
12	2022	P	4.00	3500	10	2022	P	2.50	28212
3	2023	P	4.00	2720	10	2022	P	6.00	24648
1	2023	P	6.00	2625	9	2022	C	6.00	24365
2	2023	P	6.00	2625	10	2022	P	5.00	23510
3	2023	P	6.00	2620	10	2022	C	5.00	23268
1	2023	P	4.00	2500	10	2022	P	3.50	21622
2	2023	P	4.00	2500	5	2023	P	2.00	21077
9	2022	P	5.00	2158	3	2023	C	10.00	20444
10	2022	P	3.00	1607	9	2022	P	4.00	20270
9	2022	P	7.00	1525	10	2022	P	4.00	19816
9	2022	P	5.50	1410	9	2022	C	7.00	19709
9	2022	P	6.50	1213	12	2022	C	5.00	18218
4	2023	P	2.00	1200	10	2022	C	10.00	18198
4	2023	P	1.75	1100	3	2023	P	3.00	18012
5	2023	P	1.75	1100	12	2022	P	5.00	17958
5	2023	P	2.00	1100	9	2022	C	9.00	17745
6	2023	P	1.75	1100	9	2022	C	10.00	17670
6	2023	P	2.00	1100	1	2023	C	10.00	17604
7	2023	P	1.75	1100	9	2022	P	5.00	17159
7	2023	P	2.00	1100	10	2022	P	2.00	16680
8	2023	P	1.75	1100	10	2022	C	8.00	16505
8	2023	P	2.00	1100	9	2022	P	3.00	16504
9	2023	P	1.75	1100	2	2023	C	10.00	16349
9	2023	P	2.00	1100	9	2022	P	6.00	16077
10	2023	P	1.75	1100	9	2022	C	4.00	15970
10	2023	P	2.00	1100	10	2023	P	2.50	15705
11	2022	C	15.00	1002	4	2023	P	3.00	15584
11	2022	C	12.00	1000	9	2022	P	2.50	15477
11	2022	P	6.00	1000	10	2022	P	3.25	15117
12	2022	P	6.00	1000	10	2022	C	7.00	15111
1	2023	C	9.50	1000	9	2022	P	2.75	14887
2	2023	C	9.50	1000	3	2023	C	20.00	14749
3	2023	C	9.50	1000	9	2022	C	9.50	14409
9	2022	P	7.50	990	10	2023	P	2.00	14204
11	2022	P	3.50	900	10	2023	P	3.00	14160
2	2023	C	8.00	900	12	2022	C	6.00	13887
9	2022	C	10.00	861	11	2022	P	4.00	13832
10	2022	C	9.00	854	9	2022	P	3.50	13313
1	2023	C	3.00	850	10	2022	C	4.00	13309
1	2023	C	4.00	850	10	2022	P	2.75	13287
3	2023	C	7.00	760	9	2022	C	3.00	13225
11	2022	P	5.25	750	10	2022	C	3.00	13214
12	2022	P	5.25	750	4	2023	P	2.75	13045
10	2022	P	6.00	689	5	2023	C	5.00	12995
10	2022	P	8.00	618	1	2023	P	5.00	12980
4	2023	P	3.25	615	9	2022	C	14.00	12972
5	2023	P	3.25	615	3	2023	P	4.00	12773
					5	2023	P	3	12738

