

### 19 October 2022



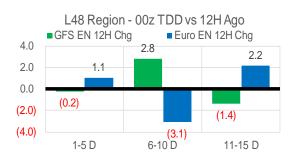
	С	urrent	Δf	rom YD		m 7D vg
WTI Prompt	\$	83.63		\$ 0.81	<b>-</b> \$	(2.3)

	_	urront	Λ fr	m VD	Δ from 7D			
	C	Current		טו וווע	Avg			
Brent	Ф	90.41	_	. 0.38	•	(1.5)		
Prompt	φ	90.41	_ 4	0.36	Ф	(1.5)		

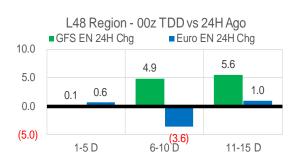
#### Page Menu

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	100.4	<b>0.07</b>	<b>-</b> 0.09

	Current	Δ from YD	Δ from 7D Avg
US ResComm	26.5	<b>-</b> 0.05	<b>8.81</b>

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	12.0	<b>a</b> 0.30	<b>a</b> 0.76

	Current		Δ from 7D Avg		
US Power Burns	31.8	▼ -0.72	<b>1.09</b>		

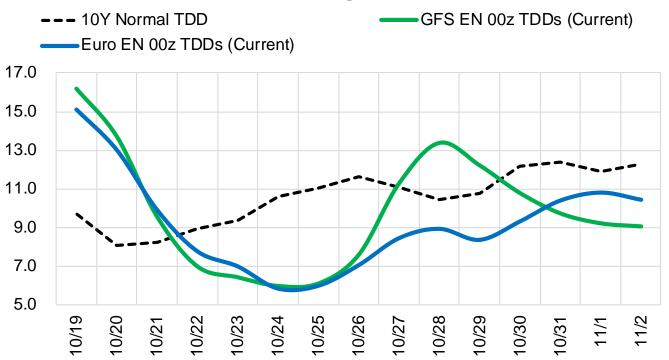
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	6.3	<b>0.10</b>	<b>0.46</b>

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.5	▼ -0.17	<b>a</b> 0.11



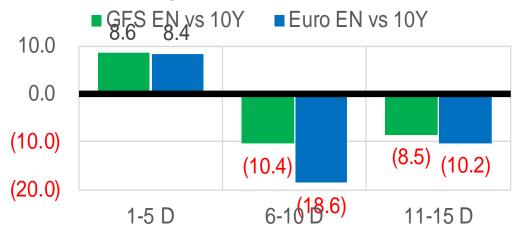
### Short-term Weather Model Outlooks (00z)





### Vs. 10Y Normal





Source: WSI, Bloomberg



## Lower 48 Component Models

#### **Daily Balances**

	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	DoD	vs. 7D
Lower 48 Dry Production	100.5	98.5	100.6	101.0	101.4	100.3	100.4	<b>▲ 0.1</b>	▼ 0.0
Canadian Imports	5.5	5.7	6.0	5.9	6.3	6.2	6.3	<b>▲ 0.1</b>	<b>0.4</b>
L48 Power	31.9	30.1	28.4	28.5	31.5	32.5	31.8	▼ -0.7	<b>1.3</b>
L48 Residential & Commercial	15.8	16.5	16.0	16.1	21.2	26.6	26.5	▼ 0.0	<b>~</b> 7.8
L48 Industrial	19.6	18.9	18.4	18.0	18.4	19.1	19.9	<b>8.0</b>	<b>1.1</b>
L48 Lease and Plant Fuel	5.6	5.5	5.6	5.6	5.7	5.6	5.6	▼ -0.1	<b>▼</b> -0.1
L48 Pipeline Distribution	2.9	2.9	2.7	2.8	3.2	3.6	3.6	▼ 0.0	<b>a</b> 0.6
L48 Regional Gas Consumption	75.8	73.9	71.1	71.0	79.9	87.4	87.3	▼ -0.1	<b>10.8</b>
Net LNG Delivered	11.15	11.25	11.00	11.12	11.81	11.73	12.03	<b>0.3</b>	<b>0.7</b>
Total Mexican Exports	6.6	6.6	6.4	6.0	6.1	6.7	6.5	▼ -0.2	<b>▲ 0.1</b>
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	12.4	12.4	18.1	18.9	9.9	0.7	8.0		

