

## 5 March 2021



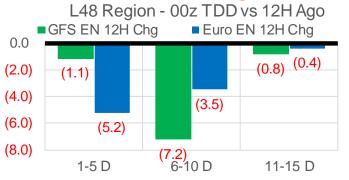
	Current	Δ from YD	Δ from Αν	
WTI Prompt	\$ 65.32	\$ 1.49	<b>\$</b>	3.9

	C	urront	ent Δ from YD		Δ from 7D		
	C	urreni			Avg		
Brent Prompt	\$	68.48	<b>\$</b>	1.74	<b>\$</b>	3.4	

#### 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

L48 Region - 00z TDD vs 24H Ago GFS EN 24H Chg ■ Euro EN 24H Chg 5.0 0.9 0.0 (0.1)(1.7)(5.0)(4.2)(6.3)(7.7)(10.0)1-5 D 6-10 D 11-15 D

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	91.5	<b>▼</b> -0.62	<b>▼</b> -0.75

	Current	Δ from YD	Δ from 7D Avg
US ResComm	36.5	▲ 0.82	<b>1.37</b>

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	11.3	▲ 0.62	<b>1.27</b>

	Current	Δ from YD	Δ from 7D Avg		
US Power Burns	26.0	-0.68	<b>▼</b> -0.22		

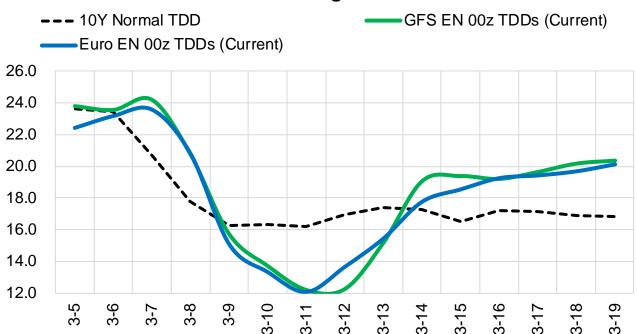
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	5.3	<b>-</b> 0.39	<b>0.41</b>

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.6	<b>-</b> 0.03	<b>0.48</b>

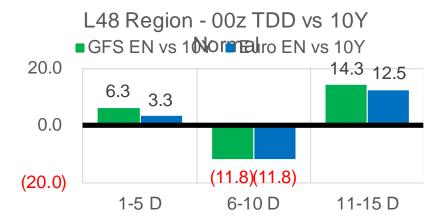


#### Short-term Weather Model Outlooks (00z)

#### L48 Region



## Vs. 10Y Normal



Source: WSI, Bloomberg



## Lower 48 Component Models

#### **Daily Balances**

	27-Feb	28-Feb	1-Mar	2-Mar	3-Mar	4-Mar	5-Mar	DoD	vs.7D
Lower 48 Dry Production	92.8	93.0	92.1	91.7	91.4	92.2	91.5	▼ -0.6	▼ -0.6
Canadian Imports	4.0	4.1	5.1	5.4	5.3	5.7	5.3	▼-0.4	<b>▲</b> 0.3
L48 Power	23.6	24.2	28.2	29.2	28.0	26.7	26.0	▼-0.7	▼ -0.6
L48 Residential & Commercial	31.0	30.3	37.7	41.4	33.3	35.7	36.5	8.0	<b>1.6</b>
L48 Industrial	18.1	18.3	19.2	19.6	19.3	19.5	20.1	<b>0.5</b>	<b>1.0</b>
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.1	5.0	5.1	5.0	▼ 0.0	▼ 0.0
L48 Pipeline Distribution	2.5	2.5	3.1	3.4	2.9	3.0	3.0	<b>0.0</b>	<b>0.1</b>
L48 Regional Gas Consumption	80.2	80.4	93.3	98.7	88.5	89.9	90.6	<b>0.6</b>	<b>2.1</b>
Net LNG Delivered	9.80	10.30	9.96	10.49	10.18	10.70	11.32	<b>0.6</b>	<b>1.1</b>
Total Mexican Exports	5.4	5.4	6.4	6.5	6.6	6.6	6.6	▼ 0.0	<b>0.4</b>
Implied Daily Storage Activity	1.4	0.9	-12.4	-18.5	-8.6	-9.4	-11.7		
EIA Reported Daily Storage Activity Daily Model Error									

