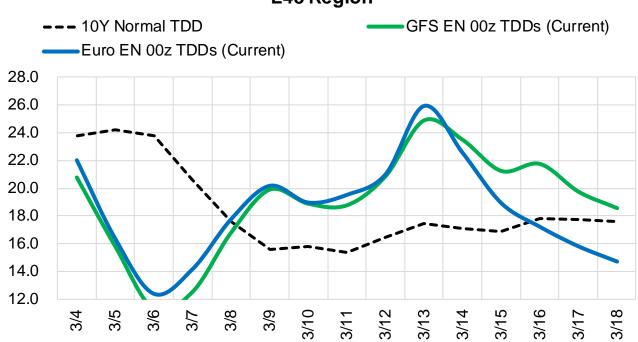


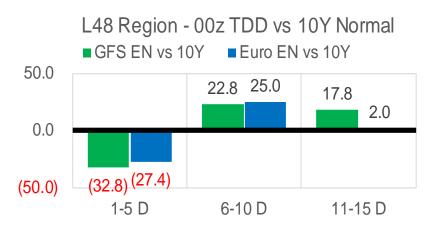


Short-term Weather Model Outlooks (00z)



L48 Region

Vs. 10Y Normal



Source: WSI, Bloomberg

Market Report

Daily Balances

	26-Feb	27-Feb	28-Feb	1-Mar	2-Mar	3-Mar	4-Mar	DoD	vs. 7D
Lower 48 Dry Production	93.8	93.7	94.6	95.0	94.8	95.1	95.4	0.2	0.9
Canadian Imports	6.0	6.2	6.1	5.3	4.8	5.2	5.2	▼ 0.0	▼ -0.4
L48 Power	28.8	29.2	29.1	27.1	26.2	26.6	25.6	▼ -1.0	▼ -2.3
L48 Residential & Commercial	48.0	40.7	39.0	31.1	28.1	33.9	34.9	1 .0	🔽 -1.9
L48 Industrial	24.3	22.9	22.4	21.4	21.5	22.2	22.5	A 0.3	0 .0
L48 Lease and Plant Fuel	5.1	5.1	5.2	5.2	5.2	5.2	5.2	▼ 0.0	a 0.0
L48 Pipeline Distribution	3.6	3.3	3.2	3.0	2.8	3.2	3.2	▼ 0.0	▼ 0.0
L48 Regional Gas Consumption	110.0	101.3	98.9	87.7	83.7	91.0	91.3	0.3	▼ -4.2
Net LNG Delivered	13.14	12.72	12.48	11.67	12.63	12.63	12.54	-0.1	▼ 0.0
Total Mexican Exports	6.4	6.0	6.3	6.5	6.5	6.5	6.6	0.1	0.3
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	-29.6	-20.1	-17.0	-5.6	-3.2	-9.8	-9.9		

Lower 48 Component Models

Daily Model Error

EIA Storage Week Balances

	28-Jan	4-Feb	11-Feb	18-Feb	25-Feb	4-Mar	WoW	vs. 4W
Lower 48 Dry Production	93.9	93.8	91.5	95.5	94.2	94.2	0.1	0.5
Canadian Imports	7.1	7.1	7.1	6.2	6.4	5.8	— -0.6	▼-0.9
L48 Power	31.9	29.7	29.4	26.8	27.3	28.2	1.0	▼ 0.0
L48 Residential & Commercial	53.5	49.0	45.8	40.3	41.4	38.6	▼ -2.8	T -5.5
L48 Industrial	26.4	27.0	24.6	26.1	26.2	25.9	T -0.3	T -0.1
L48 Lease and Plant Fuel	5.1	5.1	5.0	5.2	5.1	5.1	▼ 0.0	▲ 0.0
L48 Pipeline Distribution	4.1	3.8	3.5	3.2	3.2	3.3	0.0	- 0.2
L48 Regional Gas Consumption	121.1	114.6	108.3	101.6	103.2	101.1	▼ -2.1	▼ -5.8
Net LNG Exports	12.5	12.1	12.4	13.0	11.7	12.5	0.8	0.2
Total Mexican Exports	6.5	6.4	6.1	6.0	6.1	6.4	0.3	0.3
Implied Daily Storage Activity	-39.0	-32.2	-28.2	-18.8	-20.5	-20.0	0.5	
EIA Reported Daily Storage Activity	-38.3	-31.7	-27.1	-18.4	-19.9			
Daily Model Error	-0.7	-0.5	-1.1	-0.4	-0.6			

