

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 8.34 ▲	\$ 0.07 ▲	\$ 0.18

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](#)

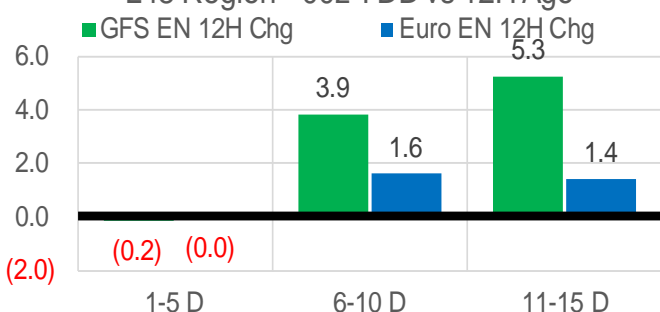
[Price Summary](#)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 91.11 ▲	\$ 0.45 ▼	\$ (4.8)

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 96.78 ▲	\$ - ▼	\$ (8.2)

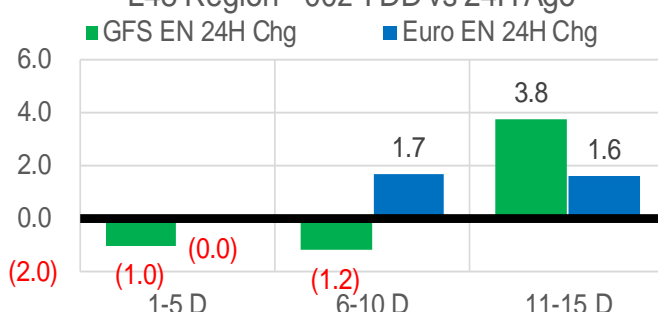
Vs. 12H Ago

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 ▼	-0.12 ▼	-0.88

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	43.4 ▼	-1.65 ▼	-0.21

	Current	Δ from YD	Δ from 7D Avg
US ResComm	8.4 ▼	-0.01 ▲	0.19

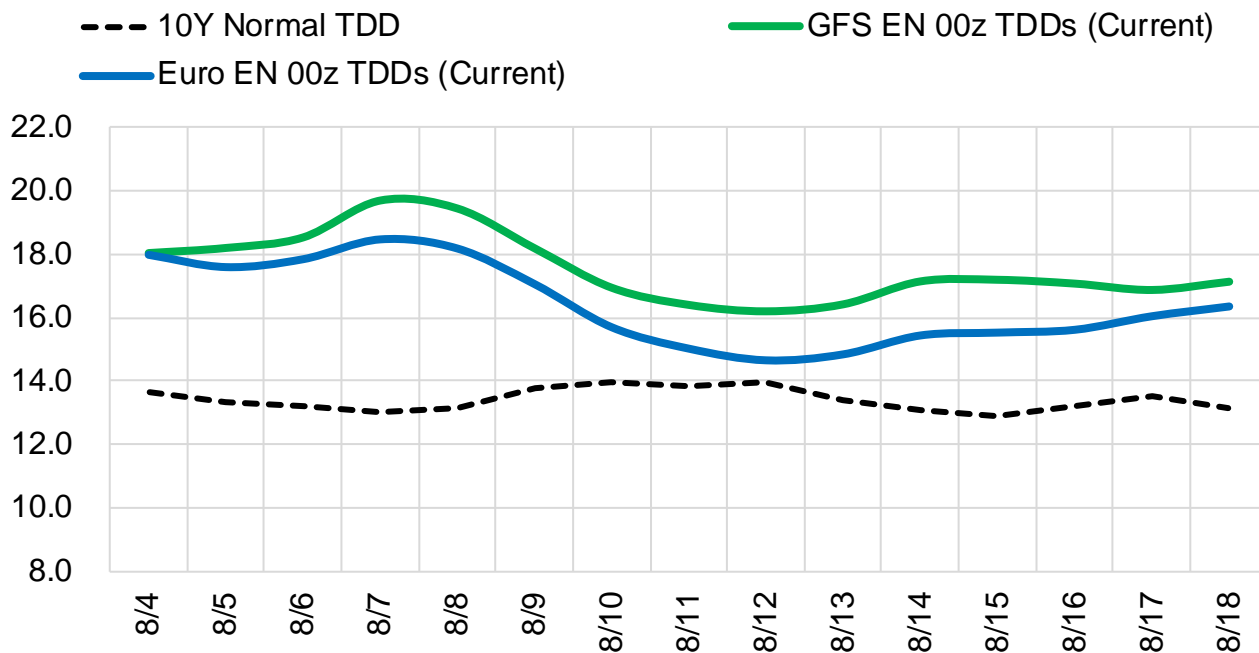
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	5.4 ▼	-0.01 ▼	-0.23

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	11.1 ▲	0.00 ▲	0.23

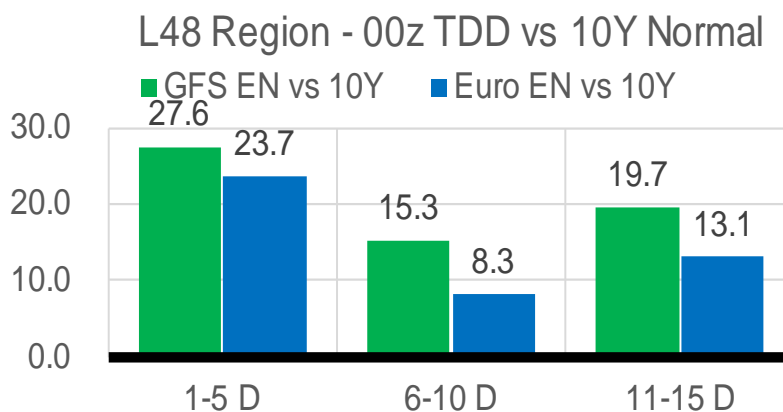
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.5 ▼	-0.07 ▼	-0.71

Short-term Weather Model Outlooks (00z)

L48 Region



Vs. 10Y Normal



Source: WSI , Bloomberg

Lower 48 Component Models

Daily Balances

	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug	3-Aug	4-Aug	DoD	vs. 7D
Lower 48 Dry Production	98.7	98.7	98.5	97.2	96.9	97.0	96.9	▼ -0.1	▼ -0.9
Canadian Imports	5.7	5.5	5.6	5.8	5.6	5.4	5.4	▼ 0.0	▼ -0.2
L48 Power	44.2	41.6	40.9	43.6	44.6	45.1	43.4	▼ -1.7	▲ 0.1
L48 Residential & Commercial	8.3	8.0	7.9	8.3	8.3	8.4	8.4	▼ 0.0	▲ 0.2
L48 Industrial	21.2	21.6	21.8	22.1	22.1	22.0	21.8	▼ -0.2	▼ 0.0
L48 Lease and Plant Fuel	5.4	5.4	5.3	5.3	5.3	5.3	5.2	▼ 0.0	▼ -0.1
L48 Pipeline Distribution	2.8	2.6	2.6	2.8	2.8	2.8	2.8	▼ -0.1	▲ 0.0
L48 Regional Gas Consumption	81.8	79.1	78.6	82.1	83.1	83.6	81.6	▼ -2.0	▲ 0.2
Net LNG Delivered	10.57	10.90	10.98	11.02	11.00	11.11	11.12	▲ 0.0	▲ 0.2
Total Mexican Exports	6.3	6.6	6.6	5.7	5.4	5.6	5.5	▼ -0.1	▼ -0.5
Implied Daily Storage Activity	5.7	7.6	8.0	4.2	3.0	2.2	4.1		
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
Lower 48 Dry Production	96.9	97.1	97.0	96.3	96.9	97.2	▲ 0.3	▲ 0.4
Canadian Imports	5.6	5.7	5.6	6.0	6.2	5.9	▼ -0.2	▲ 0.0
L48 Power	37.2	39.7	41.0	42.9	45.5	44.7	▼ -0.8	▲ 2.4
L48 Residential & Commercial	9.1	8.5	8.4	8.4	8.7	8.6	▼ -0.2	▲ 0.1
L48 Industrial	20.2	20.3	20.1	20.5	22.0	20.1	▼ -1.9	▼ -0.6
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
L48 Regional Gas Consumption	74.3	76.3	77.4	79.7	84.4	81.4	▼ -2.9	▲ 2.0
Net LNG Exports	10.6	10.6	11.2	11.1	10.8	10.7	▼ 0.0	▼ -0.2
Total Mexican Exports	7.0	7.0	6.9	7.0	7.1	6.9	▼ -0.2	▼ -0.1
Implied Daily Storage Activity	10.5	8.8	7.2	4.5	0.9	4.0	3.2	
EIA Reported Daily Storage Activity	11.7	8.6	8.3	4.6	2.1			
Daily Model Error	-1.2	0.2	-1.1	0.0	-1.3			