#### **EIA Storage Week Balances**

	29-Jan	5-Feb	12-Feb	19-Feb	26-Feb	5-Mar	WoW	vs. 4W
Lower 48 Dry Production	91.2	91.2	90.6	76.9	85.0	92.3	<b>7.3</b>	<b>6.4</b>
Canadian Imports	6.4	6.3	6.3	7.8	6.2	4.9	▼-1.4	▼-1.8
L48 Power	28.7	28.9	28.8	30.2	25.3	26.2	<b>0.9</b>	<b>▼-2.1</b>
L48 Residential & Commercial	47.5	46.7	52.4	59.8	41.8	35.1	<b>▼</b> -6.7	<b>▼-</b> 15.1
L48 Industrial	24.4	22.4	24.3	24.2	18.9	18.9	<b>0.0</b>	▼ -3.5
L48 Lease and Plant Fuel	5.0	5.0	5.0	4.2	4.7	5.1	<b>0.4</b>	<b>0.4</b>
L48 Pipeline Distribution	3.5	3.4	3.7	4.1	3.0	2.9	▼-0.2	<b>▼</b> -0.7
L48 Regional Gas Consumption	109.1	106.4	114.2	122.5	93.7	88.2	▼ -5.5	<b>▼-21.0</b>
Net LNG Exports	10.0	10.7	10.7	4.9	7.8	10.1	<b>2.2</b>	<b>1.5</b>
Total Mexican Exports	6.6	6.2	6.4	4.9	5.6	6.1	<b>0.5</b>	<b>0.3</b>
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	-28.1 -27.4 -0.6	-25.7 -24.4 -1.3	-34.3 -33.9 -0.4	-47.7 -48.3 0.6	-15.9 -14.0 -1.9	-7.2	8.7	

Monthly Balances	2Yr Ago	LY					MTD		
	Mar-19	Mar-20	Jan-18	<sup>7</sup> Feb-18	Jan-21	Feb-21	Mar-21	MoM	vs. LY
Lower 48 Dry Production	88.7	93.7	77.0	78.7	91.1	86.1	91.8	<b>5.7</b>	<u>▲13.1</u>
Canadian Imports	5.1	4.1	5.9	5.2	6.3	6.4	5.4	▼-1.0	<b>▲</b> 0.2
L48 Power	25.7	28.3	25.3	24.5	28.7	27.9	27.6	▼-0.3	<b>▲ 3.2</b>
L48 Residential & Commercial	35.7	27.4	48.9	39.3	44.4	48.5	36.9	<b>▼</b> -11.6	▼-2.4
L48 Industrial	23.0	22.2	23.8	22.6	22.8	22.0	19.5	<b>▼</b> -2.5	▼-3.1
L48 Lease and Plant Fuel	4.9	5.2	4.3	4.4	5.0	4.7	5.1	<b>a</b> 0.3	<b>0.6</b>
L48 Pipeline Distribution	2.9	2.6	3.2	2.8	3.3	3.4	3.1	▼ -0.4	<b>0.2</b>
L48 Regional Gas Consumption	92.3	85.7	105.5	93.6	104.3	106.6	92.2	▼-14.4	▼-1.4
Net LNG Exports	4.8	8.5	2.2	3.0	10.5	8.4	10.5	<b>2.1</b>	<b>7.5</b>
Total Mexican Exports	4.9	5.4	4.2	4.1	6.2	5.7	6.5	<b>8.0</b>	<b>▲</b> 2.4
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	-8.1	-1.9	-29.1	-16.9	-23.5	-28.2	-12.1		

