

Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

October 21, 2002

Trend Reversals Occur

Summary and Recommendation

Fundamental measures of interest rates have turned for now and energy prices are steady to rising thereby creating favorable conditions for energy equity investments. Our recommendations fit four themes, North American natural gas, international, integrated oil and energy infrastructure. Among international, i.e. non-U.S., stocks, for example, we recommend purchase of **Encana (ECA)**, **Canadian Oil Sands Trust (COS_u.TO)**, **CNOOC Ltd. (CEO)**, **PetroChina (PTR)** and **Royal Dutch (RD)**. While low McDep Ratio producers of energy have positive appeal, some high McDep Ratio infrastructure stocks seem unattractive. Our analysis this week details how **Kinder Morgan (KMI, KMP, KMR)** may be insolvent. We rank 82 energy stocks on valuation measures (see Tables L-1, L-2, M-1, M-2, S-1, S-2).

Liabilities May Exceed Assets for Kinder Morgan

Much of the energy infrastructure industry today seems well along on the path of debt deflation. Financial failures have put assets on the market. The lack of well-capitalized buyers has driven down asset prices further. Companies heretofore considered healthy are now under surprising pressure. Kinder Morgan calls attention to the industry condition as it has apparently applied to the Federal Energy Regulatory Commission for the right to take action against customers who suffer deterioration in credit. Perhaps the customers should require some protection from a weakening in Kinder Morgan's condition.

Kinder Morgan's accounting conceals the company's true debt position. Kinder Morgan leaves the debt of one entity off the balance sheet of the other even though the entities are closely interlocked. That action is supposedly justified because KMI nominally owns less than 20% of KMP/KMR. For convenience, companies that own less than 20% of an affiliate report just the profit from the affiliate and none of the debt. We point out that when the general partners' take is considered, Kinder Morgan "owns" 54% of KMP/KMR.

Here is how the numbers might work using the results just reported for the last quarter. We take the reported results from KMI in the first column and calculate a debt to cash flow multiple, Debt/Earnings Before Interest, Tax and Depreciation (Ebitda). We calculate cash flow as the sum of items above Ebitda and we calculate Debt as Assets minus the three items below it. Annualizing the latest quarter's cash flow by multiplying by four leads to a multiple of 5.8 times (see Table).

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	KMI Reported	54% KMP/KMR	KMI Proportionally Consolidated
Net Income	80	85	165
Income Tax	58		58
Interest	41	25	66
Depreciation	26	23	49
Elimination		-102	-102
Ebitda	205	32	237
Assets	10055	4377	14432
Free Assets	545	390	935
Deferred Tax	2400		2400
Equity	2326	1840	4166
Debt	4784	2147	6931
Debt/Ebitda	5.8	16.8	7.3

The going market for energy infrastructure properties may be about six to seven times cash flow. Apparently that is what Kinder Morgan might pay for new acquisitions. On that basis if KMI's existing assets are worth the same as new acquisitions, then KMI's debt at 5.8 times cash flow is exceeded by the value of KMI's assets and KMI is solvent.

Meanwhile consider that half of KMI's cash flow is from KMP/KMR. KMI's Ebitda of \$205 million includes \$102 million of profit from KMP/KMR. Yet, KMI reports none of the KMP/KMR debt on its statements that we can find.

Thus we make an adjustment similar to what some call proportional consolidation. The technique gives KMI credit for the cash flow and debt of KMP/KMR in proportion to its ownership.

KMI apparently owns 32 million units or shares of the average 175 million KMP/KMR units/shares outstanding in the third quarter. That looks like less than 20%. Yet the general partner gets some 44% of the net income and 40% of the distributions of the partnerships currently. If the general partner's interest is about 44%, it is equivalent to perhaps 139 million units/shares. Thus KMI has the equivalent of 171 of 314 million units, or 54% of KMP/KMR.