<b>EIA Storage Week Balances</b>								
_	LY				LW	Current		
	15-Oct	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	WoW	vs. LY
Lower 48 Dry Production	95.2	100.8	100.6	101.4	102.0	101.7	▼ -0.3	<b>6.5</b>
Canadian Imports	5.0	5.6	6.1	6.2	6.0	5.5	▼ -0.5	<b>0.6</b>
L48 Power	31.6	37.9	37.0	31.6	30.6	30.7	<b>0.1</b>	-1.0
L48 Residential & Commercial	9.2	8.0	8.2	11.9	13.1	14.9	<b>1.8</b>	5.7
L48 Industrial	21.9	20.9	21.3	20.0	20.9	21.0	<b>0.1</b>	-1.0
L48 Lease and Plant Fuel	5.3	5.6	5.6	5.6	5.7	5.7	▼ 0.0	0.4
L48 Pipeline Distribution	2.5	2.8	2.8	2.7	2.7	2.8	<b>0.1</b>	0.3
L48 Regional Gas Consumption	70.6	75.1	74.9	71.8	72.9	75.0	<b>2.1</b>	<b>4.4</b>
Net LNG Exports	10.7	11.3	11.5	11.8	11.0	11.0	▼ -0.1	<b>0.3</b>
Total Mexican Exports	6.6	6.7	6.6	6.9	6.5	6.4	▼ -0.2	▼-0.2
Implied Daily Storage Activity	12.3	13.3	13.8	17.1	17.6	14.8	-2.7	2.6
EIA Reported Daily Storage Activity	13.1	14.7	14.7	18.4	17.9			
Daily Model Error	-0.9	-1.4	-0.9	-1.3	-0.3			

	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	98.9	100.9	101.4	<b>0.5</b>	<b>6.0</b>
Canadian Imports	4.3	5.4	5.7	5.9	5.4	5.9	5.8	▼-0.1	<b>0.4</b>
L48 Power	30.6	30.4	38.3	44.3	43.1	36.8	30.6	<b>▼</b> -6.3	<b>0.1</b>
L48 Residential & Commercial	15.5	12.6	8.9	8.3	8.0	9.0	15.5	<b>6.5</b>	<b>2.9</b>
L48 Industrial	22.7	21.7	19.1	19.8	21.1	20.9	20.0	<b>▼</b> -1.0	<b>▼</b> -1.7
L48 Lease and Plant Fuel	4.8	5.3	5.5	5.5	5.5	5.6	5.7	<b>0.1</b>	<b>0.3</b>
L48 Pipeline Distribution	2.5	2.7	2.9	3.1	3.0	2.8	2.8	<b>0.0</b>	<b>0.2</b>
L48 Regional Gas Consumption	76.1	72.7	74.6	81.0	80.8	75.2	74.5	▼ -0.7	<b>1.9</b>
Net LNG Exports	8.0	10.6	11.2	10.9	11.0	11.5	11.0	▼-0.5	<b>0.4</b>
Total Mexican Exports	6.0	6.6	7.1	7.0	6.9	6.7	6.4	▼-0.3	▼ -0.2
Implied Daily Storage Activity EIA Reported Daily Storage Activity	2.7	11.0	10.0	4.7	5.7	13.5	15.3		
Daily Model Error					0.0				

Source: Bloomberg, analytix.ai



## **Daily** Average Generation Data

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

	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	DoD	vs. 7D
NRC Nuclear Daily Output	75.3	75.4	75.4	75.4	75.0	73.8	73.4	-0.4	-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	29.6	29.5	29.5	29.5	29.9	31.0	31.4	0.4	1.6
NRC % Nuclear Cap Utilization	76.6	76.7	76.7	76.6	76.3	75.1	74.7	-0.4	-1.6

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

	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	DoD	vs. 7D
CALI Wind	1123	1728	1164	1017	2216	1665	380	-1285	-1106
TEXAS Wind	14418	10956	5357	10237	14879	12443	10262	-2181	-1119
US Wind	67795	56873	47090	51137	52724	51464	49288	-2176	-5226