Monthly Balances

	2Yr Ago Aug-20	LY Aug-21	Apr-22	May-22	Jun-22	Jul-22	MTD Aug-22	MoM	vs. LY
Lower 48 Dry Production	88.8	93.8	94.9	95.8	97.0	97.0	97.0	▼ 0.0	▲ 3.3
Canadian Imports	4.9	5.1	5.8	5.1	5.7	5.9	5.6	▼ -0.3	▲ 0.5
L48 Power	41.0	40.4	25.1	29.7	36.8	43.4	44.4	▲ 1.1	▲ 4.1
L48 Residential & Commercial	7.7	7.9	22.3	12.4	9.0	8.5	8.3	▼ -0.1	▲ 0.4
L48 Industrial	20.8	21.0	20.1	19.8	20.6	20.5	22.1	▲ 1.5	▲ 1.0
L48 Lease and Plant Fuel	4.8	5.1	5.2	5.3	5.2	5.3	5.3	▲ 0.0	▲ 0.2
L48 Pipeline Distribution	2.5	2.6	2.6	2.4	2.5	2.8	2.8	▲ 0.1	▲ 0.2
L48 Regional Gas Consumption	76.9	77.0	75.3	69.6	74.2	80.4	82.9	▲ 2.5	▲ 6.0
Net LNG Exports	4.0	10.5	12.3	12.5	11.2	10.9	11.0	▲ 0.1	▲ 0.6
Total Mexican Exports	6.0	6.9	6.7	7.0	7.1	6.9	5.6	▼ -1.4	▼ -1.3
Implied Daily Storage Activity	6.7	4.6	6.4	11.9	10.2	4.7	3.1		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

Daily Average Generation Data

Nuclear Generation Daily Average - GWh (NRC)

	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug	DoD	vs. 7D
NRC Nuclear Daily Output	90.0	90.4	90.5	90.4	90.8	90.5	90.7	0.1	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	14.8	14.4	14.4	14.5	14.0	14.3	14.2	-0.1	-0.2
NRC % Nuclear Cap Utilization	91.6	92.0	92.0	91.9	92.4	92.1	92.2	0.1	0.2

Wind Generation Daily Average - MWh (EIA)

	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug	DoD	vs. 7D
CALI Wind	2252	2252	2103	1542	1495	1241	2505	1264	691
TEXAS Wind	15346	15346	11674	10484	14283	14452	18136	3685	4539
US Wind	36656	36656	29082	29203	41672	45047	59922	14875	23536

Generation Daily Average - MWh (EIA)

	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug	DoD	vs. 7D
Genscape Wind	37267	37351	28445	30413	45478	46700	62700	16000	25091
US Solar	16944	16944	17550	17318	15858	16202	18444	2242	1641
US Petroleum	1298	1298	1074	741	835	1020	1285	264	240
US Other	10142	10142	10396	9926	9700	10136	10183	47	110
US Coal	128289	128289	122320	113782	112225	124876	125287	411	3657
US Nuke	92134	92134	92724	92503	92826	92732	92827	95	319
US Hydro	31140	31140	32025	29959	28956	30470	30368	-102	-247
US Gas	229554	229554	243438	222732	209414	231667	236271	4604	8545

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%	
							-0.2	

Generation Weekly Average - MWh (EIA)

	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	WoW	WoW Bcf/d Impact
						est.		
Genscape Wind	50581	45558	42730	34294	40237	44926	4688	-0.8
US Solar	19728	19728	19728	19728	19728	18148	-1580	0.3
US Petroleum	1333	1333	1333	1333	1333	1290	-43	0.0
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	-0.2
US Hydro	39690	39690	39690	39690	39690	34445	-5245	0.9
US Gas	220700	220700	220700	220700	220700	227720	7020	1.3

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	May-22	Jun-22	Jul-22	Aug-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
NRC Nuclear Daily Output	91.2	90.3	81.7	88.5	90.6	90.8	90.6	0.2	0.4
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	14.6	23.2	16.3	14.3	14.1	14.2	-0.2	-0.4
NRC % Nuclear Cap Utilization	92.8	91.8	83.0	90.0	92.1	92.3	92.2	0.2	0.4

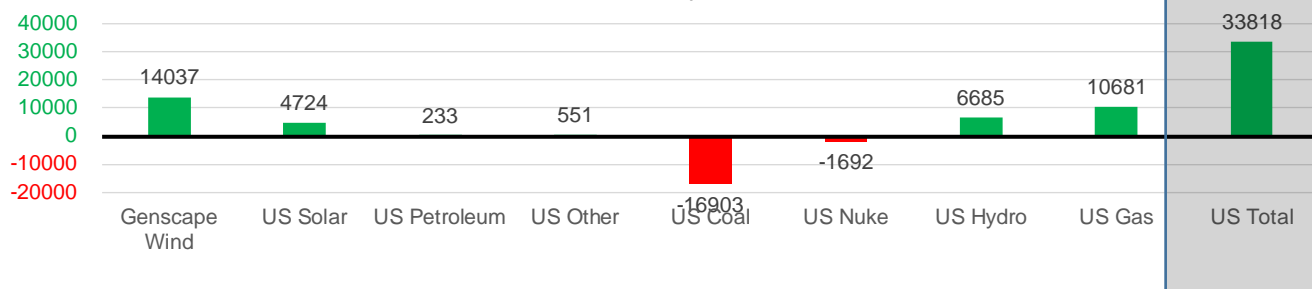
Wind Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	May-22	Jun-22	Jul-22	Aug-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
CALI Wind	2670	2330	3361	2724	2037	2189	2056	152	-274
TEXAS Wind	8793	7362	16756	19072	20882	17215	20060	-3667	12698
US Wind	30411	28445	56462	54014	57140	56204	55964	-936	27520

Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY	MTD						
	Same 30 days	Same 30 days	May-22	Jun-22	Jul-22	Aug-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
Genscape Wind	30679	27438	56803	47280	39988	58700	41475	▼17225.1	▲14037
US Solar	12277	14108	18186	19216	19098	17883	18831	▲948.2	▲4724
US Petroleum	1620	1030	518	1204	1280	1219	1263	▲44	▲233
US Other	9941	9362	7724	8994	9858	10171	9914	▼-258	▲551
US Coal	121542	138090	85273	109706	120406	125184	121187	▼-3997	▼-16903
US Nuke	93439	93086	85496	91073	91100	92803	91394	▼-1409	▼-1692
US Hydro	31911	29604	31369	38153	37598	30393	36289	▲5895	▲6685
US Gas	233222	214029	157565	204668	222720	235120	224710	▼-16001	▲10681
US Total	532160	527704	443965	530484	561182	570969	561523	▼-14777	▲33818

