

### **4 October 2022**

	Cı	ırrent	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$	6.52	<b>\$</b> 0.05	<b>\$</b> (0.22)

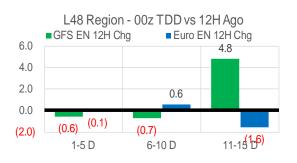
	С	urrent	∆ fr	or	n YD	Δ fror Αν	n 7D /g
WTI Prompt	\$	84.75	<u>~</u> :	\$	1.12	<b>\$</b>	4.2

		urront	Λ fro	m VD	∆ fror	n 7D
	Current	Δ 110	טו ווו	Α١	/g	
Brent Prompt	\$	90.31	<b>\$</b>	1.45	<b>\$</b>	2.2

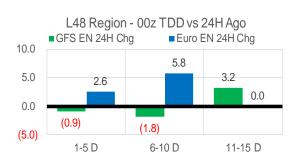
#### Page Menu

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



### Vs. 24H Ago



	Current	Δ from YD	Δ from 7D Avg
US Dry Production	101.1	▼ -2.57	<b>▼</b> -1.31

	Current	Δ from YD	Δ from 7D Avg
US ResComm	13.8	<b>▼</b> -1.00	<b>0.51</b>

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	10.6	<b>-</b> 0.01	<b>▼</b> -1.23

	Current	Δfı	rom YD	Δf	rom 7D Avg
US Power Burns	32.2		1.09		2.17

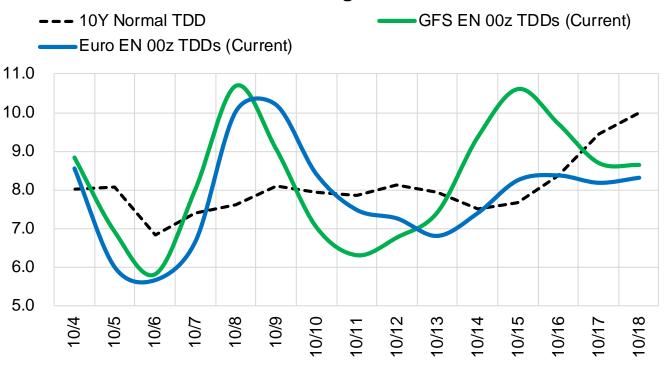
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	6.1	<b>-</b> 0.06	<b>▼</b> -0.10

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.4	-0.06	<b>▼</b> -0.34



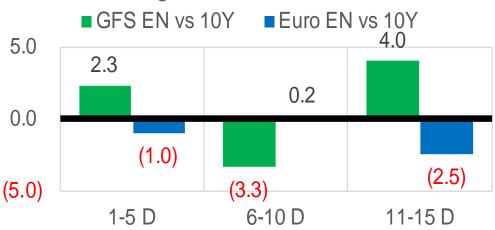
### Short-term Weather Model Outlooks (00z)





### Vs. 10Y Normal

L48 Region - 00z TDD vs 10Y Normal



Source: WSI, Bloomberg



## Lower 48 Component Models

#### **Daily Balances**

	28-Sep	29-Sep	30-Sep	1-Oct	2-Oct	3-Oct	4-Oct	DoD	vs. 7D
Lower 48 Dry Production	101.7	102.1	102.1	102.7	103.3	103.7	101.1	▼ -2.6	▼ -1.5
Canadian Imports	6.3	6.1	6.1	6.1	6.1	6.1	6.1	▼ -0.1	▼ -0.1
L48 Power	30.9	30.2	29.6	28.0	28.4	31.1	32.2	<b>1.1</b>	<b>2.5</b>
L48 Residential & Commercial	13.9	13.5	13.3	12.4	12.7	14.8	13.8	▼-1.0	<b>0.4</b>
L48 Industrial	21.0	21.2	21.4	21.6	21.6	21.9	21.7	▼ -0.1	<b>0.3</b>
L48 Lease and Plant Fuel	5.6	5.6	5.6	5.7	5.8	5.8	5.6	▼ -0.2	<b>▼</b> -0.1
L48 Pipeline Distribution	2.8	2.7	2.7	2.5	2.5	2.8	2.8	<b>0.0</b>	<b>0.2</b>
L48 Regional Gas Consumption	74.2	73.2	72.6	70.3	71.0	76.4	76.2	▼ -0.2	<b>3.3</b>
Net LNG Delivered	11.86	12.46	12.46	11.62	11.20	10.57	10.56	▼ 0.0	▼ -1.1
Total Mexican Exports	7.0	7.0	6.9	6.5	6.4	6.5	6.4	▼ -0.1	▼ -0.3
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	14.9	15.5	16.2	20.5	20.8	16.3	14.0		