Consolidating 54% of the cash flow and debt of KMP/KMR with KMI expands the debt to cash flow ratio to 7.3 times. Yet the consolidated entity may be worth only 6 to 7 times in the debt deflation environment. As a result, KMI appears insolvent. The emperor has no clothes, as the fable tells

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) 17-Oct 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap							
Exxon Mobil Corporation	XOM	36.30	6,858	249,000	36.00	0.09	1.01
BP plc	BP	42.35	3,738	158,000	50.00	0.15	0.87
TotalFinaElf S.A.	TOT	70.18	1,346	94,500	90.00	0.14	0.81
Royal Dutch/Shell	RD B	44.41	3,498	155,000	60.00	0.15	0.78
ChevronTexaco Corporation	CVX B	74.30	1,062	78,900	110.00	0.16	0.73
<i>Total or Median</i>				735,000		0.15	0.81
Energy Infrastructure							
Southern Company	SO	28.94	701	20,300	23.90	0.47	1.11
American Electric Power Co. Inc.	AEP N	18.36	326	6,000	27.40	0.74	0.91
Enel S.p.a. (32%)	EN	24.60	388	9,500	32.70	0.39	0.85
Exelon Corporation	EXC N	46.70	323	15,100	70.80	0.45	0.81
Duke Energy Corporation	DUK	18.71	792	14,800	30.40	0.48	0.80
El Paso Corporation	EP N	6.39	590	3,800	20.00	0.66	0.77
Dominion Resources	D	40.45	269	10,900	76.20	0.45	0.74
<i>Total or Median</i>				60,000		0.47	0.81
Natural Gas and Oil							
Occidental Petroleum Corp.	OXY	30.32	376	11,400	32.00	0.38	0.97
Devon Energy	DVN	50.83	165	8,400	55.00	0.48	0.96
OAO Lukoil	LUKOY	64.50	299	19,300	70.00	0.08	0.93
Anadarko Petroleum Corp.	APC	48.59	266	12,900	56.00	0.26	0.90
Encana Corporation	ECA B	29.95	470	14,100	35.00	0.28	0.90
ENI S.p.A.	E	72.98	776	56,600	85.00	0.18	0.88
Burlington Resources	BR B	40.55	202	8,200	57.00	0.28	0.79
Unocal Corporation	UCL	30.10	245	7,400	45.00	0.33	0.78
ConocoPhillips	COP B	49.27	680	33,500	80.00	0.32	0.74
Marathon Oil Corporation	MRO B	22.35	310	6,900	40.00	0.37	0.72
Petroleo Brasileiro S. A.	PBR N	10.63	1,086	11,500	30.00	0.27	0.53
<i>Total or Median</i>				179,000		0.28	0.84
Service							
Baker Hughes Inc.	BHI	28.68	339	9,700	25.00	0.09	1.13
Schlumberger Ltd.	SLB	37.70	581	21,900	44.00	0.22	0.89
Halliburton Company	HAL	14.95	432	6,500	20.00	0.21	0.80

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

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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) 17-Oct 2002	EV/ Sales NTM	EV/ Ebitda NTM	P/E NTM	Dividend or Distribution NTM (%)	PV/ Ebitda NTM	
Mega Cap								
Exxon Mobil Corporation	XOM	36.30	1.5	10.2	22	2.5	10.1	
BP plc	BP	42.35	1.1	7.9	17	3.4	9.1	
TotalFinaElf S.A.	TOT	70.18	1.2	7.3	15	3.6	9.0	
Royal Dutch/Shell	RD	B	44.41	1.1	6.9	14	3.8	8.9
ChevronTexaco Corporation	CVX	B	74.30	1.1	6.7	13	3.8	9.2
	<i>Median</i>		<i>1.1</i>	<i>7.3</i>	<i>15</i>	<i>3.6</i>	<i>9.1</i>	
Energy Infrastructure								
Southern Company	SO	28.94	3.5	10.0	17	4.6	9.0	
American Electric Power Co. Inc.	AEP	N	18.36	0.5	8.2	6	13.1	9.0
Enel S.p.a. (32%)	EN	24.60	2.1	7.6	30	6.6	9.0	
Exelon Corporation	EXC	N	46.70	2.2	7.3	10	3.8	9.0
Duke Energy Corporation	DUK	18.71	0.7	7.2	7	5.9	9.0	
Dominion Resources	D	40.45	2.8	6.7	8	6.4	9.0	
El Paso Corporation	EP	N	6.39	2.2	6.1	4	13.6	7.9
	<i>Median</i>		<i>2.2</i>	<i>7.3</i>	<i>8</i>	<i>6.4</i>	<i>9.0</i>	
Natural Gas and Oil								
Anadarko Petroleum Corp.	APC	48.59	2.9	7.3	16	0.6	8.1	
Devon Energy	DVN	50.83	3.2	7.1	51	0.4	7.4	
ConocoPhillips	COP	B	49.27	0.8	6.9	14	2.9	9.3
ENI S.p.A.	E	72.98	1.6	6.4	14	4.6	7.3	
Occidental Petroleum Corp.	OXY	30.32	1.5	5.8	10	3.3	6.0	
Burlington Resources	BR	B	40.55	4.2	5.5	10	1.4	6.9
Encana Corporation	ECA	B	29.95	2.5	5.4	11	0.9	6.1
Unocal Corporation	UCL	30.10	2.2	4.8	11	2.7	6.2	
Marathon Oil Corporation	MRO	B	22.35	0.4	4.5	7	4.1	6.3
OAO Lukoil	LUKOY	64.50	1.7	4.5	9	1.7	4.9	
Petroleo Brasileiro S. A.	PBR	N	10.63	1.1	2.7	3	12.7	5.0
	<i>Median</i>		<i>1.7</i>	<i>5.5</i>	<i>11</i>	<i>2.7</i>	<i>6.3</i>	
Service								
Baker Hughes Inc.	BHI	28.68	2.0	12.2	34	1.6	10.8	
Schlumberger Ltd.	SLB	37.70	2.1	7.9	28	2.0	8.9	
Halliburton Company	HAL	14.95	0.7	7.9	21	3.3	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