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

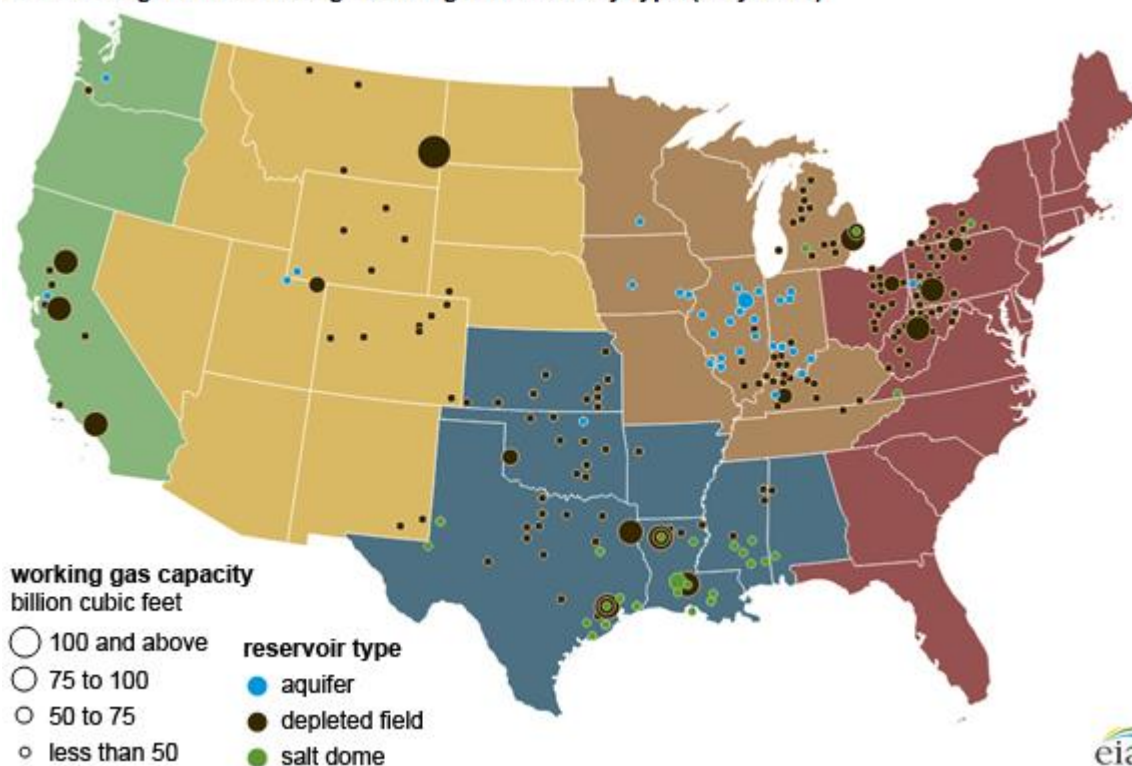
Regional S/D Models Storage Projection

Week Ending 29-Jul

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	5.1	-0.5	4.6	32
East	-0.3	2.3	2.0	14
Midwest	3.2	-0.6	2.6	18
Mountain	4.4	-4.4	0.1	0
South Central	-3.1	2.9	-0.2	-2
Pacific	1.0	-0.8	0.2	1

*Adjustment Factor is calculated based on historical regional deltas

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

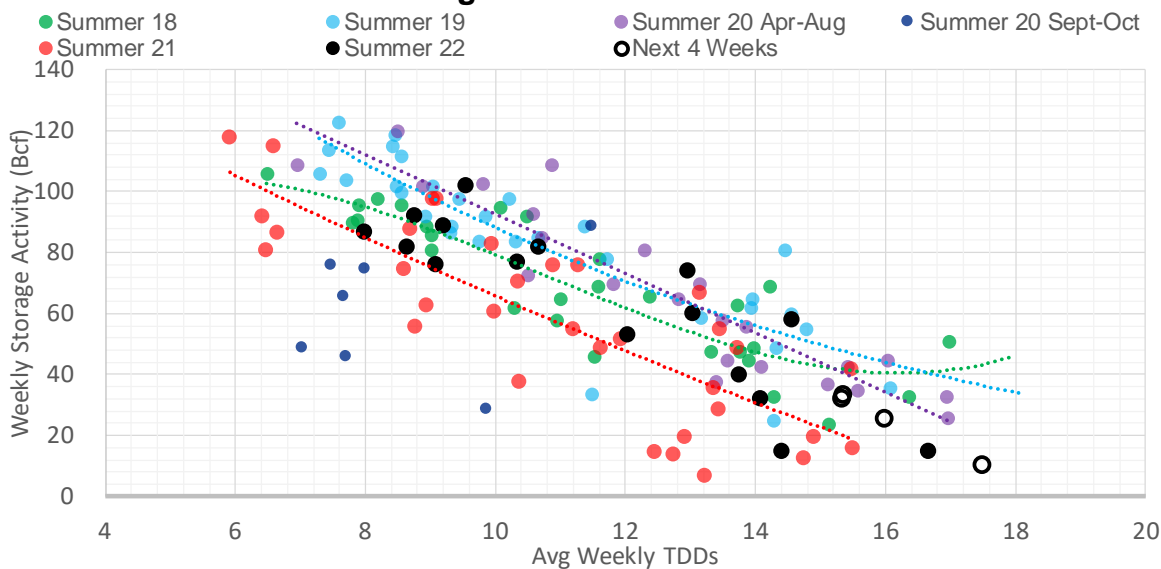


Weather Model Storage Projection

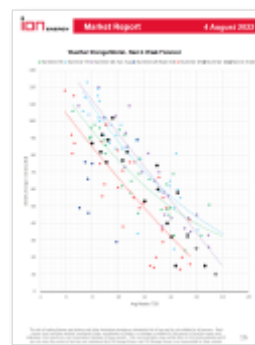
Next report
and beyond

Week Ending	GWDDs	Week Storage Projection
29-Jul	15.3	32
05-Aug	15.4	33
12-Aug	17.5	10
19-Aug	16.0	25