EIA Storage Week Balances								
_	LY				LW	Current		
	1-Oct	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	WoW	vs. LY
Lower 48 Dry Production	96.2	100.2	100.9	101.0	100.8	101.5	<b>8.0</b>	<b>5.3</b>
Canadian Imports	5.7	5.8	5.9	5.6	6.1	6.2	<b>▲ 0.1</b>	<b>0.5</b>
L48 Power	29.9	42.8	41.1	37.9	37.0	31.5	<b>▼</b> -5.5	1.6
L48 Residential & Commercial	9.2	7.9	7.6	8.0	8.2	11.9	<b>3.7</b>	2.7
L48 Industrial	22.0	21.8	21.4	20.9	21.4	20.7	▼ -0.6	-1.3
L48 Lease and Plant Fuel	5.3	5.5	5.6	5.6	5.6	5.6	<b>0.0</b>	0.3
L48 Pipeline Distribution	2.4	3.0	3.0	2.8	2.8	2.7	▼ -0.1	0.3
L48 Regional Gas Consumption	68.9	81.1	78.7	75.1	74.9	72.5	▼ -2.5	<b>3.6</b>
Net LNG Exports	10.3	10.9	11.3	11.3	11.5	11.8	<b>0.3</b>	<b>1.5</b>
Total Mexican Exports	6.6	6.9	6.6	6.7	6.6	6.9	<b>0.3</b>	<b>0.2</b>
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	16.1 16.9 -0.8	7.2 7.7 -0.5	10.2 11.0 -0.8	13.4 14.7 -1.3	13.9 14.7 -0.8	16.6	2.7	0.5

Monthly Balances									
•	2Yr Ago	LY					MTD		
	Oct-20	Oct-21	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	MoM	vs. LY
Lower 48 Dry Production	88.5	95.5	97.3	97.7	99.1	101.0	103.2	<b>2.2</b>	<b>7.8</b>
Canadian Imports	4.3	5.4	5.7	5.9	5.4	5.9	6.1	<b>0.2</b>	<b>8.0</b>
L48 Power	30.6	30.4	38.3	44.3	43.1	36.9	29.2	<b>▼</b> -7.7	<b>▼</b> -1.3
L48 Residential & Commercial	15.5	12.6	8.9	8.3	8.0	9.0	13.3	<b>4.3</b>	<b>0.7</b>
L48 Industrial	22.7	21.7	19.1	19.8	21.1	21.1	21.7	<b>0.6</b>	<b>0.0</b>
L48 Lease and Plant Fuel	4.8	5.3	5.5	5.5	5.5	5.6	5.8	<b>0.2</b>	<b>0.4</b>
L48 Pipeline Distribution	2.5	2.7	2.9	3.1	3.0	2.8	2.6	▼-0.2	▼ 0.0
L48 Regional Gas Consumption	76.1	72.7	74.6	81.0	80.8	75.4	72.6	▼ -2.9	▼ -0.1
Net LNG Exports	8.0	10.6	11.2	10.9	11.0	11.5	11.1	▼-0.4	<b>0.5</b>
Total Mexican Exports	6.0	6.6	7.1	7.0	6.9	6.7	6.5	▼-0.2	▼ -0.2
Implied Daily Storage Activity EIA Reported Daily Storage Activity	2.7	11.0	10.0	4.7	5.8	13.4	19.2		
Daily Model Error					0.0				

