

25 June 2021

	Cı	ırrent	Δ fro	m YD	Δ from 7D Avg		
Nat Gas Prompt	\$	3.46	\$	0.04	\$	0.20	

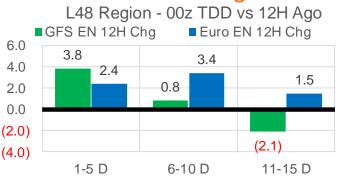
	С	urrent	Δ from YD	Δ fron Av	
WTI Prompt	\$	73.10	\$ (0.20)	\$	0.5

	Curron	t Δ from YD	Δ from 7D
Curre	Curren		Avg
Brent Prompt	\$ 75.4	l4 ▼ \$ (0.12)	\$ 1.0
1 F TOTTIPL			

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Vs. 12H Ago



Vs. 24H Ago

L48 Region - 00z TDD vs 24H Ago

GFS EN 24H Chg

1.9

0.7

0.0

1-5 D

6-10 D

(0.7)
11-15 D

Current		Δ from YD	Δ from 7D Avg		
US Dry Production	91.7	▼ -1.02	▼ -1.04		

	Current	Δ from YD	Δ from 7D Avg
US ResComm	7.8	▼ -0.22	▼ -0.48

	Current	Δ from YD	Δ from 7D Avg		
Net LNG Exports	10.9	▼ -0.21	a 0.65		

	Current	Δ from YD	Δ from 7D Avg		
US Power Burns	33.9	▲ 0.72	▼ -0.65		

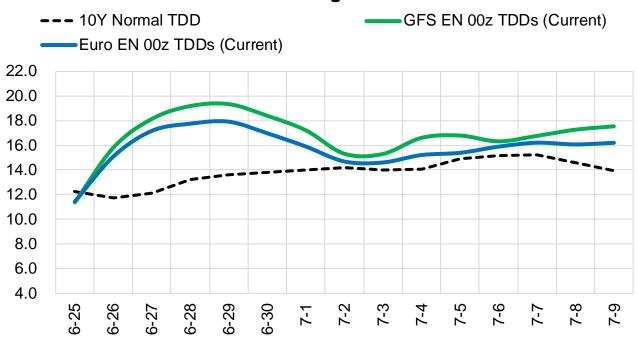
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.3	0.07	- 0.39

	Current	Δ from YD	Δ from 7D Avg		
Mexican Exports	7.6	▼ -0.36	0.02		

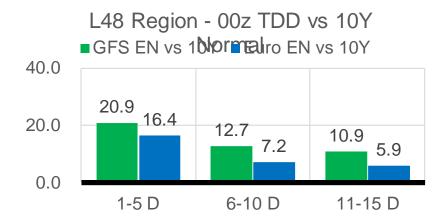


Short-term Weather Model Outlooks (00z)

L48 Region



Vs. 10Y Normal



Source: WSI, Bloomberg



Lower 48 Component Models

Daily Balances

	19-Jun	20-Jun	21-Jun	22-Jun	23-Jun	24-Jun	25-Jun	DoD	vs.7D
Lower 48 Dry Production	92.8	93.2	93.2	92.3	92.4	92.7	91.7	▼-1.0	▼-1.1
Canadian Imports	4.6	4.8	4.9	4.7	4.4	4.2	4.3	0.1	▼ -0.3
L48 Power	34.7	35.5	36.8	33.2	32.3	33.2	33.9	0.7	▼-0.4
L48 Residential & Commercial	7.7	7.9	8.8	9.3	8.4	8.0	7.8	▼-0.2	▼ -0.5
L48 Industrial	20.1	19.6	19.4	19.7	20.1	21.0	21.9	0.9	1.9
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.1	5.1	5.1	5.1	▼ -0.1	▼ -0.1
L48 Pipeline Distribution	2.1	2.1	2.2	2.1	2.0	2.0	2.1	0.0	▼ 0.0
L48 Regional Gas Consumption	69.8	70.2	72.4	69.3	67.9	69.3	70.7	1.4	0.9
Net LNG Delivered	10.34	10.48	10.19	9.71	10.37	11.13	10.92	▼-0.2	0.6
Total Mexican Exports	7.2	7.0	7.5	7.8	7.7	7.9	7.6	▼-0.4	▲ 0.1
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	10.2	10.3	8.0	10.1	10.7	8.5	6.7		