Monthly Balances

	2Yr Ago	LY					MTD		
	Mar-20	Mar-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	MoM	vs. LY
Lower 48 Dry Production	94.2	91.3	95.7	96.2	94.3	93.5	95.0	A 1.5	3.6
Canadian Imports	4.1	4.8	5.3	4.8	6.7	6.6	5.1	▼ -1.5	0.4
L48 Power	28.3	24.5	29.2	28.5	30.7	28.2	26.6	T -1.6	2 .1
L48 Residential & Commercial	27.6	28.9	28.4	33.8	49.1	43.0	31.0	▼-12.0	A 2.1
L48 Industrial	22.3	19.3	23.0	22.9	26.4	25.5	21.7	▼ -3.7	2 .5
L48 Lease and Plant Fuel	5.1	5.0	5.3	5.3	5.2	5.1	5.2	A 0.1	a 0.2
L48 Pipeline Distribution	2.9	2.8	2.9	3.2	3.9	3.4	3.0	▼ -0.4	a 0.2
L48 Regional Gas Consumption	86.2	80.4	88.8	93.7	115.2	105.1	87.5	▼-17.6	7.1
Net LNG Exports	8.5	11.1	11.4	12.1	12.4	12.4	12.3	▼ -0.1	1.2
Total Mexican Exports	5.4	6.5	6.1	6.2	6.3	6.2	6.5	0.3	▼ 0.0
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	-1.9	-2.0	-5.3	-11.0	-32.9	-23.6	-6.2		

Source: Bloomberg, analytix.ai



Daily Average Generation Data

Nuclear Generation Daily Average - GWh (NRC)

ENERGY

	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb	1-Mar	2-Mar	DoD	vs. 7D
NRC Nuclear Daily Output	86.5	86.5	86.2	85.4	86.1	86.5	85.6	-0.9	-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	18.4	18.3	18.6	19.5	18.8	18.4	19.3	0.9	0.6
NRC % Nuclear Cap Utilization	88.0	88.0	87.7	86.8	87.6	87.9	87.0	-0.9	-0.6

Wind Generation Daily Average - MWh (EIA)

	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb	1-Mar	2-Mar	DoD	vs.7D
CALI Wind	997	675	779	693	1131	815	556	-258	-292
TEXAS Wind	2951	7249	3272	5990	7368	5808	5527	-281	87
US Wind	22996	26549	35987	37569	44805	33509	30790	-2719	-2779

Generation Daily Average - MWh (EIA)

	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb	1-Mar	2-Mar	DoD	vs.7D
US Wind	22996	26549	35987	37569	44805	33509	30790	-2719	-2779
US Solar	10912	13237	12251	12107	14095	13808	14945	1137	2210
US Petroleum	4473	4362	2786	2610	3088	3062	3005	-58	-392
US Other	8745	8838	7737	7416	7498	6619	6554	-65	-1255
US Coal	118924	120078	108018	103182	103169	102058	95506	-6552	-13732
US Nuke	91156	91123	90550	90127	90742	90774	89044	-1730	-1701
US Hydro	33427	33738	31597	29396	31967	31542	33433	1891	1488
US Gas	197826	188624	172836	151975	153429	153621	145601	-8020	-24117

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

Storage Week Average Generation Data

Nuclear Generation Weekly Average - GWh (NRC)

	28-Jan	4-Feb	11-Feb	18-Feb	25-Feb	4-Mar	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	89.7	89.5	87.6	88.2	86.9	85.8	-1.1	0.2
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	15.2	15.4	17.3	16.7	18.0	19.1	1.1	
NRC % Nuclear Cap Utilization	91.2	91.0	89.1	89.7	88.3	87.2	-1.1	