Source: Bloomberg, analytix.ai

## **Daily** Average Generation Data

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

	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	1-Oct	2-Oct	DoD	vs. 7D
NRC Nuclear Daily Output	84.7	84.6	84.1	81.4	81.5	79.9	80.2	0.3	-2.6
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	20.2	20.2	20.7	23.5	23.3	25.0	24.7	-0.3	2.6
NRC % Nuclear Cap Utilization	86.1	86.1	85.6	82.8	82.9	81.2	81.5	0.3	-2.6

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

	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	1-Oct	2-Oct	DoD	vs. 7D
CALI Wind	1193	1632	1827	1549	1449	1808	1765	-43	189
TEXAS Wind	6870	8099	7871	6937	8028	8626	5976	-2650	-1763
US Wind	35542	34935	39654	34157	34600	39725	37162	-2563	726

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

	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	1-Oct	2-Oct	DoD	vs. 7D
US Wind	35542	34935	39654	34157	34600	39725	37162	-2563	726
US Solar	17172	15575	14633	13776	14185	15450	14618	-832	-514
US Petroleum	317	340	338	284	512	478	829	351	451
US Other	12219	12128	11508	10100	9953	10177	10325	147	-690
US Coal	80641	78597	76197	54443	54357	68217	68608	391	-134
US Nuke	85571	85543	84450	71198	88530	83105	81186	-1919	-1880
US Hydro	24443	24474	23452	22353	23679	19766	19198	-568	-3830
US Gas	186147	174836	167831	143486	152597	140667	150263	9596	-10665

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai



**US Nuke** 

US Hydro

**US Gas** 

## **Storage Week** Average Generation Data

Nuclear Generation Weekly Average - GWh (NRC)											
	1-Oct	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	WoW	WoW Bcf/d Impact			
NRC Nuclear Daily Output	85.1	89.6	87.5	86.0	86.7	85.1	-1.7	0.3			
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0				
NRC Nuclear Outage	19.8	15.2	17.4	18.9	18.1	19.8	1.7				
NRC % Nuclear Cap Utilization	86.5	91.2	88.9	87.4	88.2	86.5	-1.7				
Wind Generation Weekly Average - MWh (EIA)											
	1-Oct	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	WoW	WoW Bcf/d Impact			
CALI Wind	2467	1825	1285	2033	1941	1208	-733	0.1			
TEXAS Wind	10364	6839	4092	8875	11580	8083	-3498	0.7			
US Wind	43512	36122	27253	37396	47947	38901	-9046	1.7			
							-19%				
						-0.3					
Generation Weekly Average -	- MWh (EIA	)									
Contraction from the first	(2211	,			LY	Current					
						• • • • • • • • • • • • • • • • • • • •		WoW			
	1-Oct	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	YoY	Bcf/d			
					,			Impact			
US Wind	43512	36122	27253	37396	47947	38901	-9046	1.7			
US Solar	12968	17072	16144	14887	17244	16208	-1036	0.2			
US Petroleum	458	1075	1105	1029	1010	379	-632	0.1			
US Other	8725	10580	9950	9950	10826	10917	91	0.0			
US Coal	94602	113005	105981	91209	92461	74642	-17819	3.3			
							40.40				

See National Wind and Nuclear daily charts

92018

27850

232735

89638

27950

227619

88711

25849

201216

89298

23537

197532

88422

25385

156149

Source: Bloomberg, analytix.ai

85052

22830

168936

-4246

-707

-28595

-5.4



## **Monthly** Average Generation Data

Nuclear Generation Monthly Average - GWh (NRC)											
	2Yr Ago LY MTD										
	Same 30 days	Same 30 days	Jul-22	Aug-22	Sep-22	Oct-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY		
NRC Nuclear Daily Output	87.3	86.2	90.6	90.5	86.2	79.9	85.2	-6.4	-1.1		
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	17.6	18.6	14.3	14.3	18.6	25.0	19.7	6.4	1.1		
NRC % Nuclear Cap Utilization	88.7	87.7	92.1	92.1	87.7	81.2	86.6	-6.5	-1.1		