EIA Storage Week Balances

	21-May	28-May	4-Jun	11-Jun	18-Jun	25-Jun	WoW	vs. 4W
Lower 48 Dry Production	91.7	92.4	92.2	92.6	91.9	92.7	8.0	0.4
Canadian Imports	4.6	4.5	3.9	4.8	5.1	4.7	▼ -0.5	0.1
L48 Power	26.5	29.5	27.8	34.4	34.8	34.5	▼-0.3	2.9
L48 Residential & Commercial	10.5	9.4	11.8	8.4	8.2	8.3	0.1	▼-1.1
L48 Industrial	20.0	20.1	18.0	21.5	23.0	20.2	▼ -2.8	- 0.4
L48 Lease and Plant Fuel	5.0	5.1	5.1	5.1	5.1	5.1	0.0	0.0
L48 Pipeline Distribution	1.9	2.0	2.0	2.1	2.1	2.1	▼ 0.0	0.1
L48 Regional Gas Consumption	63.9	66.0	64.7	71.5	73.1	70.3	▼ -2.9	1.4
Net LNG Exports	10.4	10.5	11.0	9.4	9.6	10.3	0.7	0.1
Total Mexican Exports	6.8	6.7	7.2	7.3	7.5	7.6	▲ 0.0	0.4
Implied Daily Storage Activity	15.2	13.6	13.3	9.1	6.8	9.2	2.4	
EIA Reported Daily Storage Activity	16.4	14.0	14.0	2.3	7.9			
Daily Model Error	-1.2	-0.4	-0.7	6.8	-1.1			

Monthly Balances									
•	2Yr Ago	LY					MTD		
	Jun-19	Jun-20	Feb-21	Mar-21	Apr-21	May-21	Jun-21	MoM	vs. LY
Lower 48 Dry Production	91.5	87.7	85.2	91.8	91.7	91.9	92.4	0.5	4.6
Canadian Imports	4.7	4.0	6.3	4.8	4.7	4.5	4.7	0.2	▲ 0.8
L48 Power	33.1	35.0	27.8	24.2	25.1	27.0	34.1	7.1	▼-0.8
L48 Residential & Commercial	9.0	8.8	47.1	29.3	20.0	13.1	8.3	▼ -4.8	- 0.5
L48 Industrial	22.5	19.9	21.3	19.7	20.5	19.2	21.2	1.9	1.3
L48 Lease and Plant Fuel	5.0	4.8	4.7	5.0	5.0	5.0	5.1	0.1	0.3
L48 Pipeline Distribution	2.1	2.2	3.3	2.5	2.2	2.1	2.1	0.0	▼ -0.1
L48 Regional Gas Consumption	71.7	70.7	104.1	80.9	72.8	66.4	70.8	4.3	0.1
Net LNG Exports	5.5	4.0	8.6	11.1	11.5	10.8	9.9	▼ -0.9	▲ 5.9
Total Mexican Exports	5.2	5.5	5.8	6.5	6.7	6.8	7.5	0.7	2.0
Implied Daily Storage Activity EIA Reported Daily Storage Activity	13.8	11.5	-27.0	-2.0	5.4	12.4	8.9		
Daily Model Error									

Source: Bloomberg, analytix.ai



Daily Average Generation Data

Nuclear Generation Daily Average - GWh (NRC)

	19-Jun	20-Jun	21-Jun	22-Jun	23-Jun	24-Jun	25-Jun	DoD	vs.7D
NRC Nuclear Daily Output	89.5	91.4	90.4	90.9	89.7	89.4	89.4	0.0	-0.8
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	104.9	0.0	0.0
NRC Nuclear Outage	15.4	13.4	14.5	14.0	15.2	15.4	15.4	0.0	8.0
NRC % Nuclear Cap Utilization	91.0	93.0	91.9	92.4	91.2	91.0	91.0	0.0	-0.8

Wind Generation Daily Average - MWh (Genscape)

	19-Jun	20-Jun	21-Jun	22-Jun	23-Jun	24-Jun	25-Jun	DoD	vs. 7D
CAISO Wind	3685	3886	2901	2711	2573	3721	3759	38	513
ERCOT	19004	16557	13043	14560	19543	18763	18237	-526	1325
Genscape US Wind	41307	56111	53868	36052	65646	65646	65646	0	12541

Generation Daily Average - MWh (Genscape)

