A Weekly Analysis of Energy Stocks Using the McDep Ratio July 2, 2001

# **Reentry Point to Buy Natural Gas**

#### **Summary and Recommendation**

A decline of 71% in the spot price of natural gas is enough to justify renewed buy interest in our best fuel. Our immediate action is to revise to Strong Buy, Burlington Resources Inc. (BR), the largest concentrated stock market participation in natural gas (see Stock Idea, Burlington Resources Inc., July 2, 2001). Other more concentrated stocks in our coverage, but not yet rated on the buy/sell scale, include in descending order of size, Anadarko Petroleum Corp. (APC), Devon Energy Corporation (DVN), San Juan Basin Royalty Trust (SJT), Hugoton Royalty Trust (HGT), Cross Timbers Royalty Trust (CRT) and Purcell Energy, Ltd. (PEL.TO). Despite the spot price of gasoline also dropping sharply during the past month, we keep our Strong Buy rating on USX-Marathon Group (MRO) because a corporate separation underway adds special appeal. Power companies and oil producers that make attractive additions to a diversified energy portfolio include our recommended Buys American Electric Power (AEP), Exelon Corporation (EXC), PetroChina (PTR) and Energy Partners Limited (EPL).

## **Exploit the Wonders of Volatility**

Before futures markets were developed, we used to say buy natural gas in the summer and sell it in the winter. In hindsight we know that was the right advice for the most recent summer and winter. The daily price of Henry Hub natural gas on June 29, 2000 was \$4.29/mmbtu. It reached a high of \$10.50 on December 21, about the first day of winter. A year later on June 29, 2001 the price has receded to \$2.95.

In recent years we have become more sophisticated with futures price curves out to 2007 for oil and 2004 for natural gas (see Chart). The market already anticipates some gain with a natural gas price of \$4/mmbtu for next January and compared to \$2.95 today.

Normally one would expect about a \$0.50 difference in price between summer and winter. Natural gas resellers can buy natural gas in summer, store it underground near the market, and resell it in winter after incurring a storage cost of about \$0.50. As a result the current daily price is about \$0.50 low compared to the futures price for January.

Barring a sharp recession or a warm winter, the futures price for January ought to be more than \$4. It should be at least 20% higher than the crude oil price to be equivalent to refined distillate oil, the closest competitive fuel in winter. With the crude oil price at about \$4.30/mmbtu, natural gas ought to be over \$5 on that basis.

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A return to the \$10 price of last winter requires another surprise along the lines of the California electricity crisis. It is hard to predict crises. Some experts thought there would be a heating oil crisis in New England last winter considering that prices spiked the previous winter. As we know there was no crisis in heating oil this past winter. What we do know is that surprise crises are more likely to occur when the underlying supply/demand balance is already tight. Then when a natural surprise occurs like bitter weather or the lack of rain for hydropower, a sharp price reaction ensues.

## **Respect Futures Prices, But Think for Yourself**

Futures prices do have a shred of rationale. The long-term oil price has been remarkably steady. The futures price of oil for 2006 has traded up in a range of \$18.07 to \$22.22 per barrel, or \$3.00 to \$3.70 per mmbtu, since March 2000. Consider 2006 the anchor point of a wagging tail. Spot oil and natural gas prices are the tip of a wagging tail. The part of the tail between the anchor and the tip does not wag as much. A mathematician might say that volatility declines with increasing time period of the futures contract.

We accept futures prices, whatever they may be, as the basis for our calculations of present value and quarterly cash flow. The numbers are a widely known reference point and one might say they represent a consensus of sorts. That frees us from agonizing over the best price forecast and allows us to think about the implications of an outcome that will surely be different than what the current futures curve implies.

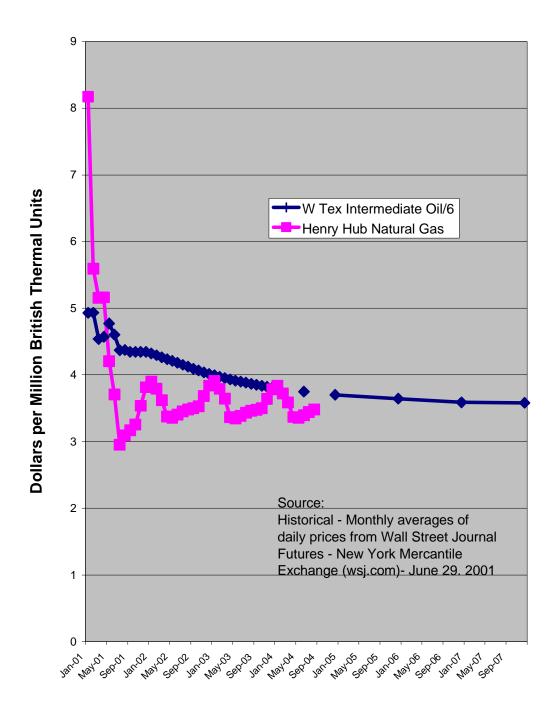
### **Energy Prices in a Half-Decade Inflationary Trend**

