

17 February 2021

	Cı	urrent	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$	3.11	\$ (0.02)	\$ 0.18

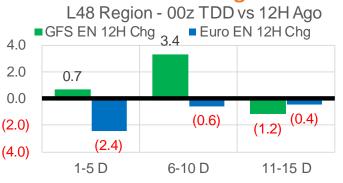
	Cı	urrent	Δ fr	O	m YD		m 7D vg
WTI Prompt	\$	61.09	<u></u>	\$	1.04	\$	1.8

	_	Current		m VD	Δ from 7D		
	C	urreni	Δ 110	טו ווו	А١	/g	
Brent Prompt	\$	64.61	\$	1.26	\$	2.2	

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Price Summary

Vs. 12H Ago



Vs. 24H Ago

L48 Region - 00z TDD vs 24H Ago GFS EN 24H Chg ■ Euro EN 24H Chg 5.0 2.4 1.9 1.7 1.5 0.0 (8.0)(5.0)(4.9)(10.0)1-5 D 6-10 D 11-15 D

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	70.5	▼ -6.99	▼ -13.12

	Current	Δ from YD	Δ from 7D Avg
US ResComm	58.2	▼ -0.17	0.16

	Current	Δ from YD	Δ from 7D Avg	
Net LNG Exports	5.5	4.10	▼ -1.44	

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	27.9	▼ -2.35	▼ -2.42

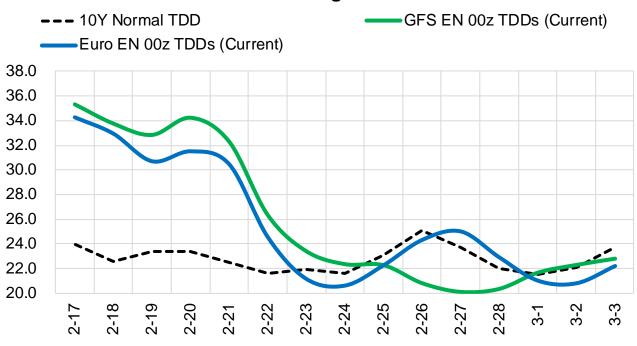
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	7.9	▼ -0.02	a 0.66

	Current	Δfı	rom YD	Δfı	rom 7D Avg
Mexican Exports	5.7		1.30		0.20

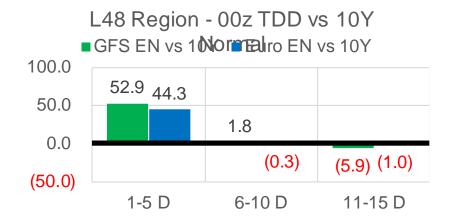


Short-term Weather Model Outlooks (00z)