Wind Generation Weekly Average - MWh (EIA)

	28-Jan	4-Feb	11-Feb	18-Feb	25-Feb	4-Mar	WoW	WoW Bcf/d Impact
CALI Wind	1580	1627	1156	2105	2261	744	-1517	0.3
TEXAS Wind	7185	12223	9259	16874	13068	5820	-7248	1.3
US Wind	45244	53914	53944	63320	60528	34285	-26243	4.7

-0.6

est.

Generation Weekly Average - MWh (EIA)

	28-Jan	4-Feb	11-Feb	18-Feb	25-Feb	4-Mar	WoW	WoW Bcf/d Impact
US Wind	45244	53914	53944	63320	60528	34285	-26243	4.7
US Solar	10087	10460	12288	12314	11828	13627	1799	-0.3
US Petroleum	5993	4672	3554	4126	2961	3131	171	0.0
US Other	9663	9661	9373	9134	8167	7317	-851	0.2
US Coal	130576	124851	113847	101772	99951	103931	3980	-0.7
US Nuke	94693	94661	92640	92758	91458	90200	-1258	0.2
US Hydro	34137	31810	32222	31959	33220	32158	-1062	0.2
US Gas	177834	159399	162271	137937	147074	158812	11738	-2.1

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	Dec-21	Jan-22	Feb-22	Mar-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
NRC Nuclear Daily Output	89.4	88.3	90.3	90.2	87.6	85.1	87.1	-2.5	-1.2
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	15.4	16.6	14.6	14.7	17.3	19.8	17.8	2.5	1.2
NRC % Nuclear Cap Utilization	91.0	89.8	91.8	91.7	89.0	86.5	88.5	-2.5	-1.2

Wind Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY				MTD			
	Same 30 S days	Same 30 days	Dec-21	Jan-22	Feb-22	Mar-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
CALI Wind	1231	2000	1585	1364	1719	621	1511	-1098	-490
TEXAS Wind	10004	9275	12927	11355	12294	5597	11259	-6697	1984
US Wind	38926	40852	54810	51165	56700	31470	52508	-25230	11656

Generation Monthly Average - MWh (EIA)

	2Yr Ago	LY				MTD			
	Same 30 days	Same 30 days	Dec-21	Jan-22	Feb-22	Mar-22	Last 30 days	MoM (MTD vs LY)	Last 30 days YoY
US Wind	38926	40852	54810	51165	56700	31470	52508	4 21038.8	A 11656
US Solar	6905	8823	7376	9476	12009	14661	12489	▼-2172.1	3665
US Petroleum	3348	3107	3135	5021	3449	3019	3396	A 377	289
US Other	6699	7514	8222	8792	8782	6570	8454	1884	4 940
US Coal	79057	126054	81617	118026	106657	97144	105055	4 7912	T -20999
US Nuke	90277	93279	95449	95259	92275	89476	91741	2264	T -1539
US Hydro	36511	32209	30826	34109	32220	32960	32392	▼ -568	183
US Gas	164864	1 50804	152627	164026	151948	147606	151776	a 30736	972
US Total	425027	460853	434177	485998	464591	423142	458324	40432	▼ -2530