Source: CME, ICE

## Nat Gas Futures Open Interest CME and ICE Combined

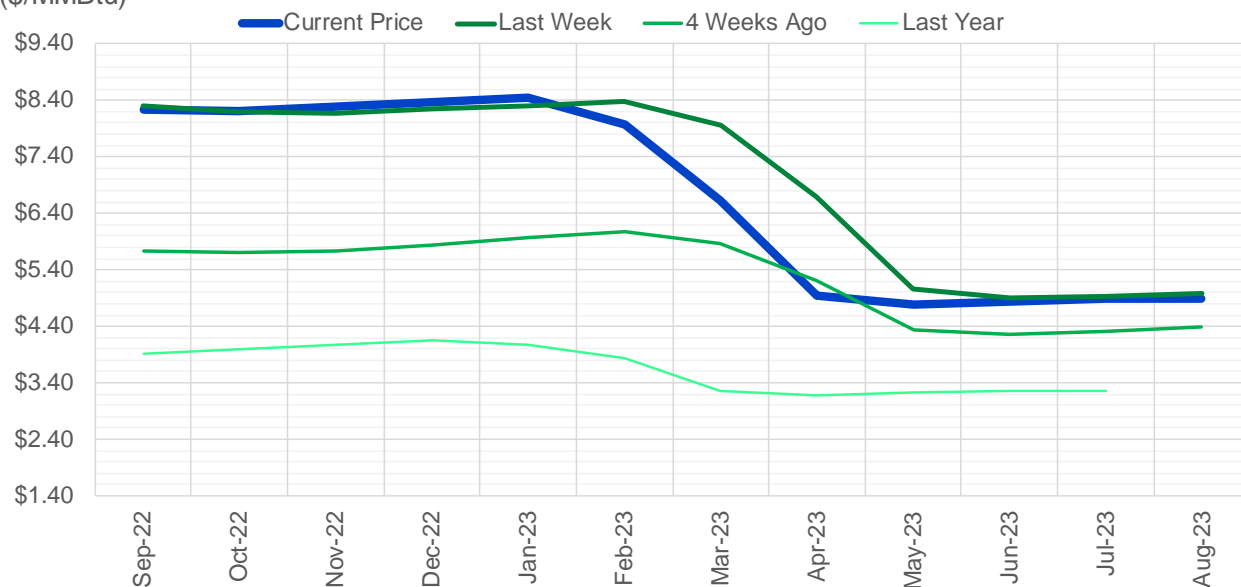
CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MM			
	Current	Prior	Daily Change		Current	Prior	Daily Change
SEP 22	164295	163776	519	SEP 22	83582	85153	-1571
OCT 22	94875	95440	-565	OCT 22	75178	74999	180
NOV 22	84811	82523	2288	NOV 22	63141	62297	844
DEC 22	53564	53579	-15	DEC 22	65293	65302	-9
JAN 23	73808	72634	1174	JAN 23	65124	65376	-253
FEB 23	34723	34821	-98	FEB 23	57721	57748	-27
MAR 23	51046	50478	568	MAR 23	52133	52160	-27
APR 23	67822	67386	436	APR 23	54085	53442	643
MAY 23	65821	65557	264	MAY 23	51894	51507	387
JUN 23	23637	23627	10	JUN 23	46156	45787	370
JUL 23	19483	19980	-497	JUL 23	44601	44227	374
AUG 23	19428	19392	36	AUG 23	43491	43152	339
SEP 23	17165	17193	-28	SEP 23	42693	42391	302
OCT 23	46057	45762	295	OCT 23	49834	49227	608
NOV 23	12741	12753	-12	NOV 23	44898	44854	44
DEC 23	11430	11407	23	DEC 23	40668	40553	115
JAN 24	17403	17309	94	JAN 24	39556	39451	105
FEB 24	7884	7775	109	FEB 24	29896	29878	18
MAR 24	16324	16426	-102	MAR 24	34397	34310	87
APR 24	13460	13576	-116	APR 24	28141	28096	45
MAY 24	6757	6795	-38	MAY 24	26772	26726	47
JUN 24	2481	2415	66	JUN 24	23738	23693	45
JUL 24	2295	2295	0	JUL 24	23468	23511	-43
AUG 24	3220	3220	0	AUG 24	23375	23328	47
SEP 24	1825	1825	0	SEP 24	23290	23245	45
OCT 24	8686	8682	4	OCT 24	26402	26367	35
NOV 24	4717	4716	1	NOV 24	24767	24752	15
DEC 24	7557	7550	7	DEC 24	27716	27701	16
JAN 25	15981	15978	3	JAN 25	20525	20526	-1
FEB 25	861	861	0	FEB 25	13729	13721	8

