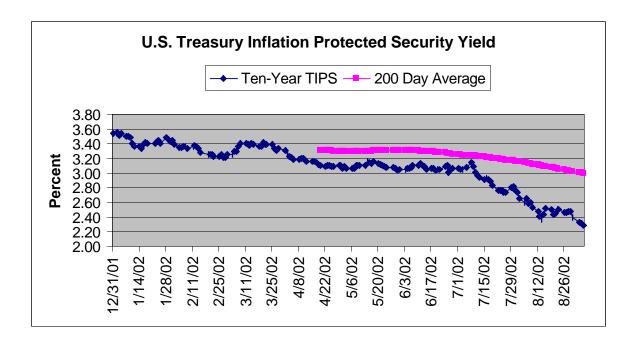
Growth Expectations Melt

Summary and Recommendation

It is eerie how well government bonds have performed as investments this year. As investors returned from August vacations, the ten-year inflation indexed note broke below a 2.4% real yield (see Chart). That is the most fundamental measure of investor expectations for economic and financial growth. The reduction in yield this year also translates to about an 11% increase in price, remarkable for the lowest volatility, risk-free, dollar investment. Lower growth means less likelihood that stocks with high McDep Ratios and high ratios of Debt/Present Value will meet overestimated prospects. Built with stocks that have low McDep Ratios, and low ratios of Debt/Present Value, the recommended combination that makes up the McDep Energy Portfolio offers moderate growth with inflation protection and deflation resistance (see *Meter Reader*, August 26, 2002). Meanwhile current buy recommendations that fit the themes of natural gas, oil and non-U.S. include **Burlington Resources (BR), ChevronTexaco (CVX)** and **PetroChina (PTR)** (see Tables L-1, L-2, M-1, M-2, S-1, and S-2).

Kurt H. Wulff, CFA



A Weekly Analysis of Energy Stocks Using the McDep Ratio September 9, 2002

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/		5-Sep	Shares	Cap	Value	Present	McDep
	Ra	ting	2002	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Mega Cap								
Exxon Mobil Corporation	XOM		33.77	6,858	232,000	36.00	0.09	0.94
BP plc	BP		43.05	3,738	161,000	50.00	0.15	0.88
TotalFinaElf S.A.	TOT		66.98	1,352	90,600	90.00	0.14	0.78
Royal Dutch/Shell	RD	В	42.09	3,498	147,000	60.00	0.15	0.75
ChevronTexaco Corporation	CVX	В	73.19	1,062	77,700	110.00	0.16	0.72
Total or Median	!				708,000		0.15	0.78
Energy Infrastructure								
Southern Company	SO		28.40	701	19,900	23.90	0.47	1.10
El Paso Corporation	EP	S	15.67	590	9,200	20.00	0.66	0.92
American Electric Power Co. Inc.	AEP	N	32.78	322	10,600	42.20	0.63	0.92
Duke Energy Corporation	DUK		25.45	792	20,200	30.40	0.48	0.92
Dominion Resources	D		61.55	269	16,600	76.20	0.45	0.90
Enel S.p.a. (32%)	EN		26.10	388	10,100	32.70	0.39	0.88
Exelon Corporation	EXC	N	44.00	323	14,200	70.80	0.45	0.79
Total or Median	!				81,000		0.47	0.91
Natural Gas and Oil								
Occidental Petroleum Corp.	OXY		29.11	372	10,800	30.00	0.48	0.98
OAO Lukoil	LUKOY	•	63.70	299	19,100	70.00	0.08	0.92
Devon Energy	DVN		46.24	165	7,600	55.00	0.48	0.91
ENI S.p.A.	E		74.70	776	58,000	85.00	0.18	0.90
Encana Corporation	ECA	В	28.91	470	13,600	35.00	0.28	0.87
Anadarko Petroleum Corp.	APC		43.72	266	11,600	56.00	0.26	0.84
Unocal Corporation	UCL		32.69	245	8,000	45.00	0.33	0.82
ConocoPhillips	P	В	51.60	680	35,100	80.00	0.32	0.76
Marathon Oil Corporation	MRO	В	24.33	310	7,500	40.00	0.36	0.75
Burlington Resources	BR	В	36.58	202	7,400	57.00	0.28	0.74
Petroleo Brasileiro S. A.	PBR	В	15.86	1,086	17,200	30.00	0.27	0.66
Total or Median	ļ.				185,000		0.28	0.83
Service								
Baker Hughes Inc.	BHI		26.24	339	8,900	25.00	0.09	1.05
Schlumberger Ltd.	SLB		40.63	581	23,600	44.00	0.22	0.94
Halliburton Company	HAL		13.68	432	5,900	20.00	0.21	0.75
1 ,					•			

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

McDep Ratio = Market cap and **Debt** to **pr**esent value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 9, 2002

