

Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

November 29, 2005

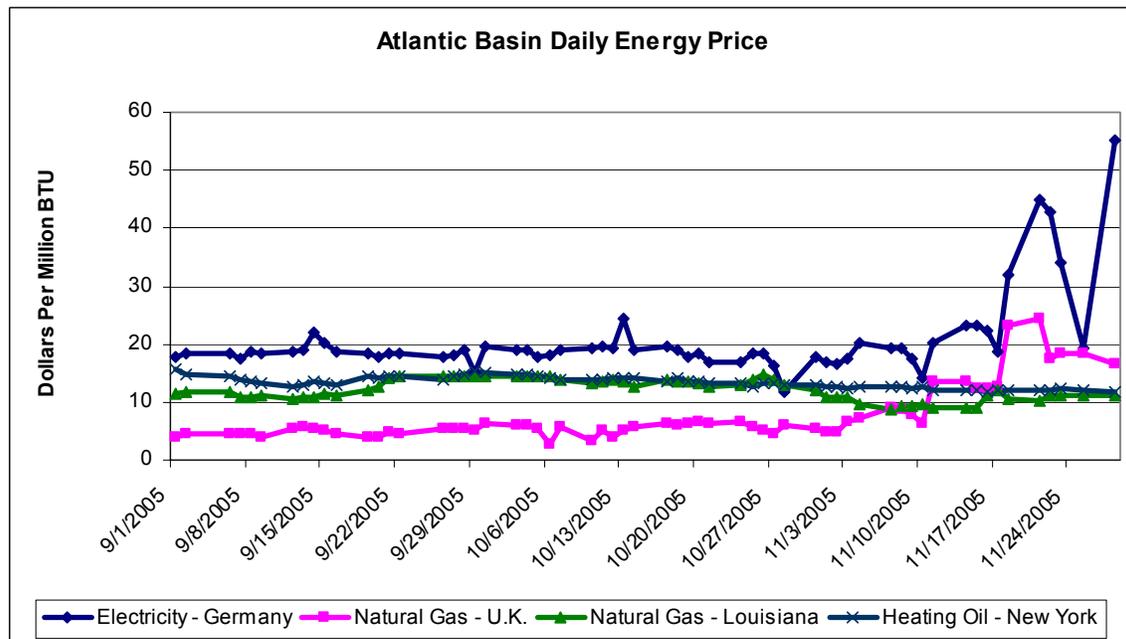
Global Natural Gas Scramble

Summary and Recommendation

Attesting to global supply limitations, some energy prices have taken flight in Europe with the advent of colder weather. Current daily price for German electricity and U.K. natural gas have about tripled in recent weeks. An acute need for immediate supply of clean energy has consumers in the U.K., Spain, the U.S. and Japan scrambling for the few tanker loads of liquefied natural gas that may be obtained in the spot market. Our natural gas mentor and pioneering consultant on global natural gas and LNG, Mr. Jim Jensen, tells *Barron's* "You could get a bidding war for Atlantic LNG cargoes". The implications appear favorable for buy-recommended natural gas producers including **Encana (ECA)**, **Burlington Resources (BR)**, and **Gazprom (OGZPF)** among others.

Tight Market for Clean Energy

Mild panic might describe the situation in the U.K. where industry and government leaders met at 10 Downing Street to discuss the winter natural gas outlook and Parliament debated the issue. Following the discoveries of natural gas in the North Sea forty years ago, Britain has enjoyed widespread advantages converting from coal to the clean fuel. Now, the British North Sea fields are in decline while new supplies from Norway, Russia, Africa, the Middle East and any other source are not yet ready in sufficient deliverable quantities. Anticipated earlier in the U.K. futures market, daily price now reflects the new market dynamics (see chart Atlantic Basin Daily Energy Price).



