

Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

October 14, 2002

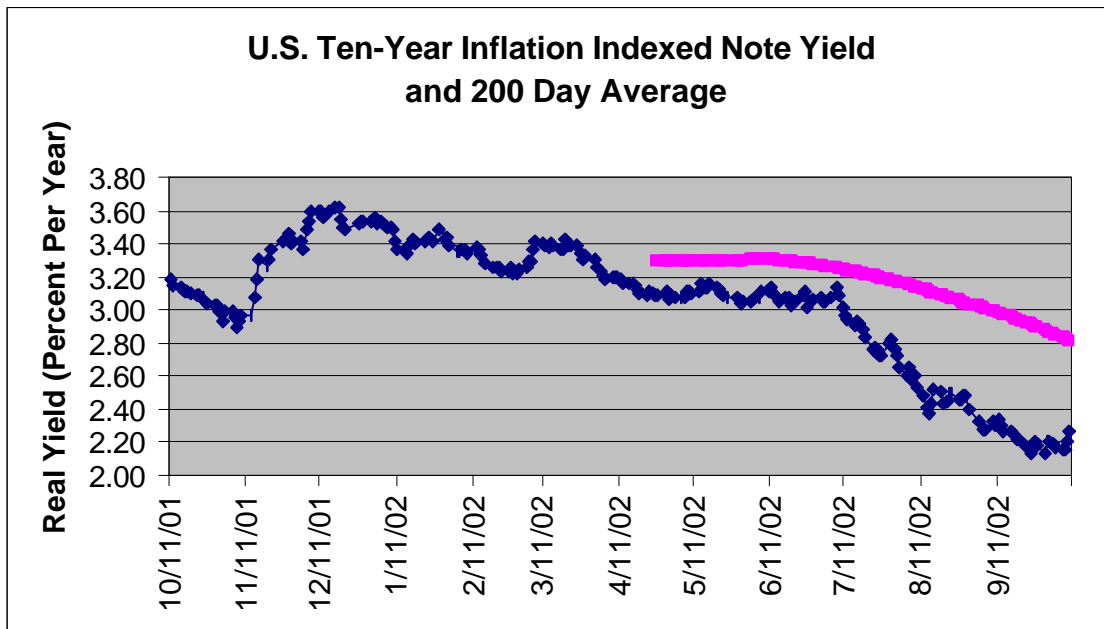
Are Trend Reversals Underway?

Summary and Recommendation

Momentum in fundamental measures of interest rates needs to turn and energy prices need to hold for energy equity investment in October to provide early rewards. The real yield on the U.S. Ten-Year Inflation Indexed Note has stopped going down this month. The reason appears to be a steeper drop in inflation expectations. The declining nominal yield on the benchmark U.S. Ten-Year Note still points to further stock market decline and financial distress for lenders and heavy borrowers. Upward momentum continues for six-year oil futures while it has been broken at least temporarily for six-year natural gas futures. Should October prove pivotal, energy stocks that have lagged in price may advance most including recommended **Royal Dutch (RD)**, **ChevronTexaco (CVX)**, **ConocoPhillips (COP)** and **Marathon (MRO)**. We believe that those and other recommendations offer growth with inflation protection and deflation resistance (see Tables L-1, L-2, M-1, M-2, S-1 and S-3).

Real Yield on Inflation Indexed Notes May Have Turned

Investors may be saying that stocks might be starting to offer a long-term return after inflation that is more competitive relative to the lowest risk alternative. A slight rise in real yield suggests less willingness to sell stocks to buy U.S. Treasury Inflation Indexed Notes (see Chart). We have been making the valuation case that the higher dividend yield for recommended Royal Dutch (currently 4.1% as displayed in Table L-2) implies an even higher real return that is more attractive than the lowest risk alternative.



