

# **Market Report**

# 14 September 2020

	Current		Δ from YD			Δ from 7D Avg		
Nat Gas Prompt	\$	2.39		\$	0.12	<u></u>	0.03	

	Current	Δ from YD		m 7D vg
WTI Prompt	\$ 37.23	\$ (0.10)	<b>~</b> \$	(0.5)

	C	Current	Δ from YD	Δ from 7D			
		arront	2o 12	Avg			
Brent Prompt	\$	39.81	<b>&gt;</b> \$ (0.02)	<b>▼</b> \$	(0.5)		

#### 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

00z GWDD Change

# Cooler Change

# Warmer Change

ECMWF Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	-1.3	3.2	1.5	3.5
24 Hr Chg	-3.2	2.1	0.6	-0.6
-				
GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
GFS Ensemble 00z 12 Hr Chg	1-5 Day 2.3	6-10 Day 0.4	11-15 Day 0.1	Total 2.9

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	86.6	▼ -0.64	<b>▼</b> -1.43

	Current	Δ from YD	Δ from 7D Avg		
US ResComm	7.7	<b>a</b> 0.27	<b>▼</b> -1.42		

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	7.4	▼ -0.25	<b>a</b> 0.87

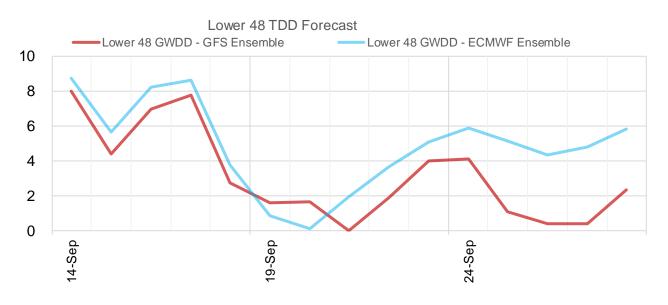
	Current	Δf	rom YD	Δf	rom 7D Avg
US Power Burns	34.1		1.57	~	-0.25

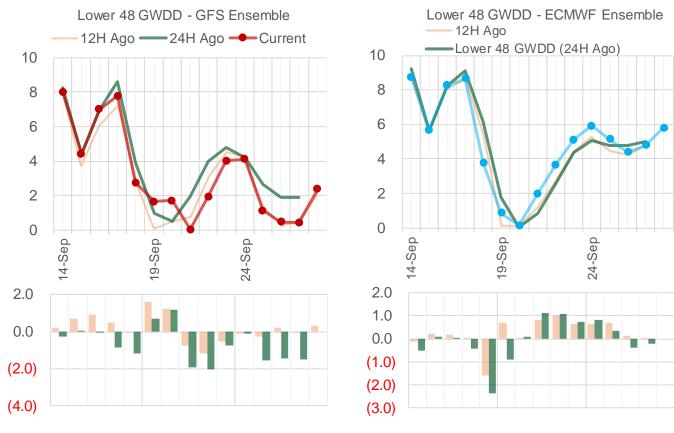
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	3.9	▼ -0.03	▼ -0.07