Source: Bloomberg, McDep Associates

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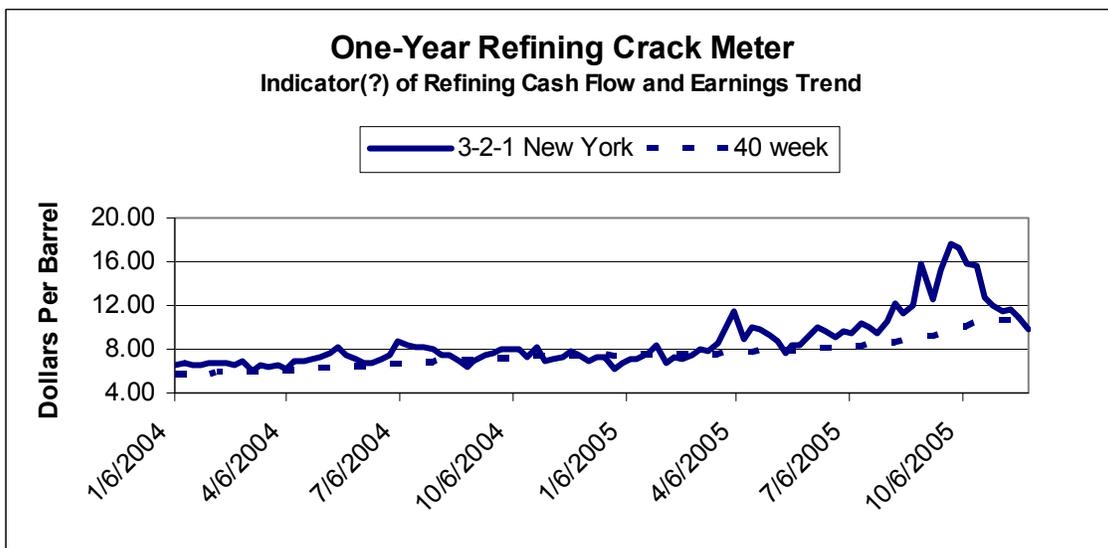
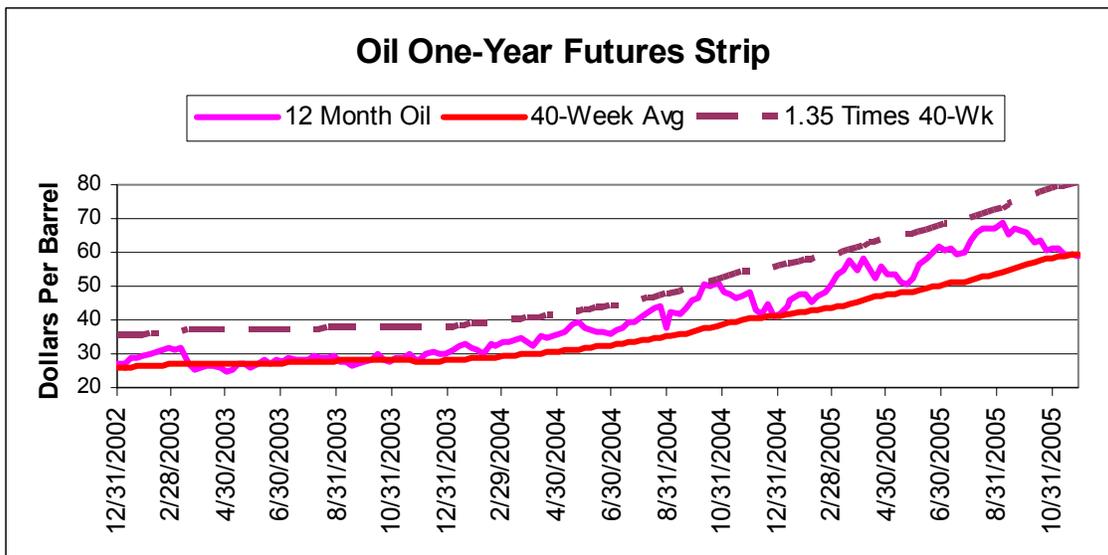
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The Interconnector, an underwater pipeline to Europe, was supposed to help. It didn't because Europe did not send extra gas to the U.K. in response to the high price. We note that German electricity price went up at the same time. Some power plants have apparently been shut for maintenance. Europeans may not have any extra natural gas if they think they need it to generate some replacement electricity or to use directly. Meanwhile, higher price and higher profits on existing investments is the normal signal to make new investments.

Three of Five Commodity Price Momentum Measures Positive

The bullish outlook for natural gas is confirmed by current quotes above the 40-week average for both six-year and one-year natural gas. Six-year oil has positive momentum by the same measure while one-year oil has broken below the 40-week average (see chart [Oil One-Year Futures Strip](#)).