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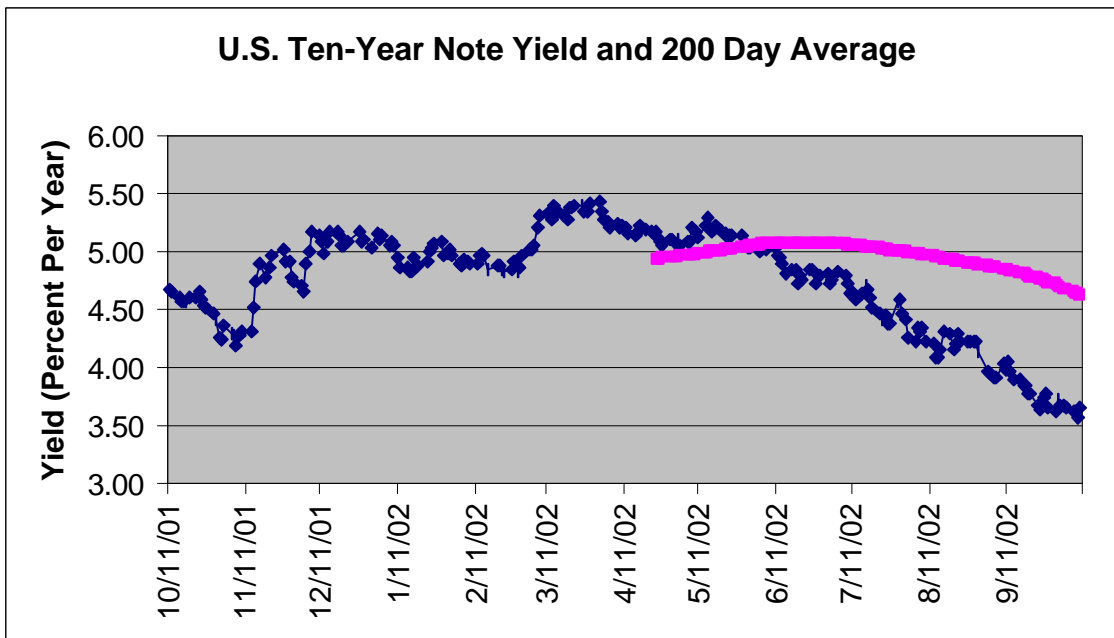
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The treasury auctioned a new ten-year inflation-indexed note in July at a price under 100. When the same security was reopened for auction last week, it drew a winning bid of about 107. That implies about an 8 or 9% total return in just three months while the stock market has had a negative return over the same period.

Nominal Yield on Ten-Year Treasury Note Still Trends Downward

There is no reversal yet suggested in the steep down trend in yield on the U.S. Ten-Year Note (see Chart). The trend is ominous for the stock market and the economy as the historical parallels are the U.S. in the 1930s and Japan in the 1990s. U.S. government bonds yielded 2% in the 1930s we understand. The current yield on ten-year Japanese government securities is little more than 1% apparently.



The main implication of ultra low government bond yields is widespread financial failure. Remember the Bank Holiday in the history of the 1930s? The whole Japanese banking system may have a negative net worth today. European banks seem vulnerable because Europe apparently relies more heavily on bank financing. The collapse of heavy borrowing utilities 70 years ago is eerily reminiscent of what has happened recently.

Nor does the Central Bank seem to be able to do much about the accompanying stagnation. Short-term rates, the main tool, went to zero in the U.S. in the 1930s and also in Japan in the 1990s, as we understand. We can be sure that the Federal Reserve will cut the 1.75% short term lending rate soon if the yield on the U.S. Ten-Year Note continues to decline. Our leaders will undoubtedly try other measures to revive activity.

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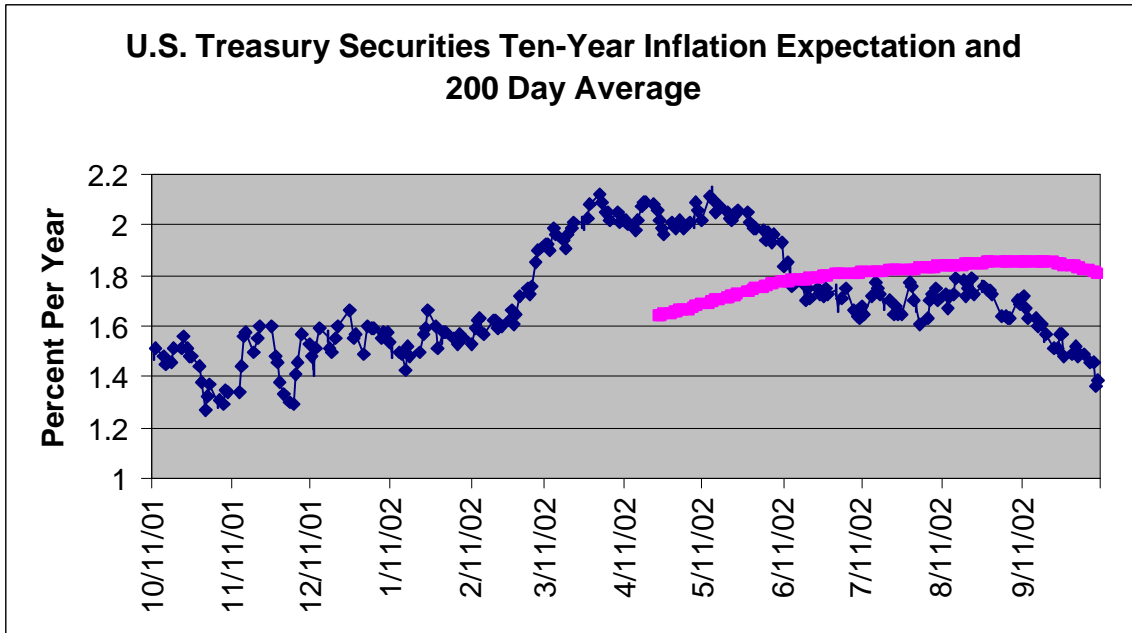
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Inflation Expectations Drop in the Past Two Months

The difference between the real yield and the nominal yield is expected inflation. After rising early in 2002, inflation expectations turned into a strong downtrend with recent acceleration (see Chart).



