A Weekly Analysis of Energy Stocks Using the McDep Ratio October 22, 2001

Rarin' To Renege Again

Summary and Recommendation

Calls by California politicians to renegotiate long term power contracts, or renege on them as we would put it, calls attention to our continuing Sell recommendation of Calpine Corporation (CPN). Skeptical of the company's business model, we estimate the stock could drop another 60% to reach our estimated present value of equity. On a more positive note a second straight week of price strength confirms for now a turn in natural gas price trend that should particularly benefit recommended **PanCanadian** Energy (PCX), San Juan Basin Royalty Trust (SJT) and Strong Buy Burlington **Resources (BR).** Meanwhile recommended **PetroChina (PTR)**, which has more than 60% appreciation potential to reach present value of equity, just made its semiannual payment to holders on its indicated annual dividend yield of 10.4% (apparently free of withholding tax). Also we are hopeful of favorable exploration news in the next few months for Strong Buy Marathon Oil (MRO) and recommended Energy Partners (**EPL**). For those recommendations and more, as well as possible alternatives, the stats are in the valuation tables (see Table L-1, L-2, S-1 and S-2). Look for Marathon, **Devon** Energy and Unocal in the same Large Cap group now as Anadarko, Burlington, **Conoco** and **Phillips** instead of those three stocks being classified as Mid Caps.

California Regulators Try to Cheat Once More

The joke around our house is that if the California governor were in our living room, we would probably find him to be a charming guest. That contrasts with our frequent opportunity to view his political leadership on energy issues in the least admirable light. Yet we should not fault the current governor exclusively as the state Public Utility Commission has been continually trying to play tricks on the energy industry for at least three decades. The repeated cycle is to buy spot when prices are low, buy contract when prices are high, then renege on contracts when prices are low again. In natural gas production the cycle included wellhead price controls through the 1970s. When supply got tight buyers signed long term contracts. When supply loosened in the 1980s, buyers reneged on the contracts. When it looked like California needed new pipeline capacity, the PUC approved long-term contracts for capacity. After the new capacity was built, the long-term contracts were held invalid.

The vicious regulatory cycle appears to be repeating in electricity. When supply was ample the California PUC required buyers to make only short-term commitments. That approach backfired big time this past winter. Not liking the price, the state simply refused to pay by letting the utility buyers go into, or threaten, bankruptcy. Then the state induced the suppliers to continue deliveries with the promise of moderately high prices in 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 analysis by Kurt Wulff doing business as McDep Associates is accessible at http://www.mcdep.com. Owning shares in energy stocks, neither Mr. Wulff nor his spouse act contrary to a buy or sell rating. Mr. Wulff is not paid by covered companies.

A Weekly Analysis of Energy Stocks Using the McDep Ratio October 22, 2001

long-term contracts. When the contracts covered more than 100% of current requirements the high spot prices miraculously disappeared. Now that the crisis is past, the time has come for the state to start reneging on its long-term electricity contracts!

Sure enough, the state's leading newspaper reported last week "State to Seek Renegotiated Energy Deals" (see http://www.latimes.com/news/local/la-000082983oct18.story). Of course the suppliers are not stupid. Knowing how untrustworthy the state's energy regulators have been, some suppliers have tried to put strong protection in their contracts. The head of the PUC tries to turn that around by saying such strong terms are evidence that the contracts are unreasonable and therefore inconsistent with Federal Law requiring "just and reasonable" energy prices. We hope that the electricity suppliers get every penny due to them, but more likely the dispute will be dragged out and the energy companies will be cheated again.

Calpine Overpromises

Considering the sorry history of California energy regulation what would you think of a company that reports earnings from past sales in California for which they have not been paid? What would you think of a company that reports positive earnings from sales under long-term contracts that may turn to losses in the future?

The case for Calpine stock is that it sells at a low multiple of earnings and its earnings are growing rapidly. In our opinion, current earnings are overstated because they may be dwarfed by future losses. That in turn implies that rapid growth is an illusion.

The resemblance between Calpine today and Coastal States Gas in the early 1970s may help explain our view. Coastal expanded aggressively by promising to deliver natural gas on long term contracts at prices below what competitors offered. The problem was that after Coastal drove out its competitors, it did not have the gas to deliver. When the price of gas went up surprisingly, Coastal was unable to obtain new supply at a price it could pay and Coastal stock lost most of its value. (The company eventually recovered and today is part of **El Paso Corporation (EPG)**).