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The slight break can hardly be seen. The break below the 40-week average for refinery crack is more apparent (see chart [One-Year Refining Crack Meter](#)).

Commodity Price and Present Value Support Investment

Oil and Gas Commodity and Stock Price

Monday, November 28, 2005

	<i>Units</i>	<i>Futures Price</i>		<i>McDep Ratio</i>	
		<i>Six-Year</i>	<i>One-Year</i>	<i>Denominator</i>	
Crude oil quotes are above the \$50 a barrel used in estimating present value, the denominator of the McDep Ratio (see table Oil and Gas Commodity and Stock Price).	Crude Oil	\$/barrel	56.31	58.90	50
One-year natural gas is above our long-term estimates while one-year refining dropped below.	Natural Gas	\$/million btu	8.50	10.53	10
The McDep Ratio compares present value calculated from commodity price with enterprise value as determined in the stock market. A stock with a McDep Ratio of 1.0 presumably offers a 7% per year unlevered real return on the constant real prices stated in the table. Four of the five groups have median McDep Ratios below 1.0. Twenty-four of twenty-eight buy recommended stocks trade above the 200-day average confirming a continuing uptrend.	Oil Refining	\$/barrel		9.74	10
	<i>Stocks</i>				<i>Median McDep Ratio</i>
	Mega Cap				0.80
	Producer/Refiner				0.86
	Independent - Large				0.79
	Independent - Small				0.70
	Income				1.07

Source: McDep Associates, Bloomberg, New York Mercantile Exchange, Yahoo and company disclosures

Select Stocks on Valuation and Strategic Considerations

Stocks are ranked in descending order of McDep Ratio to suggest “buy low and sell high” (see table [Rank by McDep Ratio](#)). We recommend representation in each of the five groups from Mega Cap to Income with emphasis on low McDep Ratio stocks.

Next Twelve Months Cash Flow, Ebitda, changes continuously with futures prices for natural gas and oil (see table [Rank by EV/Ebitda](#)). We regularly check the correlation of present value with cash flow multiple by business and expected life of production.

Investors can diversify political risk by owning stocks of companies headquartered in other countries (see table [Home Country and Business Segments](#)). Russian stocks offer potential resource value beyond that reflected in the McDep Ratio. Finally, we recommend balance among business segments. Investors should be sure to be represented in the stocks of companies with strong natural gas concentration.

Timely analyses are available on all recommended stocks (see table [Index of Recent Research](#)).

Kurt H. Wulff, CFA

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Oil and Gas Producers Rank by McDep Ratio: Market Cap and Debt to Present Value