Source: Bloomberg, analytix.ai



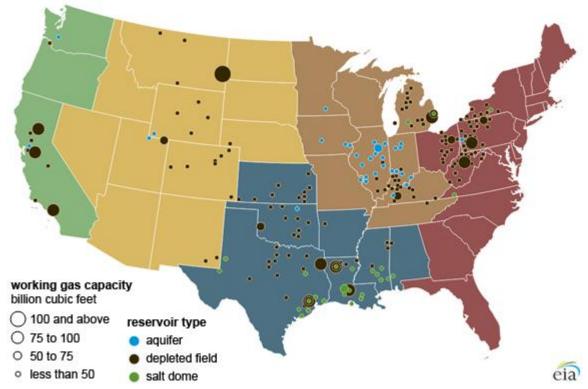
## Regional S/D Models Storage Projection

Week Ending 5-Mar

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-7.5	1.2	-6.3	-44
East	-6.3	3.1	-3.2	-22
Midwest	-3.2	-0.7	-3.9	-27
Mountain	3.0	-2.6	0.4	3
South Central	-0.8	2.0	1.2	8
Pacific	-0.3	-0.6	-0.8	-6

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

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



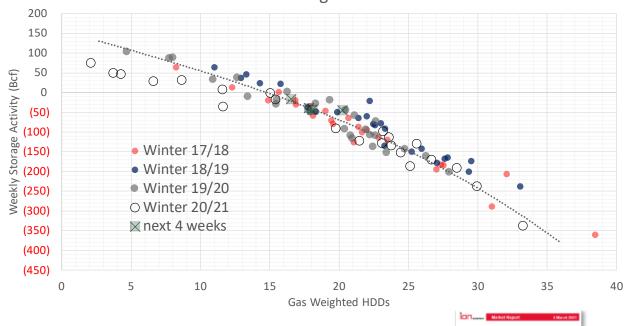


### Weather Model Storage Projection

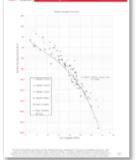
# Next report and beyond

Week Ending	GWDDs	Week Storage Projection
05-Mar	20.3	-44
12-Mar	17.8	-38
19-Mar	18.1	-43
26-Mar	16.5	-17

#### Winter Storage Forecast



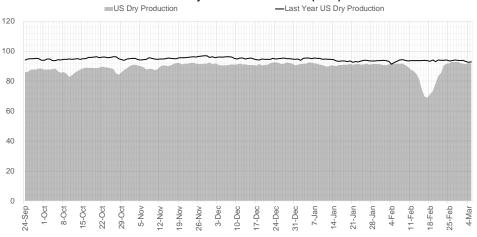
Go to larger image



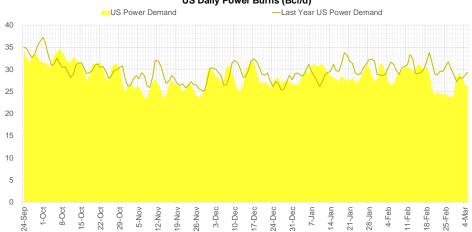


#### Supply - Demand Trends

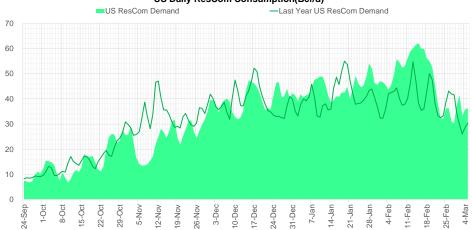
#### US Dry Natural Gas Production (Bcf/d)



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



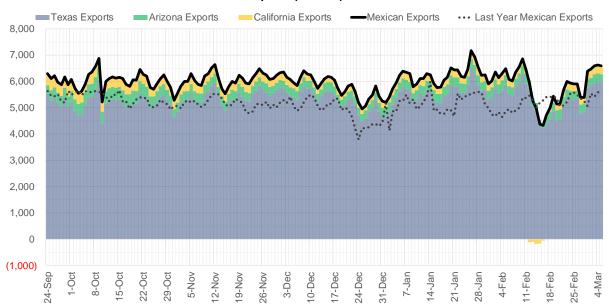
#### US Daily ResCom Consumption(Bcf/d)