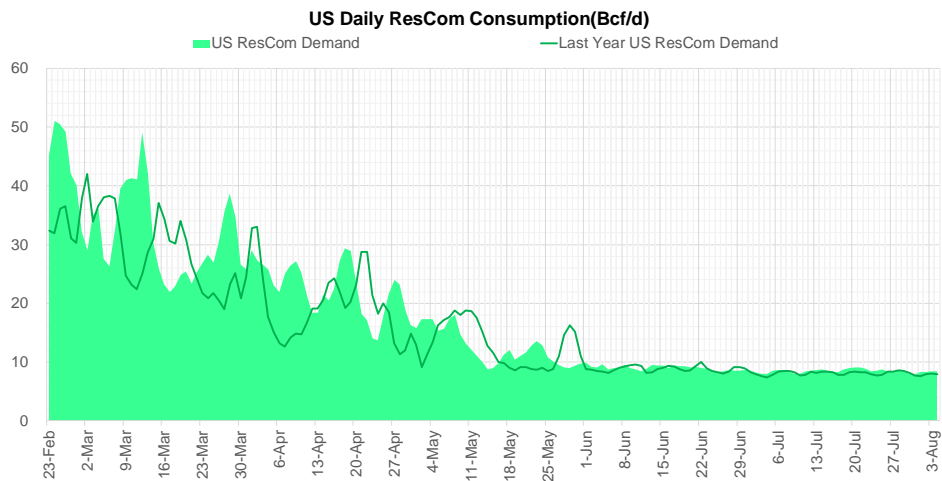
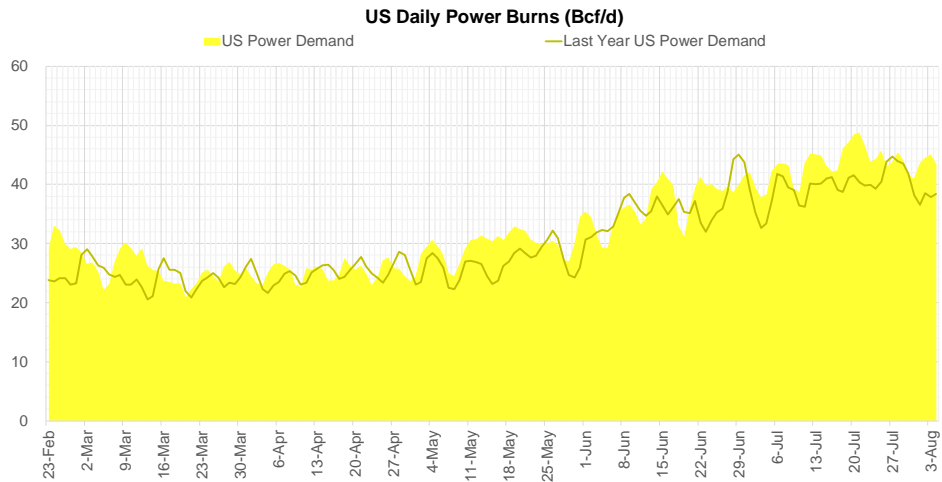
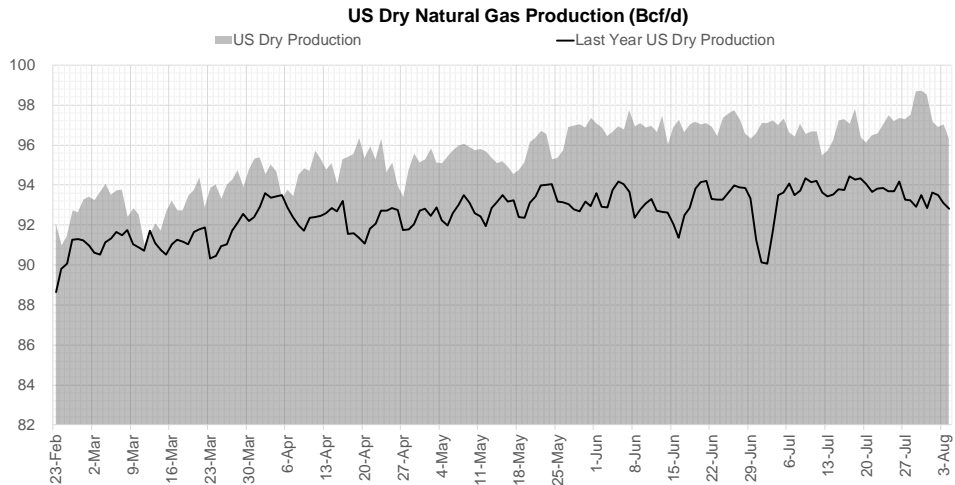
Weather Storage Model - Next 4 Week Forecast



[Go to larger image](#)



