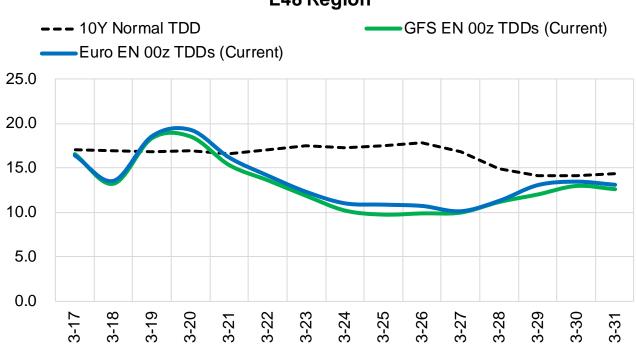


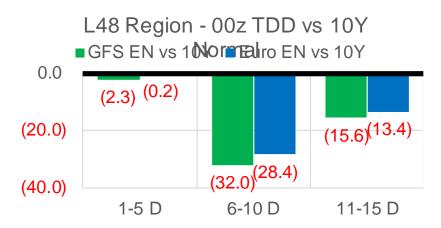


## Short-term Weather Model Outlooks (00z)



### L48 Region

## Vs. 10Y Normal



Source: WSI, Bloomberg

ENERGY

# **Market Report**

#### **Daily Balances**

	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	DoD	vs.7D
Lower 48 Dry Production	91.8	92.8	92.3	92.1	91.5	92.2	91.9	<b>-0.3</b>	<b>-0.2</b>
Canadian Imports	3.9	4.2	4.6	4.9	5.4	5.5	5.0	<b>-0.5</b>	<b>0.2</b>
L48 Power	24.2	23.0	22.0	22.4	25.8	27.4	26.3	▼-1.2	<b>2</b> .1
L48 Residential & Commercial	22.0	24.9	28.2	30.4	35.9	33.0	27.6	▼ -5.5	🔽 -1.5
L48 Industrial	18.8	19.1	19.4	20.0	20.9	20.7	20.7	<b>0</b> .0	<b>0</b> .9
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.1	5.0	5.1	5.1	▼ 0.0	▼ 0.0
L48 Pipeline Distribution	2.2	2.3	2.4	2.5	2.9	2.9	2.6	<b>-</b> 0.3	<b>0</b> .0
L48 Regional Gas Consumption	72.2	74.4	77.1	80.4	90.6	89.1	82.1	<b>-6.9</b>	<b>1.5</b>
Net LNG Delivered	10.89	11.03	10.80	11.20	11.27	11.56	11.68	<b>0.1</b>	<b>0.6</b>
Total Mexican Exports	6.4	6.3	6.0	5.8	6.0	6.4	6.5	<b>0.1</b>	<b>0.3</b>
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	6.1	5.3	3.0	-0.4	-11.0	-9.3	-3.4		

Lower 48 Component Models

Daily Model Error

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

	5-Feb	12-Feb	19-Feb	26-Feb	5-Mar	12-Mar	WoW	vs. 4W
Lower 48 Dry Production	91.0	90.3	76.5	84.6	92.4	92.5	<b>0.1</b>	<b>6.6</b>
Canadian Imports	6.3	6.3	7.8	6.2	4.9	4.7	<b>▼ -0.1</b>	▼-1.6
L48 Power	28.9	28.8	30.3	25.3	26.2	24.8	<b>T</b> -1.4	<b>-</b> 2.8
L48 Residential & Commercial	46.7	52.4	59.8	41.8	35.5	30.7	<b>V</b> -4.8	▼-16.7
L48 Industrial	22.1	23.9	20.3	21.8	19.3	18.8	▼ -0.4	▼ -2.5
L48 Lease and Plant Fuel	5.0	5.0	4.2	4.7	5.1	5.1	<b>0.0</b>	<b>0</b> .4
L48 Pipeline Distribution	3.4	3.7	4.1	3.0	2.9	2.6	<b>T</b> -0.2	<b>—</b> -0.8
L48 Regional Gas Consumption	106.1	113.7	118.6	96.6	89.0	82.1	▼ -6.9	▼-22.4
Net LNG Exports	10.7	10.7	4.9	7.8	10.1	10.6	<b>0.5</b>	<b>2.2</b>
Total Mexican Exports	6.2	6.4	4.9	5.6	6.1	6.5	<b>0.5</b>	<b>0.8</b>
Implied Daily Storage Activity	-25.6	-34.2	-44.1	-19.2	-7.8	-1.9	5.9	
EIA Reported Daily Storage Activity Daily Model Error	-24.4 -1.2	-33.9 -0.4	-48.3 4.1	-14.0 -5.2	-7.4 -0.4			