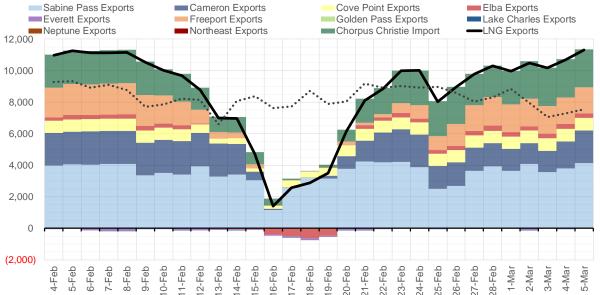
Source: Bloomberg



#### Mexican Exports (MMcf/d)



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



Source: Bloomberg



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

CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
		0	0.00		4	2024	6	2.00	07057
4	2021	С	3.00	12788	4	2021 2021	C C	3.00 4.00	67257 53198
4	2022	С	2.50	8960	4	2021	C	3.25	44237
4	2021	P	2.50	6628	10			4.00	44237 42619
4	2021	P	2.60	6443		2021	C P		
4	2021	С	3.25	4573	4	2021		2.50	42595
11	2021	С	4.00	4400	8 7	2021 2021	C C	4.00 4.00	32135 30723
5	2021	Р	2.50	4393			C		
4	2021	Р	2.75	4243	6 4	2021 2021	P	4.00	28130
6	2021	Р	2.50	3289				2.00	28088
4	2021	Р	2.70	3252	10	2021	С	3.25	28080
4	2021	Р	2.65	3163	5	2021	С	3.00	28037
4	2021	С	2.85	3079	10	2021	С	5.00	24814
4	2021	Р	2.40	2733	5	2021	С	4.00	24706
8	2021	С	3.25	2220	5	2021	P	2.50	24610
11	2021	С	3.50	2000	4	2021	С	2.75	24474
5	2021	С	3.25	1983	8	2021	С	3.50	24447
5	2021	С	3.50	1938	4	2021	С	3.50	24374
4	2021	С	2.90	1931	4	2021	P	2.75	23257
4	2021	С	2.75	1918	5	2021	C	3.50	22473
4	2021	С	2.95	1901	4	2021	Р	2.25	22181
4	2021	C	3.10	1575	4	2021	Р	2.60	21853
5	2021	Ċ	3.00	1386	4	2021	С	5.00	20483
5	2021	P	2.25	1351	6	2021	Р	2.50	20192
10	2021	C	3.50	1280	5	2021	С	3.25	20117
6	2021	Ċ	3.50	1227	10	2021	С	3.50	20096
5	2021	P	2.75	1220	8	2021	Р	2.25	19933
4	2021	P	2.45	1204	9	2021	Р	2.00	18546
6	2021	P	2.45	1172	7	2021	С	3.50	18496
10	2021	P	2.75	1000	5	2021	Р	2.00	18135
3	2021	P	2.75	1000	10	2021	Р	2.00	17957
					4	2022	С	3.00	17808
4	2021	С	2.80	982	6	2021	С	3.50	17478
4	2021	С	3.15	905	10	2021	Р	2.50	17152
5	2021	P	2.00	863	12	2021	С	4.00	16932
6	2021	P	2.60	751	10	2021	С	3.00	16908
5	2021	P	2.60	725	5	2021	Р	2.25	16681
4	2021	P	2.80	722	6	2021	Р	2.00	16401
4	2021	С	3.50	700	11	2021	С	4.00	16025
10	2021	P	2.50	700	6	2021	С	3.00	15737
4	2021	С	3.35	623	6	2021	С	3.25	15537
7	2021	С	3.50	601	9	2021	С	3.50	15252
9	2021	С	3.50	601	4	2021	С	2.50	15252
10	2021	С	3.25	575	7	2021	Р	2.00	15127
4	2021	С	3.30	530	4	2021	С	3.75	15049
5	2021	Р	2.45	505	8	2021	Р	2.00	15008
5	2021	С	3.35	503	6	2021	Р	2.25	14786
6	2021	С	3.10	501	8	2021	С	3.25	14320
4	2021	Р	2.35	500	9	2021	Ċ	3.25	13889
6	2021	С	3.35	500	7	2021	P	2.50	13836
6	2021	C	4.00	500	9	2021	С	4	13780
						-	Source	: CME, ICE	