L48 Region



Vs. 10Y Normal



Source: WSI, Bloomberg



Lower 48 Component Models

Daily Balances

11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb	DoD	vs. 7D
88.2	87.1	85.3	82.2	74.9	77.5	70.5	▼ -7.0	▼-12.0
6.7	7.0	7.2	7.5	7.8	7.9	7.9	▼ 0.0	▲ 0.6
30.6	30.4	29.5	30.1	30.9	30.2	27.9	▼-2.3	▼ -2.4
56.2	58.9	59.3	60.5	60.2	58.4	58.2	▼ -0.2	- 0.7
26.4	26.1	24.9	24.5	24.0	23.5	23.4	▼ 0.0	▼ -1.4
4.9	4.8	4.7	4.5	4.1	3.9	3.9	0.0	▼ -0.6
3.9	4.0	4.0	4.1	4.1	4.0	3.9	▼-0.1	▼ -0.1
122.0	124.1	122.4	123.6	123.4	119.9	117.3	▼-2.6	▼ -5.3
9.69	8.79	7.00	6.96	4.72	1.40	5.50	4.1	▼ -0.9
6.6	5.9	5.4	5.0	4.3	4.4	5.7	1.3	0.4
-43.4	-44.7	-42.3	-45.9	-49.7	-40.3	-50.1		
	88.2 6.7 30.6 56.2 26.4 4.9 3.9 122.0 9.69 6.6	88.2 87.1 6.7 7.0 30.6 30.4 56.2 58.9 26.4 26.1 4.9 4.8 3.9 4.0 122.0 124.1 9.69 8.79 6.6 5.9	88.2 87.1 85.3 6.7 7.0 7.2 30.6 30.4 29.5 56.2 58.9 59.3 26.4 26.1 24.9 4.9 4.8 4.7 3.9 4.0 4.0 122.0 124.1 122.4 9.69 8.79 7.00 6.6 5.9 5.4	88.2 87.1 85.3 82.2 6.7 7.0 7.2 7.5 30.6 30.4 29.5 30.1 56.2 58.9 59.3 60.5 26.4 26.1 24.9 24.5 4.9 4.8 4.7 4.5 3.9 4.0 4.0 4.1 122.0 124.1 122.4 123.6 9.69 8.79 7.00 6.96 6.6 5.9 5.4 5.0	88.2 87.1 85.3 82.2 74.9 6.7 7.0 7.2 7.5 7.8 30.6 30.4 29.5 30.1 30.9 56.2 58.9 59.3 60.5 60.2 26.4 26.1 24.9 24.5 24.0 4.9 4.8 4.7 4.5 4.1 3.9 4.0 4.0 4.1 4.1 122.0 124.1 122.4 123.6 123.4 9.69 8.79 7.00 6.96 4.72 6.6 5.9 5.4 5.0 4.3	88.2 87.1 85.3 82.2 74.9 77.5 6.7 7.0 7.2 7.5 7.8 7.9 30.6 30.4 29.5 30.1 30.9 30.2 56.2 58.9 59.3 60.5 60.2 58.4 26.4 26.1 24.9 24.5 24.0 23.5 4.9 4.8 4.7 4.5 4.1 3.9 3.9 4.0 4.0 4.1 4.1 4.0 122.0 124.1 122.4 123.6 123.4 119.9 9.69 8.79 7.00 6.96 4.72 1.40 6.6 5.9 5.4 5.0 4.3 4.4	88.2 87.1 85.3 82.2 74.9 77.5 70.5 6.7 7.0 7.2 7.5 7.8 7.9 7.9 30.6 30.4 29.5 30.1 30.9 30.2 27.9 56.2 58.9 59.3 60.5 60.2 58.4 58.2 26.4 26.1 24.9 24.5 24.0 23.5 23.4 4.9 4.8 4.7 4.5 4.1 3.9 3.9 3.9 4.0 4.0 4.1 4.1 4.0 3.9 122.0 124.1 122.4 123.6 123.4 119.9 117.3 9.69 8.79 7.00 6.96 4.72 1.40 5.50 6.6 5.9 5.4 5.0 4.3 4.4 5.7	88.2 87.1 85.3 82.2 74.9 77.5 70.5 ▼-7.0 6.7 7.0 7.2 7.5 7.8 7.9 7.9 ▼ 0.0 30.6 30.4 29.5 30.1 30.9 30.2 27.9 ▼-2.3 56.2 58.9 59.3 60.5 60.2 58.4 58.2 ▼-0.2 26.4 26.1 24.9 24.5 24.0 23.5 23.4 ▼ 0.0 4.9 4.8 4.7 4.5 4.1 3.9 3.9 ▲ 0.0 3.9 4.0 4.0 4.1 4.1 4.0 3.9 ▼-0.1 122.0 124.1 122.4 123.6 123.4 119.9 117.3 ▼-2.6 9.69 8.79 7.00 6.96 4.72 1.40 5.50 ▲ 4.1 6.6 5.9 5.4 5.0 4.3 4.4 5.7 ▲ 1.3

EIA Storage Week Balances

	8-Jan	15-Jan	22-Jan	29-Jan	5-Feb	12-Feb	WoW	vs. 4W
Lower 48 Dry Production	92.4	91.2	91.5	91.8	91.8	91.3	▼ -0.5	▼-0.3
Canadian Imports	6.2	6.2	5.9	6.4	6.3	6.3	▼ 0.0	▲ 0.1
L48 Power	28.4	30.2	27.8	28.8	29.0	28.8	▼-0.1	▼-0.1
L48 Residential & Commercial	41.6	45.6	41.6	47.5	46.6	52.3	5.7	7.0
L48 Industrial	22.9	23.3	22.3	25.0	23.1	27.0	3.9	3.6
L48 Lease and Plant Fuel	5.1	5.0	5.0	5.1	5.1	5.0	▼ 0.0	▼ 0.0
L48 Pipeline Distribution	3.2	3.4	3.1	3.5	3.4	3.6	0.2	0.3
L48 Regional Gas Consumption	101.1	107.6	99.9	109.8	107.1	116.8	9.7	10.7
Net LNG Exports	10.9	10.6	10.4	10.0	10.7	10.7	▼ 0.0	0.3
Total Mexican Exports	5.9	6.1	6.1	6.6	6.2	6.4	▲ 0.2	0.2
Implied Daily Storage Activity EIA Reported Daily Storage Activity	-19.3 -19.1	-26.9 -26.7	-19.0 -18.3	-28.1 -27.4	-25.8 -24.4	-36.2	-10.4	
Daily Model Error	-0.2	-0.2	-0.7	-0.7	-1.4			