#### **Monthly Balances**

	2Yr Ago	LY					MTD		
	Mar-19	Mar-20	Jan-18	Feb-18	Jan-21	Feb-21	Mar-21	МоМ	vs. LY
Lower 48 Dry Production	88.7	93.7	77.0	78.7	91.2	85.7	92.3	<b>6.6</b>	<b>13.7</b>
Canadian Imports	5.1	4.1	5.9	5.2	6.3	6.4	5.0	<b>▼</b> -1.4	▼-0.2
L48 Power	25.7	28.3	25.3	24.5	28.7	27.9	25.4	▼ -2.4	<b>1</b> .0
L48 Residential & Commercial	35.7	27.4	48.9	39.3	44.4	48.5	32.1	▼-16.4	▼-7.2
L48 Industrial	23.0	22.2	23.8	22.6	22.8	21.7	19.4	<b>▼</b> -2.3	▼-3.3
L48 Lease and Plant Fuel	4.9	5.2	4.3	4.4	5.0	4.7	5.1	<b>0</b> .4	<b>0.7</b>
L48 Pipeline Distribution	2.9	2.6	3.2	2.8	3.3	3.4	2.7	▼ -0.7	<b>V</b> -0.1
L48 Regional Gas Consumption	92.3	85.7	105.5	93.6	104.3	106.3	84.7	▼-21.5	▼ -8.9
Net LNG Exports	4.8	8.5	2.2	3.0	10.5	8.4	10.8	<b>2.3</b>	<b>7.8</b>
Total Mexican Exports	4.9	5.4	4.2	4.1	6.2	5.7	6.4	<b>0.7</b>	<b>2.3</b>
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	-8.1	-1.9	-29.1	-16.9	-23.5	-28.3	-4.6		

Source: Bloomberg, analytix.ai

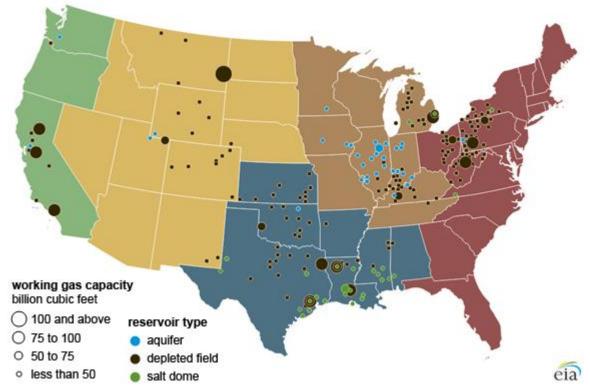


## Regional S/D Models Storage Projection

Week Ending	12-Mar			
	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-2.2	0.7	-1.5	-10
East Midwest Mountain South Central Pacific	-5.3 -1.4 3.8 1.1 -0.4	2.6 -0.6 -3.1 2.2 -0.5	-2.7 -1.9 0.7 3.4 -0.9	-19 -14 5 23 -6