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

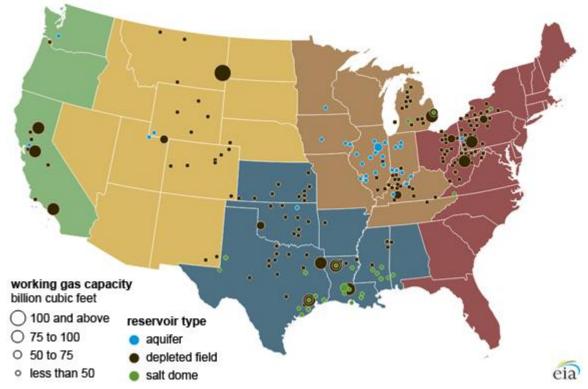


Regional S/D Models Storage Projection

Week Ending	4-Mar			
			Daily Average	Weekly
	Daily Raw Storage	Daily Adjustment Factor	Storage Activity (Adjusted) *	Adjusted Storage Activity
L48	-19.9	0.5	-19.4	-136
East	-8.4	2.0	-6.4	-45
Midwest	-5.3	0.0	-5.3	-37
Mountain	2.4	-3.8	-1.4	-10
South Central	-8.5	2.9	-5.6	-39
Pacific	-0.1	-0.6	-0.7	-5

*Adjustment Factor is calcuated based on historical regional deltas

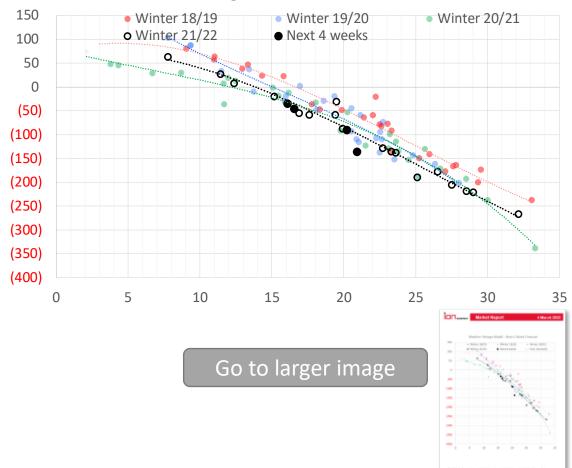
U.S. underground natural gas storage facilities by type (July 2015)



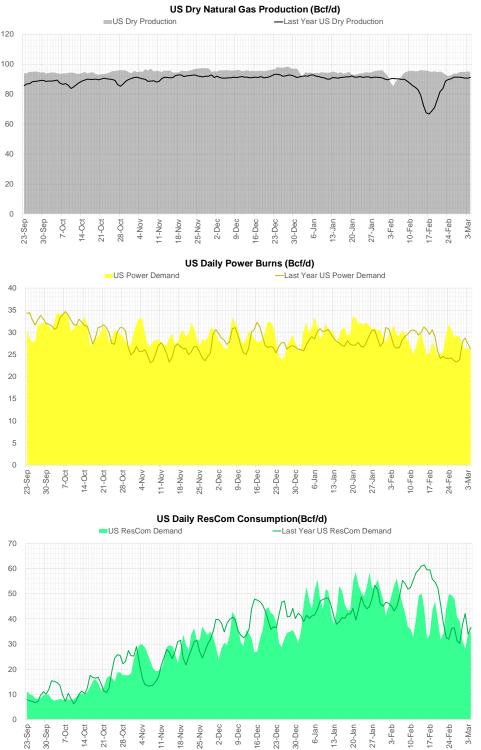
Weather Model Storage Projection

Next report and beyond		
Week Ending	GWDDs	Week Storage Projection
04-Mar	21	-136
11-Mar	17	-45
18-Mar	20	-90
25-Mar	16	-34