Monthly Balances	2Yr Ago	LY					MTD		
	Feb-19	Feb-20	Dec-17	Jan-18	Dec-20	Jan-21	Feb-21	MoM	vs. LY
Lower 48 Dry Production	87.9	93.6	78.6	77.0	91.9	91.7	87.3	▼ -4.5	▲10.3
Canadian Imports	4.9	5.3	5.6	5.9	5.8	6.3	6.7	0.4	▲ 0.8
L48 Power	27.5	30.2	25.2	25.3	28.1	28.7	29.4	0.7	▲ 4.1
L48 Residential & Commercial	45.3	40.2	42.8	48.9	40.1	44.4	53.2	8.7	4.2
L48 Industrial	23.6	25.2	24.8	23.8	24.0	23.3	25.1	1.8	1.4
L48 Lease and Plant Fuel	4.9	5.2	4.7	4.3	5.1	5.1	4.8	▼-0.3	0.5
L48 Pipeline Distribution	3.3	3.2	2.7	3.2	3.1	3.3	3.7	0.4	0.5
L48 Regional Gas Consumption	104.5	104.0	100.1	105.5	100.3	104.9	116.2	11.3	10.7
Net LNG Exports	4.1	8.5	3.0	2.2	11.0	10.5	9.0	▼ -1.5	6.7
Total Mexican Exports	4.9	5.2	4.1	4.2	5.8	6.2	5.9	▼ -0.3	<u>1.7</u>
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	-20.8	-18.8	-22.8	-29.1	-19.5	-23.5	-37.1		

Source: Bloomberg, analytix.ai



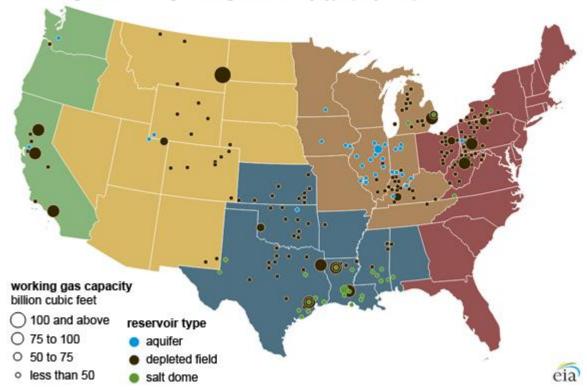
Regional S/D Models Storage Projection

Week Ending 12-Feb

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-36.5	1.2	-35.4	-248
East	-10.4	2.8	-7.6	-53
Midwest	-10.5	-0.2	-10.7	-75
Mountain	1.7	-3.4	-1.7	-12
South Central	-15.1	2.2	-12.9	-90
Pacific	-2.3	-0.2	-2.4	-17

^{*}Adjustment Factor is calcuated based on historical regional deltas

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





Weather Model Storage Projection

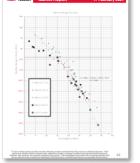
Next report
and beyond

Week Ending	GWDDs	Week Storage Projection
12-Feb	30.0	-248
19-Feb	33.6	-319
26-Feb	26.1	-160
05-Mar	22.4	-103

Winter Storage Forecast



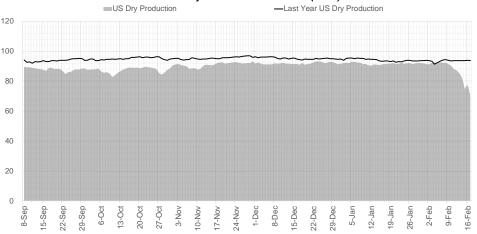
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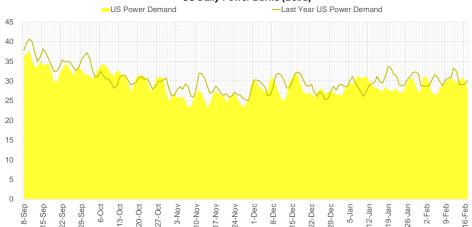