Source: CME, ICE



(\$/MMBtu)

## Nat Gas Term Structure



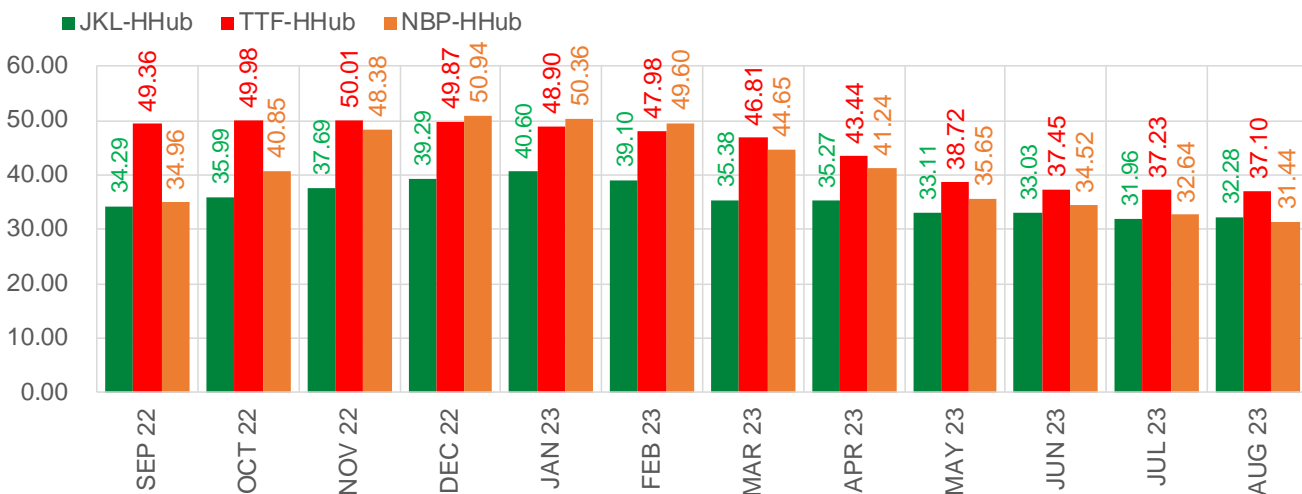
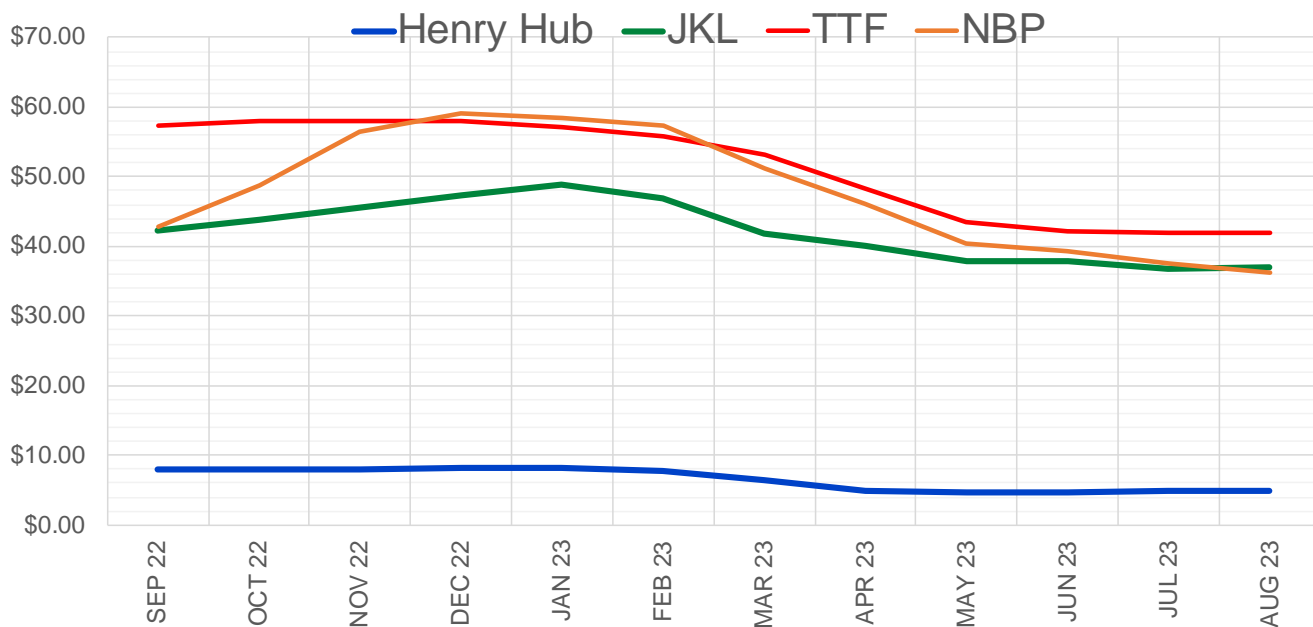
	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
<b>Current Price</b>	<b>\$8.229</b>	<b>\$8.208</b>	<b>\$8.283</b>	<b>\$8.374</b>	<b>\$8.441</b>	<b>\$7.973</b>	<b>\$6.636</b>	<b>\$4.943</b>	<b>\$4.780</b>	<b>\$4.830</b>	<b>\$4.887</b>	<b>\$4.897</b>
Last Week	\$8.299	\$8.195	\$8.167	\$8.238	\$8.312	\$8.374	\$7.952	\$6.706	\$5.057	\$4.893	\$4.942	\$4.993
vs. Last Week	-\$0.070	\$0.013	\$0.116	\$0.136	\$0.129	-\$0.401	-\$1.316	-\$1.763	-\$0.277	-\$0.063	-\$0.055	-\$0.096
4 Weeks Ago	\$5.730	\$5.712	\$5.729	\$5.837	\$5.969	\$6.066	\$5.852	\$5.215	\$4.339	\$4.257	\$4.319	\$4.381
vs. 4 Weeks Ago	\$2.499	\$2.496	\$2.554	\$2.537	\$2.472	\$1.907	\$0.784	-\$0.272	\$0.441	\$0.573	\$0.568	\$0.516
Last Year	\$3.914	\$3.920	\$3.982	\$4.085	\$4.149	\$4.069	\$3.828	\$3.267	\$3.188	\$3.218	\$3.254	\$3.261
vs. Last Year	\$4.315	\$4.288	\$4.301	\$4.289	\$4.292	\$3.904	\$2.808	\$1.676	\$1.592	\$1.612	\$1.633	\$1.636