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

	2Yr Ago	LY				MTD			
	Same 30 days	Same 30 days	Jul-22	Aug-22	Sep-22	Oct-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
CALI Wind	1268	1788	2719	2028	1608	1776	1631	167	-157
TEXAS Wind	7332	8226	11765	8440	7993	6638	8374	-1355	148
US Wind	31910	37141	39701	33222	37338	37802	38689	464	1548

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

, ,	2Yr Ago	ĹY				MTD			
	Same 30 days	Same 30 days	Jul-22	Aug-22	Sep-22	Oct-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
US Wind	31910	37141	39701	33222	37338	37802	38689	<b>886.2</b>	<b>1548</b>
US Solar	9062	13075	18598	16962	16043	14826	15874	<b>1</b> 047.9	<b>2799</b>
US Petroleum	1003	559	1252	1253	864	741	841	<b>9</b> 9	<b>281</b>
US Other	8254	9177	10128	10426	10378	10288	10439	<b>152</b>	<b>1262</b>
US Coal	86336	107226	119788	117200	90642	68510	85354	<b>16844</b>	<b>▼-21872</b>
US Nuke	90387	89120	92883	92976	88293	81666	87170	<b>5504</b>	<b>▼</b> -1951
US Hydro	26027	25114	34227	30121	25102	19340	24237	<b>4897</b>	▼ -877
US Gas	173581	176273	235766	233741	198682	147864	188225	<b>29429</b>	<b>11952</b>
US Total	424726	457809	551821	535671	465960	382270	449693	<b>57973</b>	▼ -8116



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai



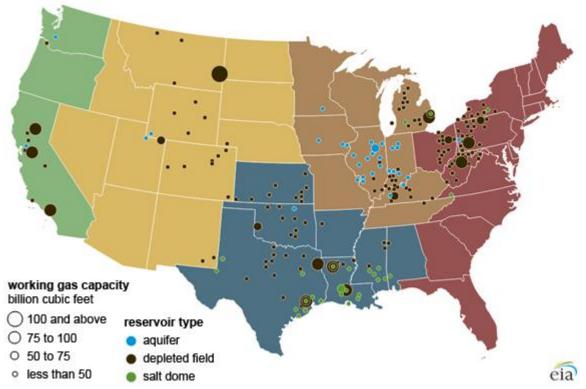
### Regional S/D Models Storage Projection

Week Ending 30-Sep

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	17.7	-0.2	17.5	122
East	2.1	2.1	4.3	30
Midwest	4.2	0.1	4.3	30
Mountain	5.5	-4.2	1.3	9
South Central	5.1	2.0	7.1	50
Pacific	8.0	-0.3	0.5	3

<sup>\*</sup>Adjustment Factor is calcuated based on historical regional deltas

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



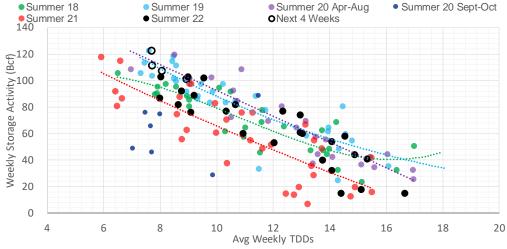


### Weather Model Storage Projection

Next report
and beyond

Week Ending	GWDDs	Week Storage Projection
30-Sep	7.7	122
07-Oct	7.7	111
14-Oct	8.1	107
21-Oct	8.9	101

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



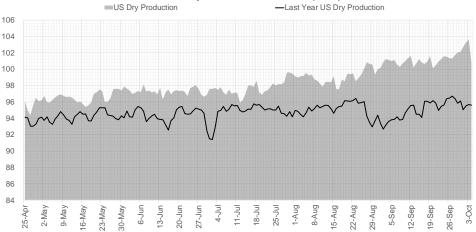
Go to larger image



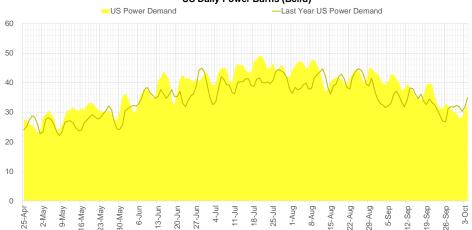


### Supply - Demand Trends

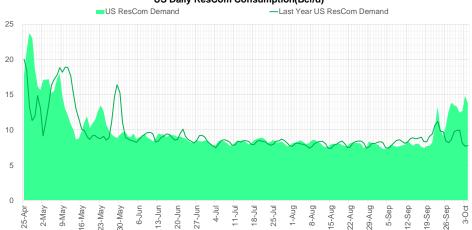
#### US Dry Natural Gas Production (Bcf/d)