\*Adjustment Factor is calcuated based on historical regional deltas

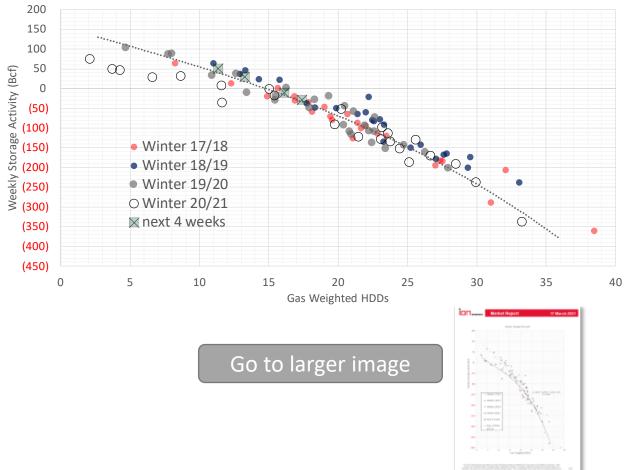
#### U.S. underground natural gas storage facilities by type (July 2015)

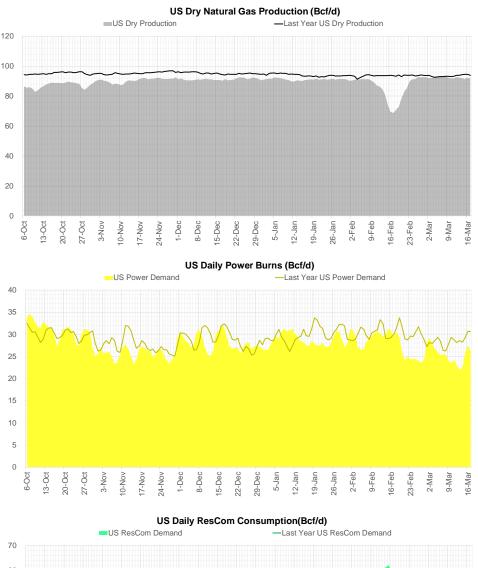


## Weather Model Storage Projection

Next report and beyond		
Week Ending	GWDDs	Week Storage Projection
12-Mar	16.1	-10
19-Mar	17.4	-28
26-Mar	13.3	31
02-Apr	11.4	51

### Winter Storage Forecast



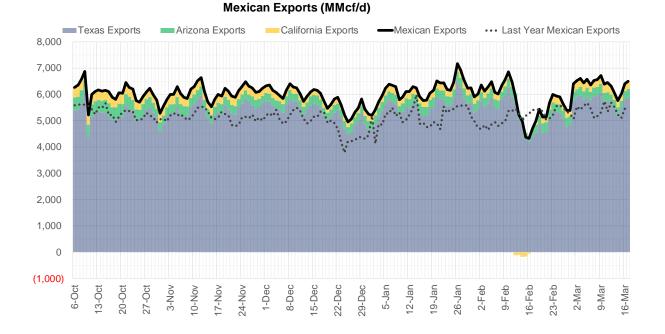


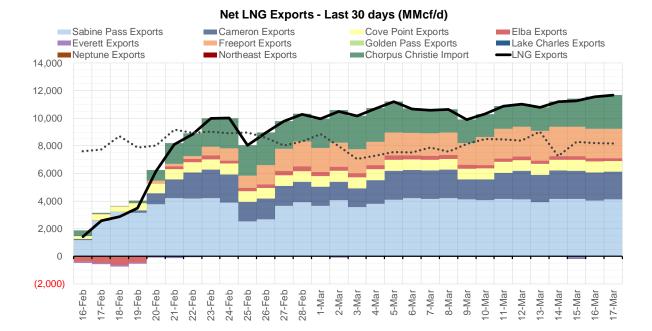
## Supply – Demand Trends

60 50 40 30 20 10 0 13-Oct 20-Oct 27-Oct 12-Jan 19-Jan 2-Feb 16-Feb 6-Oct I0-Nov I7-Nov 24-Nov I-Dec 15-Dec 22-Dec 29-Dec 5-Jan 26-Jan 9-Feb 23-Feb 16-Mar 3-Nov 8-Dec 2-Mar 9-Mar