	19-Jun	20-Jun	21-Jun	22-Jun	23-Jun	24-Jun	25-Jun	DoD	vs. 7D
Genscape US Wind	41307	56111	53868	36052	65646	65646	65646	0	12541
Genscape Other Renewables	40657	42547	50572	42824	39304	39304	39304	0	-3231
Genscape US Other	4809	4765	4989	4456	4392	4392	4392	0	-242
Genscape US Coal	119246	115386	126074	117475	111873	111873	111873	0	-5115
Genscape US Nuke	93559	95558	94479	95029	93813	93813	93813	0	-562
Genscape US Hydro	29973	29488	30954	29814	30871	30871	30871	0	542
Genscape US Gas	204132	205961	221050	192433	173424	173424	173424	0	-21646

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai



Storage Week Average Generation Data

Nuclear	Generation	Weekly	Average -	GWh ((NRC)
		,			/

	21-May	28-May	4-Jun	11-Jun	18-Jun	25-Jun	WoW	WoW Bcf/d Impact
NRC Nuclear Daily Output	81.7	86.7	89.2	88.6	86.7	89.9	3.2	-0.5
NRC Nuclear Max Capacity	104.9	104.9	104.9	104.9	104.9	104.9	0.0	
NRC Nuclear Outage	23.2	18.1	15.7	16.3	18.1	15.0	-3.2	
NRC % Nuclear Cap Utilization	0.1	0.1	0.1	0.1	0.1	0.1	0.0	

Wind Generation Weekly Average - MWh (Genscape)

	21- M ay	28-May	4-Jun	11-Jun	18-Jun	25-Jun	WoW	WoW Bcf/d
								Impact
CAISO Wind	4429	4045	4012	4607	3723	3254	-470	0.1
ERCOT	15638	18210	9217	17072	10749	16549	5800	-1.0
Genscape US Wind	44217	54606	29242	43337	32707	51377	18670	-3.1

Generation Weekly Average - MWh (Genscape)

	21-May	28-May	4-Jun	11-Jun	18-Jun	25-Jun	WoW	WoW Bcf/d Impact
Genscape US Wind	44217	54606	29242	43337	32707	51377	18670	-3.1
Genscape Other Renewables	41479	40853	43628	48111	37276	41854	4578	-0.8
Genscape US Other	5356	5615	5443	5942	5201	4729	-472	0.1
Genscape US Coal	87761	101192	91844	118938	120230	118114	-2116	0.4
Genscape US Nuke	85515	90607	93111	92667	90822	94023	3201	-0.5
Genscape US Hydro	28694	27300	28202	32469	29459	30561	1102	-0.2
Genscape US Gas	155670	176363	167948	212241	210769	198426	-12343	

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai



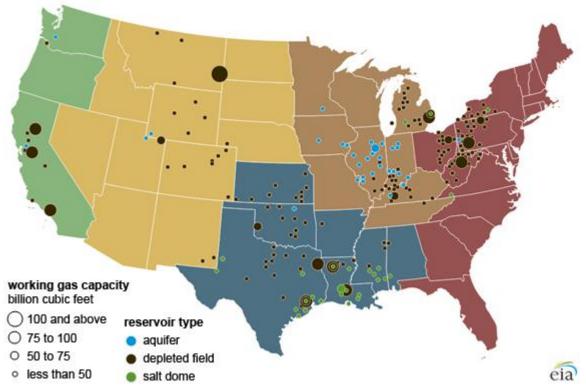
Regional S/D Models Storage Projection

Week Ending 25-Jun

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	8.9	1.1	10.1	70
East	2.7	0.7	3.4	24
Midwest	4.4	-0.4	4.0	28
Mountain	4.8	-3.8	1.0	7
South Central	-3.6	4.7	1.1	8
Pacific	0.7	-0.2	0.5	4

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

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



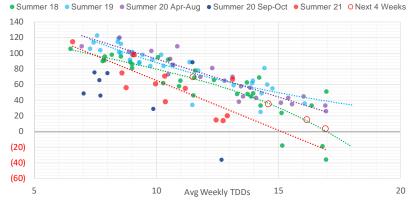


Weather Model Storage Projection

Next report
and beyond

Week Ending	GWDDs	Week Storage Projection
25-Jun	11.5	70
02-Jul	16.9	4
09-Jul	16.2	16
16-Jul	14.6	36