When inflation expectations were rising we emphasized the inflation protection offered by energy investments. That is still a valuable feature as eventually inflation could return. War can bring it on as seemed to be the case in World War I, World War II and after the Vietnam War. Should the campaign anticipated for Iraq not go well and get dragged out inflation could threaten.

The greater concern today is, no doubt, the opposite of inflation. We have translated that not to actual deflation of prices, but to deflation of debt that occurs in financial failure. High debt has typically been a factor driving our sell recommendations. We see sell recommendation **Kinder Morgan, Inc. (KMI)**, for example, as having practically no value. Its debt is about 8 times cash flow and it is borrowing more money to buy new properties at perhaps 7 times cash flow. If the price paid for new deals is indicative of the value of existing assets, KMI is like a Japanese bank in that its liabilities may exceed the value of its assets. Fortunately most of our buy recommendations have low debt and therefore offer deflation resistance.

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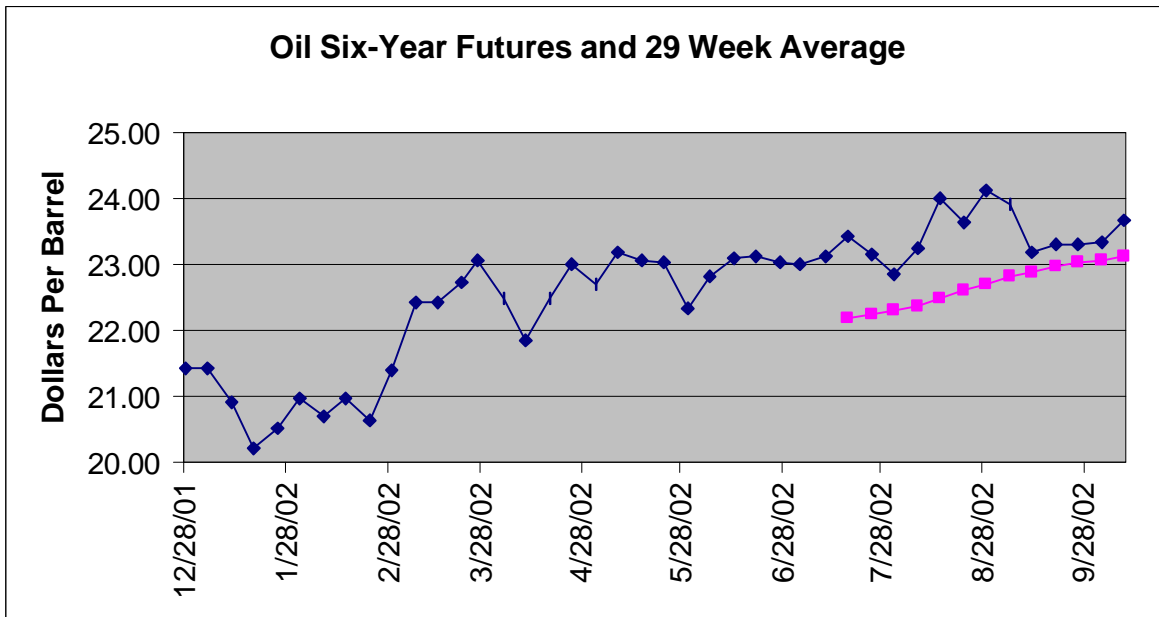
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Six-Year Oil Futures Trend Up

Declining inflation expectations are not evident in oil futures. The current six-year oil price is above the 29-week moving average thereby defining an upward trend (see Chart).



Note that six-year futures are at the relatively low level of \$23 per barrel in contrast to the spot quote near \$29 currently. Because stock prices seem more than justified by six-year futures, we conclude there is little lasting downside in energy stocks should short-term price soften toward the six-year level.

Refining Margins on Modest Upward Trend

One-year futures for crude oil and products in New York harbor define a refining margin, also known as crack spread, which appears to be fluctuating around the 29-week average (see Chart). We measure the 3-2-1 spread that assumes three barrels of crude oil will be transformed to two barrels of gasoline and one barrel of heating oil. Using a one-year period overcomes the seasonality of spot quotes. One-year futures are also less volatile than daily price or near month futures. The current one-year crack near \$5 per barrel implies normal, mediocre profitability. That is better than depressed profitability and enables strong companies to wait for the occasional high profit periods that justify being in the business.

Supposedly one of the concerns investors have about investing in oil is that if a regime change occurs in Iraq, the oil spigots will be opened wide and low oil price would ensue.