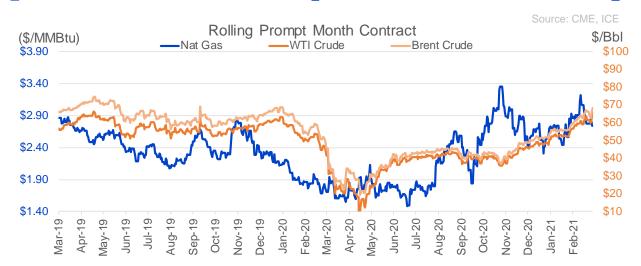




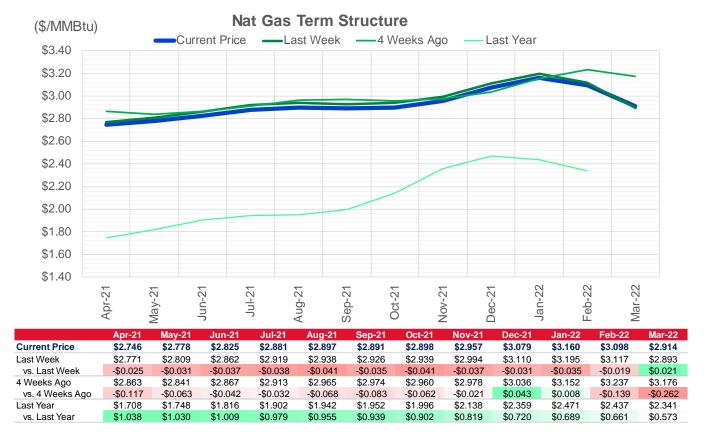
## Nat Gas Futures Open Interest

CME, and ICE Combined

CME Henry	Hub Futures (10	u)	ICE Henry Hub Futures Contract Equivalent (10,000 MM					
	Current	Prior	Daily Change	FOR JUNE 26	Current	Prior	Daily Change	
APR 21	163302	172283	-8981	APR 21	102569	102393	176	
MAY 21	216197	215828	369	MAY 21	93698	94285	-587	
JUN 21	78859	77428	1431	JUN 21	70749	70265	484	
JUL 21	73546	72097	1449	JUL 21	74940	74791	149	
AUG 21	47582	45479	2103	AUG 21	77079	76891	188	
SEP 21	96108	94590	1518	SEP 21	70337	70525	-189	
OCT 21	126529	126690	-161	OCT 21	91033	91032	1	
NOV 21	59989	58253	1736	NOV 21	56073	55925	148	
DEC 21	46641	46555	86	DEC 21	57235	56920	315	
JAN 22	60288	63612	-3324	JAN 22	57638	57482	156	
FEB 22	21777	21680	97	FEB 22	40786	40668	119	
MAR 22	40278	40967	-689	MAR 22	45523	45689	-167	
APR 22	38678	38451	227	APR 22	43835	44010	-176	
MAY 22	17878	17712	166	MAY 22	36432	36410	23	
JUN 22	12309	12367	-58	JUN 22	34903	34970	-68	
JUL 22	7199	7247	-48	JUL 22	35107	35046	60	
AUG 22	8104	8095	9	AUG 22	34134	34211	-77	
SEP 22	9236	8970	266	SEP 22	34917	34990	-74	
OCT 22	19848	20478	-630	OCT 22	41085	41178	-93	
NOV 22	8562	8488	74	NOV 22	32311	32412	-101	
DEC 22	8837	8936	-99	DEC 22	37521	37382	139	
JAN 23	6101	6382	-281	JAN 23	20406	20283	123	
FEB 23	2175	2164	11	FEB 23	18689	18611	78	
MAR 23	4188	4190	-2	MAR 23	20402	20187	215	
APR 23	5550	5541	9	APR 23	16790	16715	75	
MAY 23	2888	2880	8	MAY 23	16053	15983	70	
JUN 23	996	991	5	JUN 23	15491	15409	82	
JUL 23	993	987	6	JUL 23	14965	14881	84	
AUG 23	753	746	7	AUG 23	15280	15218	62	
SEP 23	602	562	40	SEP 23	14765	14683	82	