Calpine, too, has expanded aggressively by outbidding competitors and promising, in our opinion, natural gas that it will not be able to deliver. The power plants Calpine would build need natural gas for fuel. Calpine is expanding so aggressively that it expects to be buying 10% of U.S. natural gas supply in just a few years. The gas will be there, but electricity generators will have to outbid other users for the supply. The profits Calpine projects are more likely to accrue to natural gas producers.

Now coming back to California, what do you think the state will do? If the price of electricity stays low as it is now, the state will attempt to renege as it is doing now. If the price of natural gas is high, the state will hold Calpine responsible.

A Weekly Analysis of Energy Stocks Using the McDep Ratio October 22, 2001

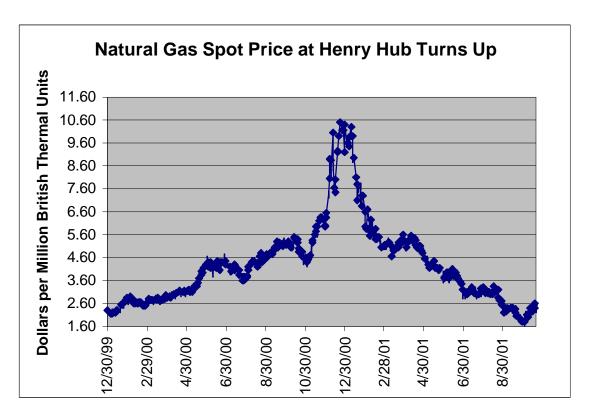
Calpine is also overleveraged, we think. Management targets a 65/35 debt/equity structure apparently on the basis that utilities have succeeded with that much leverage in the past. The difference is that Calpine is building plants primarily for an unregulated market. One of the premises of the regulated market was that ratepayers shared risks with utilities. Since that is not the case in an unregulated market, a lower debt structure would be more appropriate.

We also note that Calpine reports only nominal net interest expense even though it has some \$7 billion of debt on its balance sheet. That is another factor that might lead one to conclude that earnings are overstated.

In the end we come down to Ebitda. Projecting next twelve months results near the current rate, we estimate present value at the same 9.0 times that we use for Mega Cap Energy companies. When subtracting debt and dividing by shares we get about \$11 compared to the current stock price near \$27.

Natural Gas Upside Greater Than Downside

Natural gas spot prices bottomed three weeks ago down 83% from December 21, 2000 (see Chart). The less volatile average of the forward thirty-six months was up 8% last week after a gain of 3% the previous week.



A Weekly Analysis of Energy Stocks Using the McDep Ratio October 22, 2001

PetroChina Has High Yield, Low McDep Ratio, and Low Debt

Last week PetroChina paid its interim dividend that had been declared at RMB 0.069535 per share by the Board of Directors in a meeting on August 30, 2001. Considering that each American Depositary Receipt represents 100 ordinary shares, the dividend is equivalent to RMB 6.9535 per ADS. At the fixed rate of exchange the payment was made at \$0.84 per share. Holding our shares in a retirement account exempt from U.S. taxes, we were pleased to see that the headquarters country withheld no tax, as is the case for some European stocks.

Assuming a final dividend next June equal to what was paid this year, investors would receive another \$0.99 per share for a total of \$1.83 for the year 2001. As a result at the current price, the indicated annual dividend yield on the stock is 10.4%.

The dividend yield is so favorable one must question whether it is sound. We believe it is or we would not be recommending the stock. Cash flow covers dividends by a wide margin. Next twelve months Ebitda minus interest and tax is three times the dividend. A low ratio of debt to present value of 0.14 adds reassurance.

Our capsule justification for owning the stock was that PTR had half the oil and gas production of **ExxonMobil** while trading at one eighth the market cap and offering four times the dividend yield. It is now at one ninth the market cap of XOM and four and a half times the dividend yield of XOM.

We are gratified that on his visit to China, President Bush has had an apparently positive meeting with President Jiang Zemin. We are optimistic that close economic and political relations will be mutually beneficial. The better the relationship, the more confident we can be about economic progress and the prospects for PetroChina stock.

Devon, Marathon and Unocal Moved to Large Cap from Mid Cap

Stretching the definition of Large Cap to include possibly Enterprise Value above \$10 billion instead of just Market Cap above \$10 billion we bring MRO and UCL to the same group as Phillips and Conoco, their traditional peers. Devon is now large enough to be classified with Anadarko and Burlington.