Supply - Demand Trends

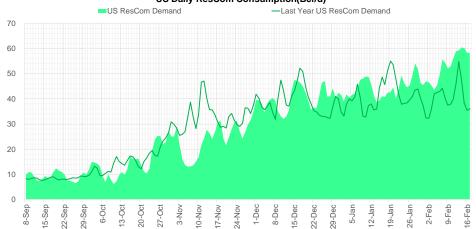
US Dry Natural Gas Production (Bcf/d)



US Daily Power Burns (Bcf/d)



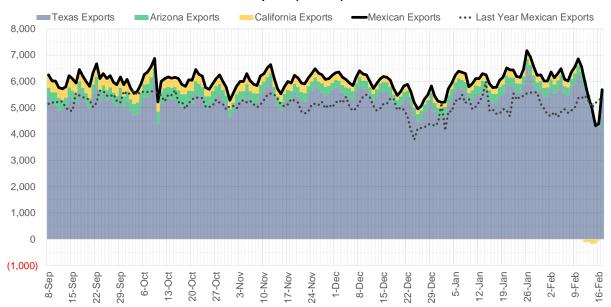
US Daily ResCom Consumption(Bcf/d)



Source: Bloomberg



Mexican Exports (MMcf/d)



Net LNG Exports - Last 30 days (MMcf/d) Cove Point Exports Sabine Pass Exports Cameron Exports Elba Exports Freeport Exports Golden Pass Exports Everett Exports Lake Charles Exports Chorpus Christie Import LNG Exports Neptune Exports Northeast Exports 12,000 10,000 8,000 6,000 4,000 2,000 0 (2,000)

Source: Bloomberg



Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
3	2021	С	3.25	36368	4	2021	С	3.00	54181
3	2021	C	3.50	30119	3	2021	Č	4.00	52971
3	2021	Č	4.00	23822	3	2021	Č	3.25	51454
3	2021	P	2.75	13658	3	2021	P	2.00	44158
3	2021	Ċ	3.75	13364	3	2021	C	3.00	40988
3	2021	Č	3.00	6556	4	2021	Č	4.00	39038
3	2021	P	3.00	6127	3	2021	Č	3.50	36109
3	2021	Ċ	3.20	6073	10	2021	С	4.00	34186
3	2021	Č	3.10	5068	3	2021	Р	2.50	32129
4	2021	Ċ	3.00	3954	3	2021	С	5.00	32021
3	2021	Ċ	3.55	3800	3	2021	С	4.50	30362
4	2021	Ċ	3.25	3662	4	2021	Р	2.50	28674
3	2021	Č	3.60	3081	4	2021	Р	2.00	27852
3	2021	P	2.90	2982	4	2021	С	3.25	27555
3	2021	P	2.80	2906	10	2021	С	3.25	26736
4	2021	P	2.50	2517	3	2021	С	6.00	24967
3	2021	C	3.90	2161	3	2021	Р	2.25	22668
4	2021	P	2.35	2037	6	2021	С	4.00	22049
3	2021	P	2.35	1871	4	2021	С	2.75	21968
3	2021	C	3.30	1844	3	2021	С	7.00	21025
3	2021	C	3.35		10	2021	С	5.00	20906
				1745	5	2021	Р	2.50	20693
3	2021	С	3.15	1679	4	2021	Р	2.25	20444
4	2021	С	3.50	1628	8	2021	Р	2.25	20428
3	2021	P	2.60	1620	5	2021	С	3.00	19895
3	2021	С	3.40	1326	3	2021	Р	2.75	19831
4	2021	P	2.25	1313	8	2021	С	4.00	19744
3	2021	С	5.00	1286	8	2021	С	3.50	19225
10	2021	P	2.50	1275	4	2021	С	5.00	19052
3	2021	С	3.65	1180	7	2021	С	4.00	18990
3	2021	C	3.85	1115	10	2021	С	3.50	18629
10	2021	P	2.20	1100	5	2021	Р	2.00	18553
4	2021	Р	2.55	1095	5	2021	С	4.00	18427
5	2021	P	2.75	1014	5	2021	С	3.50	18317
3	2021	С	4.20	1012	4	2021	С	3.50	18287
5	2021	С	3.10	1001	4	2022	С	3.00	17481
3	2021	Р	2.50	993	10	2021	Р	2.00	17257
4	2021	С	3.75	986	10	2021	С	3.00	17046
3	2021	Р	2.65	934	12	2021	С	4.00	16933
3	2021	Р	2.70	886	5	2021	С	3.25	16606
3	2021	С	3.45	875	11	2021	С	4.00	16100
3	2021	С	2.90	827	6	2021	Р	2.50	16005
3	2021	С	4.50	802	6	2021	Р	2.00	15876
5	2021	Р	2.25	778	3	2021	Р	2.10	15868
5	2021	Р	2.50	723	9	2021	Р	2.00	15336
4	2021	Р	2.60	700	10	2021	Р	2.50	15307
3	2021	С	4.25	677	3	2021	С	3.75	15273
3	2021	Р	2.85	649	5	2021	Р	2.25	15202
4	2021	Р	2.40	627	3	2021	С	2.75	14984
4	2021	С	3.30	592	3	2021	C	3.15	14912
							Source	e: CME, ICE	