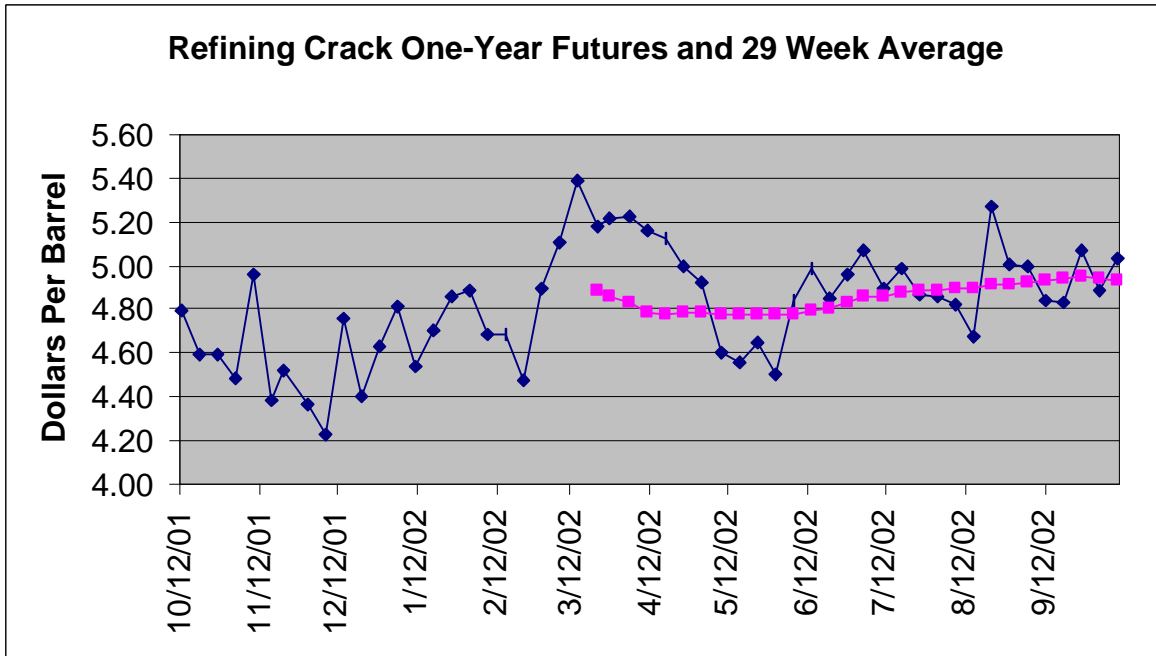
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Not only would that not happen overnight there might be high risk getting there. Nonetheless, higher Iraqi output would be in the form of heavy, high-sulfur crude oil that requires intensive refining. More than bringing oil price down, Iraqi oil would widen the spread between scarcer light oil and newly abundant heavy oil. Refiners would prosper under such conditions.



Natural Gas Breaks Trend

Finally we look at trends for the cleaner fuel, natural gas. Despite a warm winter last year, natural gas prices have been trending upward most of the year (see Chart next page). A break in the trend occurred a week ago and the latest price remains below the 29-week average. Natural gas stocks in some cases have outperformed this year. Should a turn in the stock market be imminent, natural gas stocks may not appreciate as much immediately as more depressed issues.

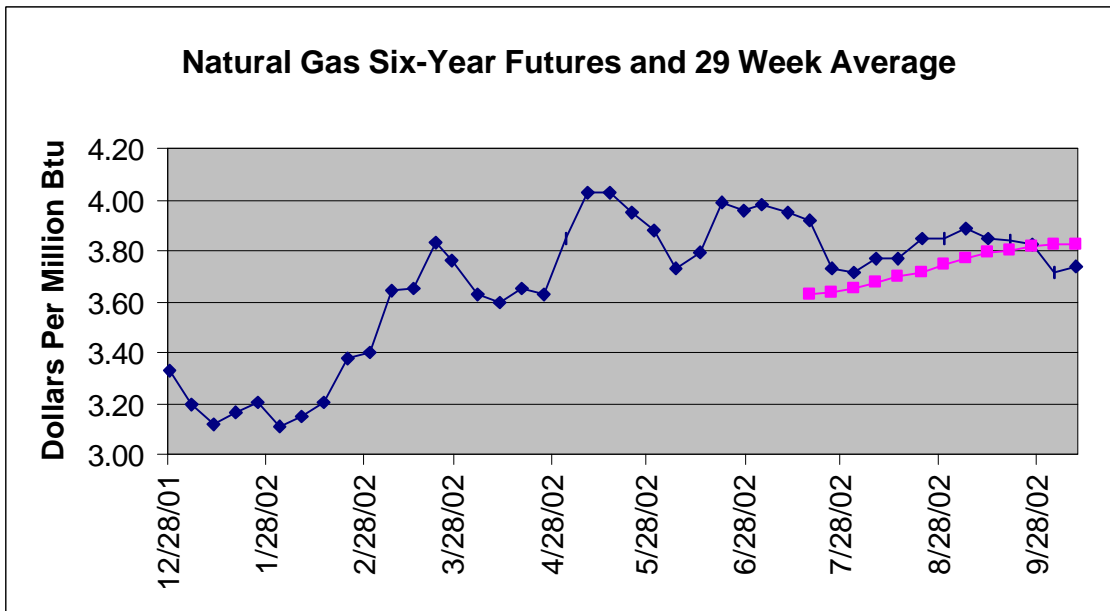
At the same time this is a quiet period for the fuel being neither an air conditioning season requiring natural gas for electricity for cooling, nor a heating season requiring natural gas for warming homes, stores, offices and factories. Yet the winter is just ahead when unexpectedly cold weather would imply strong pricing. Regardless of demand, supply of natural gas in North America has become increasingly sensitive to new drilling as old deposits become more fully exploited. Having drilled too aggressively at times, producers, in turn, have become more sensitive to economic factors. Thus even slow demand implies better pricing than in the past.