#### US Daily Power Burns (Bcf/d)



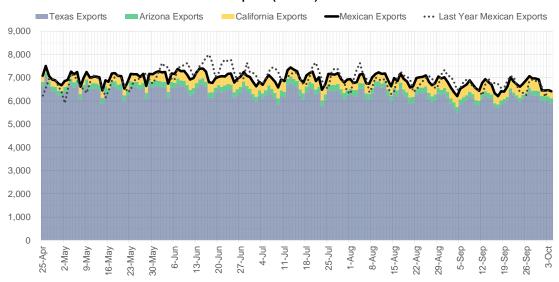
#### US Daily ResCom Consumption(Bcf/d)

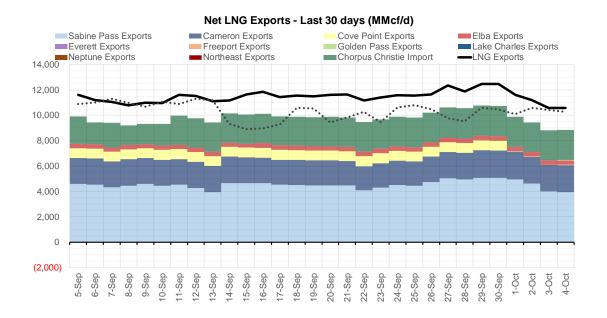


Source: Bloomberg



#### Mexican Exports (MMcf/d)





Source: Bloomberg



# 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	6.00	5280	12	2022	P	4.00	25639
11	2022	C	8.00	4757	3	2023	Ċ	10.00	25437
1	2023	C	20.00	2925	11	2022	P	4.00	24849
11	2023	P	5.00	2846	12	2022	Р	5.00	23276
11	2022	P	5.50	2510	12	2022	P	6.00	22899
11	2022	Ċ	7.50	2050	5	2023	P	2.00	22377
11	2022	P	6.25	2006	11	2022	P	5.00	21890
1	2023	C	10.00	1888	4	2023	Р	3.00	21136
3	2023	Č	10.00	1708	10	2023	Р	3.00	19534
1	2023	Ċ	15.00	1675	3	2023	Р	4.00	19255
12	2022	Ċ	7.50	1536	3	2023	С	20.00	19072
1	2024	Ċ	6.00	1500	10	2023	Р	2.50	18925
4	2023	Č	5.00	1451	1	2023	С	10.00	18864
12	2022	P	6.00	1407	12	2022	С	5.00	18227
11	2022	Р	5.75	1356	4	2023	Р	3.50	18141
12	2022	P	4.00	1309	3	2023	Р	3.00	17606
3	2023	Р	2.75	1240	11	2022	С	10.00	17571
5	2023	C	7.00	1226	5	2023	Р	3.00	17473
12	2022	C	11.50	1225	1	2023	Р	4.00	17396
5	2023	Č	5.00	1200	6	2023	Р	3.00	17395
6	2023	Ċ	5.00	1200	2	2023	С	10.00	17105
7	2023	Ċ	5.00	1200	12	2022	Р	5.50	16912
8	2023	C	5.00	1200	10	2023	P -	4.00	16906
9	2023	C	5.00	1200	5	2023	P	3.50	16790
10	2023	С	5.00	1200	11	2022	С	12.00	16676
5	2023	C	5.50	1150	1	2023	P	5.00	16547
11	2022	С	9.00	1126	12	2022	С	4.00	16194
5	2023	С	8.50	1100	12 7	2022 2023	C P	10.00	16178
5	2023	Р	2.50	1086	6	2023	P P	3.00 3.50	15950 15915
3	2023	Р	4.50	1084	7	2023	P	3.50	15890
11	2022	Р	4.00	1058	8	2023	P	3.50	15890
4	2023	С	7.00	1050	9	2023	P	3.50	15880
4	2023	С	10.00	1050	10	2023	P	3.50	15855
5	2023	С	10.00	1050	10	2023	P	2.00	15785
6	2023	С	10.00	1050	11	2022	C	4.00	15755
12	2022	С	17.00	1045	8	2023	P	3.00	15750
9	2023	С	7.00	1030	9	2023	P	3.00	15750
6	2023	С	7.00	1025	11	2022	Р	6.00	15738
7	2023	С	7.00	1025	4	2023	Р	4.00	15733
8	2023	С	7.00	1025	11	2022	С	8.00	15690
10	2023	С	7.00	1025	9	2023	Р	4.00	15386
12	2022	С	12.50	1010	2	2023	С	9.00	15337
3	2023	С	7.50	1002	12	2022	Р	7.00	14887
1	2023	Р	2.75	1000	7	2023	Р	4.00	14679
1	2023	Р	4.25	1000	4	2023	Р	2.00	14663
2	2023	Р	2.75	1000	5	2023	Р	4.00	14478
2	2023	Р	4.25	1000	8	2023	Р	4.00	14026
3	2023	Р	4.25	1000	11	2022	Р	7.00	14000
12	2022	С	15.00	983	3	2023	P Source	2.75 E: CME, ICE	13918