	Symbol/ Rating		Price (\$/sh) 28-Nov 2005	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap								
BP plc	BP	B	66.11	3,501	232,000	77.00	0.11	0.87
Total S.A.	TOT	B	125.48	1,176	148,000	160.00	0.12	0.81
Exxon Mobil Corporation	XOM	B	58.74	6,303	370,000	74.00	0.04	0.80
Royal Dutch Shell plc	RDS-A	B	61.97	3,352	208,000	84.00	0.10	0.76
Chevron Corporation	CVX	B	57.18	2,256	129,000	85.00	0.13	0.72
<i>Total or Median</i>					<i>1,087,000</i>		<i>0.11</i>	<i>0.80</i>
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	S2	90.41	123	11,120	20.00	0.76	1.85
Imperial Oil Limited (30%)	IMO	B	92.96	102	9,500	84.00	0.10	1.10
Marathon Oil Corporation	MRO	B	57.87	368	21,280	65.00	0.27	0.92
Petro-Canada	PCZ	B	37.42	525	19,660	42.00	0.18	0.91
Lukoil Oil Company	LUKOY	B	56.97	830	47,000	65.00	0.03	0.88
Suncor Energy	SU	B	56.40	461	26,010	68.00	0.11	0.85
Norsk Hydro ASA	NHY	B	101.41	251	25,440	130.00	0.11	0.80
ConocoPhillips	COP	B	61.73	1,418	87,500	100.00	0.15	0.67
PetroChina Company Ltd (10%)	PTR	B	78.07	176	13,720	120.00	0.01	0.65
Gazprom (50%)	OGZPF	B	70.60	1,013	71,500	120.00	0.03	0.60
<i>Total or Median</i>					<i>333,000</i>		<i>0.11</i>	<i>0.86</i>
Independent Natural Gas and Oil - Large Cap and Mid Cap								
Encana Corporation	ECA	B	44.75	876	39,200	51.00	0.20	0.90
XTO Energy Inc.	XTO	B	40.80	370	15,100	48.00	0.20	0.88
Burlington Resources	BR	B	70.13	381	26,700	86.00	0.09	0.83
CNOOC Limited (29%)	CEO	B	66.51	119	7,930	84.00	0.00	0.79
Devon Energy Corporation	DVN	B	59.33	454	26,900	86.00	0.15	0.74
Occidental Petroleum Corp.	OXY	B	78.08	404	31,500	120.00	0.11	0.69
Anadarko Petroleum Corp.	APC	B	88.12	238	21,000	140.00	0.12	0.67
<i>Total or Median</i>					<i>168,000</i>		<i>0.12</i>	<i>0.79</i>
Independent Natural Gas and Oil - Small Cap								
Berry Petroleum Company	BRY	B	56.11	23	1,260	65.00	0.11	0.88
Energy Partners Ltd.	EPL	B	24.13	41	990	38.00	0.19	0.71
Encore Acquisition Company	EAC	B	31.11	50	1,540	50.00	0.21	0.70
Cimarex Energy Company	XEC	B	37.95	85	3,230	64.00	0.11	0.64
<i>Total or Median</i>					<i>7,000</i>		<i>0.15</i>	<i>0.70</i>
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S3	50.26	159	8,000	15.00	0.55	2.05
Kinder Morgan Management, LLC	KMR	S3	47.65	57	2,700	15.00	0.55	1.98
Pengrowth Energy Trust	PGH		23.23	159	3,690	20.00	0.15	1.14
San Juan Basin Royalty Trust	SJT		42.84	47	2,000	40.00	-	1.07
Enerplus Resources Fund	ERF		44.88	110	4,940	42.00	0.14	1.06
Penn West Energy Trust	PWTFF	B	29.38	179	5,260	28.00	0.15	1.04
Canadian Oil Sands Trust (US\$)	COSWF	B	102.40	93	9,530	136.00	0.11	0.78
<i>Total or Median</i>					<i>36,100</i>		<i>0.15</i>	<i>1.07</i>

B = Buy, S2 = Short half unlevered position, S3 = Short quarter unlevered position