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/	Dis	tribution	PV/	
	Symbol/		5-Sep	Sales	Ebitda	P/E	NTM	Ebitda	
	Ra	iting	2002	NTM	NTM	NTM	(%)	NTM	
Mega Cap									
Exxon Mobil Corporation	XOM		33.77	1.4	9.5	20	2.7	10.1	
BP plc	BP		43.05	1.1	8.1	17	3.3	9.1	
TotalFinaElf S.A.	TOT		66.98	1.2	7.4	15	2.8	9.4	
Royal Dutch/Shell	RD	В	42.09	1.0	6.8	14	4.0	9.1	
ChevronTexaco Corporation	CVX	В	73.19	1.1	6.7	13	3.8	9.2	
Median				1.1	7.4	15	3.3	9.2	
Energy Infrastructure									
Southern Company	SO		28.40	3.4	9.9	16	4.7	9.0	
American Electric Power Co. Inc.	AEP	N	32.78	0.6	8.3	9	7.3	9.0	
Duke Energy Corporation	DUK		25.45	0.8	8.3	10	4.3	9.0	
Dominion Resources	D		61.55	3.4	8.1	13	4.2	9.0	
Enel S.p.a. (32%)	EN		26.10	2.2	7.9	32	6.2	9.0	
El Paso Corporation	EP	S	15.67	2.6	7.3	9	5.6	7.9	
Exelon Corporation	EXC	N	44.00	2.2	7.1	10	4.0	9.0	
Median				2.2	8.1	10	4.7	9.0	
Natural Gas and Oil									
Occidental Petroleum Corp.	OXY		29.11	1.5	8.0	14	3.4	8.1	
ConocoPhillips	P	В	51.60	0.8	7.1	15	2.8	9.3	
Devon Energy	DVN		46.24	3.0	6.8	47	0.4	7.4	
Anadarko Petroleum Corp.	APC		43.72	2.7	6.7	14	0.7	8.1	
ENI S.p.A.	E		74.70	1.6	6.6	15	4.5	7.3	
Burlington Resources	BR	В	36.58	4.5	6.0	14	1.5	8.0	
Encana Corporation	ECA	В	28.91	2.5	5.5	11	0.9	6.3	
Marathon Oil Corporation	MRO	В	24.33	0.4	5.5	10	3.8	7.3	
Unocal Corporation	UCL		32.69	2.3	5.0	12	2.4	6.2	
OAO Lukoil	LUKOY		63.70	1.6	4.5	9	1.7	4.9	
Petroleo Brasileiro S. A.	PBR	В	15.86	1.4	3.7	5	8.5	5.6	
Median				1.6	6.0	14	2.4	7.3	
Service									
Baker Hughes Inc.	BHI		26.24	1.9	11.3	31	1.8	10.8	
Schlumberger Ltd.	SLB		40.63	2.2	8.4	30	1.8	8.9	
Halliburton Company	HAL		13.68	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 June 30, 2003; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 9, 2002

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

			Price (\$/sh)		Market	Net Present	Debt/	
	Symbol/ Rating		5-Sep	Shares	Cap	Value	Present	McDep
			2002	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Energy Infrastructure								
Enterprise Products Part.	EPD		20.95	175	3,700	9.50	0.43	1.69
Kinder Morgan Energy Partners, L.P.	KMP	S	32.00	136	4,400	14.00	0.49	1.66
Kinder Morgan Management, LLC	KMR	S	31.00	30	900	14.00	0.49	1.62
Kinder Morgan, Inc.	KMI	S	39.80	123	4,900	8.10	0.87	1.51
Constellation Energy Group	CEG		27.19	164	4,500	20.00	0.69	1.11
Calpine Corporation	CPN	N	4.58	375	1,700	1.00	0.97	1.10
Dynegy Inc.	DYN		2.07	418	900	1.00	0.94	1.06
Williams Companies	WMB		3.23	521	1,700	1.00	0.97	1.06
AES Corporation	AES		2.69	543	1,500	1.00	0.98	1.04
CMS Energy Corporation	CMS		10.39	137	1,400	8.70	0.90	1.02
Mirant Corporation	MIR		3.43	413	1,400	4.00	0.86	0.98
Sempra Energy	SRE		22.41	207	4,600	24.30	0.64	0.97
Valero Energy Corporation	VLO		31.38	115	3,600	40.00	0.60	0.91
Consol Energy Inc.	CNX		13.15	79	1,000	20.00	0.65	0.88
Total or Median					36,200		0.77	1.06
Natural Gas and Oil								
Ocean Energy, Inc.	OEI		20.50	178	3,600	20.00	0.30	1.02
Murphy Oil Corporation	MUR		83.62	46	3,800	82.00	0.18	1.02
Suncor Energy	SU		17.12	454	7,800	17.00	0.25	1.01
Petro-Canada	PCZ		29.92	262	7,800	31.00	0.11	0.97
Imperial Oil Limited (30%)	IMO		28.12	114	3,200	30.00	0.14	0.95
XTO Energy Inc.	XTO	В	19.82	124	2,500	26.00	0.25	0.82
Norsk Hydro ASA (49%)	NHY		40.88	126	5,200	54.00	0.18	0.80
PetroChina Company Ltd (10%)	PTR	В	20.40	176	3,600	30.00	0.17	0.73
Total or Median					37,500		0.18	0.96

