ClearBridge Energy MLP Fund Inc.
Form N-Q
October 27, 2011

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number 811-22405

Clearbridge Energy MLP Fund Inc.
(Exact name of registrant as specified in charter)

620 Eighth Avenue, New York, NY 10041
(Address of principal executive offices) (Zip code)

Robert I. Frenkel, Esq.
Legg Mason & Co., LLC
100 First Stamford Place
Stamford, CT 06902
(Name and address of agent for service)

Registrant s telephone number, including area code: 1-888-777-0102

Date of fiscal year end: November 30

Date of reporting period: August 31, 2011

ITEM 1. SCHEDULE OF INVESTMENTS

CLEARBRIDGE ENERGY MLP FUND INC.

FORM N-Q

AUGUST 31, 2011

CLEARBRIDGE ENERGY MLP FUND INC.

Schedule of investments (unaudited)

August 31, 2011

SECURITY	SHARES/UNITS	VALUE
MASTER LIMITED PARTNERSHIPS 99.7%		
Diversified Energy Infrastructure 29.7%		
Energy Transfer Equity LP	3,150,000	$ 120,456,000(a)
Energy Transfer Partners LP	1,825,000	82,234,500(a)
Enterprise Products Partners LP	4,075,000	171,761,250(a)
Genesis Energy LP	369,000	9,132,750(a)
ONEOK Partners LP	1,300,000	56,498,000(a)
Regency Energy Partners LP	1,424,999	34,028,976(a)
Williams Partners LP	1,575,483	85,359,669(a)
Total Diversified Energy Infrastructure		*559,471,145*
Exploration & Production 8.6%		
Linn Energy LLC	4,275,001	*161,808,788*(a)
Gathering/Processing 17.1%		
Chesapeake Midstream Partners LP	3,365,000	93,782,550(a)
Copano Energy LLC	1,159,821	37,601,397(a)
Crestwood Midstream Partners LP	414,997	10,607,323(a)
DCP Midstream Partners LP	250,003	9,692,616(a)
Exterran Partners LP	352,000	8,022,080(a)
MarkWest Energy Partners LP	1,490,000	71,594,500(a)
Targa Resources Partners LP	1,200,000	41,160,000(a)
Western Gas Partners LP	1,394,000	50,630,080(a)
Total Gathering/Processing		*323,090,546*
Global Infrastructure 3.7%		
Brookfield Infrastructure Partners LP	2,613,940	*69,295,549*(a)
Liquids Transportation & Storage 26.5%		
Buckeye Partners LP	700,000	44,086,000(a)
Enbridge Energy Partners LP	1,000,000	28,500,000(a)
Holly Energy Partners LP	445,000	22,561,500(a)
Magellan Midstream Partners LP	1,800,004	107,946,240(a)
NuStar Energy LP	1,325,000	78,440,000(a)
NuStar GP Holdings LLC	1,148,500	39,646,220(a)
Plains All American Pipeline LP	1,794,240	108,784,771(a)
Sunoco Logistics Partners LP	669,794	57,434,836(a)
Tesoro Logistics LP	500,000	11,705,000
Total Liquids Transportation & Storage		*499,104,567*
Natural Gas Transportation & Storage 7.8%		
Boardwalk Pipeline Partners LP	398,632	10,005,663(a)
El Paso Pipeline Partners LP	2,500,000	91,975,000(a)
PAA Natural Gas Storage LP	1,401,542	25,353,895
TC Pipelines LP	478,000	20,840,800(a)
Total Natural Gas Transportation & Storage		*148,175,358*
Propane 3.3%		
Inergy LP	2,175,118	*61,686,347*(a)
Shipping 3.0%		
Golar LNG Partners LP	375,000	9,641,250
Teekay LNG Partners LP	1,397,685	47,115,961(a)

Total Shipping				*56,757,211*
TOTAL INVESTMENTS BEFORE SHORT-TERM INVESTMENTS (Cost $1,556,816,955)				1,879,389,511
	RATE	MATURITY DATE	FACE AMOUNT	
SHORT-TERM INVESTMENTS 0.3%				
Repurchase Agreements 0.3%				
State Street Bank & Trust Co. repurchase agreement, dated 8/31/11; Proceeds at maturity - $6,328,000; (Fully collateralized by U.S. government obligations, 3.875% due 8/15/40; Market value - $6,459,225) (Cost - $6,328,000)	0.000%	9/1/11	$6,328,000	6,328,000
TOTAL INVESTMENTS 100.0% (Cost $1,563,144,955#)				$ 1,885,717,511

(a) All or a portion of this security is pledged as collateral pursuant to two loan agreements.