	Symbol/ Rating		Price (\$/sh) 17-Oct 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Energy Infrastructure								
Kinder Morgan Energy Partners, L.P.	KMP	S	31.50	135	4,300	14.00	0.47	1.66
Kinder Morgan Management, LLC	KMR	S	28.20	40	1,100	14.00	0.47	1.53
Enterprise Products Part.	EPD		17.74	175	3,100	9.50	0.43	1.49
Kinder Morgan, Inc.	KMI	S	35.06	123	4,300	8.10	0.87	1.42
Calpine Corporation	CPN	N	2.13	375	800	1.00	0.97	1.03
Constellation Energy Group	CEG		21.82	164	3,600	20.00	0.69	1.03
Williams Companies	WMB		1.55	521	800	1.00	0.97	1.01
AES Corporation	AES		1.05	543	600	1.00	0.98	1.00
Dynegy Inc.	DYN		0.79	418	300	1.00	0.94	0.99
CMS Energy Corporation	CMS		7.38	137	1,000	8.70	0.90	0.98
Valero Energy Corporation	VLO		31.86	115	3,700	40.00	0.60	0.92
Sempra Energy	SRE		18.14	207	3,800	24.30	0.64	0.91
Mirant Corporation	MIR		1.19	413	500	4.00	0.86	0.90
<i>Total or Median</i>					27,900		0.86	1.01
Natural Gas and Oil								
Murphy Oil Corporation	MUR		90.83	46	4,100	82.00	0.18	1.09
Ocean Energy, Inc.	OEI		20.22	178	3,600	20.00	0.30	1.01
Suncor Energy	SU		16.67	454	7,600	17.00	0.25	0.99
Petro-Canada	PCZ		29.70	262	7,800	31.00	0.11	0.96
Imperial Oil Limited (30%)	IMO		28.07	114	3,200	30.00	0.14	0.95
XTO Energy Inc.	XTO	B	22.30	124	2,800	26.00	0.25	0.89
CNOOC Limited (19%)	CEO	B	27.10	78	2,100	33.00	-	0.82
Norsk Hydro ASA (49%)	NHY		38.25	126	4,800	54.00	0.18	0.76
PetroChina Company Ltd (10%)	PTR	B	20.25	176	3,600	30.00	0.17	0.73
<i>Total or Median</i>					39,600		0.18	0.95
Coal Producers (Small Cap)								
Penn Virginia Res. Part, L.P.	PVR		20.30	15	300	17.00	-	1.19
Consol Energy Inc.	CNX		12.40	79	1,000	5.00	0.88	1.17
Peabody Energy	BTU		23.76	55	1,300	18.00	0.75	1.08
Arch Coal	ACI		16.13	48	800	18.00	0.61	0.96
Alliance Res. Part, L.P.	ARLP		23.37	16	400	29.00	0.36	0.87
Fording Coal (US\$)	FDG		15.90	52	800	23.00	0.04	0.71
Massey Energy	MEE		5.29	75	400	18.00	0.37	0.56
					5,000		0.37	0.96