Kurt H. Wulff, CFA

A Weekly Analysis of Energy Stocks Using the McDep Ratio October 22, 2001

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

	Price							
			(\$/sh)		Market	Present	Debt/	
	Symbol/	/	19-Oct	Shares	Cap	Value	Present	McDep
	Rat	ing	2001	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Mega Cap								
Exxon Mobil Corporation	XOM		40.54	6,963	282,000	38.60	0.04	1.05
Royal Dutch/Shell	RD	2	50.58	3,544	179,000	50.80	0.06	1.00
ChevronTexaco Corporation	CVX		86.74	1,063	92,200	89.40	0.17	0.97
BP plc	BP		48.36	3,744	181,000	51.50	0.15	0.95
TotalFinaElf S.A.	TOT		68.05	1,406	96,000	86.80	0.14	0.81
Total or Median					830,000		0.14	0.97
Power								
Dynegy Inc.	DYN		43.64	338	14,800	20.60	0.56	1.50
Enron Corp.	ENE		26.05	913	23,800	9.50	0.77	1.40
Calpine Corporation	CPN	4	26.78	318	8,500	11.10	0.72	1.39
Duke Energy Corporation	DUK		39.14	779	30,500	26.40	0.55	1.22
Mirant Corporation	MIR		28.98	353	10,200	18.60	0.65	1.19
AES Corporation	AES		14.32	543	7,800	8.80	0.83	1.11
Williams Companies	WMB		28.45	485	13,800	23.30	0.62	1.08
El Paso Corporation	EPG		52.85	532	28,100	48.60	0.47	1.05
American Electric Power Co. Inc.	AEP	2	44.12	322	14,200	46.40	0.61	0.98
Southern Company	SO		25.16	683	17,200	27.40	0.42	0.95
Dominion Resources	D		61.14	247	15,100	79.40	0.45	0.87
Exelon Corporation	EXC	2	43.83	324	14,200	87.40	0.39	0.70
Total or Median					160,000		0.58	1.06
Natural Gas and Oil								
Occidental Petroleum Corp.	OXY		24.97	372	9,300	32.20	0.46	0.88
Anadarko Petroleum Corp.	APC		55.13	268	14,800	73.70	0.21	0.80
Burlington Resources (incl HTR)	BR	1	34.98	205	7,200	50.20	0.31	0.79
Unocal Corporation	UCL		32.27	257	8,300	49.00	0.29	0.76
Phillips Petroleum Company	P		54.90	383	21,000	82.70	0.28	0.76
ENI S.p.A.	E		60.60	789	47,800	86.20	0.17	0.75
Devon Energy (incl MND,AXN)	DVN		36.30	165	6,000	66.40	0.43	0.74
Conoco Inc.	COC		24.97	636	15,900	46.60	0.30	0.68
Marathon Oil Corporation	MRO	1	28.19	310	8,700	50.00	0.24	0.67
Total or Median					130,000		0.29	0.75
Service								
Baker Hughes Inc.	BHI		31.89	338	10,800	24.50	0.13	1.26
Schlumberger Ltd.	SLB		47.24	581	27,400	44.00	0.12	1.06
Halliburton Company	HAL		24.00	430	10,300	27.20	0.13	0.90

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy, 4 - Sell

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio October 22, 2001

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

	Price Divide				vidend or			
	(\$/s.		(\$/sh)	EV/	EV/	Distribution		PV/
	Symbol/	,	19-Oct	Sales	Ebitda	P/E	NTM	Ebitda
	Rat	ing	2001	2001E	NTM	NTM	(%)	NTM
Mega Cap								
Exxon Mobil Corporation	XOM		40.54	1.3	9.4	19	2.3	9.0
Royal Dutch/Shell	RD	2	50.58	1.1	9.0	20	2.8	9.0
ChevronTexaco Corporation	CVX		86.74	1.1	8.8	20	3.0	9.0
BP plc	BP		48.36	1.1	8.5	19	2.7	9.0
TotalFinaElf S.A.	TOT		68.05	1.3	7.3	14	2.7	9.0
Median				1.1	8.8	19	2.7	9.0
Power								
Dynegy Inc.	DYN		43.64	0.4	13.5	21	0.7	9.0
Enron Corp.	ENE		26.05	0.3	12.6	15	1.9	9.0
Calpine Corporation	CPN	4	26.78	2.7	12.5	14	-	9.0
Duke Energy Corporation	DUK		39.14	0.9	10.9	15	2.8	9.0
Mirant Corporation	MIR		28.98	0.6	10.8	13	-	9.0
AES Corporation	AES		14.32	3.5	10.0	11	-	9.0
Williams Companies	WMB		28.45	3.1	9.8	12	2.1	9.0
El Paso Corporation	EPG		52.85	1.0	9.4	15	1.6	9.0
American Electric Power Co. Inc.	AEP	2	44.12	0.7	8.8	12	5.4	9.0
Southern Company	SO		25.16	2.8	8.6	15	5.3	9.0
Dominion Resources	D		61.14	3.4	7.9	14	4.2	9.0
Exelon Corporation	EXC	2	43.83	2.2	6.3	9	3.9	9.0
Median				1.6	9.9	14	2.0	9.0
Natural Gas and Oil								
Occidental Petroleum Corp.	OXY		24.97	1.4	7.9	14	4.0	9.0
Anadarko Petroleum Corp.	APC		55.13	2.7	7.2	18	0.4	9.0
Burlington Resources (incl HTR)	BR	1	34.98	4.5	7.1	60	1.6	9.0
Phillips Petroleum Company	P		54.90	0.7	6.8	13	2.6	9.0
Unocal Corporation	UCL		17.11	2.4	6.5	24	2.5	8.5
ENI S.p.A.	E		60.60	1.5	6.0	12	3.0	8.0
Devon Energy (incl MND,AXN)	DVN		36.30	3.0	5.6	15	0.6	7.5
Conoco Inc.	COC		24.97	0.8	5.4	11	3.0	8.0
Marathon Oil Corporation	MRO	1	28.19	0.4	4.3	9	3.3	6.5
Median				1.5	6.5	14	2.6	8.5
Service								
Baker Hughes Inc.	BHI		31.89	2.0	10.1	22	1.4	9.0
Schlumberger Ltd.	SLB		47.24	2.5	8.5	23	1.6	9.0
Halliburton Company	HAL		24.00	0.9	7.2	16	2.1	9.0