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

	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	DoD	vs. 7D
US Wind	67795	56873	47090	51137	52724	51464	49288	-2176	-5226
US Solar	14655	13357	13466	15515	13541	12594	11713	-881	-2141
US Petroleum	923	1090	1133	1074	923	901	989	88	-18
US Other	11113	11463	11086	12264	11339	13612	12422	-1191	608
US Coal	71059	74131	74573	74865	73468	74091	78193	4102	4495
US Nuke	76376	76416	76490	76262	75816	74566	74320	-246	-1668
US Hydro	19418	19999	21388	20032	16844	17105	16800	-305	-2331
US Gas	163039	174853	177448	161046	148756	144368	161583	17215	-2

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai



**US** Other

**US Coal** 

**US Nuke** 

US Hydro

**US Gas** 

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

## **Storage Week** Average Generation Data

	15-Oct	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	76.5	86.0	86.7	84.9	80.5	76.2	-4.3	0.8
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	28.3	18.9	18.1	20.0	24.4	28.7	4.3	
NRC % Nuclear Cap Utilization	77.8	87.4	88.2	86.4	81.9	77.5	-4.4	
Wind Generation Weekly Avera	age - MWI	h (EIA)						
	15-Oct	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	WoW	WoW Bcf/d Impact
CALI Wind	2400	2033	1941	1208	1370	1086	-284	0.1
CALI Wind TEXAS Wind	2400 15396	2033 8875	1941 11580	1208 8083	1370 6160	1086 7842	-284 1682	
								0.1
TEXAS Wind	15396	8875	11580	8083	6160	7842	1682	0.1 -0.3
TEXAS Wind US Wind	15396 49918	8875 37401	11580	8083	6160	7842	1682 8350	0.1 -0.3
TEXAS Wind	15396 49918	8875 37401	11580	8083	6160 32707	7842 41057	1682 8350	0.1 -0.3
TEXAS Wind US Wind	15396 49918	8875 37401	11580	8083	6160	7842 41057	1682 8350	0.1 -0.3 -1.6
TEXAS Wind US Wind	15396 49918	8875 37401	11580	8083	6160 32707	7842 41057 0.3	1682 8350	0.1 -0.3
TEXAS Wind US Wind	15396 49918 <b>//Wh (EIA</b> )	8875 37401	11580 47953	8083 40606	6160 32707 LY	7842 41057 0.3 Current	1682 8350 26%	0.1 -0.3 -1.6 WoW Bcf/d
TEXAS Wind US Wind  Generation Weekly Average - N	15396 49918 <b>//Wh (EIA</b> )	8875 37401 )	11580 47953 23-Sep	8083 40606 30-Sep	6160 32707 LY <b>7-Oct</b>	7842 41057 0.3 Current 14-Oct	1682 8350 26% WoW	0.1 -0.3 -1.6 WoW Bcf/d Impact

See National Wind and Nuclear daily charts

10065

91209

88711

25849

201189

10826

92461

89298

23537

197536

11151

77592

86649

23101

171818

10645

75016

84500

21719

171099

12239

89840

77060

24716

165326

Source: Bloomberg, analytix.ai

363

1145

-7265

-1871

-1106

11009

76160

77235

19848

169993

-0.1

-0.2

1.4

0.4

-0.2



## **Monthly** Average Generation Data

Nuclear Generation Monthly	Average -	GWh (NF	RC)						
	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	80.5	80.7	90.6	90.5	86.2	76.9	79.9	-9.3	-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	24.4	24.1	14.3	14.3	18.7	28.0	24.9	9.3	8.0
NRC % Nuclear Cap Utilization	81.8	82.1	92.1	92.1	87.7	78.2	81.3	-9.5	-0.8

#### 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	1495	1838	2719	2028	1608	1146	1215	-462	-623
TEXAS Wind	9032	10765	11765	8440	7993	8333	8274	340	-2491
US Wind	39342	40802	39701	33222	38117	40717	41534	2600	733