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

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Oil and Gas Producers

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

	Symbol/ Rating		Price (\$/sh) 28-Nov 2005	Adjstd Resrvs/ Prod NTM	PV/ Ebitda NTM	EV/ Ebitda NTM	P/E NTM	Divd or Distrib NTM (%)
Mega Cap								
BP plc	BP	B	66.11	9.4	6.4	5.6	9	3.2
Exxon Mobil Corporation	XOM	B	58.74	11.7	6.9	5.5	10	2.0
Total S.A.	TOT	B	125.48	9.2	6.4	5.2	9	2.8
Royal Dutch Shell plc	RDS-A	B	61.97	7.5	5.7	4.3	8	3.5
Chevron Corporation	CVX	B	57.18	9.6	6.0	4.3	7	3.1
		<i>Median</i>		9.4	6.4	5.2	9	3.1
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	S2	90.41		7.5	13.9	19	3.3
Suncor Energy	SU	B	56.40	17.6	9.6	8.2	17	0.4
Imperial Oil Limited (30%)	IMO	B	92.96	11.5	7.3	8.0	14	0.9
Gazprom (50%)	OGZPF	B	70.60	20.0	11.0	6.6	11	0.6
Petro-Canada	PCZ	B	37.42	5.7	5.3	4.8	9	0.7
Marathon Oil Corporation	MRO	B	57.87	7.4	5.1	4.7	7	2.3
Lukoil Oil Company	LUKOY	B	56.97	19.8	5.0	4.4	7	1.7
Norsk Hydro ASA	NHY	B	101.41	8.0	5.3	4.3	9	2.9
PetroChina Company Ltd (10%)	PTR	B	78.07	13.9	6.4	4.2	9	4.8
ConocoPhillips	COP	B	61.73	11.2	5.8	3.9	6	2.0
		<i>Median</i>		11.5	6.1	4.8	9	1.9
Independent Natural Gas and Oil - Large Cap and Mid Cap								
XTO Energy Inc.	XTO	B	40.80	10.8	6.4	5.6	9	0.5
Encana Corporation	ECA	B	44.75	7.1	5.1	4.6	9	0.7
Occidental Petroleum Corp.	OXY	B	78.08	11.0	6.5	4.5	8	1.8
CNOOC Limited (29%)	CEO	B	66.51	9.2	5.4	4.3	8	3.5
Anadarko Petroleum Corp.	APC	B	88.12	12.5	6.2	4.2	8	0.8
Burlington Resources	BR	B	70.13	10.0	4.9	4.0	8	0.6
Devon Energy Corporation	DVN	B	59.33	7.8	4.9	3.6	6	0.5
		<i>Median</i>		10.0	5.4	4.3	8	0.7
Independent Natural Gas and Oil - Small Cap								
Berry Petroleum Company	BRY	B	56.11	10.1	6.1	5.3	10	1.1
Encore Acquisition Company	EAC	B	31.11	14.3	6.7	4.7	10	-
Energy Partners Ltd.	EPL	B	24.13	5.7	4.2	2.9	7	-
Cimarex Energy Company	XEC	B	37.95	7.6	4.5	2.9	6	-
		<i>Median</i>		8.9	5.3	3.8	8	-
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S3	50.26		7.9	16.2	23	6.3
Kinder Morgan Management, LLC	KMR	S3	47.65		7.9	15.6	22	6.6
Canadian Oil Sands Trust (US\$)	COSWF	B	102.40	20.0	12.3	9.6	11	3.3
San Juan Basin Royalty Trust	SJT		42.84	12.1	7.7	8.3	9	11.3
Pengrowth Energy Trust	PGH		23.23	7.6	5.5	6.3	9	10.9
Enerplus Resources Fund	ERF		44.88	8.6	5.5	5.8	9	9.5
Penn West Energy Trust	PWTFF	B	29.38	8.0	4.9	5.1	8	10.7
		<i>Median</i>		8.6	7.7	8.3	9	9.5

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended December 31, 2006; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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Oil and Gas Producers Home Country and Business Segments

	Symbol/ Rating		Non- U.S. Domicile	North Amer. Natural Gas (%)	Rest of World Natural Gas (%)	Oil Prod'n (%)	Down- stream (%)	Total Present Value (US\$m)
Mega Cap								
Exxon Mobil Corporation	XOM	B		10	19	38	33	487,000
BP plc	BP	B	UK	10	12	42	36	302,000
Royal Dutch Shell plc	RDS-A	B	UK	4	19	33	45	313,000
Chevron Corporation	CVX	B		9	9	52	29	221,000
Total S.A.	TOT	B	France	-	28	37	35	213,000
			<i>Total or Median</i>	9	19	38	35	1,536,000
Producer/Refiners - Large Cap and Mid Cap								
PetroChina Company Ltd.	PTR	B	China	-	9	71	20	213,000
Gazprom	OGZPF	B	Russia		100			251,000
ConocoPhillips	COP	B		13	7	45	35	166,800
Lukoil Oil Company	LUKOY	B	Russia	-	-	62	38	55,700
Norsk Hydro ASA	NHY	B	Norway	-	27	37	35	36,700
Suncor Energy	SU	B	Canada	5	-	89	7	35,100
Marathon Oil Corporation	MRO	B		14	8	33	46	32,900
Imperial Oil Limited	IMO	B	Canada	13	-	62	25	31,800
Petro-Canada	PCZ	B	Canada	23	4	53	20	27,100
			<i>Median</i>	9	7	58	30	850,000
Independent Natural Gas and Oil - Large Cap and Mid Cap								
Occidental Petroleum Corp.	OXY	B		15	1	73	11	54,700
Encana Corporation	ECA	B	Canada	83	-	17	-	55,600
Devon Energy Corporation	DVN	B		64	-	36	-	46,000
Anadarko Petroleum Corp.	APC	B		60	-	40	-	37,700
Burlington Resources	BR	B		69	5	26	-	36,000
CNOOC Limited	CEO	B	China	-	12	88	-	34,600
XTO Energy Inc.	XTO	B		83	-	17	-	22,100
			<i>Median</i>	64	-	36	-	287,000
Independent Natural Gas and Oil - Small Cap								
Cimarex Energy Company	XEC	B		71	-	29	-	6,080
Encore Acquisition Company	EAC	B		25	-	75	-	3,150
Berry Petroleum Company	BRY	B		15	-	85	-	1,950
Energy Partners Ltd.	EPL	B		54	-	46	-	1,930
			<i>Median</i>	40	-	60	-	13,110
Income								
Canadian Oil Sands Trust (US\$)	COSWF	B	Canada	-	-	100	-	14,300
Penn West Energy Trust	PWTFF	B	Canada	42	-	58	-	5,900
Enerplus Resources Fund	ERF		Canada	58	-	42	-	5,340
Pengrowth Energy Trust	PGH		Canada	42	-	58	-	3,780
San Juan Basin Royalty Trust	SJT			100	-	-	-	1,860
			<i>Median</i>	42	-	58	-	31,200