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 9, 2002

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

			Price			Di		
			(\$/sh)	EV/	EV/	Dis	stribution	PV/
	Symbol/		5-Sep	Sales	Ebitda	P/E	NTM	Ebitda
	·	Rating	2002	NTM	NTM	NTM	(%)	NTM
Energy Infrastructure								
Enterprise Products Part.	EPD		20.95	1.8	18.6	45	6.0	11.0
Kinder Morgan Energy Partners, L.P.		S	32.00	3.2	14.9	17	7.6	9.0
Kinder Morgan Management, LLC	KMR	S	31.00	3.1	14.6	16	7.9	9.0
Kinder Morgan, Inc.	KMI	S	39.80	3.5	13.6	17	0.5	9.0
Calpine Corporation	CPN	N	4.58	1.9	11.3			10.2
Constellation Energy Group	CEG		27.19	2.9	10.2	10	3.5	9.2
Consol Energy Inc.	CNX		13.15	1.9	9.6	10	4.3	10.9
Dynegy Inc.	DYN		2.07	0.2	9.6		-	9.0
Williams Companies	WMB		3.23	1.9	9.5		-	9.0
AES Corporation	AES		2.69	2.8	9.3			9.0
CMS Energy Corporation	CMS		10.39	1.3	9.2	6	6.9	9.0
Mirant Corporation	MIR		3.43	0.4	8.8	2	-	9.0
Sempra Energy	SRE		22.41	2.5	8.8	8	4.5	9.0
Valero Energy Corporation	VLO		31.38	0.4	7.1	8	1.3	7.8
Median				1.9	9.6	10	3.9	9.0
Natural Gas and Oil								
Suncor Energy	SU		17.12	3.6	10.9	24	1.3	10.8
Imperial Oil Limited (30%)	IMO		28.12	1.3	9.7	22	1.9	10.3
Murphy Oil Corporation	MUR		83.62	1.0	8.1	39	1.8	8.0
Ocean Energy, Inc.	OEI		20.50	4.7	7.9	35	0.8	7.8
Petro-Canada	PCZ		29.92	1.8	7.1	18	0.8	7.4
XTO Energy Inc.	XTO	В	19.82	4.2	6.0	11	0.2	7.3
Norsk Hydro ASA (49%)	NHY		40.88	0.7	3.8	11	2.5	4.8
PetroChina Company Ltd (10%)	PTR	В	20.40	1.6	3.7	7	6.2	5.1
Median				1.7	7.5	20	1.5	7.6

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 9, 2002

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

	Symbol/ Rai	ting	Price (\$/sh) 5-Sep 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Energy Infrastucture								
El Paso Energy Partners	EPN	S	34.37	42.8	1,470	10.20	0.64	1.86
Enbridge Energy Partners,	EEP		42.72	31.0	1,320	16.60	0.58	1.66
TEPPCO Partners, L.P.	TPP		29.72	46.5	1,380	12.90	0.61	1.51
Plains All Amer. Pipeline	PAA		23.80	41.6	990	14.90	0.39	1.37
Penn Virginia Res. Part, L.P.	PVR		20.46	15.3	310	15.00	_	1.36
Northern Border Partners	NBP		35.89	42.0	1,510	20.10	0.57	1.34
AmeriGas Partners, L.P.	APU		22.98	49.0	1,130	23.50	0.47	0.99
Penn Virginia Corporation	PVA		34.06	9.0	310	38.00	0.09	0.91
Total or Median					8,400		0.52	1.37
Natural Gas and Oil					,			
Dorchester Hugoton, Ltd.	DHULZ		13.83	10.7	149	11.60	(0.17)	1.23
Provident Energy Trust	PVX		6.82	36.0	250	5.00	0.46	1.20
Quicksilver Resources Inc.	KWK		19.70	19.4	380	19.00	0.44	1.02
Pogo Producing Company	PPP		32.45	60.5	1,960	32.00	0.27	1.01
Newfield Exploration Company	NFX		32.03	48.6	1,560	33.00	0.25	0.98
Enerplus Resources Fund	ERF		17.48	69.6	1,220	20.00	0.19	0.90
CNOOC Limited (19%)	CEO	В	26.60	78.0	2,080	30.00	-	0.89
Encore Acquisition Corp. (25%)	EAC		17.05	7.5	128	20.00	0.18	0.88
Spinnaker Exploration Company	SKE		29.57	28.5	840	35.00	0.03	0.85
Stone Energy Company	SGY		33.05	26.4	870	42.00	0.29	0.85
Southwestern Energy Company	SWN		11.33	25.6	290	17.00	0.44	0.81
Forest Oil Corporation	FST	N	25.35	46.8	1,190	35.00	0.30	0.81
Unit Corporation	UNT		16.41	36.2	590	21.00	0.03	0.79
Magnum Hunter Resources, Inc.	MHR		5.40	71.5	390	11.00	0.46	0.72
Swift Energy Company	SFY		12.74	24.8	320	22.00	0.32	0.71
Canadian Oil Sands Trust (US\$)	COS_u.TO	В	24.77	56.9	1,410	40.00	0.12	0.66
Total or Median					13,600		0.26	0.86
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		16.85	6.0	101	20.40	-	0.83
San Juan Basin Royalty Trust	SJT	В	11.52	46.6	540	16.40	-	0.70
Hugoton RoyaltyTrust (46%)	HGT		11.20	18.4	210	16.60	-	0.67
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.73	27.0	20	2.00	0.84	0.90
Energy Partners Ltd.(30%)	EPL	В	7.80	8.2	64	10.00	0.38	0.86
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.38	27.3	38	3.00	0.22	0.58