#### **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
US Wind	39342	40802	39701	33222	38117	40717	41534	<b>817.1</b>	<b>~</b> 733
US Solar	9239	11826	18599	16965	16179	14216	15105	<b>889.6</b>	<b>3279</b>
US Petroleum	889	706	1252	1253	864	837	736	<b>▼</b> -101	<b>30</b>
US Other	7972	10649	10142	10543	10489	11327	11220	<b>▼</b> -107	<b>571</b>
US Coal	73728	93477	119788	117200	92002	75828	78384	<b>2556</b>	<b>▼-</b> 15092
US Nuke	83763	82507	92883	92976	89052	77979	81893	<b>3914</b>	<b>▼</b> -614
US Hydro	24945	24716	34227	30121	25197	19511	20939	<b>1428</b>	<b>▼</b> -3777
US Gas	166713	164528	235752	233741	199945	166110	171901	<b>9397</b>	<b>~</b> 7373
US Total	404844	429118	551815	535704	470441	406805	420642	<b>17976</b>	▼ -8475



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai



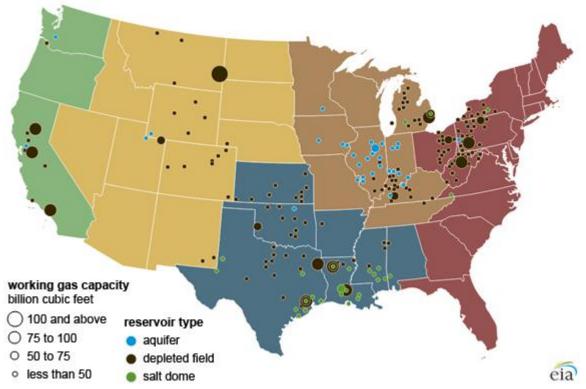
### Regional S/D Models Storage Projection

Week Ending 14-Oct

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	16.0	-0.4	15.6	109
East	1.2	2.6	3.8	27
Midwest	3.9	0.4	4.3	30
Mountain	4.8	-4.4	0.4	3
South Central	5.7	1.4	7.1	50
Pacific	0.4	-0.5	-0.1	0

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

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



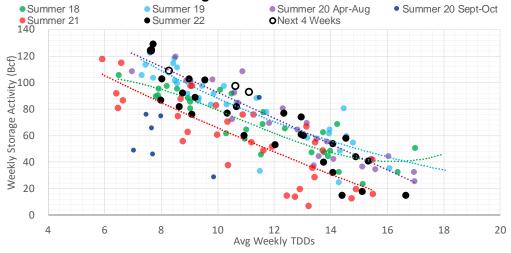


### Weather Model Storage Projection

Next report
and beyond

Week Ending	GWDDs	Week Storage Projection
14-Oct	8.3	109
21-Oct	11.1	93
28-Oct	7.7	124
04-Nov	10.6	97

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



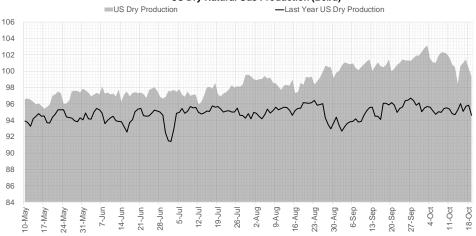
Go to larger image



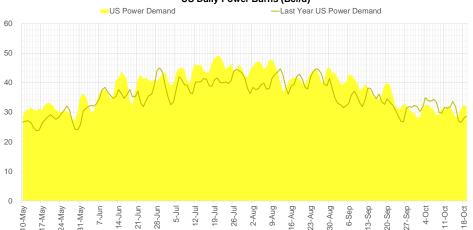


### Supply - Demand Trends

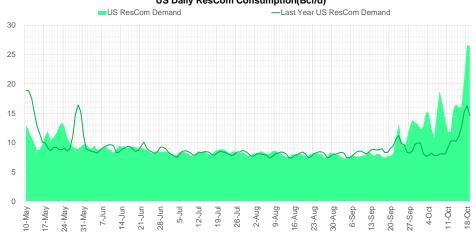
#### US Dry Natural Gas Production (Bcf/d)