An investment idea can be appealing as long as everyone does not believe it. The fact of the widespread denial of higher electricity price in California is wonderful evidence of a large constituency that does not believe the fundamental level of energy pricing is moving higher. That was the case with the oil and gas shortage of 1973. Politicians denied the economic evidence for higher energy price and blamed producers. Yet higher energy prices persisted and indeed went a lot higher still.

Perhaps because it may represent a rough consensus, the futures market also reflects less of the inflation in energy price we think is ahead of us. As a result we expect the oil futures curve to be higher eventually. We expect natural gas futures to be above oil futures, not below as is the case now, when both are stated in heating value equivalent. We expect power prices to move away from those set by cheap coal and nuclear plants that are no longer being built, at least for completion any time soon, and toward the natural gas equivalent since almost all new capacity is tied to natural gas.

Kurt H. Wulff, CFA

# Natural Gas and Oil Price, 2001-2007



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Table L-1
Mega Cap and Large Cap Energy Companies
Rank by McDep Ratio: Market Cap and Debt to Present Value

		Price			Net		
		(\$/sh)		Market	Present	Debt/	
	Symbol/	29-Jun	Shares	Cap	Value	Present	McDep
	Rating	2001	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Mega Cap							
Exxon Mobil Corporation	XOM	87.35	3,510	307,000	74.30	0.09	1.16
BP PLC	BP	49.85	3,720	185,000	48.90	0.17	1.02
TOTAL Fina Elf S.A.	TOT	70.20	1,400	98,000	72.00	0.16	0.98
Royal Dutch/Shell	RD	58.27	3,580	209,000	60.80	0.09	0.96
Chevron (incl. Texaco)	CHV	90.50	1,060	95,900	103.40	0.15	0.89
Total or Median				895,000		0.15	0.98
Power							
Enron Corp.	ENE	49.10	814	40,000	16.90	0.68	1.61
Dynegy Inc.	DYN	45.50	338	15,400	20.60	0.56	1.54
Mirant Corporation	MIR	34.40	353	12,100	11.70	0.75	1.49
AES Corporation	AES	43.05	538	23,200	15.80	0.73	1.47
Calpine Corporation	CPN	37.80	313	11,800	21.40	0.48	1.40
Duke Energy Corporation	DUK	39.01	752	29,300	20.90	0.62	1.33
El Paso Corporation	EPG	52.54	521	27,400	30.00	0.57	1.32
Williams Companies	WMB	32.95	485	16,000	16.60	0.69	1.30
American Electric Power Co. Inc.	AEP 2	46.17	324	15,000	25.90	0.73	1.21
Southern Company	SO	23.25	683	15,900	16.90	0.54	1.17
Exelon Corporation	EXC 2	64.12	324	20,800	55.30	0.51	1.08
Total or Median				227,000		0.62	1.33
Natural Gas and Oil							
Occidental Petroleum	OXY	26.59	370	9,800	35.60	0.46	0.86
Anadarko Petroleum Corp.	APC	53.91	263	14,200	66.30	0.24	0.86
Burlington Resources, Inc	BR 1	39.75	215	8,500	50.50	0.21	0.83
ENI S.p.A.	E	61.70	800	49,400	91.90	0.10	0.70
Conoco Inc.	COC.B	28.90	623	18,000	48.00	0.21	0.68
Phillips (incl. Tosco)	P	57.00	379	21,600	102.10	0.27	0.68
Total or Median				122,000		0.22	0.77
Service							
Schlumberger Ltd.	SLB	52.65	581	30,600	37.70	0.14	1.34
Halliburton Company	HAL	35.60	430	15,300	27.20	0.13	1.27

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy

McDep Ratio = Market cap and **De**bt to **p**resent value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 2, 2001