Weather Storage Model - Next 4 Week Forecast



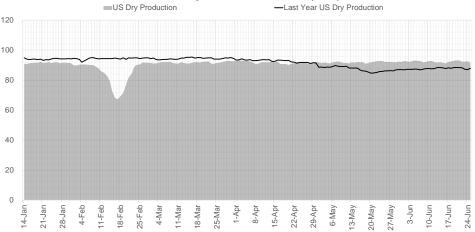
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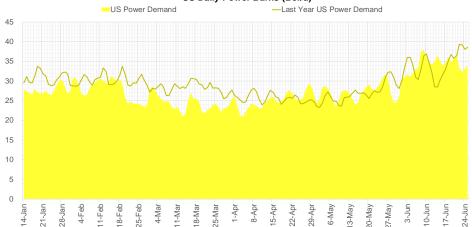


Supply - Demand Trends

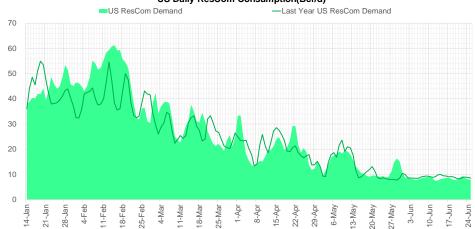
US Dry Natural Gas Production (Bcf/d)



US Daily Power Burns (Bcf/d)



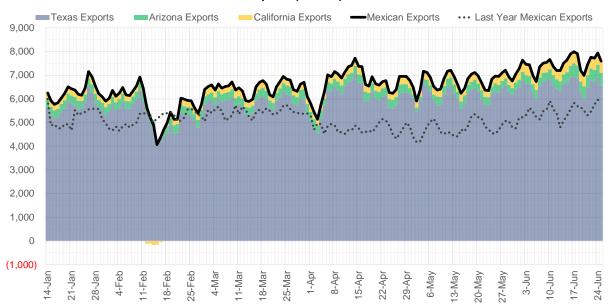
US Daily ResCom Consumption(Bcf/d)



Source: Bloomberg



Mexican Exports (MMcf/d)



Net LNG Exports - Last 30 days (MMcf/d) Sabine Pass Exports Cameron Exports Cove Point Exports Elba Exports Everett Exports Freeport Exports Golden Pass Exports ■Lake Charles Exports Northeast Exports Chorpus Christie Import LNG Exports ■Neptune Exports 12,000 10,000 8,000 6,000 4,000 2,000 0 (2,000)7-Jun 8-Jun 9-Jun 10-Jun 11-Jun 12-Jun 15-Jun I6-Jun

