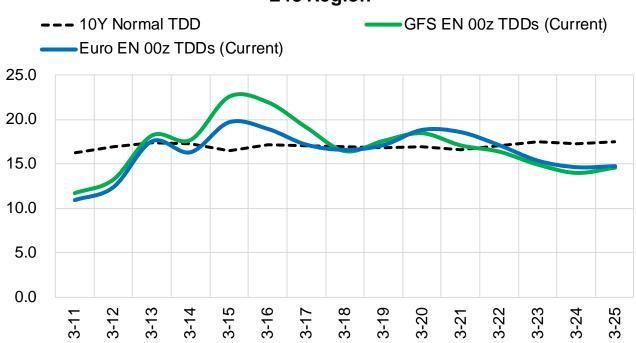


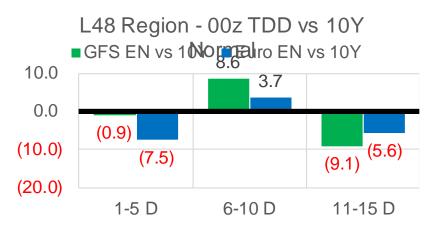


## Short-term Weather Model Outlooks (00z)



### L48 Region

# Vs. 10Y Normal



Source: WSI, Bloomberg

# **Market Report**

#### **Daily Balances**

	5-Mar	6-Mar	7-Mar	8-Mar	9-Mar	10-Mar	11-Mar	DoD	vs.7D
Lower 48 Dry Production	92.7	92.8	92.6	92.7	91.9	91.5	90.4	<b>-1.1</b>	▼ -2.0
Canadian Imports	5.3	5.3	5.2	5.2	4.3	3.9	3.9	▼ 0.0	▼ -1.0
L48 Power	26.0	25.3	25.5	25.6	24.2	23.6	24.3	<b>A</b> 0.7	▼ -0.8
L48 Residential & Commercial	38.2	38.3	37.6	31.2	24.2	22.6	21.7	<b>T</b> -1.0	▼-10.3
L48 Industrial	19.9	19.9	19.5	19.3	18.9	19.2	19.7	<b>A</b> 0.4	<b>0.2</b>
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.1	5.1	5.0	5.0	▼ -0.1	▼ -0.1
L48 Pipeline Distribution	3.1	3.0	3.0	2.7	2.3	2.2	2.2	▼ 0.0	▼ -0.5
L48 Regional Gas Consumption	92.2	91.6	90.7	83.9	74.7	72.7	72.8	<b>0.1</b>	▼-11.5
Net LNG Delivered	11.19	10.66	10.58	10.65	9.91	10.31	11.01	<b>0.7</b>	<b>0.5</b>
Total Mexican Exports	6.6	6.4	6.3	6.5	6.7	6.4	6.5	<b>0.1</b>	<b>0.1</b>
Implied Daily Storage Activity EIA Reported Daily Storage Activity	-12.0	-10.4	-9.7	-3.2	4.9	6.0	4.0		

Lower 48 Component Models

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	92.5	<b>A</b> 7.5	<b>6.6</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	30.3	25.3	26.2	<b>a</b> 0.9	<b>-2.1</b>
L48 Residential & Commercial	47.5	46.7	52.4	59.8	41.8	35.5	▼ -6.3	▼-14.7
L48 Industrial	24.3	22.3	24.2	20.6	21.6	19.7	<b>T</b> -1.9	<b>-</b> 2.5
L48 Lease and Plant Fuel	5.0	5.0	5.0	4.2	4.7	5.1	<b>0</b> .4	<b>a</b> 0.4
L48 Pipeline Distribution	3.5	3.4	3.7	4.1	3.0	2.9	▼ -0.1	<b>-</b> 0.7
L48 Regional Gas Consumption	109.1	106.3	114.1	<b>118.9</b>	96.4	89.4	▼ -7.0	▼-19.5
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	-28.0 -27.4	-25.7 -24.4	-34.2 -33.9	-44.1 -48.3	-18.6 -14.0	-8.2	10.4	
Daily Model Error	-27.4	-24.4	-0.4	4.2	-4.6			