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended September 30, 2002; 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 October 22, 2001

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

	Symbol/		Price (\$/sh) 19-Oct	Shares	Market	Net Present Value	Debt/ Present	МсДер
	Symbol∕ Rati	ng	2001	(mm)	Сар (\$тт)	(\$/sh)	Value	Ratio
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Power								
Consol Energy Inc.	CNX		25.58	79	2,000	35.90	0.51	0.86
Sempra Energy	SRE		24.30	203	4,900	41.70	0.50	0.79
CMS Energy Corporation	CMS		21.24	128	2,700	48.30	0.62	0.79
Constellation Energy Group	CEG		27.56	152	4,200	56.50	0.35	0.67
Total or Median					13,800		0.51	0.79
Natural Gas and Oil								
Imperial Oil Limited (30%)	IMO		27.50	119	3,300	29.30	0.11	0.94
Ocean Energy, Inc.	OEI		18.10	178	3,200	20.60	0.29	0.91
Murphy Oil Corporation	MUR		79.90	46	3,600	94.60	0.16	0.87
PanCanadian Energy	PCX	2	26.19	262	6,860	32.10	0.14	0.84
Valero Energy Corp.(with UDS)	VLO		36.70	110	4,000	54.50	0.49	0.83
Petro-Canada	PCZ		25.71	267	6,900	34.40	0.08	0.77
Norsk Hydro ASA (49%)	NHY		35.63	127	4,500	51.90	0.19	0.75
PetroChina Company Ltd (10%)	PTR	2	17.69	176	3,100	31.70	0.14	0.62
Total or Median					35,500		0.15	0.84
Small Cap								
Quicksilver Resources Inc.	KWK		14.03	19.3	270	5.50	0.73	1.41
Spinnaker Exploration Company	SKE		41.99	28.4	1,190	38.60	-	1.09
Magnum Hunter Resources, Inc.	MHR		10.49	37.0	390	10.40	0.36	1.01
XTO Energy Inc.	XTO		17.11	123.0	2,110	17.70	0.29	0.98
Southwestern Energy Company	SWN		12.50	25.7	320	13.90	0.48	0.95
Louis Dreyfus Natural Gas Corp.	LD	3	39.66	44.8	1,780	45.10	0.23	0.91
Swift Energy Company	SFY		22.60	25.7	580	28.40	0.24	0.84
Encore Acquisition Corp. (25%)	EAC		12.60	7.5	95	15.60	0.16	0.84
Penn Virginia Corporation	PVA		35.22	8.8	310	47.70	0.19	0.79
Newfield Exploration Company	NFX		32.68	49.3	1,610	49.50	0.17	0.72
Forest Oil Corporation	FST		27.14	50.2	1,360	42.90	0.21	0.71
Stone Energy Company	SGY		35.50	26.5	940	54.60	0.09	0.68
Total or Median					10,960		0.22	0.88
Trusts and Partnerships								
TEPPCO Partners, L.P.	TPP		33.25	38	1,260	18.00	0.58	1.36
Dorchester Hugoton, Ltd.	DHULZ		12.25	10.7	132	11.20	-	1.10
Cross Timbers Royalty Trust	CRT		17.05	6.0	102	16.80	-	1.01
Hugoton RoyaltyTrust	HGT		10.77	40.0	430	14.60	-	0.74
San Juan Basin Royalty Trust	SJT	2	11.08	46.6	520	15.10	-	0.73
Total or Median					2,440		_	1.01
Micro Cap								
Abraxas Petroleum Corporation	ABP		1.60	23.6	38	0.90	0.94	1.05
Purcell Energy, Ltd. (US\$)	PEL.TO		2.21	26.6	59	3.10	0.10	0.74
Energy Partners Ltd.(30%)	EPL	2	7.95	8.1	64	12.30	0.10	0.68