### Nat Gas Futures Open Interest

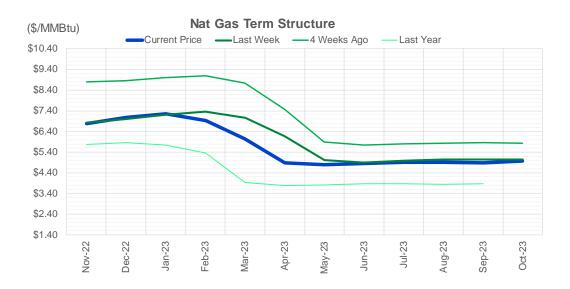
CME and ICE Combined

CME Henry Hub Futures (10,000 MMBtu)  ICE Henry Hub Futures Contract Equivalent (10,000 MM													
CME Henry H				ICE Henry F			No. 1						
	Current	Prior	Daily Change		Current	Prior	Daily Change						
NOV 22	161649	159153	2496	NOV 22	71933	72253	-320						
DEC 22	68268	66508	1760	DEC 22	73856	71853	2003						
JAN 23	92503	92053	450	JAN 23	69860	69761	99						
FEB 23	46704	44971	1733	FEB 23	64544	64678	-133						
MAR 23	73987	72440	1547	MAR 23	57027	56695	332						
APR 23	75908	76555	-647	APR 23	54741	54583	158						
MAY 23	83113	82388	725	MAY 23	55182	54688	495						
JUN 23	23729	23201	528	JUN 23	45612	45634	-22						
JUL 23	25980	25706	274	JUL 23	46001	45405	596						
AUG 23	20260	20177	83	AUG 23	44868	44355	513						
SEP 23	22821	22849	-28	SEP 23	41636	41619	17						
OCT 23	56024	54992	1032	OCT 23	54856	54855	1						
NOV 23	18999	19441	-442	NOV 23	47500	47670	-170						
DEC 23	15338	14939	399	DEC 23	40728	40562	166						
JAN 24	26366	25607	759	JAN 24	43589	43646	-58						
FEB 24	9747	9601	146	FEB 24	31227	31202	25						
MAR 24	18980	19069	-89	MAR 24	36808	36716	92						
APR 24	16018	16215	-197	APR 24	29810	29674	137						
MAY 24	8041	8027	14	MAY 24	28378	28195	183						
JUN 24	2771	2697	74	JUN 24	25684	25509	175						
JUL 24	3691	3685	6	JUL 24	25267	25086	181						
AUG 24	3714	3704	10	AUG 24	24967	24787	180						
SEP 24	2289	2293	-4	SEP 24	24693	24519	174						
OCT 24	9098	9103	-5	OCT 24	28842	28511	332						
NOV 24	4983	4982	1	NOV 24	25990	25932	59						
DEC 24	8247	8251	-4	DEC 24	29337	29291	45						
JAN 25	17417	17398	19	JAN 25	23889	23946	-57						
FEB 25	1636	1624	12	FEB 25	15891	15902	-11						
MAR 25	5229	5209	20	MAR 25	18093	18050	43						
APR 25	5171	5171	0	APR 25	16470	16496	-27						