#### **Monthly Balances**

	2Yr Ago	LY					MTD		
	Mar-19	Mar-20	Jan-18	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	92.1	<b>6.0</b>	<b>13.4</b>
Canadian Imports	5.1	4.1	5.9	5.2	6.3	6.4	5.0	<b>▼</b> -1.4	<b>-0.2</b>
L48 Power	25.7	28.3	25.3	24.5	28.7	27.9	26.0	▼ -1.8	<b>1.6</b>
L48 Residential & Commercial	35.7	27.4	48.9	39.3	44.4	48.5	33.1	▼-15.4	▼-6.2
L48 Industrial	23.0	22.2	23.8	22.6	22.8	21.8	19.6	▼-2.2	▼-3.0
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</b> .7
L48 Pipeline Distribution	2.9	2.6	3.2	2.8	3.3	3.4	2.8	<b>-</b> 0.6	▼ 0.0
L48 Regional Gas Consumption	92.3	85.7	105.5	93.6	104.3	106.4	86.7	▼-19.8	<b>-7.0</b>
Net LNG Exports	4.8	8.5	2.2	3.0	10.5	8.4	10.5	<b>2.1</b>	<b>A</b> 7.5
Total Mexican Exports	4.9	5.4	4.2	4.1	6.2	5.7	6.5	<b>0.8</b>	<b>2.4</b>
Implied Daily Storage Activity EIA Reported Daily Storage Activity	-8.1	-1.9	-29.1	-16.9	-23.5	-28.1	-6.6		
	-8.1	-1.9	-29.1	-16.9	-23.5	-28.1	-6.6		

Source: Bloomberg, analytix.ai

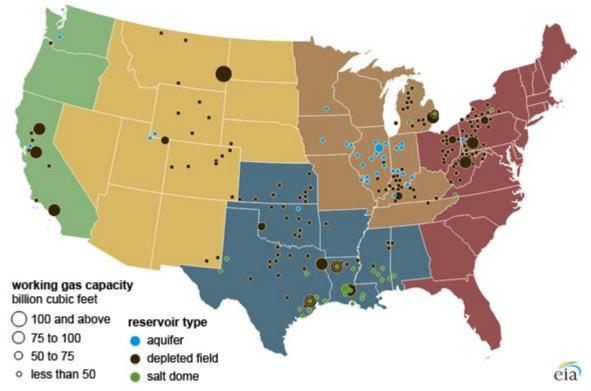


## Regional S/D Models Storage Projection

Week Ending	5-Mar			
			Daily	
			Average	Weekly
		Daily	Storage	Adjusted
	Daily Raw	Adjustment	Activity	Storage
	Storage	Factor	(Adjusted) *	Activity
L48	-8.5	1.5	-7.0	-49
East	-6.8	3.2	-3.7	-26
Midwest	-3.4	-0.7	-4.1	-28
Mountain	3.0	-2.6	0.5	3
South Central	-1.0	2.1	1.1	8
Pacific	-0.3	-0.5	-0.9	-6

\*Adjustment Factor is calcuated based on historical regional deltas

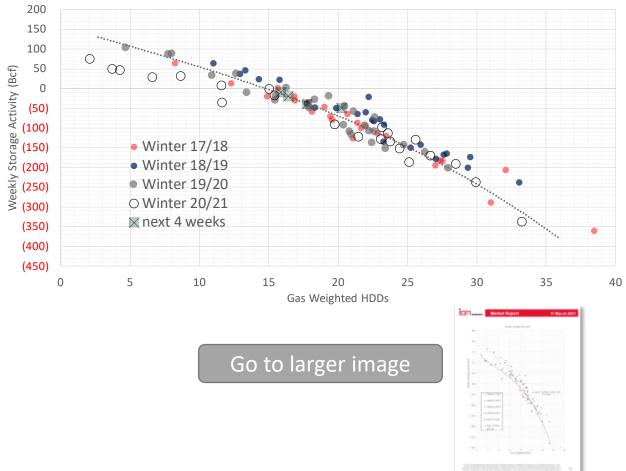
### U.S. underground natural gas storage facilities by type (July 2015)