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	7.95	8.65	0.70
TETCO M3	\$/MMBtu	7.72	8.03	0.31
FGT Zone 3	\$/MMBtu	7.84	12.40	4.56
Zone 6 NY	\$/MMBtu	7.84	8.04	0.20
Chicago Citygate	\$/MMBtu	7.97	8.10	0.13
Michcon	\$/MMBtu	7.93	8.05	0.12
Columbia TCO Pool	\$/MMBtu	7.49	7.61	0.12
Ventura	\$/MMBtu	5.95	7.99	2.04
Rockies/Opal	\$/MMBtu	8.07	7.91	-0.15
El Paso Permian Basin	\$/MMBtu	7.71	7.76	0.05
Socal Citygate	\$/MMBtu	9.18	9.29	0.11
Malin	\$/MMBtu	8.02	8.23	0.21
Houston Ship Channel	\$/MMBtu	8.03	8.03	0.00
Henry Hub Cash	\$/MMBtu	8.33	7.92	-0.41
AECO Cash	C\$/GJ	5.05	4.34	-0.72
Station2 Cash	C\$/GJ	5.31	8.08	2.77
Dawn Cash	C\$/GJ	7.95	8.10	0.15

Source: CME, Bloomberg

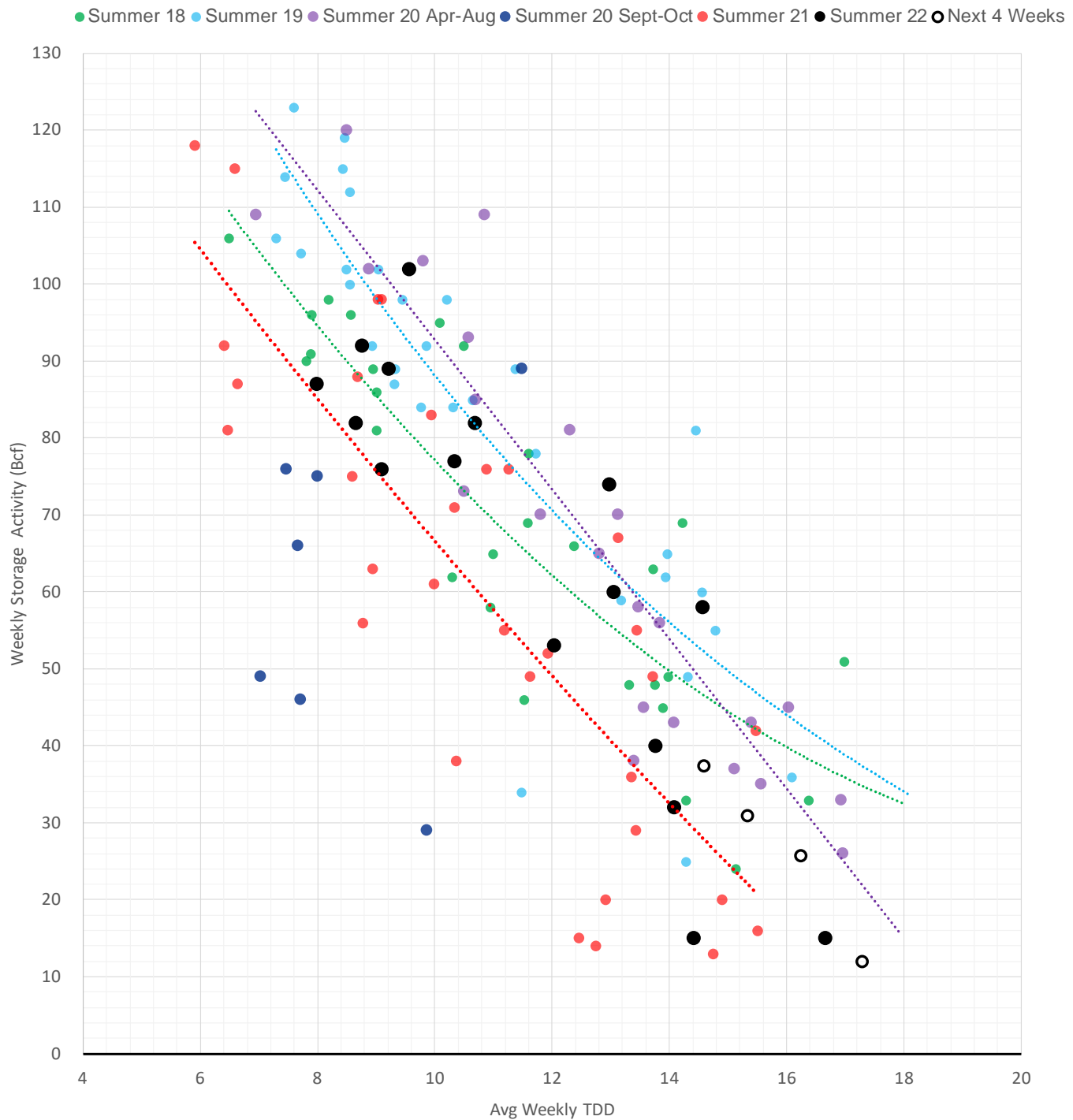
	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 1.921
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 0.000	▲ 0.000	▲ 0.299
NatGas Oct21/Jan22	\$/MMBtu	-1.817	▲ 0.000	▲ 0.000	▼ -2.046
NatGas Apr22/Oct22	\$/MMBtu	2.872	▲ 0.041	▲ 2.479	▲ 2.871
WTI Crude	\$/Bbl	98.62	▲ 3.920	▼ -9.810	▲ 24.670
Brent Crude	\$/Bbl	110.01	▲ 6.810	▼ -1.620	▲ 33.680
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	362.47	▲ 16.910	▼ -31.420	▲ 142.530
Propane, Mt. Bel	cents/Gallon	1.15	▲ 0.004	▼ -0.071	▲ 0.051
Ethane, Mt. Bel	cents/Gallon	0.57	▼ -0.002	▲ 0.097	▲ 0.262
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)