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy, 3 - Neutral

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 October 22, 2001

Table S-2

Mid Cap and Small Cap Energy Companies

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

	Symbol/		Price (\$/sh)	EV/	EV/	Dividend or Distribution		PV/
			19-Oct	Sales	Ebitda	P/E	NTM	Ebitda
	Ratir	no	2001	2001E	NTM	NTM	(%)	NTM
	Tun	18	2001	2001L	11111	11111	(70)	11111
Power								
Consol Energy Inc.	CNX		25.58	2.1	7.7	9	4.4	9.0
Sempra Energy	SRE		24.30	1.1	7.1	9	4.1	9.0
CMS Energy Corporation	CMS		21.24	0.8	7.1	8	6.9	9.0
Constellation Energy Group	CEG		27.56	1.7	6.0	9	1.7	9.0
Median				1.4	7.1	9	4.2	9.0
Natural Gas and Oil								
Imperial Oil Limited (30%)	IMO		27.50	1.1	8.5	19	2.0	9.0
Murphy Oil Corporation	MUR		79.90	0.9	7.0	25	1.9	8.0
Ocean Energy, Inc.	OEI		18.10	3.9	6.4	20	0.9	7.0
PanCanadian Energy	PCX	2	26.19	1.2	5.9	12	1.0	7.0
Valero Energy Corp.(with UDS)	VLO		36.70	0.3	5.8	5	1.1	7.0
Petro-Canada	PCZ		25.71	1.4	5.4	12	1.0	7.0
Norsk Hydro ASA (49%)	NHY		35.63	0.7	3.7	9	2.9	5.0
PetroChina Company Ltd (10%)	PTR	2	17.69	1.5	3.1	7	10.6	5.0
Median				1.1	5.9	12	1.5	7.0
Small Cap								
Quicksilver Resources Inc.	KWK		14.03	5.7	19.7		_	14.0
Magnum Hunter Resources, Inc.	MHR		10.49	5.3	10.1		_	10.0
Spinnaker Exploration Company	SKE		41.99	8.2	9.8	46	_	9.0
Louis Dreyfus Natural Gas Corp.	LD	3	39.66	6.1	9.1	32	_	10.0
XTO Energy Inc.	XTO		17.11	5.6	8.8	25	0.2	9.0
Southwestern Energy Company	SWN		12.50	2.7	8.5	176	_	9.0
Swift Energy Company	SFY		22.60	5.6	7.6	25	_	9.0
Encore Acquisition Corp. (25%)	EAC		12.60	4.3	7.6	23	_	9.0
Penn Virginia Corporation	PVA		35.22	4.5	6.3	11	2.6	8.0
Forest Oil Corporation	FST		27.14	2.2	5.7	32	_	8.0
Newfield Exploration Company	NFX		32.68	3.9	5.0	22	_	7.0
Stone Energy Company	SGY		35.50	3.7	4.8	26	_	7.0
Median ()				4.9	8.1	26	-	9.0
Trusts and Partnerships								
Dorchester Hugoton, Ltd.	DHULZ		12.25	7.7	11.4	15	23.9	10.4
TEPPCO Partners, L.P.	TPP		33.25	0.7	12.2	17	6.3	9.0
Cross Timbers Royalty Trust	CRT		17.05	6.7	11.6	12	8.0	11.5
San Juan Basin Royalty Trust	SJT	2	11.08	6.2	8.1	12	8.7	11.0
Hugoton RoyaltyTrust	HGT		10.77	5.0	7.7	12	8.7	10.5
Median				6.2	11.4	12	8.7	10.5
Micro Cap								
Abraxas Petroleum Corporation	ABP		1.60	6.3	11.6		-	11.0
Energy Partners Ltd.(30%)	EPL	2	7.95	2.1	4.5		-	6.6
Purcell Energy, Ltd. (US\$)	PEL.TO		2.21	3.1	4.4	12	-	6.0

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