Source: Bloomberg







Source: Bloomberg

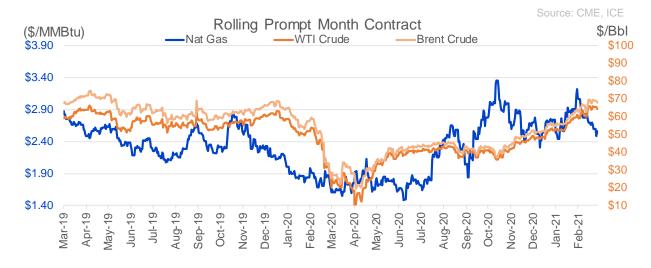


#### Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

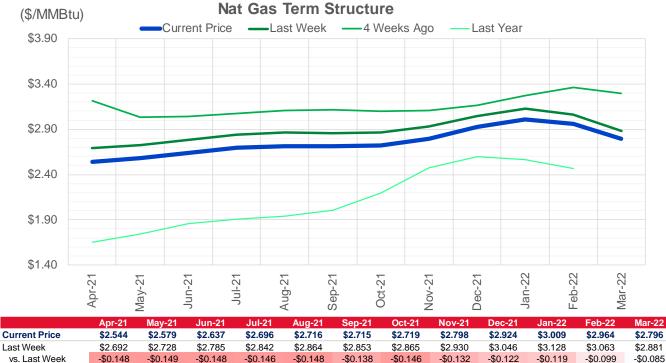
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	C	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
5	2021	Р	2.40	6116	_	4	2021	С	3.00	56834
8	2021	С	4.00	5811		4	2021	С	4.00	53148
5	2021	C	3.00	5418		4	2021	Р	2.50	45450
6	2021	P	2.40	5251		10	2021	С	4.00	42768
8	2021	P	2.40	5087		4	2021	С	3.25	39722
7	2021	Р	2.40	5039		8	2021	С	4.00	31850
9	2021	Р	2.40	5000		7	2021	С	4.00	31185
10	2021	P	2.40	5000		5	2021	С	3.00	29462
4	2021	P	2.25	4854		10	2021	С	3.25	29316
5	2021	P	2.25	4600		4	2021	С	2.75	29068
4	2021	P	2.50	4400		4	2021	Р	2.00	28279
4	2021	P	2.40	4384		6	2021	С	4.00	27937
4	2021	P	2.00	3689		8	2021	С	3.50	26453
8	2021	C	3.50	3601		5	2021	С	3.50	25552
9	2021	P	2.25	3540		4	2021	Р	2.25	25391
6	2021	P	2.25	3265		5	2021	С	4.00	24706
4	2021	C	2.75	3264		10	2021	С	5.00	24629
5	2021	C	3.25	3218		4	2021	С	3.50	23983
7	2021	P	2.25	2943		5	2021	С	3.25	22953
8	2021	P	2.25	2750		4	2021	Р	2.75	22783
10	2021	P	2.25	2746		5	2021	Р	2.50	22526
5	2021	C	2.75	2456		10	2021	С	3.50	21157
5	2021	C	2.90	2346		6	2021	Р	2.50	21131
4	2021	P	2.35	2182		4	2021	С	5.00	20533
5	2021	P	2.50	2109		5	2021	P	2.25	20257
5	2021	P	2.00	2053		8	2021	Р	2.25	20226
4	2022	P	2.10	2000		7	2021	С	3.50	19395
4	2021	P	2.55	1886		6	2021	С	3.00	19168
7	2021	P	2.50	1819		4	2021	P	2.60	18941
5	2021	P	2.55	1783		4	2022	С	3.00	18314
5	2021	P	2.20	1711		5	2021	P	2.00	18087
6	2021	C	3.00	1640		10	2021	С	3.00	17974
4	2021	C	2.85	1573		6	2021	С	3.50	17741
6	2021	C	2.75	1554		11 12	2021 2021	C C	4.00 4.00	17550 17233
4	2021	C	2.70	1543		12	2021	P		
8	2021	P	2.55	1507		9	2021	P P	2.00	17211
6	2021	P	2.55	1500		9	2021	P C	2.00 3.50	17186 16948
7	2021	P	2.55	1500		9 7	2021	P	2.50	16948
9	2021	P	2.55	1500		10	2021	P	2.50	16736
10	2021	P	2.55	1500		6	2021	P	2.50	16597
7	2021	C	3.25	1480		6	2021	P	2.23	16535
10	2021	C	3.50	1327		6	2021	F C	3.25	16455
7	2021	c	3.00	1308		4	2021	c	2.50	16096
5	2021	C	2.80	1290		7	2021	c	3.25	15288
6	2021	c	2.90	1281		7	2021	P	2.00	15233
5	2021	P	2.60	1270		4	2021	C	3.75	15049
6	2021	P	2.60	1203		8	2021	P	2.00	14980
8	2021	C	3.00	1176		8	2021	C	3.25	14455
9	2021	c	3.00	1159		12	2021			
e e		5	0.00				2021	Source	: CME, ICE	10010