	SEP 22	OCT 22	NOV 22	DEC 22	JAN 23	FEB 23	MAR 23	APR 23	MAY 23	JUN 23	JUL 23	AUG 23
<b>Henry Hub</b>	\$7.933	\$7.916	\$7.987	\$8.081	\$8.175	\$7.743	\$6.440	\$4.850	\$4.697	\$4.759	\$4.814	\$4.828
<b>JKL</b>	\$42.225	\$43.910	\$45.680	\$47.370	\$48.770	\$46.845	\$41.820	\$40.120	\$37.810	\$37.785	\$36.775	\$37.110
<b>JKL-HHub</b>	\$34.292	\$35.994	\$37.693	\$39.289	\$40.595	\$39.102	\$35.380	\$35.270	\$33.113	\$33.026	\$31.961	\$32.282
<b>TTF</b>	\$57.295	\$57.895	\$57.992	\$57.950	\$57.079	\$55.721	\$53.250	\$48.285	\$43.416	\$42.208	\$42.046	\$41.929
<b>TTF-HHub</b>	\$49.362	\$49.979	\$50.005	\$49.869	\$48.904	\$47.978	\$46.810	\$43.435	\$38.719	\$37.449	\$37.232	\$37.101
<b>NBP</b>	\$42.888	\$48.763	\$56.368	\$59.018	\$58.532	\$57.343	\$51.085	\$46.088	\$40.347	\$39.282	\$37.457	\$36.269
<b>NBP-HHub</b>	\$34.955	\$40.847	\$48.381	\$50.937	\$50.357	\$49.600	\$44.645	\$41.238	\$35.650	\$34.523	\$32.643	\$31.441