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Kurt H. Wulff, CFA

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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

	Symbol/ Rating	Price (\$/sh) 10-Oct 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap							
Exxon Mobil Corporation	XOM	33.79	6,858	232,000	36.00	0.09	0.94
BP plc	BP	38.94	3,738	146,000	50.00	0.15	0.81
TotalFinaElf S.A.	TOT	67.41	1,346	90,700	90.00	0.14	0.78
Royal Dutch/Shell	RD B	41.60	3,498	146,000	60.00	0.15	0.74
ChevronTexaco Corporation	CVX B	71.30	1,062	75,700	110.00	0.16	0.71
<i>Total or Median</i>				690,000		0.15	0.78
Energy Infrastructure							
Southern Company	SO	28.89	701	20,300	23.90	0.47	1.11
American Electric Power Co. Inc.	AEP N	21.20	326	6,900	27.40	0.74	0.94
Enel S.p.a. (32%)	EN	23.75	388	9,200	32.70	0.39	0.83
Exelon Corporation	EXC N	46.58	323	15,000	70.80	0.45	0.81
Duke Energy Corporation	DUK	18.91	792	15,000	30.40	0.48	0.81
El Paso Corporation	EP S	5.38	590	3,200	20.00	0.66	0.75
Dominion Resources	D	38.87	269	10,500	76.20	0.45	0.73
<i>Total or Median</i>				60,000		0.47	0.81
Natural Gas and Oil							
OAo Lukoil	LUKOY	64.80	299	19,400	70.00	0.08	0.93
Occidental Petroleum Corp.	OXY	28.26	376	10,600	32.00	0.38	0.93
Devon Energy	DVN	45.80	165	7,600	55.00	0.48	0.91
ENI S.p.A.	E	70.22	776	54,500	85.00	0.18	0.86
Anadarko Petroleum Corp.	APC	45.00	266	12,000	56.00	0.26	0.86
Encana Corporation	ECA B	27.11	470	12,700	35.00	0.28	0.83
Unocal Corporation	UCL	28.88	245	7,100	45.00	0.33	0.76
Burlington Resources	BR B	36.17	202	7,300	57.00	0.28	0.74
ConocoPhillips	COP B	45.47	680	30,900	80.00	0.32	0.71
Marathon Oil Corporation	MRO B	20.74	310	6,400	40.00	0.37	0.70
Petroleo Brasileiro S. A.	PBR N	10.62	1,086	11,500	30.00	0.27	0.53
<i>Total or Median</i>				161,000		0.30	0.80
Service							
Baker Hughes Inc.	BHI	26.99	339	9,100	25.00	0.09	1.07
Schlumberger Ltd.	SLB	35.07	581	20,400	44.00	0.22	0.84
Halliburton Company	HAL	13.66	432	5,900	20.00	0.21	0.75

Buy/Sell rating after symbol: B - Buy, N - Neutral, S - Sell

McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses

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

	Symbol/ Rating	Price (\$/sh) 10-Oct 2002	EV/ Sales NTM	EV/ Ebitda NTM	P/E NTM	Dividend or Distribution NTM (%)	PV/ Ebitda NTM	
Mega Cap								
Exxon Mobil Corporation	XOM	33.79	1.4	9.5	20	2.7	10.1	
BP plc	BP	38.94	1.0	7.4	15	3.7	9.1	
TotalFinaElf S.A.	TOT	67.41	1.1	7.1	14	3.8	9.0	
Royal Dutch/Shell	RD	B	41.60	1.0	6.6	13	4.1	8.9
ChevronTexaco Corporation	CVX	B	71.30	1.1	6.5	12	3.9	9.2
	<i>Median</i>		<i>1.1</i>	<i>7.1</i>	<i>14</i>	<i>3.8</i>	<i>9.1</i>	
Energy Infrastructure								
Southern Company	SO	28.89	3.5	10.0	17	4.6	9.0	
American Electric Power Co. Inc.	AEP	N	21.20	0.5	8.5	7	11.3	9.0
Enel S.p.a. (32%)	EN		23.75	2.1	7.5	29	6.8	9.0
Exelon Corporation	EXC	N	46.58	2.2	7.3	10	3.8	9.0
Duke Energy Corporation	DUK		18.91	0.7	7.3	7	5.8	9.0
Dominion Resources	D		38.87	2.8	6.6	8	6.6	9.0
El Paso Corporation	EP	S	5.38	2.1	5.9	3	16.2	7.9
	<i>Median</i>		<i>2.1</i>	<i>7.3</i>	<i>8</i>	<i>6.6</i>	<i>9.0</i>	
Natural Gas and Oil								
Anadarko Petroleum Corp.	APC	45.00	2.7	6.9	14	0.7	8.1	
Devon Energy	DVN	45.80	3.0	6.8	46	0.4	7.4	
ConocoPhillips	COP	B	45.47	0.8	6.6	13	3.2	9.3
ENI S.p.A.	E		70.22	1.5	6.2	14	4.8	7.3
Occidental Petroleum Corp.	OXY		28.26	1.4	5.6	10	3.5	6.0
Burlington Resources	BR	B	36.17	3.9	5.1	9	1.5	6.9
Encana Corporation	ECA	B	27.11	2.3	5.1	10	0.9	6.1
Unocal Corporation	UCL		28.88	2.1	4.7	10	2.8	6.2
OAo Lukoil	LUKOY		64.80	1.7	4.6	9	1.7	4.9
Marathon Oil Corporation	MRO	B	20.74	0.4	4.4	7	4.4	6.3
Petroleo Brasileiro S. A.	PBR	N	10.62	1.1	2.7	3	12.7	5.0
	<i>Median</i>		<i>1.7</i>	<i>5.1</i>	<i>10</i>	<i>2.8</i>	<i>6.3</i>	
Service								
Baker Hughes Inc.	BHI	26.99	1.9	11.5	32	1.7	10.8	
Schlumberger Ltd.	SLB	35.07	2.0	7.5	26	2.1	8.9	
Halliburton Company	HAL	13.66	0.6	7.4	19	3.7	9.8	