Source: Bloomberg



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

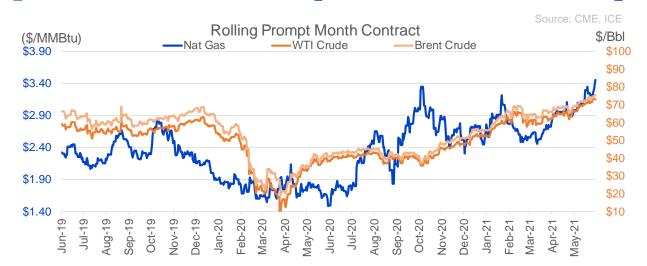
CONTRACT	CONTRACT	PUT/CALL	STRIKE	CUMULATIVE	CONTRACT	CONTRACT	PUT/CALL	STRIKE	CUMULATIVE OI
MONTH	YEAR	1 01/OALL	OTIVILLE	VOL	MONTH	YEAR	1 01/CALL	STRIKE	COMOLATIVE OF
7	2021	С	3.50	8154	10	2021	С	4.00	46563
7	2021	Р	3.30	6374	8	2021	С	3.50	42824
8	2021	Р	2.90	6234	8	2021	С	4.00	42249
8	2021	C	3.50	5307	9	2021	С	4.00	40786
7	2021	P	3.25	4901	10	2021	С	3.50	34274
10	2021	P	2.75	4355	7	2021	С	3.50	33833
7	2021	C	3.40	4204	10	2021	Р	2.50	32522
10	2021	Č	4.50	3677	8	2021	Р	3.00	30815
11	2021	P	2.75	3510	8	2021	С	3.75	30792
11	2021	C	4.50	3500	7	2021	Р	2.90	29482
8	2021	Č	4.00	3377	8	2021	Р	2.50	29335
8	2021	Č	3.75	3022	10	2021	С	3.25	29011
7	2021	Č	3.45	3011	7	2021	Р	2.50	28794
7	2021	C	3.45	2944	7	2021	С	4.00	28471
7	2021	C	3.30	2536	7	2021	С	3.25	28083
9	2021	P		2449	10	2021	C	5.00	28024
			3.10		9	2021	C	3.50	26506
4	2022	С	4.00	2150	7	2021	P	2.75	26179
11	2022	С	3.25	2100	8	2021	C	3.25	24899
9	2021	P	2.90	1935	10	2021	P	2.75	24724
10	2021	Р	3.00	1810	10	2021	P	2.00	23689
10	2021	Р	2.50	1794	7	2021	P	2.85	23679
10	2021	Р	3.25	1787	8	2021	P	2.90	23646
9	2021	С	3.75	1773	7	2021	P	2.80	23457
10	2021	С	5.50	1717	9	2021	P	2.50	23406
7	2021	Р	3.40	1631	7	2021	P	3.00	23213
7	2021	Р	3.35	1606	12	2021	Ċ	4.00	22709
8	2021	Р	2.75	1550	7	2021	Č	3.75	21846
8	2021	Р	3.25	1518	7	2021	C	3.73	21329
1	2022	Р	3.25	1450	9	2021	P	2.00	20423
3	2022	С	4.00	1450	8	2021	P	2.75	20370
9	2021	С	3.50	1390	9	2021	C		20370
9	2021	C	4.00	1354				3.25	
8	2021	P	3.20	1353	10 10	2021	C P	4.50	20027
8	2021	P	3.10	1336		2021		2.25	19741
8	2021	C	5.00	1251	11	2021	C P	4.00	19716
7	2021	Č	2.75	1229	8	2021		2.00	19664
8	2021	Č	4.25	1218	4	2022	С	3.00	19623
9	2021	Č	4.50	1158	8	2021	P	2.25	19478
8	2021	Č	3.85	1117	10	2021	С	3.00	18010
3	2021	P	2.25	1100	3	2022	С	4.00	17056
		C			10	2021	С	6.00	16198
5	2022		4.00	1100	8	2021	С	3.00	16181
6	2022	С	4.00	1100	7	2021	P	2.00	16035
7	2022	С	4.00	1100	8	2021	С	3.30	15526
8	2022	С	4.00	1100	11	2021	Р	2.50	15470
9	2022	С	4.00	1100	7	2021	Р	2.70	15367
10	2022	C	4.00	1100	10	2021	С	3.75	14965
8	2021	P	3.00	1093	3	2022	С	3.00	14793
4	2022	С	3.25	1000	1	2022	С	4.00	14623
5	2022	С	3.25	1000	3	2022	C Source	: CME, ICE	14016