Source: CME, ICE







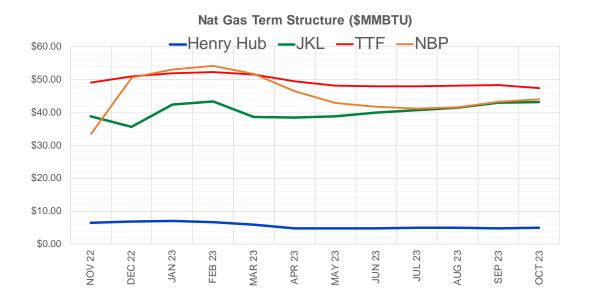
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
<b>Current Price</b>	\$6.766	\$7.065	\$7.247	\$6.937	\$6.028	\$4.887	\$4.784	\$4.848	\$4.914	\$4.924	\$4.894	\$4.965
Last Week	\$6.828	\$6.992	\$7.203	\$7.366	\$7.054	\$6.174	\$5.021	\$4.911	\$4.977	\$5.045	\$5.056	\$5.031
vs. Last Week	-\$0.062	\$0.073	\$0.044	-\$0.429	-\$1.026	-\$1.287	-\$0.237	-\$0.063	-\$0.063	-\$0.121	-\$0.162	-\$0.066
4 Weeks Ago	\$8.786	\$8.850	\$8.997	\$9.078	\$8.731	\$7.456	\$5.890	\$5.733	\$5.786	\$5.842	\$5.856	\$5.842
vs. 4 Weeks Ago	-\$2.020	-\$1.785	-\$1.750	-\$2.141	-\$2.703	-\$2.569	-\$1.106	-\$0.885	-\$0.872	-\$0.918	-\$0.962	-\$0.877
Last Year	\$5.619	\$5.763	\$5.853	\$5.742	\$5.367	\$3.940	\$3.787	\$3.820	\$3.861	\$3.869	\$3.851	\$3.880
vs. Last Year	\$1.147	\$1.302	\$1.394	\$1.195	\$0.661	\$0.947	\$0.997	\$1.028	\$1.053	\$1.055	\$1.043	\$1.085

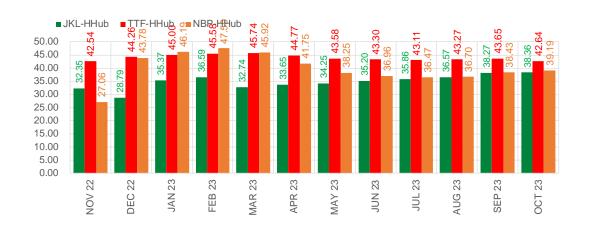
		Cash	Prompt	Cash to	
	Units	Settled	Settle	Prompt	
AGT Citygate	\$/MMBtu	5.10	5.10	0.00	
TETCO M3	\$/MMBtu	4.81	4.97	0.16	
FGT Zone 3	\$/MMBtu	4.95	7.46	2.51	
Zone 6 NY	\$/MMBtu	4.95	4.53	-0.43	
Chicago Citygate	\$/MMBtu	4.72	5.98	1.26	
Michcon	\$/MMBtu	4.74	5.86	1.12	
Columbia TCO Pool	\$/MMBtu	4.15	5.26	1.11	
Ventura	\$/MMBtu	4.67	5.91	1.24	
Rockies/Opal	\$/MMBtu	4.68	5.76	1.08	
El Paso Permian Basin	\$/MMBtu	2.74	4.17	1.43	
Socal Citygate	\$/MMBtu	5.49	6.42	0.93	
Malin	\$/MMBtu	5.10	6.12	1.02	
Houston Ship Channel	\$/MMBtu	4.68	5.87	1.19	
Henry Hub Cash	\$/MMBtu	5.64	5.72	0.08	
AECO Cash	C\$/GJ	3.27	3.22	-0.05	
Station2 Cash	C\$/GJ	0.39	6.00	5.61	
Dawn Cash	C\$/GJ	4.72	5.86	1.14	