Aggregate cost for federal income tax purposes is substantially the same.

See Notes to Schedule of Investments.

Notes to Schedule of Investments (unaudited)

1. Organization and significant accounting policies

ClearBridge Energy MLP Fund Inc. (the Fund) was incorporated in Maryland on March 31, 2010 and is a non-diversified, closed-end management investment company under the Investment Company Act of 1940, as amended (the 1940 Act). The Board of Directors authorized 100 million shares of $0.001 par value common stock. The Fund s investment objective is to provide a high level of total return with an emphasis on cash distributions. The Fund seeks to achieve its objective by investing primarily in master limited partnerships (MLPs) in the energy sector. There can be no assurance that the Fund will achieve its investment objective.

Under normal market conditions, the Fund will invest at least 80% of its Managed Assets in MLPs in the energy sector (the 80% policy). For purposes of the 80% policy, the Fund considers investments in MLPs to include investments that offer economic exposure to public and private MLPs in the form of equity securities of MLPs, securities of entities holding primarily general partner or managing member interests in MLPs, securities that are derivatives of interests in MLPs, including I-Shares, and debt securities of MLPs. Entities in the energy sector are engaged in the business of exploring, developing, producing, gathering, transporting, processing, storing, refining, distributing, mining or marketing of natural gas, natural gas liquids (including propane), crude oil, refined petroleum products or coal.

The following are significant accounting policies consistently followed by the Fund and are in conformity with U.S. generally accepted accounting principles (GAAP).

(a) Investment valuation. Equity securities for which market quotations are available are valued at the last reported sales price or official closing price on the primary market or exchange on which they trade. The valuations for fixed income securities and certain derivative instruments are typically the prices supplied by independent third party pricing services, which may use market prices or broker/dealer quotations or a variety of fair valuation techniques and methodologies. Short-term fixed income securities that will mature in 60 days or less are valued at amortized cost, unless it is determined that using this method would not reflect an investment s fair value. If independent third party pricing services are unable to supply prices for a portfolio investment, or if the prices supplied are deemed by the manager to be unreliable, the market price may be determined by the manager using quotations from one or more broker/dealers. When reliable prices are not readily available, such as when the value of a security has been significantly affected by events after the close of the exchange or market on which the security is principally traded, but before the Fund calculates its net asset value, the Fund values these securities as determined in accordance with procedures approved by the Fund s Board of Directors.

The Fund has adopted Financial Accounting Standards Board Codification Topic 820 (ASC Topic 820). ASC Topic 820 establishes a single definition of fair value, creates a three-tier hierarchy as a framework for measuring fair value based on inputs used to value the Fund s investments, and requires additional disclosure about fair value. The hierarchy of inputs is summarized below.

- Level 1 quoted prices in active markets for identical investments

- Level 2 other significant observable inputs (including quoted prices for similar investments, interest rates, prepayment speeds, credit risk, etc.)

- Level 3 significant unobservable inputs (including the Fund s own assumptions in determining the fair value of investments)

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

The Fund uses valuation techniques to measure fair value that are consistent with the market approach and/or income approach, depending on the type of security and the particular circumstance. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable securities. The income approach uses valuation techniques to discount estimated future cash flows to present value.

The following is a summary of the inputs used in valuing the Fund s assets carried at fair value:

Notes to Schedule of Investments (unaudited) (continued)

ASSETS

DESCRIPTION	QUOTED PRICES (LEVEL 1)	OTHER SIGNIFICANT OBSERVABLE INPUTS (LEVEL 2)	SIGNIFICANT UNOBSERVABLE INPUTS (LEVEL 3)	TOTAL
Master limited partnerships	$ 1,879,389,511			$ 1,879,389,511
Short-term investments		$ 6,328,000		6,328,000
Total investments	$ 1,879,389,511	$ 6,328,000		$ 1,885,717,511

See Schedule of Investments for additional detailed categorizations.