	Current	Δ from YD	Δ from 7D Avg		
Mexican Exports	6.2	<b>a</b> 0.21	▼ -0.04		



# Short-term Weather Model Outlooks (00z)





Source: WSI, Bloomberg



# **Market Report**

# Lower 48 Component Models

#### **Daily Balances**

	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	DoD	vs. 7D
Lower 48 Dry Production	88.4	88.3	88.3	87.7	87.7	87.3	86.6	<b>▽ -0.6</b>	▼ -1.3
Canadian Imports	3.8	4.0	4.6	3.8	3.9	3.9	3.9	<b>▽</b> 0.0	▼ -0.1
L48 Power	35.4	36.1	37.2	34.9	31.9	32.6	34.1	<b>1.6</b>	▼ -0.5
L48 Residential & Commercial	10.1	11.0	10.8	9.2	7.7	7.4	7.7	<b>0.3</b>	▼ -1.7
L48 Industrial	20.0	20.3	20.1	20.0	19.9	19.8	19.8	<b>△</b> 0.0	▼ -0.2
L48 Lease and Plant Fuel	4.9	4.9	4.9	4.9	4.9	4.9	4.8	▼ 0.0	▼ -0.1
L48 Pipeline Distribution	2.2	2.2	2.3	2.1	1.9	1.9	2.0	<b>△</b> 0.1	▼ -0.1
L48 Regional Gas Consumption	72.6	74.5	75.3	71.1	66.2	66.5	68.4	<b>1.9</b>	▼ -2.6
Net LNG Exports	6.2	6.8	6.9	6.4	7.2	7.6	7.4	<b>▽ -0.3</b>	<b>△</b> 0.5
Total Mexican Exports	6.4	6.2	6.3	6.2	6.0	6.0	6.2	<b>△</b> 0.2	▲ 0.0
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	7.1	4.8	4.6	7.7	12.2	11.1	8.5		

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

	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	WoW	vs. 4W
Lower 48 Dry Production	87.3	87.4	87.2	86.0	86.3	88.3	<u>^</u> 2.1	<b>1.6</b>
Canadian Imports	4.6	5.0	4.7	5.2	4.4	3.8	<b>▽ -0.6</b>	▼ -1.0
L48 Power	40.7	42.9	40.0	41.6	37.2	35.1	▼ -2.1	▼ -5.3
L48 Residential & Commercial	8.1	8.1	8.2	8.3	7.8	8.8	<b>1.0</b>	<b>0.7</b>
L48 Industrial	18.8	19.0	20.4	19.6	19.5	19.9	<b>0.4</b>	<b>a</b> 0.2
L48 Lease and Plant Fuel	4.9	4.9	4.8	4.8	4.8	4.9	<b>0.1</b>	<b>△</b> 0.1
L48 Pipeline Distribution	2.2	2.3	2.2	2.3	2.1	2.1	▼ 0.0	▼ -0.2
L48 Regional Gas Consumption	74.7	77.2	75.7	76.6	71.4	70.8	<b>▽ -0.6</b>	▼ -4.4
Net LNG Exports	3.9	4.4	4.7	3.9	3.0	5.2	<b>2.1</b>	<b>1.2</b>
Total Mexican Exports	6.1	6.0	6.2	6.6	6.5	6.4	<b>▽</b> -0.2	<b>△</b> 0.0
Implied Daily Storage Activity	7.2	4.8	5.3	4.1	9.7	9.8	0.1	
EIA Reported Daily Storage Activity	8.3	6.1	6.4	5.0	10.0			
Daily Model Error	-1.1	-1.3	-1.1	-0.9	-0.3			

## **Monthly Balances**

monthly Dalances									
	2Yr Ago	LY Son 10	May 20	lum 20	Jul-20	Aug 20	MTD	MoM	vo IV
	Sep-18	Sep-19	May-20	Jun-20	Jui-20	Aug-20	Sep-20	INIOINI	vs. LY
Lower 48 Dry Production	85.2	93.5	85.8	85.1	86.6	86.9	87.6	<b>△</b> 0.7	▼ -5.9
Canadian Imports	4.5	4.7	3.9	4.0	4.4	4.9	3.9	▼ -1.0	▽ -0.8
L48 Power	34.2	36.4	26.9	34.8	43.8	40.6	35.3	▼ -5.3	▼ -1.0
L48 Residential & Commercial	8.5	8.3	12.9	9.0	8.6	8.1	8.4	<b>△</b> 0.3	<b>△</b> 0.1
L48 Industrial	21.6	22.3	18.9	18.3	17.8	19.5	19.8	<b>0.3</b>	▼ -2.5
L48 Lease and Plant Fuel	4.8	5.2	4.8	4.9	4.9	4.8	4.9	<b>△</b> 0.1	▼ -0.3
L48 Pipeline Distribution	2.0	2.1	1.9	2.0	2.4	2.2	2.1	▼ -0.2	▼ 0.0
L48 Regional Gas Consumption	71.2	74.3	65.5	69.1	77.5	75.2	70.4	▼ -4.8	▼ -3.8
Net LNG Exports	3.1	6.2	6.7	4.0	3.3	4.0	5.3	<b>1.3</b>	▼ -0.8
Total Mexican Exports	5.1	5.4	4.9	5.7	6.1	6.3	6.4	<b>△</b> 0.1	<b>1.0</b>
Implied Daily Storage Activity	10.3	12.4	12.6	10.2	4.1	6.2	9.3		
EIA Reported Daily Storage Activity Daily Model Error								D	