Weather Storage Model - Next 4 Week Forecast

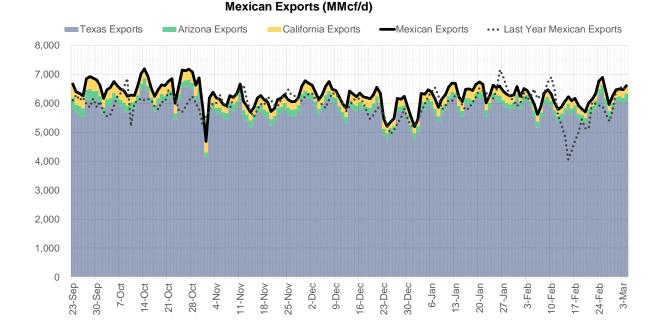






Source: Bloomberg





Sabine Pass Exports Cameron Exports Cove Point Exports Elba Exports Golden Pass Exports Lake Charles Exports Everett Exports Freeport Exports Chorpus Christie Import LNG Exports Neptune Exports Northeast Exports 16,000 14,000 12,000 10,000 8,000 6,000 4,000 2,000 0 (2,000)4-Feb 5-Feb 6-Feb 7-Feb 8-Feb IO-Feb 11-Feb 12-Feb 13-Feb 4-Feb 15-Feb 6-Feb 17-Feb 18-Feb 19-Feb 20-Feb 21-Feb 22-Feb 23-Feb 24-Feb 25-Feb 26-Feb 27-Feb 3-Feb 9-Feb 28-Feb 2-Mar 3-Mar 4-Mar 1-Mar

Net LNG Exports - Last 30 days (MMcf/d)

Source: Bloomberg

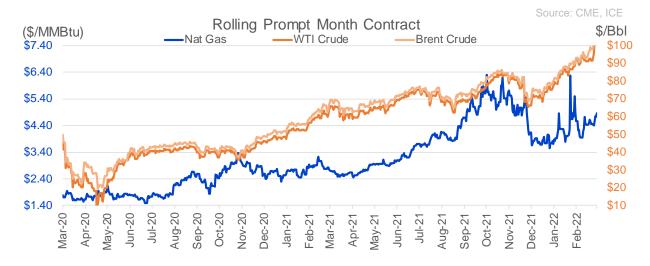


Nat Gas Options Volume and Open Interest CME and ICE Combined

CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
4	2022	Р	3.75	11140	4	2022	Р	3.50	32886
6	2022	Р	3.75	11124	4	2022	С	5.00	32467
4	2022	Р	4.00	4739	4	2022	Р	3.00	30079
4	2022	С	5.00	4670	10	2022	С	6.00	28592
4	2022	Р	4.50	3403	4	2022	С	4.75	28430
6	2022	Р	3.25	2554	10	2022	С	5.00	25829
3	2023	С	20.00	2550	4	2022	Р	4.00	23296
5	2022	Р	3.75	2381	5	2022	Р	3.00	22451
4	2022	С	5.25	2324	6	2022	С	6.00	22420
4	2022	С	6.00	2247	4	2022	С	6.00	22198
5	2022	Р	3.50	2168	5	2022	С	5.00	21908
6	2022	Р	3.50	2125	4	2022	Р	3.75	21522
4	2022	С	5.50	2119	5	2022	Р	2.50	19900
6	2022	С	6.00	2118	5	2022	С	6.00	19663
3	2023	С	6.00	2100	6	2022	С	5.00	18753
5	2022	Р	4.00	2058	9	2022	С	6.00	18632
8	2022	Р	3.75	1747	10	2022	Р	3.00	18434
5	2022	С	5.00	1743	4	2022	С	4.50	18383
5	2022	С	6.50	1693	12	2022	С	5.00	18346
7	2022	Р	3.25	1614	6	2022	Р	3.00	18230
10	2022	Р	4.00	1562	4	2022	P	4.50	18121
8	2022	Р	3.60	1472	8	2022	С	6.00	17730
5	2022	С	6.00	1470	4	2022	С	3.00	17511
7	2022	Р	4.00	1438	5	2022 2022	P P	2.75	17385
7	2022	С	6.00	1406	4			2.50	17297
8	2022	С	6.00	1388	4 7	2022	С	5.50 6.00	16877
6	2022	Р	3.00	1367		2022	C P		16854
9	2022	С	6.00	1260	7 6	2022 2022	P	3.25 3.75	16736 16358
7	2022	Р	3.75	1160	5	2022	P	4.00	16314
6	2022	С	6.50	1142	5 4	2022	P	4.00 3.25	15214
6	2022	С	7.00	1136	8	2022	P	3.25	15214
10	2022	С	6.00	1128	o 4	2022	F C	3.00 8.00	15106
4	2022	Р	3.00	1098	4 7	2022	P	3.00	15009
9	2022	Р	4.00	1082	10	2022	C	7.00	14837
5	2022	С	7.00	1078	7	2022	c	5.00	14693
6	2022	Р	4.00	1066	, 1	2022	c	5.00	14035
4	2022	С	7.00	1006	5	2023	c	7.00	14225
7	2022	Р	3.50	947	6	2022	c	4.50	13923
4	2022	С	6.50	941	10	2022	P	2.00	13921
5	2022	С	5.50	938	9	2022	P	3.00	13899
4	2022	С	5.75	926	5	2022	Ċ	3.00	13733
8	2022	Р	3.00	900	5	2022	P	3.50	13661
10	2022	P	3.00	900	12	2022	C	6.25	13633
9	2022	Р	3.50	846	4	2022	c	7.00	13572
8	2022	Р	4.00	845	6	2022	c	3.00	13438
7	2022	C	5.50	836	5	2022	c	4.00	13434
10	2022	P	3.50	812	7	2022	c	3.00	13230
8	2022	C	5.50	809	8	2022	C	3.00	13226
6	2022	P	4.50	745	9	2022			
					-		Source	e: CME, ICE	