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended September 30, 2003; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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

	<i>Symbol/ Rating</i>		<i>Price (\$/sh) 10-Oct 2002</i>	<i>Shares (mm)</i>	<i>Market Cap (\$mm)</i>	<i>Net Present Value (\$/sh)</i>	<i>Debt/ Present Value</i>	<i>McDep Ratio</i>
Energy Infrastructure								
Kinder Morgan Energy Partners, L.P.	KMP	S	30.63	136	4,200	14.00	0.49	1.61
Kinder Morgan Management, LLC	KMR	S	28.50	30	900	14.00	0.49	1.54
Enterprise Products Part.	EPD		17.00	175	3,000	9.50	0.43	1.45
Kinder Morgan, Inc.	KMI	S	33.20	123	4,100	8.10	0.87	1.40
Calpine Corporation	CPN	N	2.01	375	800	1.00	0.97	1.03
Williams Companies	WMB		1.54	521	800	1.00	0.97	1.01
Constellation Energy Group	CEG		20.61	164	3,400	20.00	0.69	1.01
AES Corporation	AES		1.16	543	600	1.00	0.98	1.00
Dynegy Inc.	DYN		0.73	418	300	1.00	0.94	0.98
CMS Energy Corporation	CMS		6.03	137	800	8.70	0.90	0.97
Sempra Energy	SRE		18.40	207	3,800	24.30	0.64	0.91
Mirant Corporation	MIR		1.26	413	500	4.00	0.86	0.90
Valero Energy Corporation	VLO		25.42	115	2,900	40.00	0.60	0.85
<i>Total or Median</i>					<i>26,100</i>		<i>0.86</i>	<i>1.01</i>
Natural Gas and Oil								
Murphy Oil Corporation	MUR		86.40	46	3,900	82.00	0.18	1.04
Ocean Energy, Inc.	OEI		18.52	178	3,300	20.00	0.30	0.95
Imperial Oil Limited (30%)	IMO		27.83	114	3,200	30.00	0.14	0.94
Suncor Energy	SU		15.24	454	6,900	17.00	0.25	0.92
Petro-Canada	PCZ		27.58	262	7,200	31.00	0.11	0.90
XTO Energy Inc.	XTO	B	20.52	124	2,500	26.00	0.25	0.84
CNOOC Limited (19%)	CEO	B	26.40	78	2,100	33.00	-	0.80
Norsk Hydro ASA (49%)	NHY		39.25	126	4,900	54.00	0.18	0.78
PetroChina Company Ltd (10%)	PTR	B	19.69	176	3,500	30.00	0.17	0.71
<i>Total or Median</i>					<i>37,500</i>		<i>0.18</i>	<i>0.90</i>
Coal Producers (Small Cap)								
Penn Virginia Res. Part, L.P.	PVR		20.20	15	300	17.00	-	1.19
Consol Energy Inc.	CNX		10.90	79	900	5.00	0.88	1.14
Peabody Energy	BTU		25.00	55	1,400	18.00	0.75	1.10
Arch Coal	ACI		15.50	48	700	18.00	0.61	0.95
Alliance Res. Part, L.P.	ARLP		21.17	16	300	29.00	0.36	0.83
Fording Coal (US\$)	FDG		14.78	52	800	23.00	0.04	0.66
Massey Energy	MEE		4.84	75	400	18.00	0.37	0.54
					<i>4,800</i>		<i>0.37</i>	<i>0.95</i>

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Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