(b) Repurchase agreements. The Fund may enter into repurchase agreements with institutions that its investment adviser has determined are creditworthy. Each repurchase agreement is recorded at cost. Under the terms of a typical repurchase agreement, the Fund acquires a debt security subject to an obligation of the seller to repurchase, and of the Fund to resell, the security at an agreed-upon price and time, thereby determining the yield during the Fund s holding period. When entering into repurchase agreements, it is the Fund s policy that its custodian or a third party custodian, acting on the Fund s behalf, take possession of the underlying collateral securities, the market value of which, at all times, at least equals the principal amount of the repurchase transaction, including accrued interest. To the extent that any repurchase transaction maturity exceeds one business day, the value of the collateral is marked-to-market and measured against the value of the agreement in an effort to ensure the adequacy of the collateral. If the counterparty defaults, the Fund generally has the right to use the collateral to satisfy the terms of the repurchase transaction. However, if the market value of the collateral declines during the period in which the Fund seeks to assert its rights or if bankruptcy proceedings are commenced with respect to the seller of the security, realization of the collateral by the Fund may be delayed or limited.

(c) Master limited partnerships. Entities commonly referred to as MLPs are generally organized under state law as limited partnerships or limited liability companies. The Fund intends to primarily invest in MLPs receiving partnership taxation treatment under the Internal Revenue Code of 1986, and whose interests or units are traded on securities exchanges like shares of corporate stock. To be treated as a partnership for U.S. federal income tax purposes, an MLP whose units are traded on a securities exchange must receive at least 90% of its income from qualifying sources such as interest, dividends, real estate rents, gain from the sale or disposition of real property, income and gain from mineral or natural resources activities, income and gain from the transportation or storage of certain fuels, and, in certain circumstances, income and gain from commodities or futures, forwards and options with respect to commodities. Mineral or natural resources activities include exploration, development, production, processing, mining, refining, marketing and transportation (including pipelines), of oil and gas, minerals, geothermal energy, fertilizer, timber or industrial source carbon dioxide. An MLP consists of a general partner and limited partners (or in the case of MLPs organized as limited liability companies, a managing member and members). The general partner or managing member typically controls the operations and management of the MLP and has an ownership stake in the partnership. The limited partners or members, through their ownership of limited partner or member interests, provide capital to the entity, are intended to have no role in the operation and management of the entity and receive cash distributions. The MLPs themselves generally do not pay U.S. federal income taxes. Thus, unlike investors in corporate securities, direct MLP investors are generally not subject to double taxation (i.e., corporate level tax and tax on corporate dividends). Currently, most MLPs operate in the energy and/or natural resources sector.

(d) Concentration risk. Concentration in the energy sector may present more risks than if the Fund were broadly diversified over numerous sectors of the economy. A downturn in the energy sector of the economy could have a larger impact on the Fund than on an investment company that does not concentrate in the sector. At times, the performance of securities of companies in the sector may lag the performance of other sectors or the broader market as a whole.

(e) Security transactions. Security transactions are accounted for on a trade date basis.

2. Investments

At August 31, 2011, the aggregate gross unrealized appreciation and depreciation of investments for federal income tax purposes were substantially as follows:

Gross unrealized appreciation	$	345,138,609
Gross unrealized depreciation		(22,566,053)
Net unrealized appreciation	$	322,572,556

Notes to Schedule of Investments (unaudited) (continued)

3. Derivative Instruments and Hedging Activities

Financial Accounting Standards Board Codification Topic 815 requires enhanced disclosure about an entity s derivative and hedging activities.

During the period ended August 31, 2011, the Fund did not invest in any derivative instruments.

ITEM 2. CONTROLS AND PROCEDURES.

(a) The registrant s principal executive officer and principal financial officer have concluded that the registrant s disclosure controls and procedures (as defined in Rule 30a- 3(c) under the Investment Company Act of 1940, as amended (the 1940 Act)) are effective as of a date within 90 days of the filing date of this report that includes the disclosure required by this paragraph, based on their evaluation of the disclosure controls and procedures required by Rule 30a-3(b) under the 1940 Act and 15d-15(b) under the Securities Exchange Act of 1934.

(b) There were no changes in the registrant s internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the registrant s last fiscal quarter that have materially affected, or are likely to materially affect the registrant s internal control over financial reporting.

ITEM 3. EXHIBITS.

Certifications pursuant to Rule 30a-2(a) under the Investment Company Act of 1940, as amended, are attached hereto.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Clearbridge Energy MLP Fund Inc.

By /s/ R. Jay Gerken
R. Jay Gerken
Chief Executive Officer

Date: October 27, 2011

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By /s/ R. Jay Gerken
R. Jay Gerken
Chief Executive Officer

Date: October 27, 2011

By /s/ Kaprel Ozsolak
Kaprel Ozsolak
Chief Financial Officer

Date: October 27, 2011