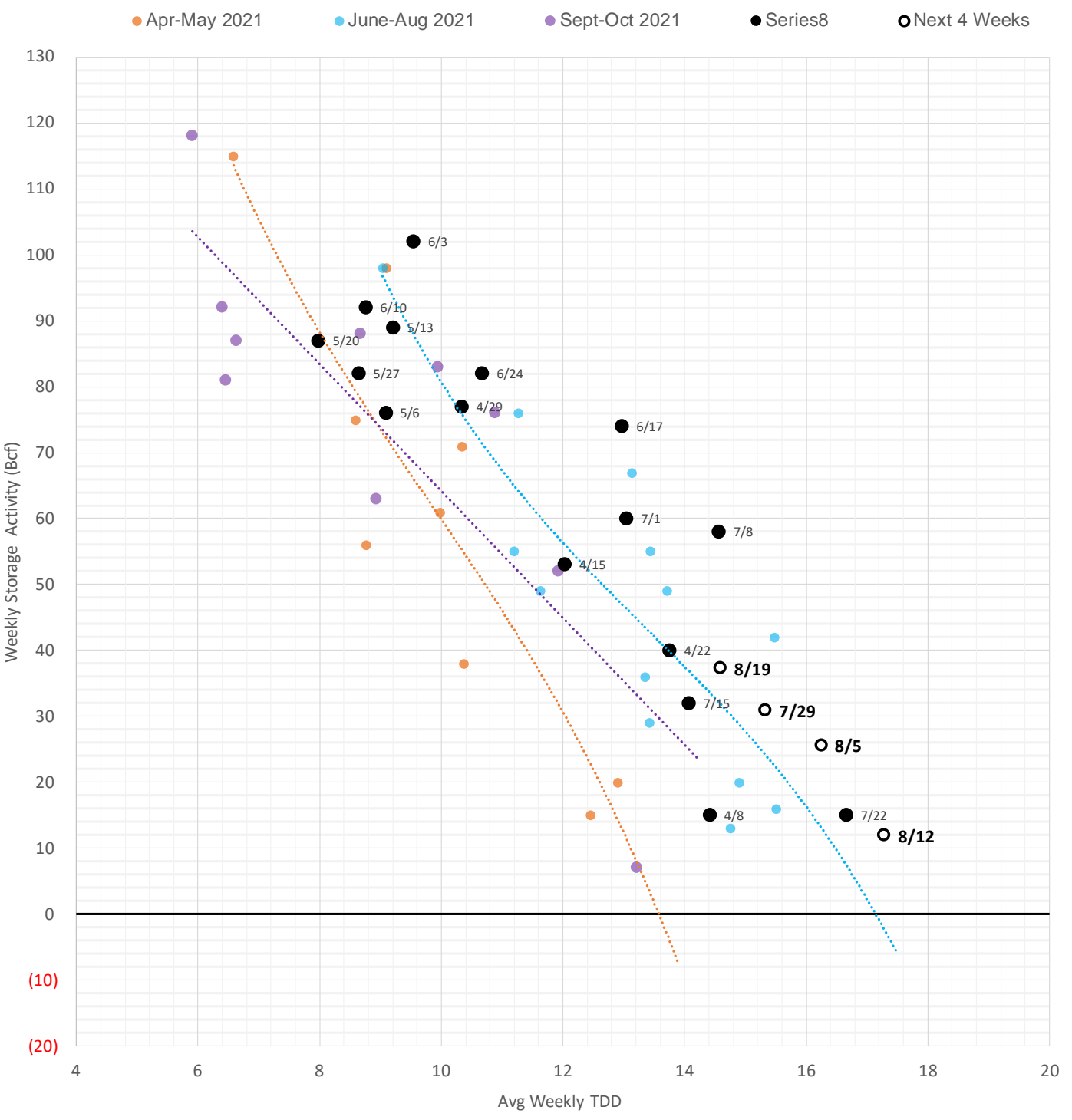
## Weather Storage Model - Next 4 Week Forecast



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.