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



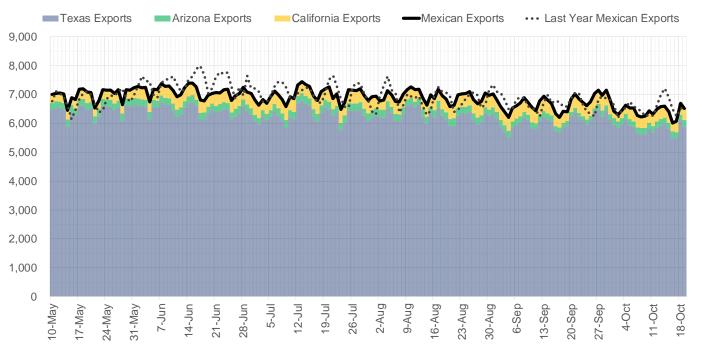
#### US Daily ResCom Consumption(Bcf/d)



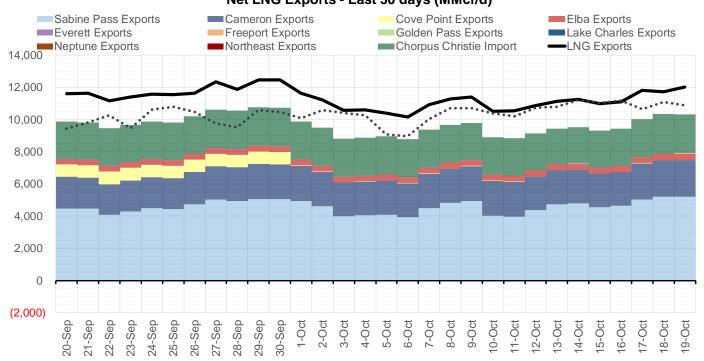
Source: Bloomberg



#### Mexican Exports (MMcf/d)



#### Net LNG Exports - Last 30 days (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	5.50	5209	12	2022	P	5.00	29303
11	2022	C	7.00	4917	12	2022	Р	4.00	26950
11	2022	Č	6.50	3888	11	2022	C	10.00	26939
3	2023	Č	8.00	3002	11	2022	P	6.00	24905
11	2022	Č	8.00	2753	11	2022	Р	4.00	24528
11	2022	P	5.65	2621	12	2022	Р	6.00	24340
11	2022	P	5.00	2481	3	2023	С	10.00	24032
11	2022	Р	5.25	2097	5	2023	Р	2.00	23262
3	2023	C	10.00	1748	11	2022	С	8.00	21693
3	2023	Č	6.00	1690	11	2022	Р	5.00	21561
12	2022	Č	9.00	1667	4	2023	Р	3.00	21226
1	2023	P	5.00	1635	10	2023	Р	3.00	21034
12	2022	C	7.50	1619	1	2023	С	10.00	20783
1	2023	C	10.00	1600	3	2023	Р	4.00	19980
11	2022	Č	6.00	1563	4	2023	Р	3.50	19446
11	2022	Č	8.50	1368	1	2023	Р	4.00	19417
2	2023	Č	10.00	1322	3	2023	Р	3.00	18936
12	2022	Č	6.50	1238	3	2023	С	20.00	18933
12	2022	C	10.00	1204	10	2023	Р	4.00	18841
1	2023	P	4.50	1176	10	2023	Р	2.50	18775
2	2023	P	5.00	1151	11	2022	Р	5.50	18257
5	2023	P	3.50	1135	12	2022	С	5.00	18227
3	2023	P	3.00	1125	2	2023	С	10.00	17912
12	2023	C	8.00	1064	11	2022	С	12.00	17519
1	2023	P	6.00	961	4	2023	Р	4.00	17148
2	2023	P	6.00	957	6	2023	Р	3.00	17050
12	2023	P	4.00	942	12	2022	Р	5.50	16908
12	2022	P	6.00	895	5	2023	Р	3.00	16803
3	2023	P	5.00	875	12	2022	С	10.00	16725
2	2023	C	12.00	849	9	2023	Р	4.00	16721
4	2023	C	7.00	800	3	2023	Р	2.75	16470
11	2023	P	4.75	770	5	2023	Р	3.50	16419
11	2022	C		770 759	2	2023	С	9.00	16388
12	2022	P	6.80 4.25	759 714	4	2023	Р	2.00	16298
4	2022	P	4.25	700	6	2023	Р	3.50	16284
1	2023	C	7.50	685	11	2022	Р	6.50	16207
11	2023	C	7.50 7.50	680	12	2022	С	4.00	16195
11	2022	P	7.50 5.75	665	10	2023	Р	3.50	16138
11	2022	C		660	8	2023	Р	3.50	15976
5	2022	C	8.25 5.00	660	7	2023	Р	3.50	15944
		C			9	2023	Р	3.50	15934
4	2023	P	5.00	655	11	2022	С	4.00	15755
4	2023		4.00	655	7	2023	Р	4.00	15679
6	2023	С	5.00	655	10	2023	Р	2.00	15673
7	2023	С	5.00	655	6	2023	Р	4.00	15621
8	2023	С	5.00	655	1	2023	Р	5.00	15605
9	2023	С	5.00	655	5	2023	P -	4.00	15318
10	2023	С	5.00	655	8	2023	P -	4.00	15206
4	2024	P	4.00	650	12	2022	Р	7.00	15173
5	2024	Р	4.00	650	7	2023	P Source	: CME, ICE	15105