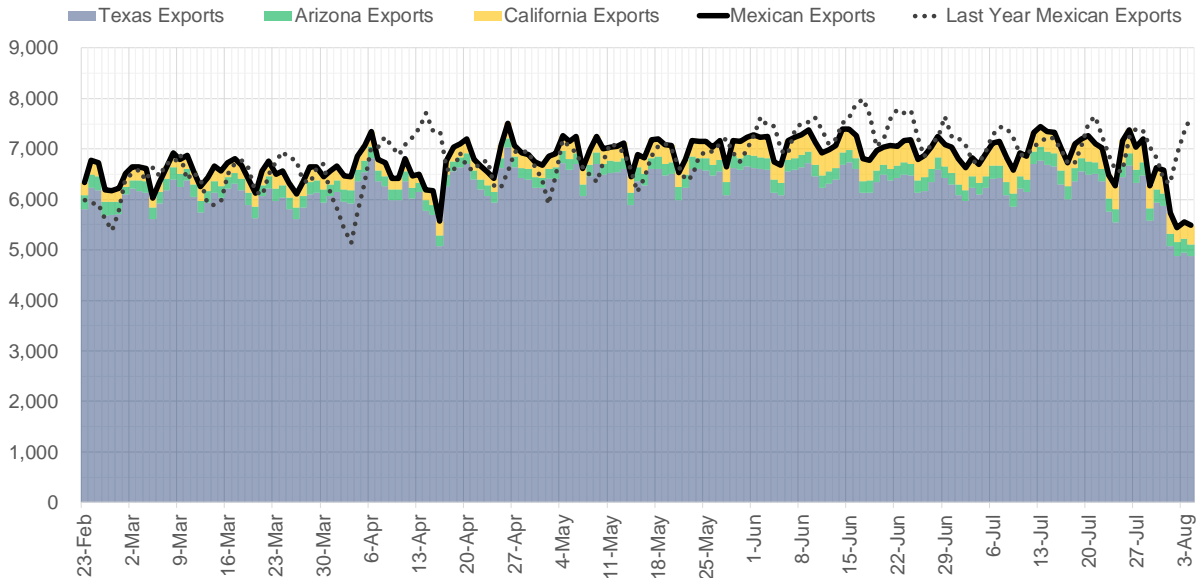
Supply – Demand Trends



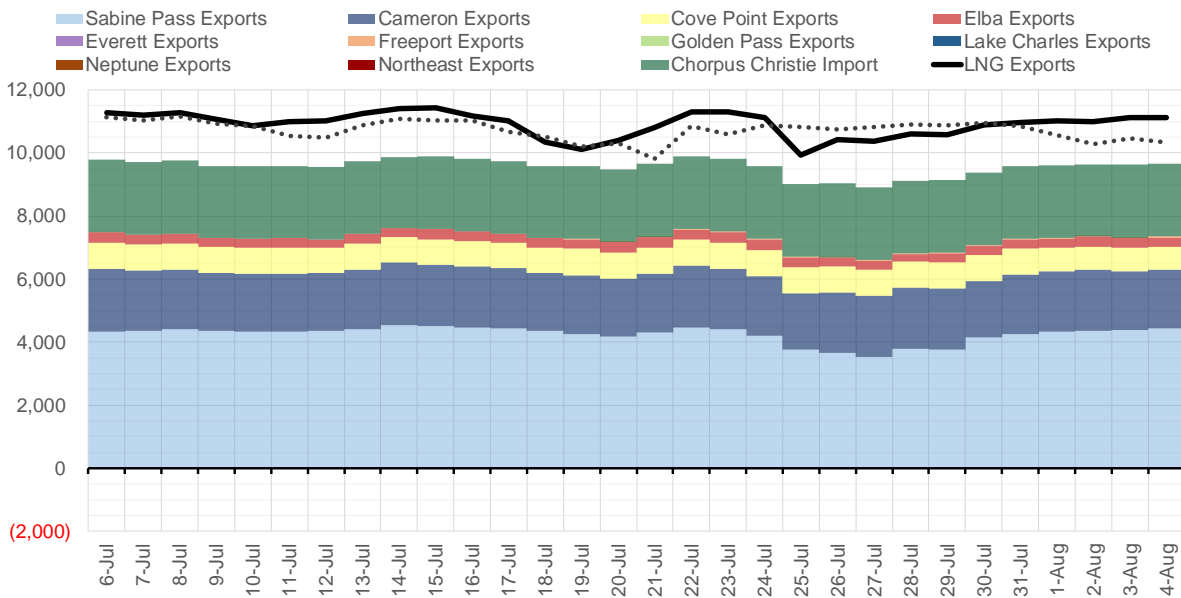
Source: Bloomberg

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 and ICE Combined

CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
9	2022	P	6.50	5157	10	2022	C	6.00	36014
9	2022	C	9.00	5114	10	2022	P	3.00	35628
9	2022	C	10.00	4795	10	2022	P	2.50	28187
12	2022	P	5.50	4260	10	2022	P	6.00	24490
11	2022	P	5.50	4225	9	2022	C	6.00	24362
12	2022	P	7.00	3550	10	2022	P	5.00	23429
9	2022	P	7.00	3222	10	2022	C	5.00	23268
9	2022	P	6.00	3047	3	2023	C	10.00	21853
11	2022	P	7.00	2450	10	2022	P	3.50	21629
9	2022	C	12.00	2060	10	2022	P	4.00	20616
9	2022	C	11.00	2024	5	2023	P	2.00	20477
5	2023	P	3.00	1875	9	2022	P	4.00	20267
6	2023	P	3.00	1875	9	2022	C	10.00	19572
7	2023	P	3.00	1875	9	2022	C	7.00	19505
8	2023	P	3.00	1875	10	2022	C	10.00	18666
9	2023	P	3.00	1875	9	2022	C	9.00	18284
11	2022	C	10.00	1850	12	2022	C	5.00	18218
11	2022	C	10.10	1850	11	2022	P	4.00	18082
9	2022	C	9.50	1700	12	2022	P	5.00	18001
10	2022	P	7.00	1619	3	2023	P	3.00	17962
9	2022	C	13.00	1605	1	2023	C	10.00	17607
1	2023	P	3.00	1450	9	2022	P	3.00	16633
9	2022	P	5.00	1391	10	2022	P	2.00	16580
4	2023	P	3.00	1375	10	2022	C	8.00	16298
10	2023	P	3.00	1375	2	2023	C	10.00	16277
10	2022	C	12.00	1299	9	2022	P	6.00	16267
9	2022	P	7.50	1250	9	2022	C	4.00	15970
9	2022	P	6.75	1205	4	2023	P	3.00	15909
1	2023	P	4.25	1150	10	2023	P	2.50	15705
9	2022	P	4.50	1055	9	2022	P	5.00	15614
12	2022	P	8.00	1050	9	2022	P	2.50	15477
4	2023	P	2.75	1050	10	2022	P	3.25	15350
5	2023	P	2.75	1050	9	2022	C	9.50	15247
6	2023	P	2.75	1050	10	2022	C	7.00	15111
7	2023	P	2.75	1050	9	2022	P	2.75	14887
8	2023	P	2.75	1050	10	2023	P	2.00	14829
9	2023	P	2.75	1050	3	2023	C	20.00	14749
10	2023	P	2.75	1050	10	2023	P	3.00	14410
2	2023	P	5.50	1025	12	2022	C	6.00	13987
4	2023	P	3.50	1025	11	2022	C	8.00	13343
5	2023	P	3.50	1025	9	2022	P	3.50	13313
6	2023	P	3.50	1025	10	2022	C	4.00	13309
7	2023	P	3.50	1025	10	2022	P	2.75	13286
8	2023	P	3.50	1025	9	2022	C	3.00	13225
9	2023	P	3.50	1025	10	2022	C	3.00	13214
10	2023	P	3.50	1025	1	2023	P	4.00	13113
12	2022	P	3.25	950	4	2023	P	2.75	13045
9	2022	C	8.00	944	5	2023	P	3.00	13003
10	2022	P	6.00	908	6	2023	P	3.00	13000
					3	2023	P	4	12918.25