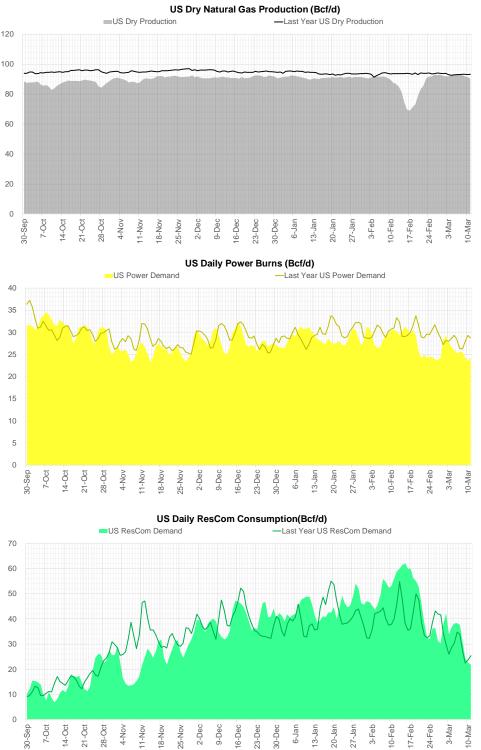
# Weather Model Storage Projection

Next report and beyond		
Week Ending	GWDDs	Week Storage Projection
05-Mar	20.2	-49
12-Mar	16.4	-20
19-Mar	17.8	-39
26-Mar	15.9	-8