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

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 9, 2002

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

			Price (\$/sh)	EV/	EV/	Dividend or Distribution		PV/
	Symbol/		5-Sep	Sales	Ebitda	P/E	NTM	Ebitda
	Rai	ting	2002	NTM	NTM	NTM	(%)	NTM
Energy Infrastucture								
El Paso Energy Partners	EPN	S	34.37	9.4	16.7	26	7.9	9.0
Enbridge Energy Partners,	EEP		42.72	6.7	14.9	82	8.2	9.0
TEPPCO Partners, L.P.	TPP		29.72	1.1	13.6	19	7.7	9.0
Penn Virginia Res. Part, L.P.	PVR		20.46	9.6	13.3	15	9.8	9.7
Plains All Amer. Pipeline	PAA		23.80	0.2	12.3	17	8.6	9.0
Northern Border Partners	NBP		35.89	7.6	12.1	16	8.9	9.0
AmeriGas Partners, L.P.	APU		22.98	1.5	8.9	13	9.6	9.0
Penn Virginia Corporation	PVA		34.06	3.3	5.2	22	2.6	5.8
Median				5.0	12.8	18	8.4	9.0
Natural Gas and Oil								
Dorchester Hugoton, Ltd.	DHULZ		13.83	6.7	10.0	14	8.8	8.1
Quicksilver Resources Inc.	KWK		19.70	4.6	8.5	21	-	8.3
Pogo Producing Company	PPP		32.45	4.3	7.3	46	0.4	7.3
Provident Energy Trust	PVX		6.82	3.6	7.3	89	16.3	6.1
Canadian Oil Sands Trust (US\$)	COS_u.TO	В	24.77	3.7	6.8	8	5.2	10.3
Enerplus Resources Fund	ERF		17.48	4.6	6.6	16	12.5	7.4
Encore Acquisition Corp. (25%)	EAC		17.05	4.3	6.5	14	-	7.4
Forest Oil Corporation	FST	N	25.35	3.7	6.3	21	-	7.8
Magnum Hunter Resources, Inc.	MHR		5.40	2.9	6.0	15	-	8.3
CNOOC Limited (19%)	CEO	В	26.60	4.5	5.8	12	0.9	6.5
Swift Energy Company	SFY		12.74	3.9	5.8	26	-	8.1
Unit Corporation	UNT		16.41	2.8	5.2	11	-	6.6
Southwestern Energy Company	SWN		11.33	2.1	5.1	11	-	6.3
Newfield Exploration Company	NFX		32.03	3.3	4.6	18	-	4.7
Stone Energy Company	SGY		33.05	3.2	4.3	10	-	5.0
Spinnaker Exploration Company	SKE		29.57	3.5	4.1	13	-	4.8
Median				3.7	6.1	15	-	7.3
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		16.85	6.0	8.5	9	10.9	10.3
San Juan Basin Royalty Trust	SJT	В	11.52	5.6	7.2	10	10.3	10.3
Hugoton RoyaltyTrust (46%)	HGT		11.20	4.6	6.7	9	10.8	10.0
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.73	4.3	6.2		_	6.9
Energy Partners Ltd.(30%)	EPL	В	7.80	2.6	5.4		_	6.3
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.38	3.3	5.0	11	-	8.5

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