			Price (\$/sh)	EV/ Sales	EV/ Ebitda	P/E	Dividend or Distribution	PV/ Ebitda
	Symbol/ Rating		10-Oct 2002	NTM	NTM	NTM	NTM (%)	NTM
Energy Infrastructure								
Enterprise Products Part.	EPD		17.00	1.6	15.9	37	7.4	11.0
Kinder Morgan Energy Partners, L.P.	KMP	S	30.63	3.1	14.5	16	8.0	9.0
Kinder Morgan Management, LLC	KMR	S	28.50	2.9	13.8	15	8.6	9.0
Kinder Morgan, Inc.	KMI	S	33.20	3.3	12.6	14	0.6	9.0
Calpine Corporation	CPN	N	2.01	1.8	10.5			10.2
Constellation Energy Group	CEG		20.61	2.6	9.2	8	4.7	9.2
Williams Companies	WMB		1.54	1.8	9.1		-	9.0
AES Corporation	AES		1.16	2.7	9.0			9.0
Dynegy Inc.	DYN		0.73	0.2	8.8		-	9.0
CMS Energy Corporation	CMS		6.03	1.3	8.7	3	11.9	9.0
Sempra Energy	SRE		18.40	2.3	8.2	7	5.4	9.0
Mirant Corporation	MIR		1.26	0.4	8.1	1	-	9.0
Valero Energy Corporation	VLO		25.42	0.4	6.7	6	1.6	7.8
	<i>Median</i>			<i>1.8</i>	<i>9.1</i>	<i>8</i>	<i>4.7</i>	<i>9.0</i>
Natural Gas and Oil								
Suncor Energy	SU		15.24	3.3	10.0	22	1.4	10.8
Imperial Oil Limited (30%)	IMO		27.83	1.3	9.6	22	1.9	10.3
Murphy Oil Corporation	MUR		86.40	1.0	8.4	41	1.7	8.0
Ocean Energy, Inc.	OEI		18.52	4.4	7.4	32	0.9	7.8
Petro-Canada	PCZ		27.58	1.7	6.6	17	0.9	7.4
XTO Energy Inc.	XTO	B	20.52	4.0	5.6	10	0.2	6.6
CNOOC Limited (19%)	CEO	B	26.40	3.9	5.1	11	2.4	6.4
Norsk Hydro ASA (49%)	NHY		39.25	0.7	3.7	11	2.6	4.8
PetroChina Company Ltd (10%)	PTR	B	19.69	1.6	3.6	7	6.5	5.1
	<i>Median</i>			<i>1.7</i>	<i>6.6</i>	<i>17</i>	<i>1.7</i>	<i>7.4</i>
Coal Producers (Small Cap)								
Penn Virginia Res. Part, L.P.	PVR		20.20	9.5	13.1	15	9.9	11.0
Consol Energy Inc.	CNX		10.90	1.8	11.1	25	5.1	9.7
Peabody Energy	BTU		25.00	1.5	9.8	21	1.6	9.0
Arch Coal	ACI		15.50	1.4	8.6	87	1.5	9.0
Fording Coal (US\$)	FDG		14.78	1.4	5.9	13	2.6	9.0
Alliance Res. Part, L.P.	ARLP		21.17	1.2	5.0	6	9.4	6.0
Massey Energy	MEE		4.84	0.8	4.8	121	3.3	8.9
				<i>1.4</i>	<i>8.6</i>	<i>21</i>	<i>3.3</i>	<i>9.0</i>

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended September 30, 2003; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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Small Cap Energy Companies
Rank by McDep Ratio: Market Cap and Debt to Present Value