## Winter Storage Forecast

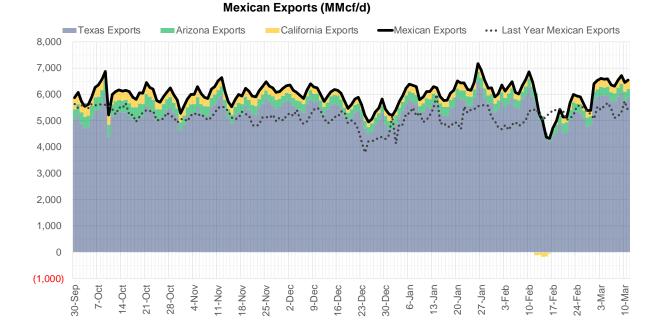


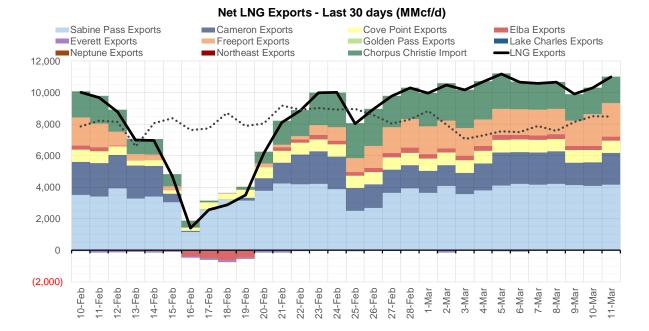




Source: Bloomberg







Source: Bloomberg

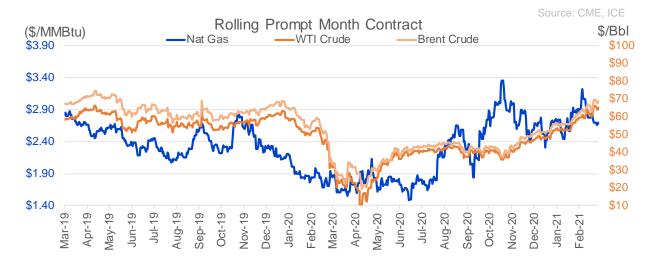


### Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

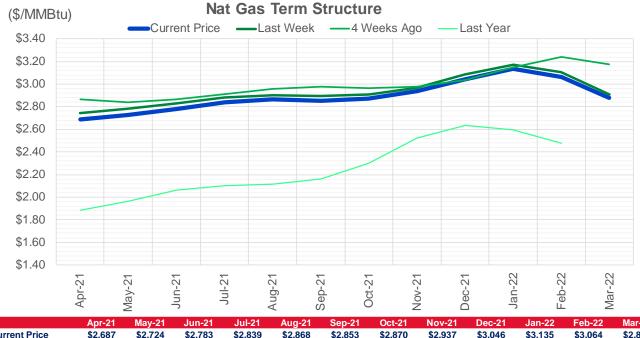
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
4	2021	Р	2.50	12706	4	2021	С	3.00	60872
6	2021	P	2.50	7872	4	2021	P	2.50	53832
6	2021	C	3.25	7212	4	2021	С	4.00	53198
5	2021	P	2.50	6385	4	2021	C	3.25	42893
4	2021	P	2.60	6350	10	2021	C	4.00	42816
4	2021	P	2.40	5966	8	2021	C	4.00	32350
4	2021	C	3.00	5591	7	2021	C	4.00	31329
4	2021	c	2.75	5101	5	2021	С	3.00	29664
5	2021	c	3.00	5050	10	2021	С	3.25	29120
5	2021	P	2.60	4022	4	2021	Р	2.00	28601
4	2021	P	2.45	3909	6	2021	С	4.00	27973
6	2021	P	2.60	3411	4	2021	С	2.75	26941
4	2021	P	2.30	3396	5	2021	С	4.00	24706
5	2021	P	2.30	3382	5	2021	С	3.50	24401
6	2021	P	2.40	3100	8	2021	С	3.50	24370
4	2021	P	2.40	2973	10	2021	С	5.00	24366
6	2021	c	3.00	2497	4	2021	Р	2.25	24187
4	2021	P	2.55	2319	4	2021	С	3.50	24023
4 5	2021	F C	3.25	2319	4	2021	Р	2.75	23429
5 10	2021	P	2.25	1880	5	2021	Р	2.50	22781
4	2021	F C	2.25	1566	6	2021	Р	2.50	22181
					10	2021	С	3.50	21318
4	2021	C P	2.80	1425	5	2021	С	3.25	21258
5	2021		2.25	1416	4	2021	Р	2.60	20810
10	2021	C P	3.50	1380	4	2021	С	5.00	20533
6	2021	P P	2.25	1310	5	2021	Р	2.25	20466
8	2021	P	2.25	1280	8	2021	Р	2.25	19645
4	2021		2.25	1256	7	2021	С	3.50	18490
5 4	2021	C P	3.35	1226	10	2021	Р	2.00	18086
-	2021	P	2.00	1200	9	2021	Р	2.00	17946
10	2021		2.50	1175	6	2021	С	3.50	17841
5	2021	C P	3.50	1085	4	2022	С	3.00	17814
10	2021	P	2.00	1075	5	2021	Р	2.00	17679
9	2021	P	2.25	1031	10	2021	С	3.00	17580
7	2021	P P	2.25	1030	11	2021	С	4.00	17550
8	2021	P P	2.40	1030	12	2021	С	4.00	17232
7	2021		2.40	1001	10	2021	Р	2.50	17168
9	2021	P	2.40	1000	6	2021	С	3.00	17026
5 4	2021	C P	2.75	959	6	2021	Р	2.25	16946
-	2021		2.70	915	6	2021	С	3.25	16835
8	2021	C P	3.25	900	6	2021	Р	2.00	16071
6	2021		2.00	857	9	2021	С	3.50	15591
4	2021	C P	2.85	856	4	2021	С	2.50	15252
4	2021		2.65	824	4	2021	С	3.75	15049
4	2021	С	2.95	791	7	2021	Р	2.50	15019
9	2021	С	3.50	704	7	2021	P	2.00	14981
10	2021	С	2.80	650	8	2021	P	2.00	14853
4	2021	С	3.05	619	7	2021	С	3.25	14560
5	2021	P	2.45	557	8	2021	Р	2.50	13768
7	2021	С	3.25	551	12	2021	P Source	: CME, ICE	13734