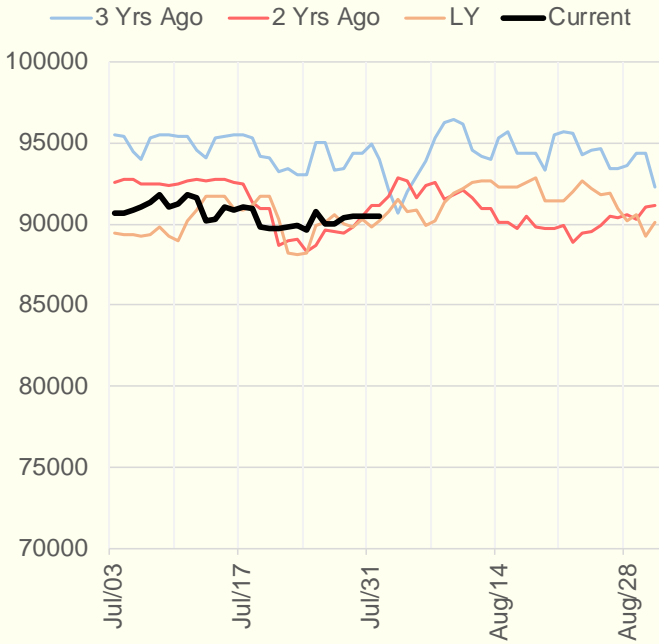


## Weather Storage Model - Next 4 Week Forecast

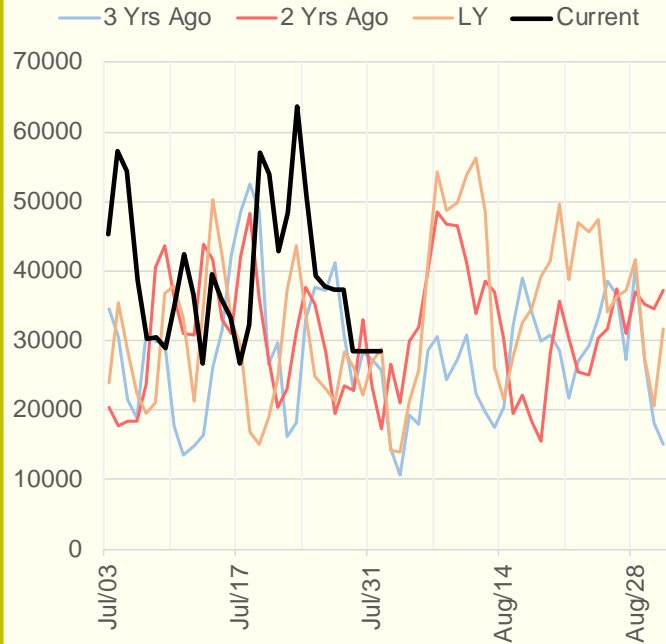


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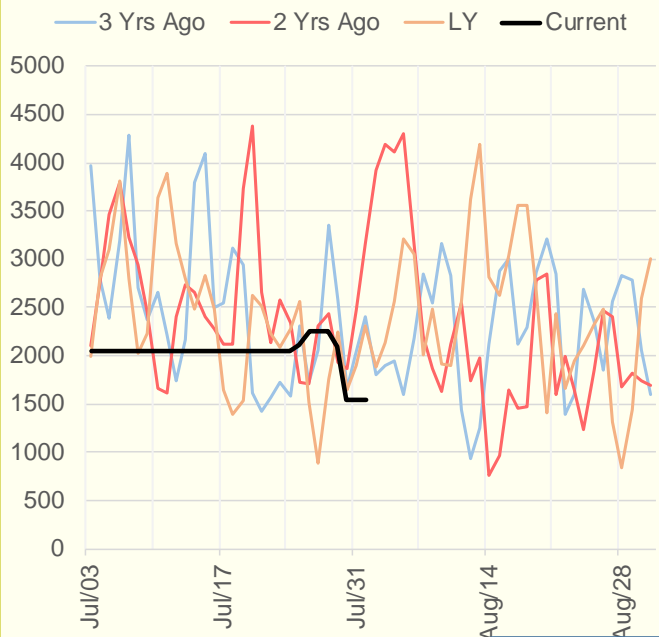
### NRC Nuclear Daily Output



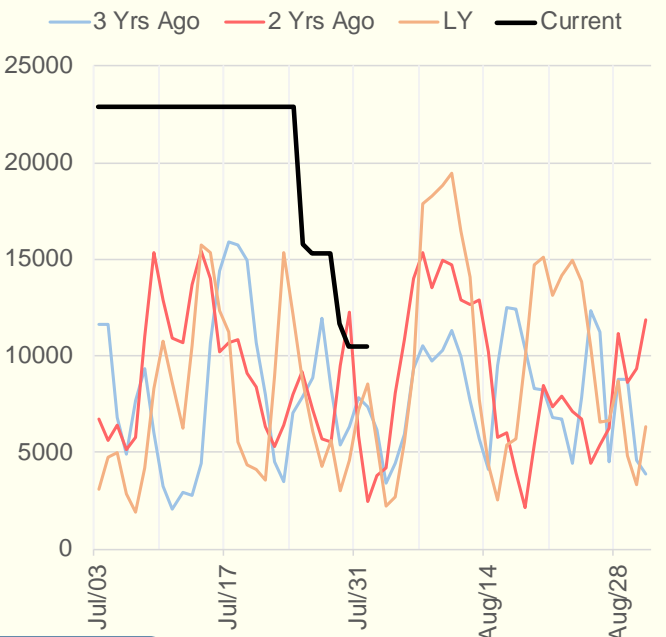
### Genscape Wind



### CALI Wind



### TEXAS Wind



EIA 930 data is not being updated. EIA experiencing some issues.

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