Source: Bloomberg, analytix.ai



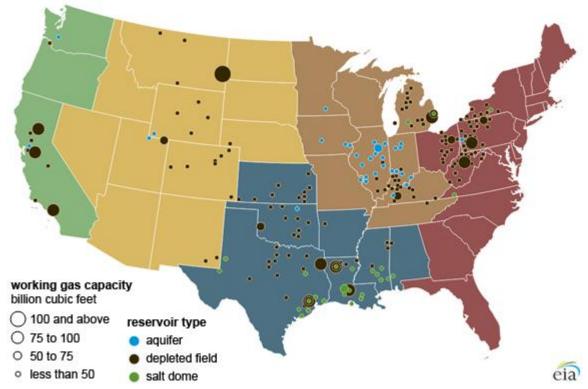
# Regional S/D Models Storage Projection

Week Ending 11-Sep

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	9.5	0.9	10.5	71
East	0.9	1.4	2.3	15
Midwest	3.6	0.3	4.0	27
Mountain	3.4	-2.9	0.5	3
South Central	8.0	2.6	3.4	24
Pacific	8.0	-0.5	0.2	2

<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 Storage								
Week Ending	Projection								
18-Sep	97								
25-Sep	104								
2-Oct	104								

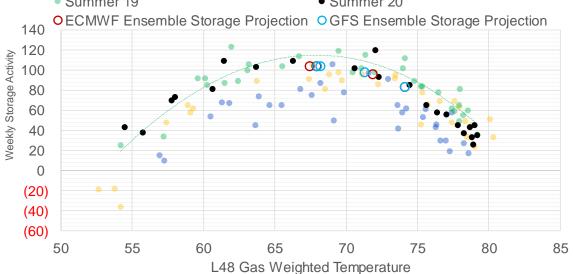
## Weather Storage Model - Next 4 Week Forecast

Summer 17

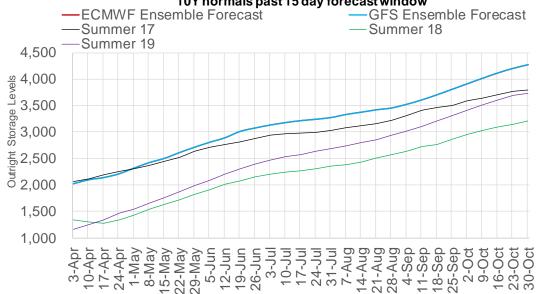
Summer 18

Summer 19

• Summer 20



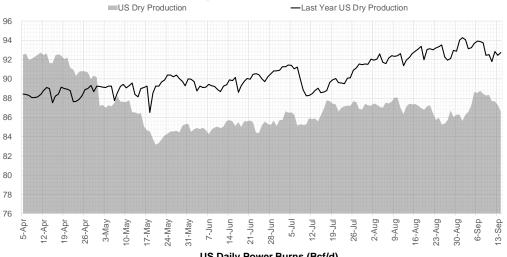
#### Weather Based End of Winter Projection (Bcf) 10Y normals past 15 day forecast window



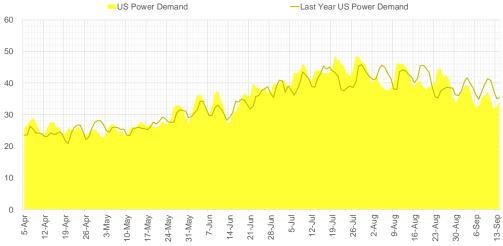


## Supply - Demand Trends

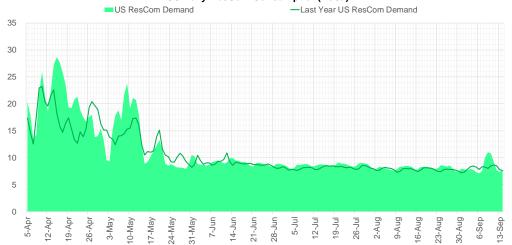
#### US Dry Natural Gas Production (Bcf/d)