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

	Civic, and ice combined									
CME Henry I	Hub Futures (1				o Futures Co		ent (10,000 MM			
	Current	Prior	Daily Change	FOR JUNE 26	Current	Prior	Daily Change			
APR 21	99946	111803	-11857	APR 21	91660	95391	-3731			
MAY 21	241172	238706	2466	MAY 21	87940	88796	-856			
JUN 21	102612	104681	-2069	JUN 21	73494	71878	1616			
JUL 21	89282	88841	441	JUL 21	77397	75620	1778			
AUG 21	49664	48725	939	AUG 21	76902	77357	-455			
SEP 21	100462	100407	55	SEP 21	68888	69407	-519			
OCT 21	127314	131411	-4097	OCT 21	86609	86442	167			
NOV 21	65370	65580	-210	NOV 21	56712	56420	291			
DEC 21	45536	45368	168	DEC 21	57547	57622	-75			
JAN 22	52972	53539	-567	JAN 22	57851	57786	65			
FEB 22	19883	19730	153	FEB 22	42007	41965	42			
MAR 22	43280	43125	155	MAR 22	47859	47715	145			
APR 22	43060	43276	-216	APR 22	44252	44210	41			
MAY 22	19725	19222	503	MAY 22	37175	37072	103			
JUN 22	12793	12580	213	JUN 22	35369	35217	152			
JUL 22	8085	7816	269	JUL 22	35669	35625	44			
AUG 22	8314	8232	82	AUG 22	34619	34481	138			
SEP 22	8462	8534	-72	SEP 22	35477	35336	141			
OCT 22	19927	18728	1199	OCT 22	41958	41770	188			
NOV 22	8937	8865	72	NOV 22	32674	32621	53			
DEC 22	8772	8769	3	DEC 22	38155	38063	92			
JAN 23	6257	6260	-3	JAN 23	20757	20745	12			
FEB 23	2336	2355	-19	FEB 23	19007	18967	40			
MAR 23	4422	4319	103	MAR 23	20754	20686	69			
APR 23	4940	4930	10	APR 23	17064	17037	26			
MAY 23	3556	3552	4	MAY 23	16199	16173	27			
JUN 23	1084	1084	0	JUN 23	15771	15793	-22			
JUL 23	998	995	3	JUL 23	15566	15566	1			
AUG 23	769	769	0	AUG 23	15877	15877	1			
SEP 23	605	603	2	SEP 23	14939	14938	1			