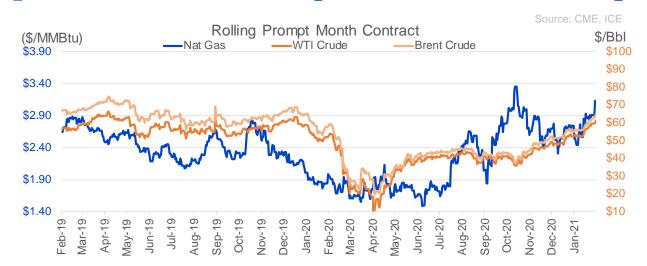




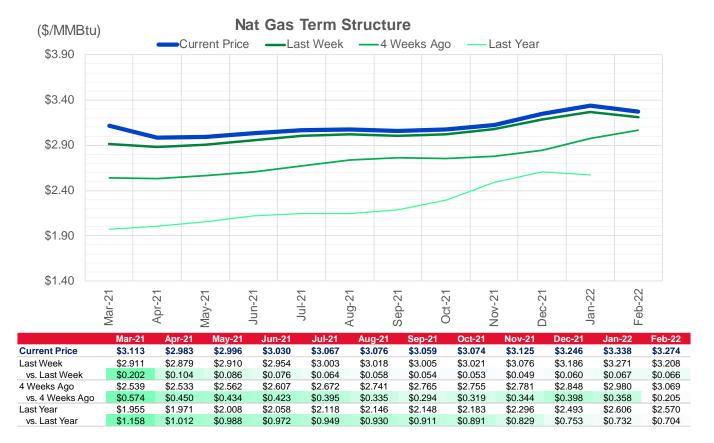
Nat Gas Futures Open Interest

CME, and ICE Combined

CME Henry	Hub Futures (1	0,000 MMBt	u)	ICE Henry Hul	b Futures Co	ntract Equiva	lent (10,000 MM
	Current	Prior	Daily Change	FOR JUNE 26	Current	Prior	Daily Change
MAR 21	82095	102052	-19957	MAR 21	85446	90308	-4862
APR 21	160776	152592	8184	APR 21	88261	87273	988
MAY 21	195298	192107	3191	MAY 21	94468	94063	405
JUN 21	70444	67425	3019	JUN 21	69219	69227	-8
JUL 21	62726	59005	3721	JUL 21	73041	72856	185
AUG 21	43183	43597	-414	AUG 21	75831	75621	210
SEP 21	85462	82883	2579	SEP 21	69356	69500	-144
OCT 21	129645	135683	-6038	OCT 21	89533	89278	255
NOV 21	50392	50214	178	NOV 21	55394	55302	93
DEC 21	45338	47393	-2055	DEC 21	56510	56421	89
JAN 22	53467	52346	1121	JAN 22	52616	52087	529
FEB 22	25005	24106	899	FEB 22	39057	38868	190
MAR 22	38517	36052	2465	MAR 22	42804	42630	173
APR 22	36388	35616	772	APR 22	42453	41748	705
MAY 22	17554	17078	476	MAY 22	36112	35615	497
JUN 22	12034	11615	419	JUN 22	34138	33951	188
JUL 22	7818	7957	-139	JUL 22	34520	34334	186
AUG 22	7061	6944	117	AUG 22	33360	33166	194
SEP 22	8533	8627	-94	SEP 22	34345	34195	150
OCT 22	22673	20972	1701	OCT 22	39550	38955	595
NOV 22	7581	7538	43	NOV 22	31737	31670	68
DEC 22	7809	7770	39	DEC 22	36885	36805	80
JAN 23	5481	5426	55	JAN 23	19404	19235	170
FEB 23	2138	2136	2	FEB 23	17592	17465	126
MAR 23	3370	3359	11	MAR 23	19617	19586	31
APR 23	4660	4647	13	APR 23	15828	15778	50
MAY 23	2870	2870	0	MAY 23	14932	14919	13
JUN 23	834	834	0	JUN 23	14323	14263	60
JUL 23	921	921	0	JUL 23	14020	13965	55
AUG 23	677	677	0	AUG 23	14362	14300	62