Nat Gas Futures Open Interest CME and ICE Combined

CME Henry H	Hub Futures (1)			ICE Henry	Hub Futures Cont		
	Current	Prior	Daily Change		Current	Prior	Daily Change
APR 22	124146	128633	-4487	APR 22	79956	82059	-2103
MAY 22	193456	193016	440	MAY 22	80896	80438	458
JUN 22	71808	71916	-108	JUN 22	72388	71986	402
JUL 22	79624	84083	-4459	JUL 22	67208	66620	589
AUG 22	45215	44635	580	AUG 22	61661	61592	69
SEP 22	66511	67965	-1454	SEP 22	62654	62470	184
OCT 22	83118	85679	-2561	OCT 22	71379	70549	830
NOV 22	43216	44557	-1341	NOV 22	55948	56044	-96
DEC 22	43641	43932	-291	DEC 22	65601	65767	-166
JAN 23	61761	59671	2090	JAN 23	63970	62603	1367
FEB 23	21179	22262	-1083	FEB 23	45593	45472	122
MAR 23	39229	39658	-429	MAR 23	50346	50142	204
APR 23	39157	39305	-148	APR 23	48455	48388	67
MAY 23	24264	24200	64	MAY 23	43030	43123	-93
JUN 23	14141	13107	1034	JUN 23	39963	39848	115
JUL 23	10536	10259	277	JUL 23	39740	39622	119
AUG 23	7884	7454	430	AUG 23	39334	39388	-54
SEP 23	12017	11525	492	SEP 23	38851	38721	130
OCT 23	22143	22522	-379	OCT 23	43145	43061	85
NOV 23	11095	10754	341	NOV 23	40695	40693	2
DEC 23	14226	14016	210	DEC 23	35433	35401	32
JAN 24	15860	15305	555	JAN 24	29268	28818	450
FEB 24	3392	3401	-9	FEB 24	20056	19941	115
MAR 24	14197	14197	0	MAR 24	25915	25941	-26
APR 24	7008	7038	-30	APR 24	20183	20037	147
MAY 24	2392	2397	-5	MAY 24	19037	19025	12
JUN 24	1077	1074	3	JUN 24	18881	18764	117
JUL 24	868	866	2	JUL 24	19607	19587	19
AUG 24	988	986	2	AUG 24	19356	19306	51
SEP 24	1124	1126	-2	SEP 24	19050	19039	12