# **Market Report**



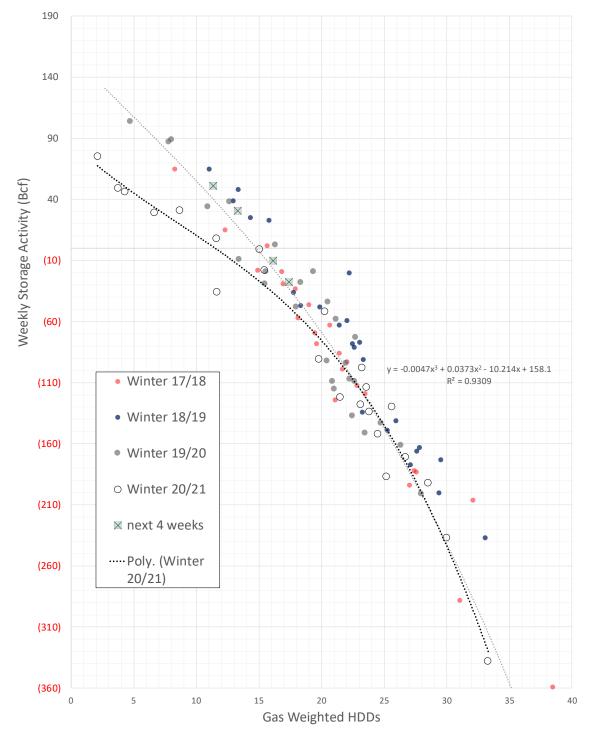
Last Week	\$2.692	\$2.728	\$2.785	\$2.842	\$2.864	\$2.853	\$2.865	\$2.930	\$3.046	\$3.128	\$3.063	\$2.881
vs. Last Week	-\$0.148	-\$0.149	-\$0.148	-\$0.146	-\$0.148	-\$0.138	-\$0.146	-\$0.132	-\$0.122	-\$0.119	-\$0.099	-\$0.085
4 Weeks Ago	\$3.219	\$3.032	\$3.040	\$3.073	\$3.108	\$3.116	\$3.103	\$3.112	\$3.162	\$3.275	\$3.362	\$3.295
vs. 4 Weeks Ago	-\$0.675	-\$0.453	-\$0.403	-\$0.377	-\$0.392	-\$0.401	-\$0.384	-\$0.314	-\$0.238	-\$0.266	-\$0.398	-\$0.499
Last Year	\$1.604	\$1.647	\$1.740	\$1.854	\$1.907	\$1.940	\$2.005	\$2.196	\$2.475	\$2.598	\$2.568	\$2.466
vs. Last Year	\$0.940	\$0.932	\$0.897	\$0.842	\$0.809	\$0.775	\$0.714	\$0.602	\$0.449	\$0.411	\$0.396	\$0.330

		Cash	Prompt	Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	2.74	2.86	0.12
TETCO M3	\$/MMBtu	2.27	2.29	0.02
FGT Zone 3	\$/MMBtu	2.27	2.77	0.50
Zone 6 NY	\$/MMBtu	2.27	2.31	0.04
Chicago Citygate	\$/MMBtu	2.38	2.62	0.24
Michcon	\$/MMBtu	2.41	2.58	0.17
Columbia TCO Pool	\$/MMBtu	2.16	2.36	0.20
Ventura	\$/MMBtu	2.33	2.56	0.23
Rockies/Opal	\$/MMBtu	2.48	2.46	-0.02
El Paso Permian Basin	\$/MMBtu	2.33	2.47	0.14
Socal Citygate	\$/MMBtu	3.45	2.69	-0.76
Malin	\$/MMBtu	2.37	2.61	0.24
Houston Ship Channel	\$/MMBtu	2.55	2.65	0.10
Henry Hub Cash	\$/MMBtu	2.50	2.56	0.06
AECO Cash	C\$/GJ	2.13	2.19	0.06
Station2 Cash	C\$/GJ	2.08	2.55	0.47
Dawn Cash	C\$/GJ	2.41	2.59	0.18

Source: CME, Bloomberg



					vs	. 4 Weeks		
	Units	<b>Current Price</b>	vs.	Last Week		Ago	vs	. Last Year
NatGas Jan21/Apr21	\$/MMBtu	0.078		-0.147		-0.487		0.451
NatGas Mar21/Apr21	\$/MMBtu	-0.309		-0.147		-0.496	▼	-0.550
NatGas Oct21/Nov21	\$/MMBtu	0.079		0.014		0.029		0.022
NatGas Apr21/Oct21	\$/MMBtu	0.174		0.572		0.819	▼	-0.129
WTI Crude	\$/Bbl	64.30		-0.140		3.160		43.930
Brent Crude	\$/Bbl	67.75	$\bullet$	-0.150		3.410		42.870
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18		0.000		0.000		0.000
Heating Oil	cents/Gallon	191.45	$\mathbf{\nabla}$	-0.280		7.680		96.030
Propane, Mt. Bel	cents/Gallon	0.94		0.010		0.026		0.650
Ethane, Mt. Bel	cents/Gallon	0.22		-0.003		-0.061		0.096
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