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Index of Recent Research

Stock Ideas

<u>Date</u>	<u>Symbol</u>	<u>Stock</u>	<u>Theme</u>
28-Nov	OGZPF	Gazprom	Raise Net Present Value to \$120 a Share
14-Nov	PTR	PetroChina Company Limited	Diversify Political Risk
11-Nov	SJT	San Juan Basin Royalty Trust	Record Distributions Ahead
11-Nov	EPL	Energy Partners, Ltd.	Denali Partners
10-Nov	PWTF	Penn West Energy Trust	Quality Income Stock
7-Nov	TOT	Total S.A.	Global Clean Fuel Supplier
4-Nov	BRY	Berry Petroleum	Expanding on Multiple Fronts
4-Nov	XEC	Cimarex Energy Company	Doubling Done
3-Nov	DVN	Devon Energy Corporation	No Hedges in 2006
1-Nov	CEO	CNOOC Ltd	Low Price for Natural Gas
1-Nov	OXY	Occidental Petroleum Corporation	Vintage Pending
31-Oct	CVX	Chevron Corporation	Lower Net Present Value to \$85 a Share
31-Oct	APC	Anadarko Petroleum Corporation	Long Life for Free
31-Oct	BR	Burlington Resources, Inc.	Natural Gas Beneficiary
28-Oct	XOM	Exxon Mobil Corporation	Momentum Challenge
28-Oct	RDSA	Royal Dutch Shell plc	Downstream Gains
28-Oct	SU	Suncor Energy Inc.	Up and Running Again
28-Oct	* MRO	Marathon Oil Corporation	Downstream Gains
28-Oct	* PCZ	Petro-Canada	Oil Sands Producer
27-Oct	* COP	ConocoPhillips	Emerging Mega Cap
27-Oct	* ECA	EnCana Corporation	Natural Gas Leader
27-Oct	* EAC	Encore Acquisition Company	Long Life Oil Value
26-Oct	* BP	BP p.l.c.	Lower Net Present Value to \$77 a Share
26-Oct	* NHY	Norsk Hydro ASA	Record Results
26-Oct	* COSWF	Canadian Oil Sands Trust	Distribution Doubled and Unit Split Proposed
21-Oct	* IMO	Imperial Oil Limited	The Unpromoters
21-Oct	* XTO	XTO Energy Inc.	Ready for Winter
20-Oct	* KMX	Kinder Morgan	Wheel and Deal
14-Oct	* OXY	Occidental Petroleum Corporation	Buy Despite Momentum Signal
13-Oct	* APC BR DVN OXY XTO		Edge of Panic
7-Oct	* ECA IMO PCZ SU		Exaggerated Stock Price Change
26-Sep	* LUKOY	Lukoil Oil Company	Adapting to New Russia

Meter Reader - A Weekly Analysis

29-Nov		Global Natural Gas Scramble
22-Nov	*	\$10 Refining Margin
15-Nov	*	\$10 Natural Gas
8-Nov	*	World Energy Outlook

Natural Gas and Oil Royalty Trusts - A Weekly Analysis

25-Nov		Canadian Thanksgiving
18-Nov	*	D-Day
11-Nov	*	Hold That Line
4-Nov	*	What to Do with the Money

* Archived on www.mcdep.com

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