vs. Last Year

\$1.946

\$1.938

\$1.931

\$1.930

\$1.916

\$1.906

\$1.915

\$1.931

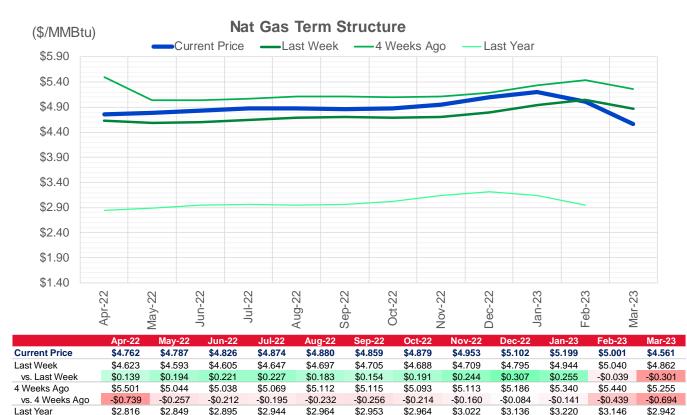
\$1.966

Market Report

\$1.855

\$1.619

\$1.979



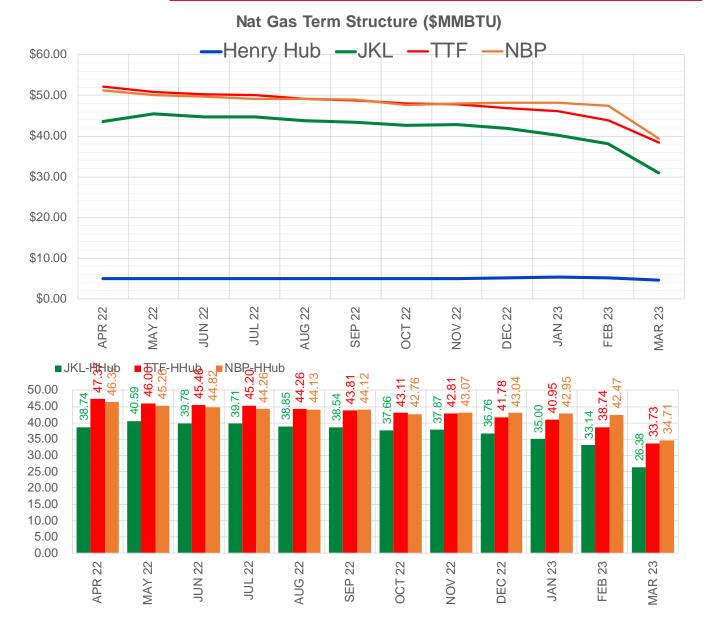
		Cash	Prompt	Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	5.15	8.25	3.10
TETCO M3	\$/MMBtu	4.75	4.07	-0.68
FGT Zone 3	\$/MMBtu	4.91	4.62	-0.29
Zone 6 NY	\$/MMBtu	4.91	4.13	-0.78
Chicago Citygate	\$/MMBtu	4.39	4.47	0.08
Michcon	\$/MMBtu	4.42	4.40	-0.02
Columbia TCO Pool	\$/MMBtu	4.19	3.87	-0.32
Ventura	\$/MMBtu	4.38	4.59	0.21
Rockies/Opal	\$/MMBtu	4.22	4.27	0.04
El Paso Permian Basin	\$/MMBtu	4.09	3.92	-0.18
Socal Citygate	\$/MMBtu	4.45	4.32	-0.13
Malin	\$/MMBtu	4.18	4.20	0.02
Houston Ship Channel	\$/MMBtu	4.45	4.26	-0.20
Henry Hub Cash	\$/MMBtu	4.58	4.29	-0.29
AECO Cash	C\$/GJ	4.01	3.67	-0.34
Station2 Cash	C\$/GJ	3.88	4.07	0.19
Dawn Cash	C\$/GJ	4.54	4.52	-0.02