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

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Table M-2
Mid Cap Energy Companies
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		17-Oct 2002	NTM	NTM	NTM	NTM (%)	NTM
Energy Infrastructure								
Enterprise Products Part.	EPD		17.74	1.6	16.4	38	7.0	11.0
Kinder Morgan Energy Partners, L.P.	KMP	S	31.50	3.1	14.0	16	7.7	8.4
Kinder Morgan Management, LLC	KMR	S	28.20	2.9	12.9	14	8.7	8.4
Kinder Morgan, Inc.	KMI	S	35.06	3.4	12.5	13	0.6	8.8
Calpine Corporation	CPN	N	2.13	1.8	10.5			10.2
Constellation Energy Group	CEG		21.82	2.6	9.4	8	4.4	9.2
Williams Companies	WMB		1.55	1.8	9.1		-	9.0
AES Corporation	AES		1.05	2.7	9.0			9.0
Dynegy Inc.	DYN		0.79	0.2	8.9		-	9.0
CMS Energy Corporation	CMS		7.38	1.3	8.9	4	9.8	9.0
Sempra Energy	SRE		18.14	2.3	8.2	7	5.5	9.0
Mirant Corporation	MIR		1.19	0.4	8.1	1	-	9.0
Valero Energy Corporation	VLO		31.86	0.4	7.2	8	1.3	7.8
	<i>Median</i>			1.8	9.1	8	4.4	9.0
Natural Gas and Oil								
Suncor Energy	SU		16.67	3.5	10.7	24	1.3	10.8
Imperial Oil Limited (30%)	IMO		28.07	1.3	9.7	22	1.9	10.3
Murphy Oil Corporation	MUR		90.83	1.0	8.7	43	1.7	8.0
Ocean Energy, Inc.	OEI		20.22	4.7	7.9	34	0.8	7.8
Petro-Canada	PCZ		29.70	1.8	7.1	18	0.8	7.4
XTO Energy Inc.	XTO	B	22.30	4.2	5.9	11	0.2	6.6
CNOOC Limited (19%)	CEO	B	27.10	4.0	5.3	11	2.3	6.4
PetroChina Company Ltd (10%)	PTR	B	20.25	1.6	3.7	7	6.3	5.1
Norsk Hydro ASA (49%)	NHY		38.25	0.7	3.6	10	2.7	4.8
	<i>Median</i>			1.8	7.1	18	1.7	7.4
Coal Producers (Small Cap)								
Penn Virginia Res. Part, L.P.	PVR		20.30	9.5	13.1	15	9.9	11.0
Consol Energy Inc.	CNX		12.40	1.8	11.4	28	4.5	9.7
Peabody Energy	BTU		23.76	1.5	9.7	20	1.7	9.0
Arch Coal	ACI		16.13	1.4	8.7	90	1.4	9.0
Fording Coal (US\$)	FDG		15.90	1.5	6.3	14	2.4	9.0
Alliance Res. Part, L.P.	ARLP		23.37	1.2	5.3	7	8.6	6.0
Massey Energy	MEE		5.29	0.9	5.0	132	3.0	8.9
				1.5	8.7	20	3.0	9.0

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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Energy Infrastructure								
El Paso Energy Partners	EPN	S	30.32	42.8	1,300	10.20	0.64	1.72
Enbridge Energy Partners,	EEP		40.91	31.0	1,270	16.60	0.58	1.62
TEPPCO Partners, L.P.	TPP		29.36	46.5	1,360	12.90	0.61	1.50
Plains All Amer. Pipeline	PAA		24.00	41.6	1,000	14.90	0.39	1.38
Northern Border Partners	NBP		36.94	42.0	1,550	20.10	0.57	1.36
AmeriGas Partners, L.P.	APU		23.21	49.0	1,140	23.50	0.47	0.99
Western Gas Resources	WGR		34.09	33.8	1,150	37.60	0.28	0.93
	<i>Total or Median</i>				8,800		0.57	1.38
Natural Gas and Oil								
Provident Energy Trust	PVX		6.97	36.0	250	5.00	0.46	1.21
Dorchester Hugoton, Ltd.	DHULZ		13.35	10.7	143	11.60	(0.17)	1.17
Quicksilver Resources Inc.	KWK		21.75	19.4	420	19.00	0.44	1.08
Pogo Producing Company	PPP		35.92	64.5	2,320	35.00	0.23	1.02
Newfield Exploration Company	NFX		34.90	48.9	1,710	35.00	0.24	1.00
Unit Corporation	UNT		19.95	36.2	720	21.00	0.03	0.95
Enerplus Resources Fund	ERF		17.94	69.6	1,250	20.00	0.19	0.92
Stone Energy Company	SGY		34.25	26.4	910	42.00	0.29	0.87
Encore Acquisition Corp. (25%)	EAC		17.20	7.0	120	21.00	0.20	0.85
Penn Virginia Corporation	PVA		31.61	9.0	280	38.00	0.09	0.85
Forest Oil Corporation	FST	N	26.65	46.8	1,250	35.00	0.30	0.83
Spinnaker Exploration Company	SKE		27.45	34.2	940	33.00	-	0.83
Southwestern Energy Company	SWN		11.58	25.6	300	17.00	0.44	0.82
Magnum Hunter Resources, Inc.	MHR		4.73	71.5	340	11.00	0.46	0.69
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	24.28	57.2	1,390	40.00	0.12	0.66
Swift Energy Company	SFY		7.40	24.8	180	22.00	0.32	0.55
	<i>Total or Median</i>				12,500		0.23	0.86
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		17.93	6.0	108	19.30	-	0.93
San Juan Basin Royalty Trust	SJT	B	12.43	46.6	580	15.40	-	0.81
Hugoton RoyaltyTrust (46%)	HGT		11.88	18.4	220	15.10	-	0.79
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.70	27.0	19	2.00	0.84	0.90
Energy Partners Ltd.(30%)	EPL	B	8.28	8.2	68	10.00	0.38	0.89
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.45	27.3	40	3.00	0.22	0.60