		Cash	Prompt	Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	10.35	4.77	-5.58
TETCO M3	\$/MMBtu	10.97	3.04	-7.93
FGT Zone 3	\$/MMBtu	14.65	3.01	-11.65
Zone 6 NY	\$/MMBtu	14.65	3.20	-11.45
Chicago Citygate	\$/MMBtu	21.99	2.98	-19.01
Michcon	\$/MMBtu	8.33	2.86	-5.47
Columbia TCO Pool	\$/MMBtu	13.03	2.68	-10.35
Ventura	\$/MMBtu	174.66	3.07	-171.59
Rockies/Opal	\$/MMBtu	181.00	2.83	-178.18
El Paso Permian Basin	\$/MMBtu	208.10	2.79	-205.32
Socal Citygate	\$/MMBtu	108.23	3.03	-105.20
Malin	\$/MMBtu	11.47	3.01	-8.46
Houston Ship Channel	\$/MMBtu	55.00	2.97	-52.03
Henry Hub Cash	\$/MMBtu	16.13	2.87	-13.26
AECO Cash	C\$/GJ	3.96	2.59	-1.37
Station2 Cash	C\$/GJ	3.76	3.04	-0.72
Dawn Cash	C\$/GJ	9.12	3.01	-6.11

Source: CME, Bloomberg



						4 Weeks		
					V	s. 4 Weeks		
	Units	Current Price	VS.	Last Week		Ago	VS	. Last Year
NatGas Jan21/Apr21	\$/MMBtu	0.516		0.104		0.421		0.906
NatGas Mar21/Apr21	\$/MMBtu	-0.130		-0.098	•	-0.101		-0.382
NatGas Oct21/Nov21	\$/MMBtu	0.051		-0.004	•	-0.016	•	-0.017
NatGas Apr21/Oct21	\$/MMBtu	0.091		0.645		0.405	•	-0.227
WTI Crude	\$/Bbl	61.09		2.410		7.850		7.800
Brent Crude	\$/BbI	64.61		3.140		8.530		5.490
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18		0.000		0.000		0.000
Heating Oil	cents/Gallon	184.04		7.940		24.000		13.360
Propane, Mt. Bel	cents/Gallon	0.90		0.045		0.038		0.497
Ethane, Mt. Bel	cents/Gallon	0.28		0.007		0.047		0.131
Coal, PRB	\$/MTon	12.30		0.000		0.000		0.050
Coal, PRB	\$/MMBtu	0.70						
Coal, ILB	\$/MTon	31.05		0.000		0.000	_	-1.000
Coal, ILB	\$/MMBtu	1.32						



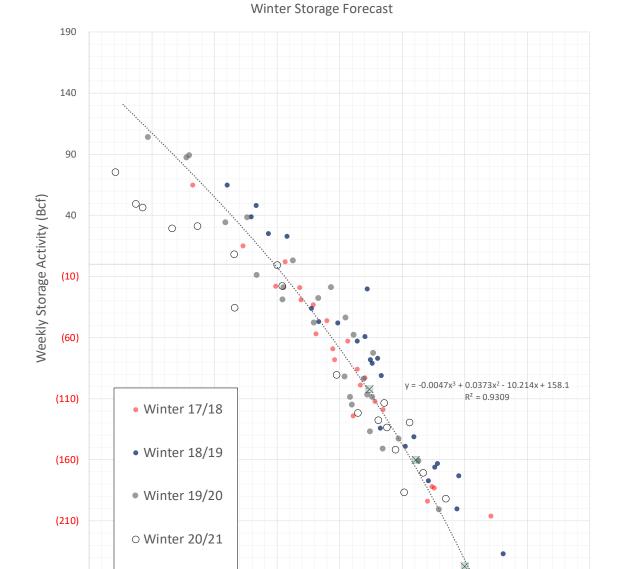
(260)

(310)

(360)

x next 4 weeks

10



Gas Weighted HDDs

40

30