Source: CME, Bloomberg

					\/ C	s. 4 Weeks		
	Units	<b>Current Price</b>	vs.	Last Week	va	Ago	vs	. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224		0.000		0.000		0.000
NatGas Oct21/Nov21	\$/MMBtu	0.361		0.000		0.000		0.436
NatGas Oct21/Jan22	\$/MMBtu	-1.817		0.000		0.000		-1.975
NatGas Apr22/Oct22	\$/MMBtu	1.532		-0.035	•	-1.918		1.611
WTI Crude	\$/Bbl	83.63		6.920	•	-3.240		6.010
Brent Crude	\$/Bbl	88.86		4.800	▼	-6.880		7.600
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18		0.000		0.000		0.000
Heating Oil	cents/Gallon	336.91		24.000	▼	-20.890		93.250
Propane, Mt. Bel	cents/Gallon	0.86	•	-0.132	•	-0.225		-0.643
Ethane, Mt. Bel	cents/Gallon	0.39		-0.072	•	-0.175		-0.049
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						



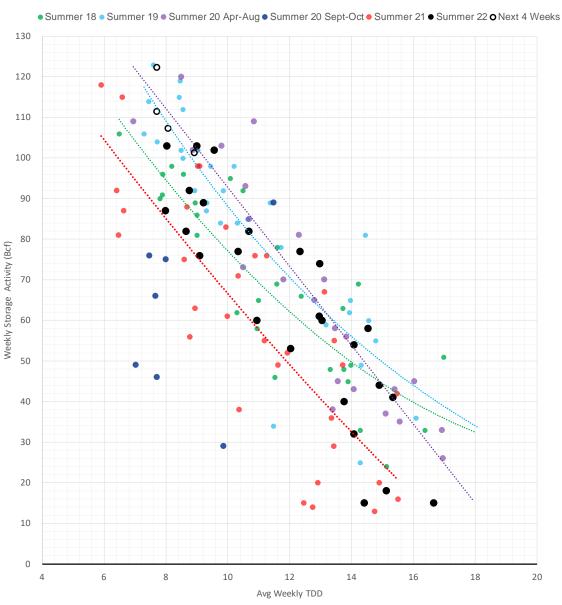




	NOV 22	DEC 22	JAN 23	FEB 23	MAR 23	APR 23	MAY 23	JUN 23	JUL 23	AUG 23	SEP 23	OCT 23
Henry Hub	\$6.517	\$6.847	\$7.008	\$6.734	\$5.947	\$4.812	\$4.701	\$4.769	\$4.853	\$4.855	\$4.820	\$4.905
JKL	\$38.870	\$35.640	\$42.380	\$43.325	\$38.685	\$38.465	\$38.950	\$39.965	\$40.715	\$41.425	\$43.090	\$43.260
JKL-HHub	\$32.353	\$28.793	\$35.372	\$36.591	\$32.738	\$33.653	\$34.249	\$35.196	\$35.862	\$36.570	\$38.270	\$38.355
TTF	\$49.060	\$51.103	\$52.005	\$52.312	\$51.690	\$49.584	\$48.279	\$48.064	\$47.963	\$48.121	\$48.470	\$47.541
TTF-HHub	\$42.543	\$44.256	\$44.997	\$45.578	\$45.743	\$44.772	\$43.578	\$43.295	\$43.110	\$43.266	\$43.650	\$42.636
NBP	\$33.580	\$50.631	\$53.194	\$54.320	\$51.865	\$46.566	\$42.950	\$41.731	\$41.327	\$41.550	\$43.254	\$44.096
NBP-HHub	\$27.063	\$43.784	\$46.186	\$47.586	\$45.918	\$41.754	\$38.249	\$36.962	\$36.474	\$36.695	\$38.434	\$39.191



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





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