Source: CME, Bloomberg

П	ENERGY

				V	s. 4 Weel	ks	
	Units	Current Price	vs. Last	Week	Ago	VS	. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	a 0.00	0	0.000		2.196
NatGas Oct21/Nov21	\$/MMBtu	0.361	a 0.00	0 🔺	0.000		0.301
NatGas Oct21/Jan22	\$/MMBtu	-1.817	a 0.00	0	0.000	-	-2.080
NatGas Apr22/Oct22	\$/MMBtu	0.101	- 0.01	9 🔺	0.005		0.063
WTI Crude	\$/Bbl	107.67	1 4.86	60 🔺	17.400		43.840
Brent Crude	\$/Bbl	110.46	A 11.38	30 🔺	19.350		43.720
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	a 0.00	0 🔺	0.000		0.000
Heating Oil	cents/Gallon	350.34	a 60.65	50 🔺	66.390		160.740
Propane, Mt. Bel	cents/Gallon	1.53	a 0.21	4 🔺	0.249		0.557
Ethane, Mt. Bel	cents/Gallon	0.42	a 0.01	8 🔻	-0.008		0.206
Coal, PRB	\$/MTon	12.30	a 0.00	0 🔺	0.000		0.000
Coal, PRB	\$/MMBtu	0.70					
Coal, ILB	\$/MTon	31.05	a 0.00	0	0.000		0.000
Coal, ILB	\$/MMBtu	1.32					

Market Report

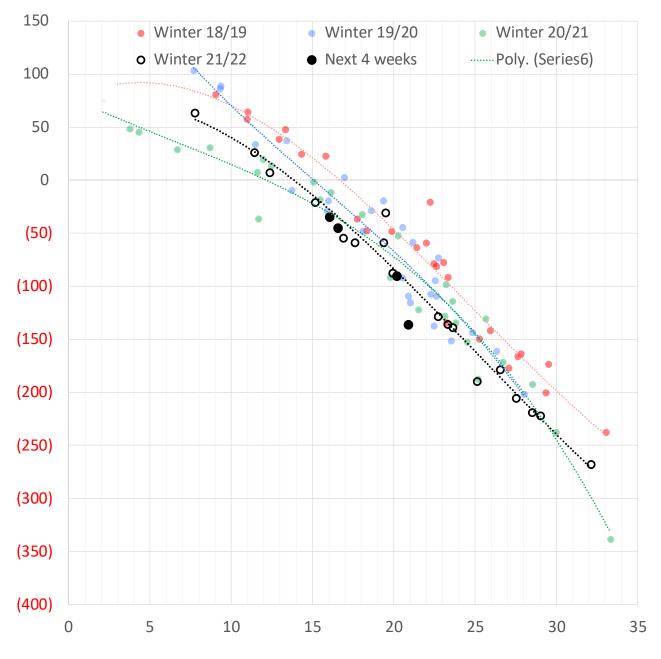


	APR 22	MAY 22	JUN 22	JUL 22	AUG 22	SEP 22	OCT 22	NOV 22	DEC 22	JAN 23	FEB 23	MAR 23
Henry Hub	\$4.862	\$4.878	\$4.907	\$4.951	\$4.972	\$4.935	\$4.960	\$5.040	\$5.164	\$5.254	\$5.068	\$4.613
JKL	\$43.600	\$45.470	\$44.685	\$44.665	\$43.825	\$43.475	\$42.615	\$42.905	\$41.925	\$40.255	\$38.210	\$30.990
JKL-HHub	\$38.738	\$40.592	\$39.778	\$39.714	\$38.853	\$38.540	\$37.655	\$37.865	\$36.761	\$35.001	\$33.142	\$26.377
TTF	\$52.228	\$50.880	\$50.369	\$50.152	\$49.235	\$48.747	\$48.065	\$47.853	\$46.939	\$46.203	\$43.809	\$38.340
TTF-HHub	\$47.366	\$46.002	\$45.462	\$45.201	\$44.263	\$43.812	\$43.105	\$42.813	\$41.775	\$40.949	\$38.741	\$33.727
NBP	\$51.230	\$50.136	\$49.724	\$49.214	\$49.098	\$49.055	\$47.720	\$48.109	\$48.206	\$48.207	\$47.542	\$39.318
NBP-HHub	\$46.368	\$45.258	\$44.817	\$44.263	\$44.126	\$44.120	\$42.760	\$43.069	\$43.042	\$42.953	\$42.474	\$34.705

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.

4 March 2022

Weather Storage Model - Next 4 Week Forecast



Market Report

ENERGY

4 March 2022