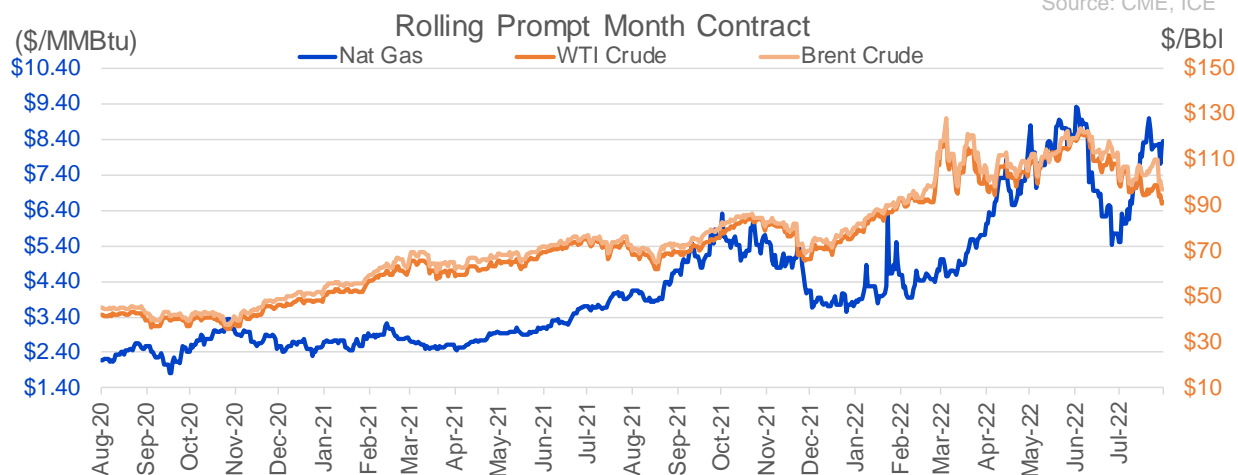
Source: CME, ICE

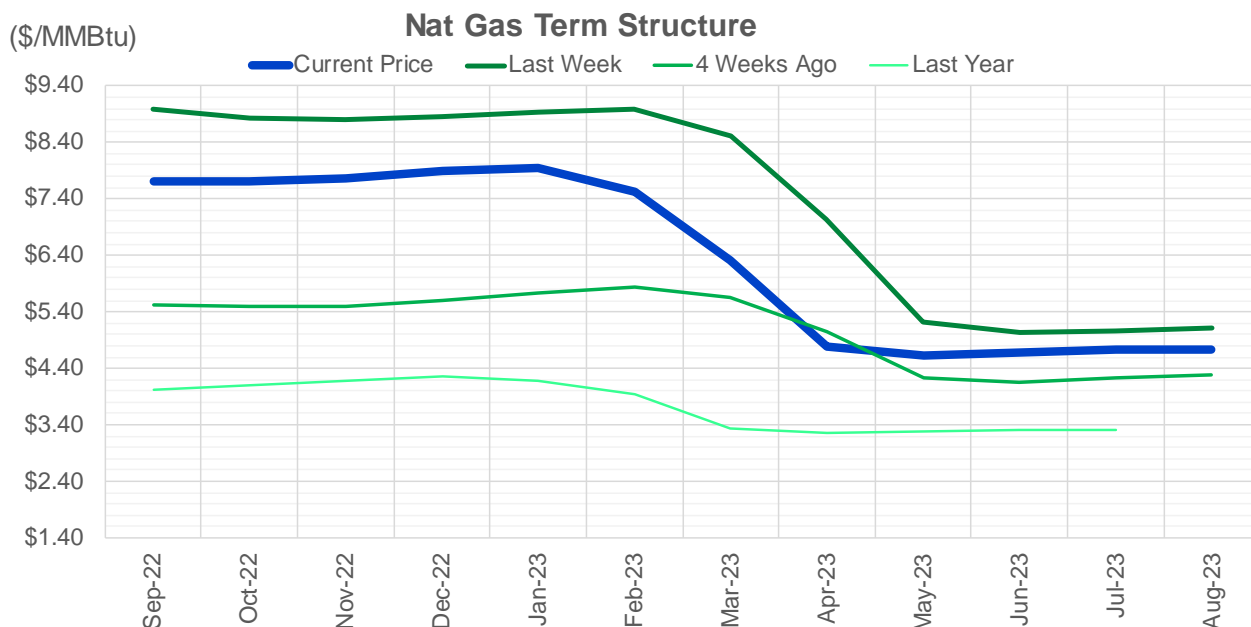
Nat Gas Futures Open Interest

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	155533	157146	-1613	SEP 22	83007	81912	1095
OCT 22	95841	95425	416	OCT 22	75030	74917	113
NOV 22	84578	83688	890	NOV 22	62727	63263	-536
DEC 22	56077	56335	-258	DEC 22	65188	64862	327
JAN 23	73870	73449	421	JAN 23	65458	65516	-58
FEB 23	35360	35212	148	FEB 23	58488	58016	473
MAR 23	51125	50888	237	MAR 23	52767	52228	539
APR 23	70008	69565	443	APR 23	53838	53788	50
MAY 23	67304	66475	829	MAY 23	52377	52284	93
JUN 23	23191	23287	-96	JUN 23	46443	46233	210
JUL 23	22343	20689	1654	JUL 23	44757	44617	139
AUG 23	19519	19332	187	AUG 23	43803	43595	209
SEP 23	17698	17334	364	SEP 23	43019	42755	263
OCT 23	47539	46705	834	OCT 23	50161	49868	293
NOV 23	13093	13076	17	NOV 23	44811	44831	-20
DEC 23	11734	11689	45	DEC 23	40645	40614	31
JAN 24	17782	17814	-32	JAN 24	39677	39735	-58
FEB 24	7873	7846	27	FEB 24	30205	30087	118
MAR 24	17102	16651	451	MAR 24	34692	34682	11
APR 24	13627	13450	177	APR 24	28227	28241	-14
MAY 24	6774	6746	28	MAY 24	26868	26867	2
JUN 24	2527	2526	1	JUN 24	23848	23830	17
JUL 24	2296	2317	-21	JUL 24	23545	23550	-5
AUG 24	3252	3222	30	AUG 24	23464	23469	-5
SEP 24	1826	1806	20	SEP 24	23377	23382	-5
OCT 24	8737	8746	-9	OCT 24	26643	26596	47
NOV 24	4732	4707	25	NOV 24	24907	24822	85
DEC 24	7556	7556	0	DEC 24	27913	27772	141
JAN 25	15988	15988	0	JAN 25	20635	20596	39
FEB 25	868	863	5	FEB 25	13890	13834	56

Source: CME, ICE





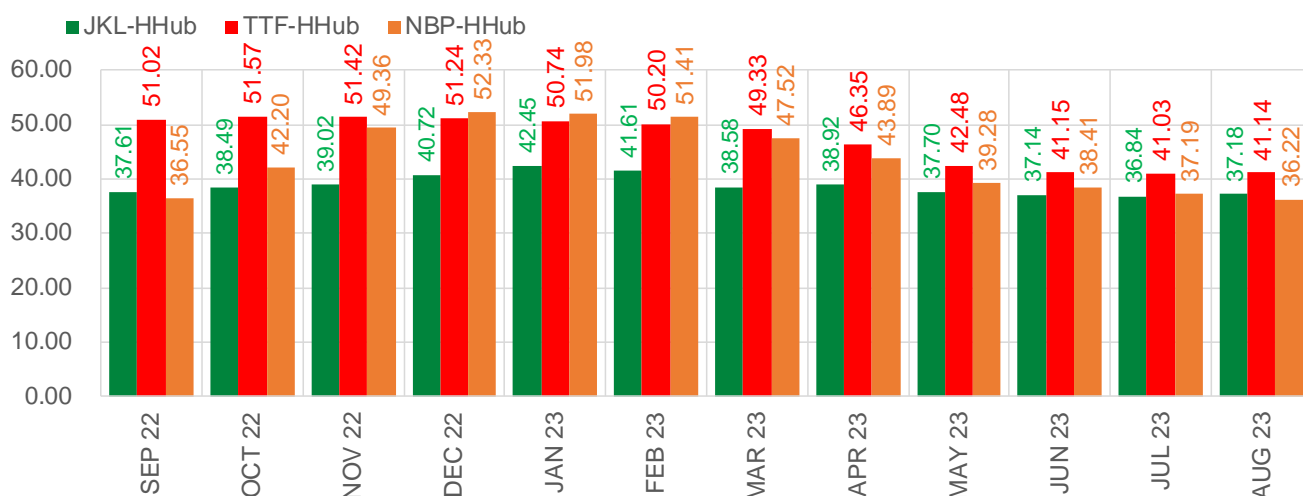
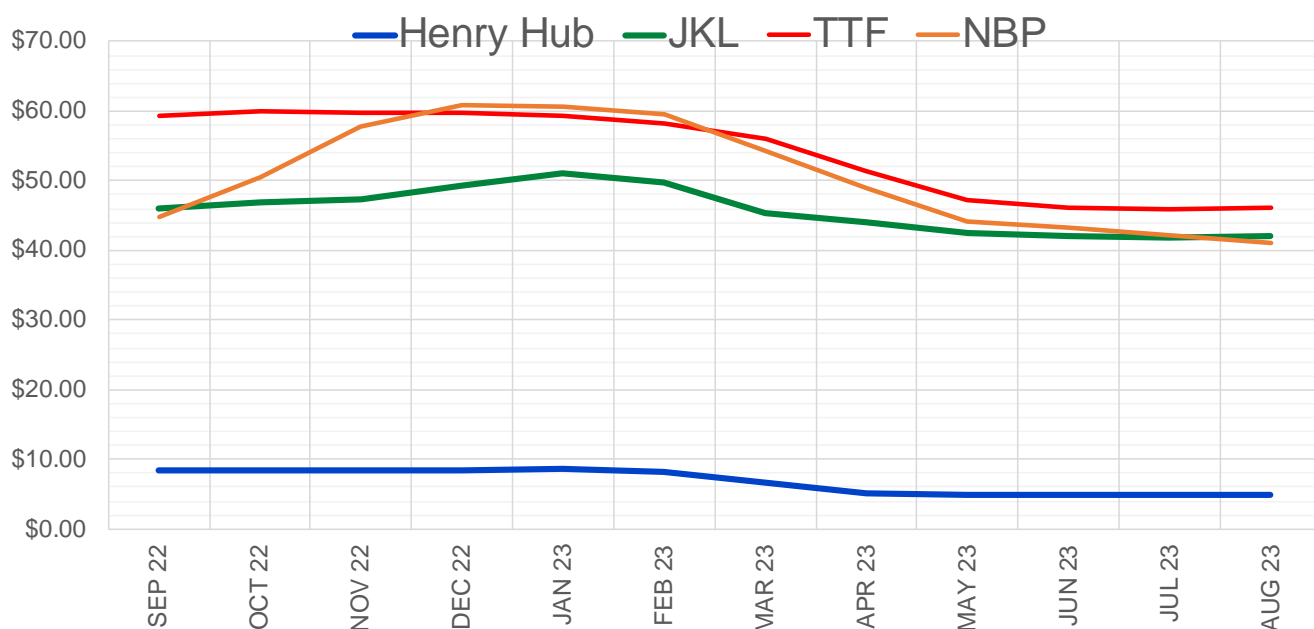
	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Current Price	\$7.706	\$7.698	\$7.775	\$7.887	\$7.950	\$7.537	\$6.305	\$4.794	\$4.629	\$4.676	\$4.727	\$4.741
Last Week	\$8.993	\$8.825	\$8.794	\$8.866	\$8.944	\$8.999	\$8.516	\$7.031	\$5.210	\$5.023	\$5.072	\$5.125
vs. Last Week	-\$1.287	-\$1.127	-\$1.019	-\$0.979	-\$0.994	-\$1.462	-\$2.211	-\$2.237	-\$0.581	-\$0.347	-\$0.345	-\$0.384
4 Weeks Ago	\$5.523	\$5.487	\$5.495	\$5.605	\$5.734	\$5.839	\$5.642	\$5.061	\$4.237	\$4.162	\$4.223	\$4.283
vs. 4 Weeks Ago	\$2.183	\$2.211	\$2.280	\$2.282	\$2.216	\$1.698	\$0.663	-\$0.267	\$0.392	\$0.514	\$0.504	\$0.458
Last Year	\$4.027	\$4.032	\$4.089	\$4.190	\$4.256	\$4.175	\$3.930	\$3.331	\$3.244	\$3.273	\$3.308	\$3.315
vs. Last Year	\$3.679	\$3.666	\$3.686	\$3.697	\$3.694	\$3.362	\$2.375	\$1.463	\$1.385	\$1.403	\$1.419	\$1.426