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



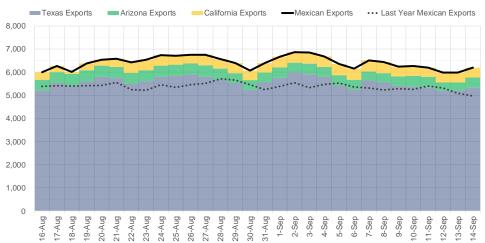
#### US Daily ResCom Consumption(Bcf/d)

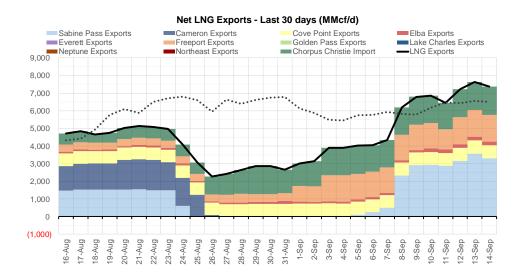


Source: Bloomberg



#### Mexican Exports - Last 30 days (MMcf/d)





Source: Bloomberg



# **Market Report**

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

	anner, roe anno risolate que constitue de la c									
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI	
10	2020	С	2.75	14444	10	2020	Р	2.00	49611	
10	2020	Р	2.00	9559	10	2020	С	3.00	44007	
11	2020	Р	2.25	6728	10	2020	Р	1.50	43993	
10	2020	С	2.50	6334	10	2020	С	2.75	42592	
10	2020	P	2.25	4690	10	2020	Р	1.60	34188	
10	2020	P	2.10	4641	10	2020	Р	2.25	34151	
10	2020	C	3.00	4515	10	2020	Р	1.75	33916	
11	2020	Č	3.25	3949	10	2020	С	2.50	32455	
11	2020	P	2.50	3618	3	2021	Р	2.00	32439	
11	2020	C	3.75	3367	4	2021	С	5.00	29687	
11	2020	P	1.75	3177	10	2020	Р	1.25	28897	
11	2020	Р	2.00	3074	11	2020	С	3.50	27588	
11	2020	C	3.00	3063	3	2021	С	3.25	26018	
10	2020	P	2.05	3007	3	2021	С	4.00	25264	
10	2020	C	2.45	2797	10	2020	С	3.25	24387	
10	2020	C	2.45	2684	10	2020	Р	1.00	24016	
10	2020	P	1.50	2557	11	2020	Р	2.00	23972	
	2020	C	3.50	2521	10	2020	Р	2.10	23570	
11		P			1	2021	С	4.50	23165	
10	2020	-	1.75	2382	12	2020	P	2.00	23011	
10	2020	P	1.85	2177	11	2020	С	5.00	22951	
10	2020	P	2.15	2145	1	2021	C	3.50	22890	
10	2020	С	2.25	2030	10	2020	P	1.90	22035	
10	2020	C	2.40	1950	10	2020	C	2.10	21984	
10	2020	P	2.40	1895	10	2020	P	1.80	21931	
11	2020	С	5.00	1833	3	2021	С	3.00	21861	
10	2020	C	2.70	1822	10	2020	P	2.20	21559	
10	2020	Р	2.20	1790	3	2021	С	6.00	20455	
10	2020	Р	1.80	1721	11	2020	P	2.25	19727	
3	2022	С	3.50	1700	3	2021	С	3.50	19531	
3	2022	Р	2.00	1700	10	2020	Р	1.30	19440	
10	2020	С	2.65	1507	10	2020	С	3.50	18955	
10	2020	Р	1.40	1449	10	2020	C	2.00	18663	
10	2020	С	2.60	1378	11	2020	P	2.50	18168	
11	2020	С	2.75	1310	1	2021	С	5.00	18130	
10	2020	С	2.55	1287	1	2021	Č	3.75	17595	
10	2020	Р	1.70	1217	11	2020	Ċ	3.25	17370	
10	2020	С	3.25	1166	2	2021	C	5.00	17296	
10	2020	Р	2.30	1016	10	2020	Ċ	2.25	17285	
1	2021	С	3.75	1014	1	2021	Č	3.00	16783	
1	2021	С	4.00	1014	11	2020	Ċ	3.00	16328	
1	2021	С	3.50	1010	10	2020	Ċ	2.40	15400	
1	2021	С	4.75	1000	12	2020	P	2.50	15294	
10	2020	Р	1.95	873	12	2020	C	4.00	15113	
12	2020	С	3.50	830	10	2020	Ċ	2.60	15052	
10	2020	P	1.50	814	11	2020	Ċ	2.75	14678	
10	2020	C	2.30	789	10	2020	P	1.40	14486	
11	2020	P	2.20	772	11	2020	C	4.00	14471	
10	2020	C	3.50	683	12	2020	Č	3.75	14332	
11	2020	Č	4.00	663	1	2021	P	2.25	14329	