Table L-2
Mega Cap and Large Cap Energy Companies
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

		Price		Dividend or			
		(\$/sh)	EV/	EV/	Distribution		PV/
		29-Jun	Sales	Ebitda	P/E	NTM	Ebitda
	Symbol	2001	2001E	NTM	NTM	(%)	NTM
Mega Cap							
Exxon Mobil Corporation	XOM	87.35	1.5	8.1	16	2.0	7.0
BP PLC	BP	49.85	1.2	7.1	11	2.8	7.0
TOTAL Fina Elf S.A.	TOT	70.20	1.1	6.9	16	1.6	7.0
Royal Dutch/Shell	RD	58.27	1.4	6.7	15	2.4	7.0
Chevron (incl. Texaco)	CHV	90.50	1.0	5.4	10	2.9	6.0
Median			1.2	6.9	15	2.4	7.0
Power							
Enron Corp.	ENE	49.10	0.4	16.1	28	1.0	10.0
Dynegy Inc.	DYN	45.50	0.4	13.8	22	0.7	9.0
Calpine Corporation	CPN	37.80	3.6	12.6	19	-	9.0
Mirant Corporation	MIR	34.40	0.7	11.9	17	-	8.0
AES Corporation	AES	43.05	4.2	11.8	21	-	8.0
Duke Energy Corporation	DUK	39.01	0.9	10.6	15	2.8	8.0
Williams Companies	WMB	32.95	3.3	10.4	14	1.8	8.0
El Paso Corporation	EPG	52.54	0.7	9.3	16	1.6	7.0
American Electric Power Co. Inc.	AEP 2	46.17	0.7	8.5	13	5.2	7.0
Southern Company	SO	23.25	2.7	8.2	14	5.8	7.0
Exelon Corporation	EXC 2	64.12	2.6	7.6	14	2.6	7.0
Median			0.9	10.6	16	1.6	8.0
Natural Gas and Oil							
Burlington Resources, Inc	BR 1	39.75	4.4	7.4	34	1.4	9.0
Occidental Petroleum	OXY	26.59	1.2	5.2	7	3.8	6.0
Anadarko Petroleum Corp.	APC	53.91	2.3	5.1	9	0.4	6.0
Conoco Inc.	COC.B	28.90	0.6	4.1	8	2.6	6.0
Phillips (incl. Tosco)	P	57.00	0.7	4.1	7	2.4	6.0
ENI S.p.A.	E	61.70	1.1	3.5	6	2.6	5.0
Median			1.2	4.6	8	2.5	6.0
Service							
Halliburton Company	HAL	35.60	1.2	10.1	24	1.4	8.0
Schlumberger Ltd.	SLB	52.65	2.7	9.4	26	1.4	7.0

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2002; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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Table S-1
Mid Cap and Small Cap Energy Companies
Rank by McDep Ratio: Market Cap and Debt to Present Value

		Price			Net		
		(\$/sh)		Market	Present	Debt/	
	Symbol/	29-Jun	Shares	Cap	Value	Present	McDep
	Rating	2001	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Power							
Constellation Energy Group	CEG	42.60	152	6,500	37.10	0.45	1.08
CMS Energy Corporation	CMS	27.85	128	3,600	19.80	0.80	1.08
Sempra Energy	SRE	27.34	203	5,600	23.10	0.65	1.07
Total or Median				15,700		0.65	1.08
Natural Gas and Oil							
TEPPCO Partners, L.P.	TPP	29.35	38	1,120	13.20	0.65	1.43
Triton Energy Limited	OIL	32.75	59	1,900	24.50	0.24	1.26
Unocal Corporation	UCL	34.15	256	8,700	51.90	0.27	0.75
PanCanadian Pete (15%)(US\$)	PCP.TO	30.60	38	1,170	41.80	0.07	0.75
USX-Marathon Group	MRO 1	29.51	309	9,100	44.80	0.23	0.74
Valero Energy Corp.(with UDS)	VLO	36.78	112	4,100	70.70	0.42	0.72
Devon Energy Corporation	DVN	52.50	135	7,100	80.10	0.16	0.71
Petro-Canada	PCZ	23.89	272	6,500	35.20	0.09	0.71
Norsk Hydro ASA (49%)	NHY	42.70	128	5,500	65.90	0.15	0.70
PetroChina Company Ltd (10%)	PTR 2	20.40	176	3,600	32.50	0.15	0.69
Total or Median				48,800		0.20	0.73
Small Cap							
Dorchester Hugoton, Ltd.*	DHULZ	13.31	10.7	143	12.30	-	1.08
Cross Timbers Royalty Tr*	CRT	15.37	6.0	92	16.70	-	0.92
San Juan Basin Royalty Tr*	SJT	12.69	46.6	590	15.00	-	0.85
Hugoton RoyaltyTrust*	HGT	12.56	40.0	500	15.60	-	0.80
<b>Encore Acquisition Corporation</b>	EAC	11.50	30.0	350	16.40	0.15	0.75
Energy Partners Ltd.*	EPL 2	13.41	27.0	360	18.40	0.04	0.74
Total or Median				2,040		-	0.82
Micro Cap							
Purcell Energy, Ltd. (US\$)	PEL.TO	2.60	26.0	68	3.70	0.07	0.74