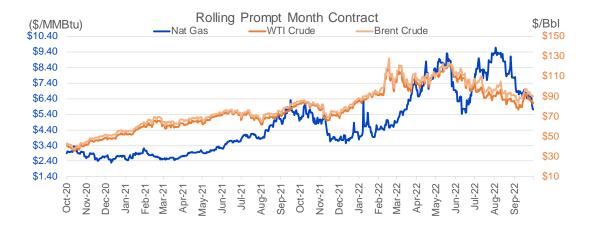


### Nat Gas Futures Open Interest

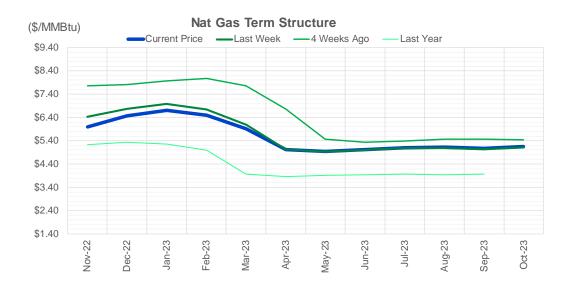
CME and ICE Combined

CME Harmall	ula Eutumaa (4)		and IOE Con		July Eutoman Card	wast Establish	Nort (40,000 NANA
Civic Henry H	ub Futures (1)			ICE Henry F			alent (10,000 MM
1101100	Current	Prior	Daily Change	1101/00	Current	Prior	Daily Change
NOV 22	55915	64157	-8242	NOV 22	74559	73600	959
DEC 22	86834	84688	2146	DEC 22	77540	76878	662
JAN 23	122566	119969	2597	JAN 23	72016	72097	-81
FEB 23	53234	52880	354	FEB 23	66551	66592	-41
MAR 23	89553	89260	293	MAR 23	59680	59665	15
APR 23	77429	77496	-67	APR 23	55916	55376	540
MAY 23	83969	83973	-4	MAY 23	56511	56220	292
JUN 23	24484	24531	-47	JUN 23	47210	46985	225
JUL 23	29842	29557	285	JUL 23	47499	47333	166
AUG 23	20874	20811	63	AUG 23	45463	45336	127
SEP 23	29041	28498	543	SEP 23	42836	42709	127
OCT 23	52512	52652	-140	OCT 23	55874	55686	188
NOV 23	23265	23264	1	NOV 23	47553	47593	-41
DEC 23	24998	24029	969	DEC 23	40306	40298	8
JAN 24	34303	34013	290	JAN 24	44345	44354	-9
FEB 24	9962	10132	-170	FEB 24	30919	30966	-47
MAR 24	20841	20692	149	MAR 24	35334	35367	-33
APR 24	19111	19116	-5	APR 24	30709	30549	160
MAY 24	8387	8410	-23	MAY 24	28434	28525	-91
JUN 24	3138	3122	16	JUN 24	26038	26128	-90
JUL 24	4002	3999	3	JUL 24	25451	25549	-98
AUG 24	3916	3901	15	AUG 24	25209	25310	-101
SEP 24	2492	2481	11	SEP 24	24823	24922	-99
OCT 24	8681	8724	-43	OCT 24	28688	28728	-40
NOV 24	4914	4906	8	NOV 24	26190	26226	-36
DEC 24	8276	8272	4	DEC 24	30094	30132	-39
JAN 25	17627	17515	112	JAN 25	23206	23230	-24
FEB 25	1718	1718	0	FEB 25	15709	15708	1
MAR 25	5315	5315	0	MAR 25	18008	18127	-119
APR 25	5336	5336	0	APR 25	16384	16352	32