Source: CME, Nasdaq, ICE

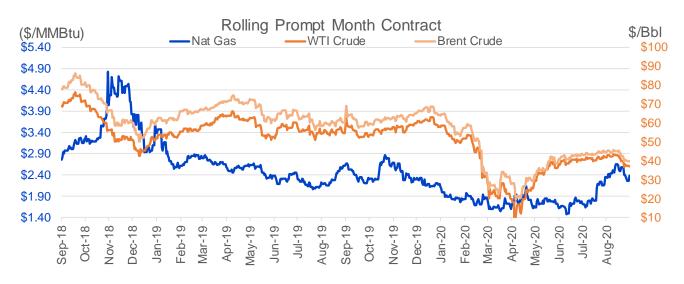


# Nat Gas Futures Open Interest

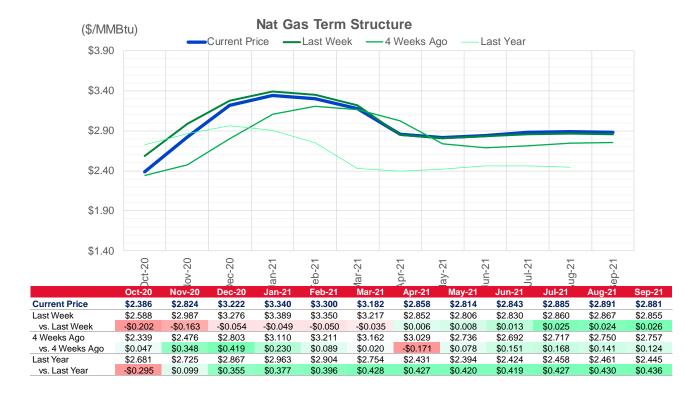
			O	hined
( N/III	and	н н	L.Om	ninaa

CMF Henry	Hub Futures (10		, and ICE C		Futures Co	ntract Equiva	lent (10,000 MM
5 <u>5</u>	Current	Prior		FOR JUNE 26	Current	Prior	Daily Change
OCT 20	143053	158979	-15926	OCT 20	87958	89433	-1475.25
NOV 20	230286	227202	3084	NOV 20	80275	81388	-1113
DEC 20	108334	105747	2587	DEC 20	74176	74094	82.25
JAN 21	134667	133841	826	JAN 21	89027	87245	1781.25
FEB 21	56024	55361	663	FEB 21	58972	58748	224
MAR 21	111365	108609	2756	MAR 21	77951	78068	-116.25
APR 21	77065	77182	-117	APR 21	64244	64073	171.25
MAY 21	46979	46737	242	MAY 21	56718	56325	393
JUN 21	29602	29490	112	JUN 21	51001	50849	152
JUL 21	20651	20614	37	JUL 21	53441	53281	160
AUG 21	22033	22039	-6	AUG 21	53268	53181	87.5
SEP 21	27915	27915	0	SEP 21	50044	49814	230.5
OCT 21	67867	67446	421	OCT 21	74384	74189	195.5
NOV 21	27156	27176	-20	NOV 21	42658	42669	-11.75
DEC 21	24078	23914	164	DEC 21	42816	42730	86.25
JAN 22	22669	22063	606	JAN 22	36488	36880	-392.25
FEB 22	12827	12632	195	FEB 22	32001	32048	-47.25
MAR 22	17684	17937	-253	MAR 22	33848	33850	-2
APR 22	20956	21151	-195	APR 22	33911	33811	100
MAY 22	6141	6088	53	MAY 22	24750	24693	56.5
JUN 22	3627	3621	6	JUN 22	24036	23944	92.5
JUL 22	2990	2983	7	JUL 22	25088	24994	93.75
AUG 22	1954	1946	8	AUG 22	24378	24282	95.5
SEP 22	2078	2061	17	SEP 22	23428	23408	20
OCT 22	3217	3296	-79	OCT 22	24647	24955	-307.25
NOV 22	2382	2373	9	NOV 22	22318	22063	254.5
DEC 22	2293	2188	105	DEC 22	24501	23180	1320.5
JAN 23	2873	2873	0	JAN 23	12445	12437	8
FEB 23	858	858	0	FEB 23	11441	11434	7
MAR 23	900	900	0	MAR 23	11905	11897	7.75