### Nat Gas Futures Open Interest CME, and ICE Combined

CME Henry I	Hub Futures (1)				o Futures Co		lent (10,000 MM				
	Current	Prior	Daily Change	FOR JUNE 26	Current	Prior	Daily Change				
APR 21	139747	147055	-7308	APR 21	96082	95675	408				
MAY 21	223052	221458	1594	MAY 21	92690	93646	-956				
JUN 21	89542	87245	2297	JUN 21	71127	70685	442				
JUL 21	83488	82213	1275	JUL 21	74800	74542	258				
AUG 21	50398	49480	918	AUG 21	77534	76926	608				
SEP 21	101362	99077	2285	SEP 21	69538	69713	-174				
OCT 21	127917	126361	1556	OCT 21	87356	87704	-348				
NOV 21	65664	65125	539	NOV 21	56370	56217	153				
DEC 21	46213	45751	462	DEC 21	57554	57478	76				
JAN 22	53759	53559	200	JAN 22	57065	56985	80				
FEB 22	19971	20261	-290	FEB 22	41173	41052	121				
MAR 22	42624	42809	-185	MAR 22	46630	46567	62				
APR 22	40773	39786	987	APR 22	44079	43892	188				
MAY 22	18893	18541	352	MAY 22	36722	36567	155				
JUN 22	12234	12234	0	JUN 22	35015	34879	136				
JUL 22	7499	7381	118	JUL 22	35484	35335	149				
AUG 22	8181	8056	125	AUG 22	34247	34099	148				
SEP 22	8311	8435	-124	SEP 22	35103	34960	143				
OCT 22	19035	18644	391	OCT 22	41563	41453	110				
NOV 22	8457	8600	-143	NOV 22	32442	32391	51				
DEC 22	8580	8771	-191	DEC 22	37721	37779	-58				
JAN 23	5998	6067	-69	JAN 23	20486	20651	-165				
FEB 23	2362	2257	105	FEB 23	18756	18781	-25				
MAR 23	4191	4189	2	MAR 23	20516	20546	-30				
APR 23	5541	5540	1	APR 23	16738	16642	96				
MAY 23	2842	2842	0	MAY 23	15893	15833	60				
JUN 23	1033	1033	0	JUN 23	15338	15294	44				
JUL 23	993	993	0	JUL 23	15061	15016	45				
AUG 23	758	753	5	AUG 23	15403	15358	45				
SEP 23	596	595	1	SEP 23	14610	14552	58				