	Symbol/ Rating	Price (\$/sh) 10-Oct 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio	
Energy Infrastructure								
El Paso Energy Partners	EPN	S	28.36	42.8	1,210	10.20	0.64	1.64
Enbridge Energy Partners,	EEP		41.86	31.0	1,300	16.60	0.58	1.64
TEPPCO Partners, L.P.	TPP		28.00	46.5	1,300	12.90	0.61	1.46
Northern Border Partners	NBP		36.33	42.0	1,530	20.10	0.57	1.35
Plains All Amer. Pipeline	PAA		23.40	41.6	970	14.90	0.39	1.35
AmeriGas Partners, L.P.	APU		22.65	49.0	1,110	23.50	0.47	0.98
Western Gas Resources	WGR		31.49	33.8	1,060	37.60	0.28	0.88
				<i>Total or Median</i>	8,500	0.57	1.35	
Natural Gas and Oil								
Provident Energy Trust	PVX		6.63	36.0	240	5.00	0.46	1.18
Dorchester Hugoton, Ltd.	DHULZ		12.77	10.7	137	11.60	(0.17)	1.12
Pogo Producing Company	PPP		32.75	60.5	1,980	32.00	0.27	1.02
Quicksilver Resources Inc.	KWK		17.28	19.4	340	19.00	0.44	0.95
Newfield Exploration Company	NFX		32.19	48.9	1,570	35.00	0.24	0.94
Enerplus Resources Fund	ERF		17.47	69.6	1,220	20.00	0.19	0.90
Unit Corporation	UNT		17.75	36.2	640	21.00	0.03	0.85
Stone Energy Company	SGY		31.73	26.4	840	42.00	0.29	0.83
Penn Virginia Corporation	PVA		30.35	9.0	270	38.00	0.09	0.82
Southwestern Energy Company	SWN		11.35	25.6	290	17.00	0.44	0.82
Forest Oil Corporation	FST	N	24.45	46.8	1,140	35.00	0.30	0.79
Spinnaker Exploration Company	SKE		26.00	34.2	890	33.00	-	0.79
Encore Acquisition Corp. (25%)	EAC		14.23	7.0	100	21.00	0.20	0.74
Magnum Hunter Resources, Inc.	MHR		4.90	71.5	350	11.00	0.46	0.70
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	21.92	56.9	1,250	40.00	0.12	0.60
Swift Energy Company	SFY		7.15	24.8	180	22.00	0.32	0.54
				<i>Total or Median</i>	11,400	0.25	0.82	
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		17.25	6.0	104	19.70	-	0.88
San Juan Basin Royalty Trust	SJT	B	11.84	46.6	550	15.60	-	0.76
Hugoton RoyaltyTrust (46%)	HGT		11.14	18.4	210	15.10	-	0.74
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.66	27.0	18	2.00	0.84	0.89
Energy Partners Ltd.(30%)	EPL	B	7.90	8.2	65	10.00	0.38	0.87
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.49	27.3	41	3.00	0.22	0.61

Buy/Sell rating after symbol: B - Buy, N - Neutral, S - Sell

McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at www.mcdep.com. Mr. Wulff is not paid by covered companies. He and his spouse do not sell short nor act contrary to a buy or sell rating except for tax loss purposes.

Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

October 14, 2002

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

	Symbol/ Rating		Price (\$/sh) 10-Oct 2002	EV/ Sales NTM	EV/ Ebitda NTM	P/E NTM	Dividend or Distribution NTM (%)	PV/ Ebitda NTM
Energy Infrastructure								
El Paso Energy Partners	EPN	S	28.36	8.3	14.8	21	9.5	9.0
Enbridge Energy Partners,	EEP		41.86	6.6	14.8	81	8.4	9.0
TEPPCO Partners, L.P.	TPP		28.00	1.0	13.1	18	8.2	9.0
Northern Border Partners	NBP		36.33	7.6	12.2	16	8.8	9.0
Plains All Amer. Pipeline	PAA		23.40	0.2	12.1	17	8.8	9.0
AmeriGas Partners, L.P.	APU		22.65	1.5	8.8	12	9.7	9.0
Western Gas Resources	WGR		31.49	0.6	7.9	17	0.6	9.0
	<i>Median</i>			<i>1.5</i>	<i>12.2</i>	<i>17</i>	<i>8.8</i>	<i>9.0</i>
Natural Gas and Oil								
Dorchester Hugoton, Ltd.	DHULZ		12.77	6.1	9.1	13	9.5	8.1
Quicksilver Resources Inc.	KWK		17.28	4.2	7.9	19	-	8.3
Pogo Producing Company	PPP		32.75	4.3	7.4	46	0.4	7.3
Provident Energy Trust	PVX		6.63	3.6	7.2	86	16.7	6.1
Enerplus Resources Fund	ERF		17.47	4.6	6.6	16	12.5	7.4
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	21.92	3.3	6.2	7	5.8	10.3
Forest Oil Corporation	FST	N	24.45	3.6	6.2	20	-	7.8
Magnum Hunter Resources, Inc.	MHR		4.90	2.8	5.8	14	-	8.3
Unit Corporation	UNT		17.75	3.0	5.7	12	-	6.6
Southwestern Energy Company	SWN		11.35	2.2	5.1	11	-	6.3
Encore Acquisition Corp. (25%)	EAC		14.23	3.3	4.8	9	-	6.5
Penn Virginia Corporation	PVA		30.35	2.9	4.7	20	3.0	5.8
Swift Energy Company	SFY		7.15	2.9	4.4	15	-	8.1
Spinnaker Exploration Company	SKE		26.00	3.7	4.4	16	-	5.5
Stone Energy Company	SGY		31.73	3.2	4.2	9	-	5.0
Newfield Exploration Company	NFX		32.19	2.9	4.1	13	-	4.4
	<i>Median</i>			<i>3.3</i>	<i>5.7</i>	<i>14</i>	<i>-</i>	<i>7.0</i>
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		17.25	6.1	8.5	9	10.9	9.7
San Juan Basin Royalty Trust	SJT	B	11.84	5.5	7.0	9	10.6	9.3
Hugoton RoyaltyTrust (46%)	HGT		11.14	4.6	6.7	9	10.8	9.0
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.66	4.3	6.2		-	6.9
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.49	3.4	5.2	12	-	8.5
Energy Partners Ltd.(30%)	EPL	B	7.90	2.3	4.2		-	4.8

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended September 30, 2003; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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