Source: CME, ICE







		Cash	Prompt	Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	1.35	1.74	0.39
TETCO M3	\$/MMBtu	1.27	1.47	0.20
FGT Zone 3	\$/MMBtu	1.25	2.57	1.32
Zone 6 NY	\$/MMBtu	1.25	1.25	0.00
Chicago Citygate	\$/MMBtu	1.78	2.26	0.48
Michcon	\$/MMBtu	1.73	2.14	0.41
Columbia TCO Pool	\$/MMBtu	1.24	1.61	0.37
Ventura	\$/MMBtu	1.74	2.24	0.50
Rockies/Opal	\$/MMBtu	1.85	2.11	0.26
El Paso Permian Basin	\$/MMBtu	1.37	1.81	0.44
Socal Citygate	\$/MMBtu	1.86	2.54	0.68
Malin	\$/MMBtu	1.86	2.33	0.47
Houston Ship Channel	\$/MMBtu	2.02	2.53	0.51
Henry Hub Cash	\$/MMBtu	1.93	2.30	0.37
AECO Cash	C\$/GJ	1.66	2.05	0.39
Station2 Cash	C\$/GJ	1.59	2.53	0.94
Dawn Cash	C\$/GJ	1.76	2.14	0.38

Source: CME, Bloomberg



					V	s. 4 Weeks		
	Units	<b>Current Price</b>	vs.	Last Week		Ago	VS	. Last Year
NatGas Jan/Apr	\$/MMBtu	-0.48	<b>A</b>	0.055	$\overline{}$	-0.007	$\overline{}$	-0.018
NatGas Mar/Apr	\$/MMBtu	-0.324	<b>A</b>	0.041	$\overline{}$	-0.617	$\overline{}$	-0.602
NatGas Oct/Nov	\$/MMBtu	0.44	_	0.039	_	0.111		0.389
NatGas Oct/Jan	\$/MMBtu	0.95	<b>A</b>	0.153	<b>A</b>	0.219		0.638
WTI Crude	\$/Bbl	37.23	$\overline{}$	-2.540	$\overline{}$	-5.660	$\overline{}$	-25.670
Brent Crude	\$/BbI	39.81	$\overline{}$	-2.200	$\overline{}$	-5.560	$\overline{}$	-29.210
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	_	0.000	<b>A</b>	0.000		0.000
Heating Oil	cents/Gallon	109.16	$\overline{}$	-5.990	$\overline{}$	-14.750	$\overline{}$	-99.220
Propane, Mt. Bel	cents/Gallon	0.47	$\overline{}$	-0.008	$\overline{}$	-0.029		0.005
Ethane, Mt. Bel	cents/Gallon	0.21		0.013	$\overline{}$	-0.031	$\overline{}$	-0.016
Coal, PRB	\$/MTon	12.30	<b>A</b>	0.000		0.000		0.150
Coal, ILB	\$/MTon	31.05	<b>A</b>	0.000	_	0.000	$\overline{}$	-4.500