# **Market Report**



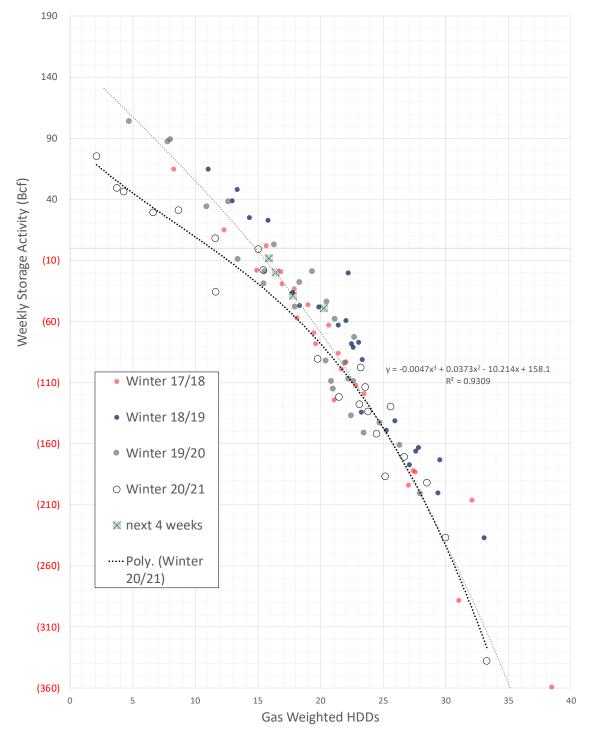
	Apr-21	iviay-21	Jun-21	Jui-zi	Aug-21	Sep-21	001-21	1107-21	Dec-21	Jall-22	rep-22	IVIdI-22
Current Price	\$2.687	\$2.724	\$2.783	\$2.839	\$2.868	\$2.853	\$2.870	\$2.937	\$3.046	\$3.135	\$3.064	\$2.881
Last Week	\$2.746	\$2.781	\$2.829	\$2.879	\$2.903	\$2.894	\$2.907	\$2.967	\$3.085	\$3.170	\$3.105	\$2.911
vs. Last Week	-\$0.059	-\$0.057	-\$0.046	-\$0.040	-\$0.035	-\$0.041	-\$0.037	-\$0.030	-\$0.039	-\$0.035	-\$0.041	-\$0.030
4 Weeks Ago	\$2.868	\$2.836	\$2.864	\$2.910	\$2.960	\$2.975	\$2.964	\$2.979	\$3.037	\$3.151	\$3.238	\$3.178
vs. 4 Weeks Ago	-\$0.181	-\$0.112	-\$0.081	-\$0.071	-\$0.092	-\$0.122	-\$0.094	-\$0.042	\$0.009	-\$0.016	-\$0.174	-\$0.297
Last Year	\$1.841	\$1.885	\$1.965	\$2.065	\$2.103	\$2.116	\$2.162	\$2.298	\$2.522	\$2.637	\$2.593	\$2.480
vs. Last Year	\$0.846	\$0.839	\$0.818	\$0.774	\$0.765	\$0.737	\$0.708	\$0.639	\$0.524	\$0.498	\$0.471	\$0.401

		Cash	Prompt	Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	2.85	2.97	0.12
TETCO M3	\$/MMBtu	2.09	2.33	0.24
FGT Zone 3	\$/MMBtu	2.13	2.82	0.69
Zone 6 NY	\$/MMBtu	2.13	2.34	0.21
Chicago Citygate	\$/MMBtu	2.50	2.67	0.17
Michcon	\$/MMBtu	2.49	2.62	0.13
Columbia TCO Pool	\$/MMBtu	2.20	2.42	0.22
Ventura	\$/MMBtu	2.35	2.61	0.26
Rockies/Opal	\$/MMBtu	2.66	2.54	-0.12
El Paso Permian Basin	\$/MMBtu	2.37	2.50	0.13
Socal Citygate	\$/MMBtu	3.45	2.78	-0.67
Malin	\$/MMBtu	2.69	2.68	-0.01
Houston Ship Channel	\$/MMBtu	2.46	2.70	0.25
Henry Hub Cash	\$/MMBtu	2.58	2.60	0.02
AECO Cash	C\$/GJ	2.25	2.22	-0.03
Station2 Cash	C\$/GJ	2.28	2.57	0.29
Dawn Cash	C\$/GJ	2.50	2.65	0.15

Source: CME, Bloomberg

Π	ENERGY

		vs. 4 Weeks						
	Units	<b>Current Price</b>	vs.	Last Week		Ago	vs	. Last Year
NatGas Jan21/Apr21	\$/MMBtu	0.219		-0.060	▼	-0.150		0.652
NatGas Mar21/Apr21	\$/MMBtu	-0.168		-0.060	▼	-0.200	▼	-0.444
NatGas Oct21/Nov21	\$/MMBtu	0.067		0.007		0.009		0.008
NatGas Apr21/Oct21	\$/MMBtu	0.184		0.624		0.696		-0.176
WTI Crude	\$/Bbl	65.17		1.340		6.930		33.670
Brent Crude	\$/Bbl	68.73		1.990		7.590		35.510
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18		0.000		0.000		0.000
Heating Oil	cents/Gallon	192.35		2.750		17.890		76.370
Propane, Mt. Bel	cents/Gallon	0.93		-0.045		0.075		0.613
Ethane, Mt. Bel	cents/Gallon	0.22		0.009		-0.059		0.081
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						



Winter Storage Forecast