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
Current Price	\$5.999	\$6.479	\$6.714	\$6.508	\$5.913	\$5.014	\$4.948	\$5.023	\$5.103	\$5.115	\$5.084	\$5.158
Last Week	\$6.435	\$6.784	\$6.974	\$6.743	\$6.081	\$5.022	\$4.932	\$5.005	\$5.077	\$5.083	\$5.048	\$5.120
vs. Last Week	-\$0.436	-\$0.305	-\$0.260	-\$0.235	-\$0.168	-\$0.008	\$0.016	\$0.018	\$0.026	\$0.032	\$0.036	\$0.038
4 Weeks Ago	\$7.752	\$7.804	\$7.966	\$8.074	\$7.764	\$6.764	\$5.466	\$5.347	\$5.402	\$5.458	\$5.469	\$5.450
vs. 4 Weeks Ago	-\$1.753	-\$1.325	-\$1.252	-\$1.566	-\$1.851	-\$1.750	-\$0.518	-\$0.324	-\$0.299	-\$0.343	-\$0.385	-\$0.292
Last Year	\$4.989	\$5.236	\$5.346	\$5.261	\$5.000	\$3.965	\$3.871	\$3.910	\$3.954	\$3.957	\$3.939	\$3.971
vs. Last Year	\$1.010	\$1.243	\$1.368	\$1.247	\$0.913	\$1.049	\$1.077	\$1.113	\$1.149	\$1.158	\$1.145	\$1.187

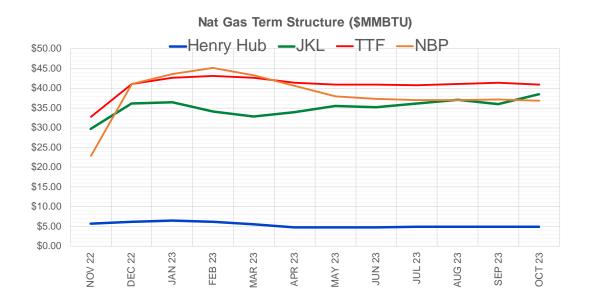
	Units	Cash Settled	Prompt Settle	Cash to
			l	Prompt
AGT Citygate	\$/MMBtu	6.10	10.45	4.35
TETCO M3	\$/MMBtu	5.65	6.27	0.62
FGT Zone 3	\$/MMBtu	5.77	6.79	1.02
Zone 6 NY	\$/MMBtu	5.77	6.36	0.59
Chicago Citygate	\$/MMBtu	5.87	6.27	0.40
Michcon	\$/MMBtu	5.56	6.11	0.55
Columbia TCO Pool	\$/MMBtu	5.44	5.74	0.30
Ventura	\$/MMBtu	5.77	6.32	0.55
Rockies/Opal	\$/MMBtu	5.47	5.92	0.45
El Paso Permian Basin	\$/MMBtu	5.07	2.97	-2.10
Socal Citygate	\$/MMBtu	7.52	6.45	-1.07
Malin	\$/MMBtu	5.00	6.23	1.23
Houston Ship Channel	\$/MMBtu	5.45	5.93	0.48
Henry Hub Cash	\$/MMBtu	6.00	5.91	-0.10
AECO Cash	C\$/GJ	2.94	4.34	1.40
Station2 Cash	C\$/GJ	2.28	6.71	4.43
Dawn Cash	C\$/GJ	5.75	6.15	0.40