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	8.07	8.84	0.77
TETCO M3	\$/MMBtu	8.03	8.14	0.11
FGT Zone 3	\$/MMBtu	8.25	15.27	7.02
Zone 6 NY	\$/MMBtu	8.25	8.12	-0.13
Chicago Citygate	\$/MMBtu	7.54	8.45	0.91
Michcon	\$/MMBtu	7.49	8.39	0.90
Columbia TCO Pool	\$/MMBtu	7.15	7.86	0.71
Ventura	\$/MMBtu	5.95	8.30	2.35
Rockies/Opal	\$/MMBtu	7.46	8.15	0.69
El Paso Permian Basin	\$/MMBtu	6.81	8.13	1.32
Socal Citygate	\$/MMBtu	9.45	9.63	0.18
Malin	\$/MMBtu	7.60	8.62	1.02
Houston Ship Channel	\$/MMBtu	7.32	8.39	1.07
Henry Hub Cash	\$/MMBtu	7.85	8.25	0.40
AECO Cash	C\$/GJ	4.17	4.21	0.04
Station2 Cash	C\$/GJ	3.20	8.24	5.04
Dawn Cash	C\$/GJ	7.52	8.42	0.90

Source: CME, Bloomberg

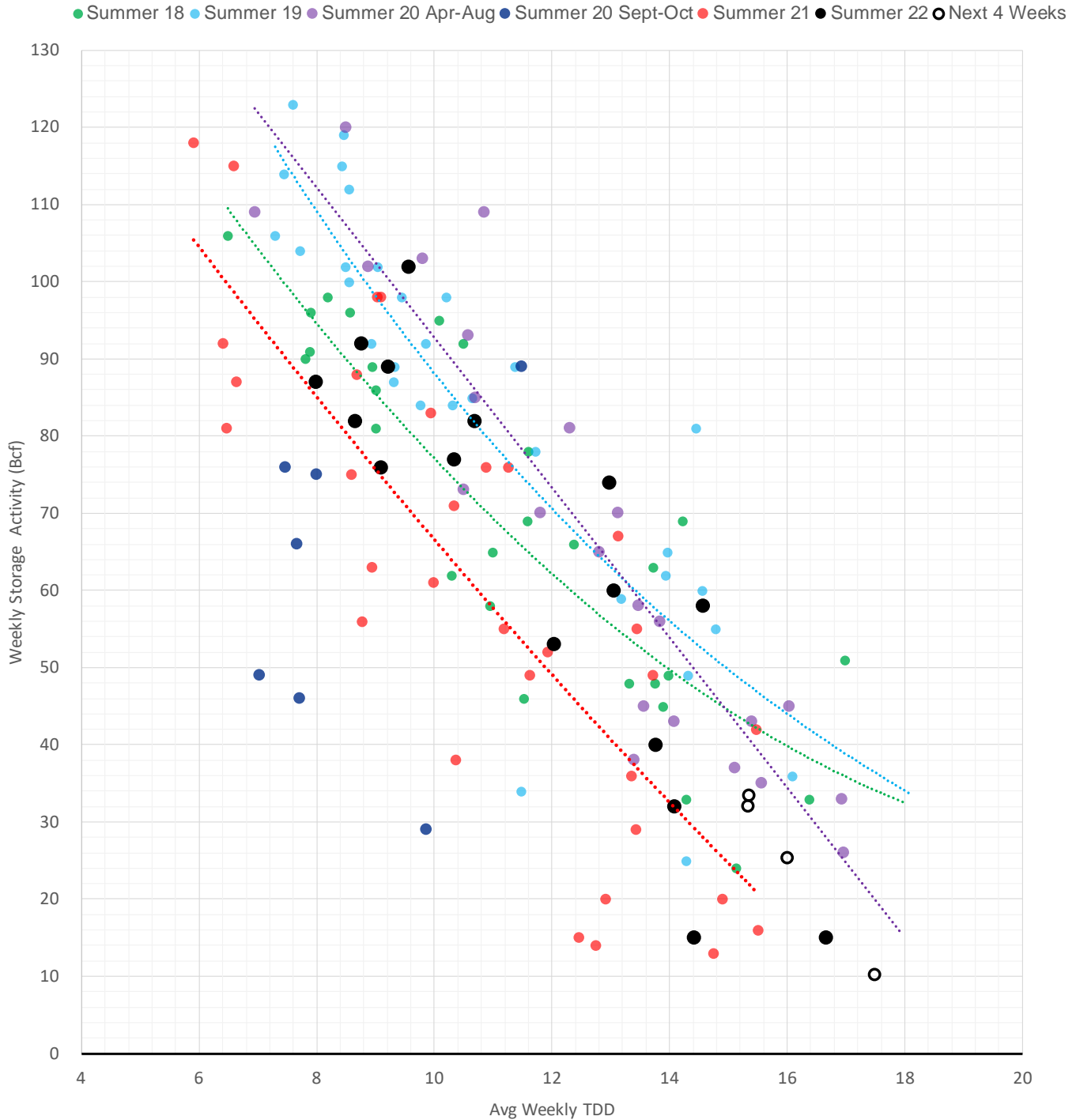
	Units	Current Price	vs. 4 Weeks			
			vs. Last Week	Ago	vs. Last Year	
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 1.678	
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 0.000	▲ 0.000	▲ 0.303	
NatGas Oct21/Jan22	\$/MMBtu	-1.817	▲ 0.000	▲ 0.000	▼ -2.040	
NatGas Apr22/Oct22	\$/MMBtu	2.926	▼ -0.264	▲ 2.769	▲ 2.946	
WTI Crude	\$/Bbl	90.66	▼ -6.600	▼ -7.870	▲ 22.510	
Brent Crude	\$/Bbl	96.78	▼ -9.840	▼ -3.910	▲ 26.400	
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000	
Heating Oil	cents/Gallon	341.48	▼ -30.250	▲ 0.420	▲ 134.070	
Propane, Mt. Bel	cents/Gallon	1.10	▼ -0.043	▼ -0.048	▲ 0.020	
Ethane, Mt. Bel	cents/Gallon	0.57	▼ -0.002	▲ 0.116	▲ 0.232	
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)