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy

McDep Ratio =  $\mathbf{M}$ arket  $\mathbf{c}$ ap and  $\mathbf{D}$ ebt to  $\mathbf{p}$ resent value of oil and gas and other businesses

<sup>\*</sup> For small cap stocks marked with asterisk, estimated present value recalculated weekly.

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 2, 2001

Table S-2
Mid Cap and Small Cap Energy Companies
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

		Price (\$/sh)	EV/	EV/	Div	PV/	
		, ,				tribution	
	Comb of	29-Jun	Sales 2001E	Ebitda	P/E	NTM	Ebitda NTM
	Symbol	2001	2001E	NTM	NTM	(%)	I <b>V I</b> IVI
Power							
Constellation Energy Group	CEG	42.60	2.2	7.6	13	1.1	7.0
CMS Energy Corporation	CMS	27.85	0.9	7.6	10	5.2	7.0
Sempra Energy	SRE	27.34	1.2	7.5	11	3.7	7.0
Median			1.2	7.6	11	3.7	7.0
Natural Gas and Oil							
TEPPCO Partners, L.P.	TPP	29.35	0.7	11.4	15	7.2	8.0
Triton Energy Limited	OIL	32.75	4.8	7.5	17	-	6.0
Unocal Corporation	UCL	34.15	1.6	4.5	12	2.3	6.0
PanCanadian Pete (15%)(US\$)	PCP.TO	30.60	1.3	4.1	8	0.8	5.5
Valero Energy Corp.(with UDS)	VLO	36.78	0.3	4.0	4	0.9	5.5
Petro-Canada	PCZ	23.89	1.0	3.9	9	1.1	5.5
USX-Marathon Group	MRO 1	29.51	0.4	3.7	6	3.1	5.0
Devon Energy Corporation	DVN	52.50	2.7	3.6	7	0.4	5.0
Norsk Hydro ASA (49%)	NHY	42.70	0.8	2.8	7	2.4	4.0
PetroChina Company Ltd (10%)	PTR 2	20.40	1.5	2.7	5	8.4	4.0
Median			1.1	3.9	8	1.7	5.5
Small Cap							
Dorchester Hugoton, Ltd.*	DHULZ	13.31	7.3	9.6	11	8.1	8.9
Cross Timbers Royalty Tr*	CRT	15.37	5.5	8.8	9	10.7	9.6
San Juan Basin Royalty Tr*	SJT	12.69	6.0	7.6	10	9.7	9.0
Hugoton RoyaltyTrust*	HGT	12.56	5.1	7.4	10	10.1	9.2
Encore Acquisition Corporation	EAC	11.50	3.0	4.5	10	-	6.0
Energy Partners Ltd.*	EPL 2	13.41	2.3	3.7	18	-	4.9
Median			5.3	7.5	10	8.9	8.9
Micro Cap							
Purcell Energy, Ltd. (US\$)	PEL.TO	2.60	3.4	4.4	14	-	6.0

 $EV = Enterprise\ Value = Market\ Cap\ and\ Debt;\ Ebitda = Earnings\ before\ interest,\ tax,\ depreciation\ and\ amortization;\ NTM = Next\ Twelve\ Months\ Ended\ June\ 30,\ 2002;\ P/E = Stock\ Price\ to\ Earnings;\ PV = Present\ Value\ of\ oil\ and\ gas\ and\ other\ businesses$ 

<sup>\*</sup> For small cap stocks marked with asterisk, estimated present value recalculated weekly.