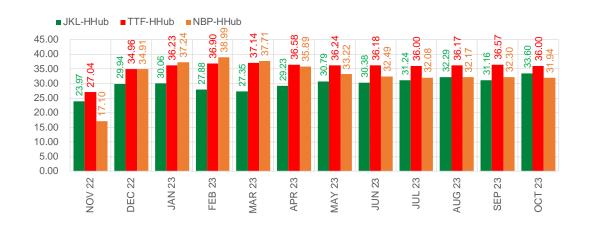
Source: CME, Bloomberg



					VS	s. 4 Weeks		
	Units	<b>Current Price</b>	vs.	<b>Last Week</b>		Ago	VS	s. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224		0.000		0.000		0.000
NatGas Oct21/Nov21	\$/MMBtu	0.361		0.000		0.000		1.114
NatGas Oct21/Jan22	\$/MMBtu	-1.817		0.000		0.000		-1.441
NatGas Apr22/Oct22	\$/MMBtu	1.532		0.000	•	-0.849		1.537
WTI Crude	\$/Bbl	82.82		-6.530	•	-1.630		-0.140
Brent Crude	\$/BbI	90.03		-4.260	▼	-0.590		4.950
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18		0.000		0.000		0.000
Heating Oil	cents/Gallon	399.35		6.270		62.130		143.280
Propane, Mt. Bel	cents/Gallon	0.84		-0.024	▼	-0.188		-0.637
Ethane, Mt. Bel	cents/Gallon	0.41		-0.017	•	-0.076		-0.025
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						



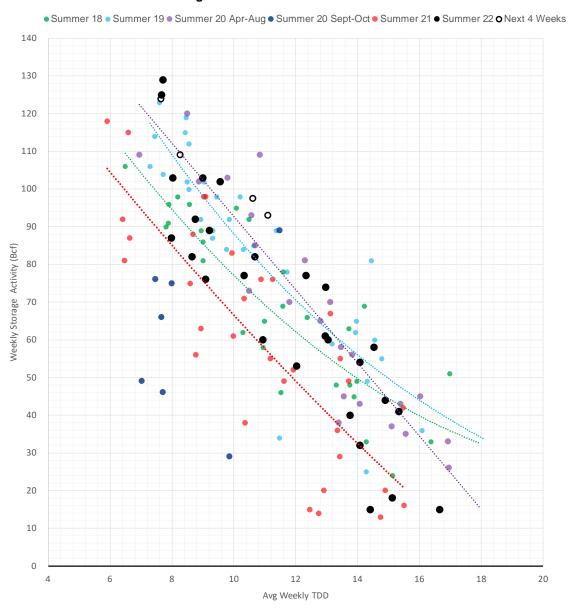




	NOV 22	<b>DEC 22</b>	JAN 23	FEB 23	MAR 23	APR 23	MAY 23	<b>JUN 23</b>	JUL 23	AUG 23	SEP 23	OCT 23
Henry Hub	\$5.722	\$6.171	\$6.434	\$6.209	\$5.599	\$4.784	\$4.726	\$4.799	\$4.879	\$4.897	\$4.873	\$4.949
JKL	\$29.690	\$36.110	\$36.490	\$34.090	\$32.945	\$34.010	\$35.515	\$35.175	\$36.120	\$37.185	\$36.035	\$38.550
JKL-HHub	\$23.968	\$29.939	\$30.056	\$27.881	\$27.346	\$29.226	\$30.789	\$30.376	\$31.241	\$32.288	\$31.162	\$33.601
TTF	\$32.765	\$41.129	\$42.666	\$43.105	\$42.740	\$41.363	\$40.964	\$40.983	\$40.875	\$41.071	\$41.439	\$40.947
TTF-HHub	\$27.043	\$34.958	\$36.232	\$36.896	\$37.141	\$36.579	\$36.238	\$36.184	\$35.996	\$36.174	\$36.566	\$35.998
NBP	\$22.818	\$41.080	\$43.670	\$45.196	\$43.306	\$40.672	\$37.946	\$37.289	\$36.962	\$37.069	\$37.176	\$36.886
NBP-HHub	\$17.096	\$34.909	\$37.236	\$38.987	\$37.707	\$35.888	\$33.220	\$32.490	\$32.083	\$32.172	\$32.303	\$31.937



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





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