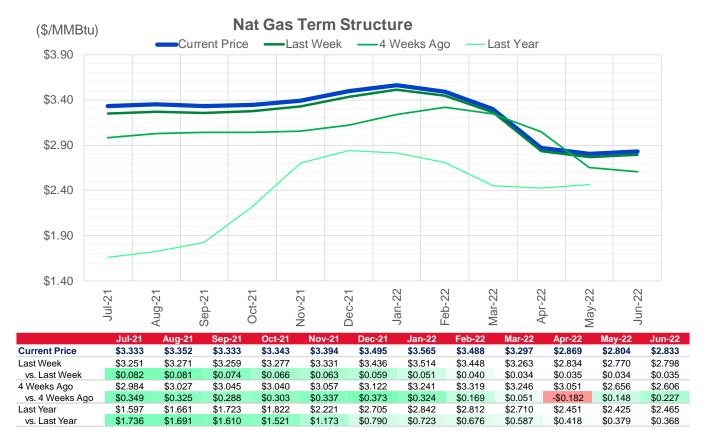
Nat Gas Futures Open Interest

CME, and ICE Combined

CME Henry	Hub Futures (10	0,000 MMBti	J)	ICE Henry H	Hub Futures Con	tract Equiva	alent (10,000 MM
	Current	Prior	Daily Change		Current	Prior	Daily Change
JUL 21	15786	24569	-8783	JUL 21	85332	87460	-2129
AUG 21	217719	215142	2577	AUG 21	87167	85038	2129
SEP 21	204533	204327	206	SEP 21	83996	85668	-1671
OCT 21	148120	145608	2512	OCT 21	97473	97265	208
NOV 21	92890	92545	345	NOV 21	71876	71553	323
DEC 21	65326	65369	-43	DEC 21	68607	68331	276
JAN 22	100067	100385	-318	JAN 22	83435	84699	-1264
FEB 22	39759	38003	1756	FEB 22	65366	65649	-283
MAR 22	84249	83333	916	MAR 22	65065	64911	154
APR 22	76087	75821	266	APR 22	59826	59186	640
MAY 22	55934	53751	2183	MAY 22	57277	55588	1689
JUN 22	24701	24824	-123	JUN 22	51666	51761	-95
JUL 22	18234	17900	334	JUL 22	50465	49969	496
AUG 22	18370	17745	625	AUG 22	50871	50381	490
SEP 22	16087	15762	325	SEP 22	50974	50478	496
OCT 22	49050	49284	-234	OCT 22	55859	57004	-1145
NOV 22	20113	20138	-25	NOV 22	44511	44270	241
DEC 22	14918	14609	309	DEC 22	47195	47102	93
JAN 23	10039	9379	660	JAN 23	27016	26527	490
FEB 23	3443	2910	533	FEB 23	24455	24197	258
MAR 23	7649	7576	73	MAR 23	27621	27352	269
APR 23	8758	8654	104	APR 23	21923	21705	217
MAY 23	4682	4686	-4	MAY 23	22182	21941	241
JUN 23	1173	1177	-4	JUN 23	20722	20462	261
JUL 23	1885	1885	0	JUL 23	20581	20314	267
AUG 23	969	969	0	AUG 23	20544	20308	236
SEP 23	1364	1364	0	SEP 23	20189	19929	260
OCT 23	2307	2307	0	OCT 23	21157	20881	276
NOV 23	816	816	0	NOV 23	19762	19559	204
DEC 23	1133	1133	0	DEC 23	20138	19927	211







		Cash	Prompt	Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	2.75	2.82	0.07
TETCO M3	\$/MMBtu	2.58	2.71	0.13
FGT Zone 3	\$/MMBtu	2.65	3.29	0.64
Zone 6 NY	\$/MMBtu	2.65	2.65	0.00
Chicago Citygate	\$/MMBtu	3.17	3.13	-0.04
Michcon	\$/MMBtu	3.14	3.06	-0.08
Columbia TCO Pool	\$/MMBtu	2.75	2.68	-0.07
Ventura	\$/MMBtu	2.66	3.05	0.39
Rockies/Opal	\$/MMBtu	3.38	3.04	-0.34
El Paso Permian Basin	\$/MMBtu	3.01	3.22	0.21
Socal Citygate	\$/MMBtu	4.25	4.50	0.25
Malin	\$/MMBtu	3.46	3.50	0.04
Houston Ship Channel	\$/MMBtu	3.26	3.29	0.03
Henry Hub Cash	\$/MMBtu	3.30	3.09	-0.22
AECO Cash	C\$/GJ	2.72	2.59	-0.13
Station2 Cash	C\$/GJ	2.66	3.38	0.72
Dawn Cash	C\$/GJ	3.15	3.06	-0.09

Source: CME, Bloomberg



			vs. 4 Weeks					
	Units	Current Price	vs.	Last Week		Ago	VS	. Last Year
NatGas Jul21/Oct21	\$/MMBtu	0.004		-0.020	\blacksquare	-0.029		-0.015
NatGas Oct21/Nov21	\$/MMBtu	0.047	•	-0.006	•	-0.019		-0.003
NatGas Oct21/Jan22	\$/MMBtu	0.216		-0.016	•	-0.053		-0.071
NatGas Apr22/Oct22	\$/MMBtu	0.015		-0.009	▼	-0.026		-0.035
WTI Crude	\$/Bbl	73.30		2.260		6.450		34.580
Brent Crude	\$/Bbl	75.56		2.480		6.100		34.510
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18		0.000		0.000		0.000
Heating Oil	cents/Gallon	216.23		9.550		10.590		100.670
Propane, Mt. Bel	cents/Gallon	0.97		0.019		0.142		0.468
Ethane, Mt. Bel	cents/Gallon	0.28		-0.001		0.016		0.057
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						