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Energy Infrastructure								
El Paso Energy Partners	EPN	S	30.32	8.7	15.5	23	8.9	9.0
Enbridge Energy Partners,	EEP		40.91	6.5	14.6	79	8.6	9.0
TEPPCO Partners, L.P.	TPP		29.36	1.1	13.5	19	7.8	9.0
Plains All Amer. Pipeline	PAA		24.00	0.2	12.4	18	8.5	9.0
Northern Border Partners	NBP		36.94	7.7	12.3	16	8.7	9.0
AmeriGas Partners, L.P.	APU		23.21	1.5	9.0	13	9.5	9.0
Western Gas Resources	WGR		34.09	0.7	8.4	19	0.6	9.0
	<i>Median</i>			<i>1.5</i>	<i>12.4</i>	<i>19</i>	<i>8.6</i>	<i>9.0</i>
Natural Gas and Oil								
Dorchester Hugoton, Ltd.	DHULZ		13.35	6.4	9.5	13	9.1	8.1
Quicksilver Resources Inc.	KWK		21.75	4.8	9.0	23	-	8.3
Provident Energy Trust	PVX		6.97	3.7	7.4	91	15.9	6.1
Enerplus Resources Fund	ERF		17.94	4.7	6.8	16	12.2	7.4
Forest Oil Corporation	FST	N	26.65	3.8	6.5	22	-	7.8
Unit Corporation	UNT		19.95	3.4	6.3	14	-	6.6
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	24.28	3.3	5.8	6	5.2	8.8
Magnum Hunter Resources, Inc.	MHR		4.73	2.8	5.7	13	-	8.3
Pogo Producing Company	PPP		35.92	3.5	5.6	18	0.3	5.5
Encore Acquisition Corp. (25%)	EAC		17.20	3.8	5.5	11	-	6.5
Southwestern Energy Company	SWN		11.58	2.2	5.2	11	-	6.3
Penn Virginia Corporation	PVA		31.61	3.0	4.9	21	2.8	5.8
Spinnaker Exploration Company	SKE		27.45	3.9	4.6	17	-	5.5
Swift Energy Company	SFY		7.40	3.0	4.5	15	-	8.1
Stone Energy Company	SGY		34.25	3.3	4.4	10	-	5.0
Newfield Exploration Company	NFX		34.90	3.1	4.4	14	-	4.4
	<i>Median</i>			<i>3.4</i>	<i>5.7</i>	<i>15</i>	<i>-</i>	<i>6.6</i>
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		17.93	6.1	8.5	9	11.1	9.1
San Juan Basin Royalty Trust	SJT	B	12.43	5.4	6.8	9	10.9	8.5
Hugoton RoyaltyTrust (46%)	HGT		11.88	4.6	6.6	9	11.2	8.4
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.70	4.3	6.2		-	6.9
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.45	3.4	5.1	12	-	8.5
Energy Partners Ltd.(30%)	EPL	B	8.28	2.3	4.3		-	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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