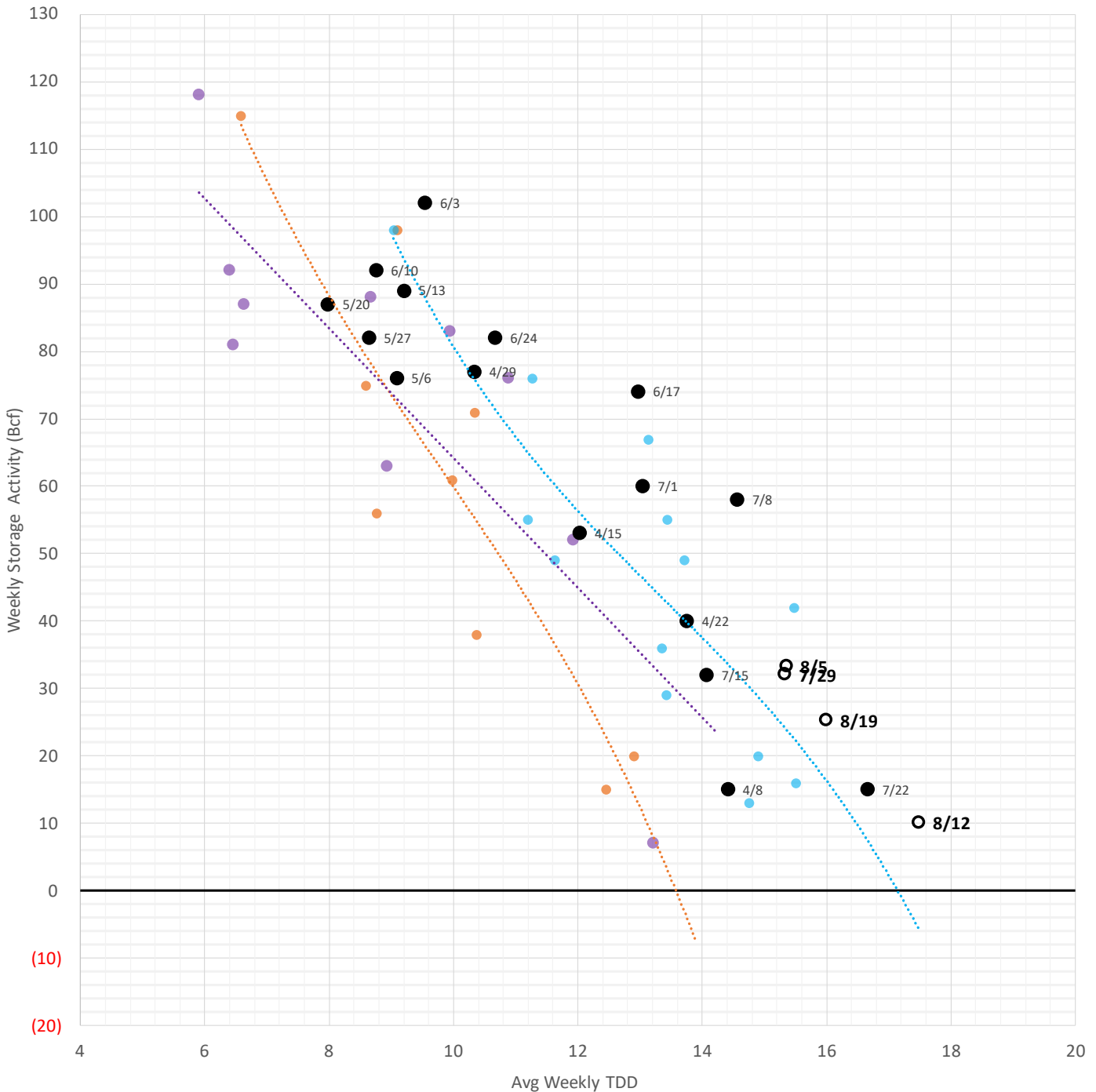
	SEP 22	OCT 22	NOV 22	DEC 22	JAN 23	FEB 23	MAR 23	APR 23	MAY 23	JUN 23	JUL 23	AUG 23
Henry Hub	\$8.338	\$8.325	\$8.399	\$8.498	\$8.555	\$8.097	\$6.750	\$5.022	\$4.828	\$4.875	\$4.920	\$4.911
JKL	\$45.950	\$46.815	\$47.420	\$49.220	\$51.005	\$49.705	\$45.330	\$43.940	\$42.530	\$42.015	\$41.755	\$42.095
JKL-HHub	\$37.612	\$38.490	\$39.021	\$40.722	\$42.450	\$41.608	\$38.580	\$38.918	\$37.702	\$37.140	\$36.835	\$37.184
TTF	\$59.356	\$59.893	\$59.823	\$59.742	\$59.297	\$58.293	\$56.079	\$51.374	\$47.309	\$46.023	\$45.953	\$46.055
TTF-HHub	\$51.018	\$51.568	\$51.424	\$51.244	\$50.742	\$50.196	\$49.329	\$46.352	\$42.481	\$41.148	\$41.033	\$41.144
NBP	\$44.886	\$50.529	\$57.763	\$60.829	\$60.537	\$59.503	\$54.267	\$48.912	\$44.111	\$43.288	\$42.113	\$41.128
NBP-HHub	\$36.548	\$42.204	\$49.364	\$52.331	\$51.982	\$51.406	\$47.517	\$43.890	\$39.283	\$38.413	\$37.193	\$36.217

Weather Storage Model - Next 4 Week Forecast

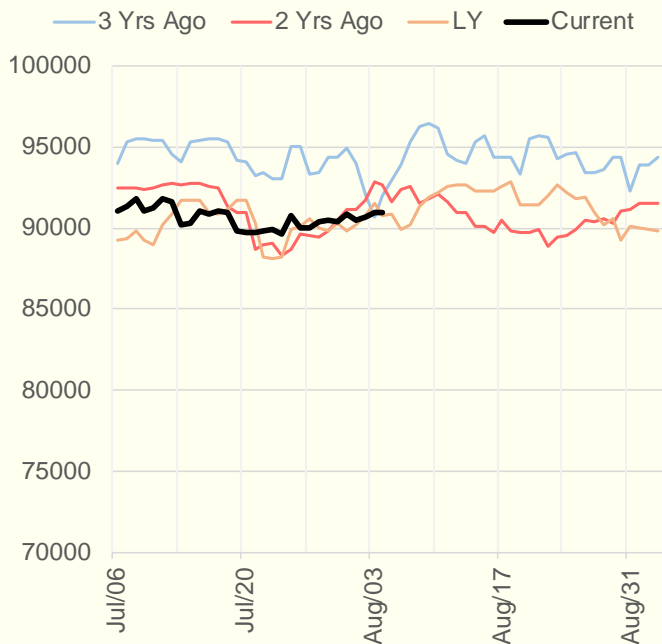


Weather Storage Model - Next 4 Week Forecast

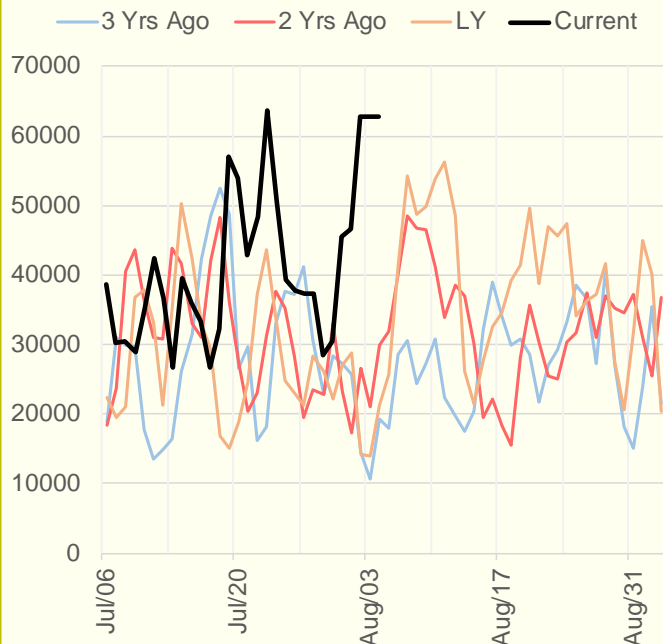
● Apr-May 2021
 ● June-Aug 2021
 ● Sept-Oct 2021
 ● Series8
 ○ Next 4 Weeks



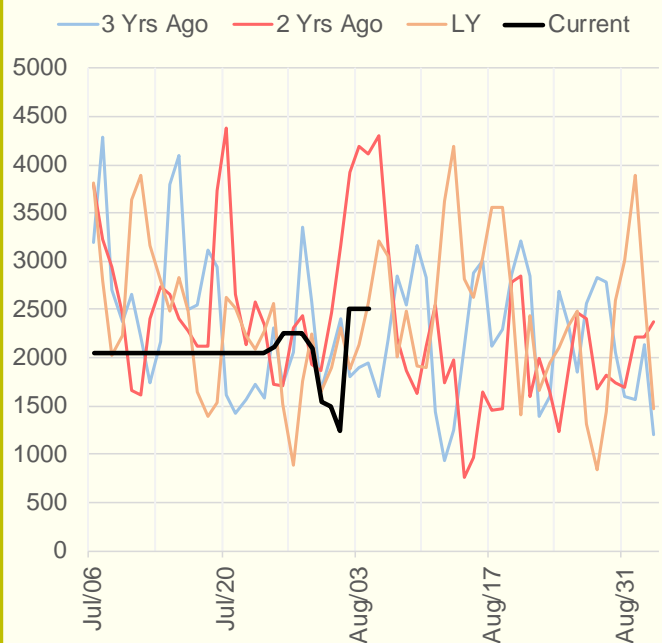
NRC Nuclear Daily Output



Genscape Wind



CALI Wind



TEXAS Wind