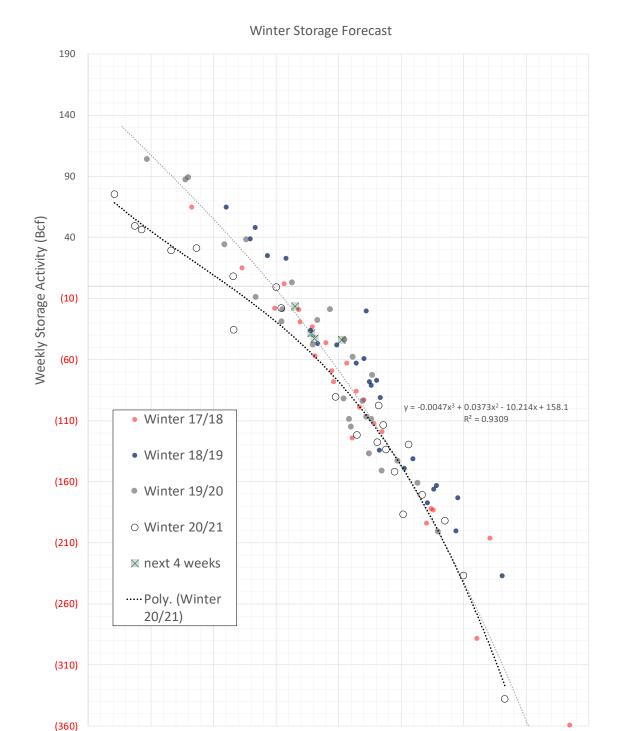
		Cash Promp		Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	8.00	2.99	-5.01
TETCO M3	\$/MMBtu	2.82	2.32	-0.50
FGT Zone 3	\$/MMBtu	2.82	2.83	0.01
Zone 6 NY	\$/MMBtu	2.82	2.33	-0.49
Chicago Citygate	\$/MMBtu	2.62	2.66	0.04
Michcon	\$/MMBtu	2.63	2.63	0.00
Columbia TCO Pool	\$/MMBtu	2.48	2.44	-0.04
Ventura	\$/MMBtu	2.53	2.60	0.07
Rockies/Opal	\$/MMBtu	2.57	2.54	-0.03
El Paso Permian Basin	\$/MMBtu	2.50	2.51	0.01
Socal Citygate	\$/MMBtu	3.28	2.73	-0.55
Malin	\$/MMBtu	2.66	2.69	0.03
Houston Ship Channel	\$/MMBtu	2.66	2.73	0.07
Henry Hub Cash	\$/MMBtu	2.77	2.62	-0.15
AECO Cash	C\$/GJ	2.31	2.27	-0.04
Station2 Cash	C\$/GJ	2.27	2.53	0.26
Dawn Cash	C\$/GJ	2.66	2.70	0.04

Source: CME, Bloomberg



					V	s. 4 Weeks		
	Units	<b>Current Price</b>	vs.	Last Week		Ago	vs	s. Last Year
NatGas Jan21/Apr21	\$/MMBtu	0.279	•	-0.025	_	-0.095		0.628
NatGas Mar21/Apr21	\$/MMBtu	-0.108	•	-0.025	•	-0.130	•	-0.327
NatGas Oct21/Nov21	\$/MMBtu	0.059		0.004		0.001		-0.009
NatGas Apr21/Oct21	\$/MMBtu	0.152		0.624		0.663		-0.087
WTI Crude	\$/Bbl	65.32		3.820		8.470		24.040
Brent Crude	\$/Bbl	68.48		2.350		9.140		23.210
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18		0.000		0.000		0.000
Heating Oil	cents/Gallon	193.30		7.650		21.930		54.780
Propane, Mt. Bel	cents/Gallon	0.97		0.061		0.111		0.608
Ethane, Mt. Bel	cents/Gallon	0.21		-0.054		-0.055		0.072
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						





Gas Weighted HDDs

10

40

30