

Kayne Anderson MLP Investment CO

Form DEF 14A

May 14, 2007

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

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities
Exchange Act of 1934 (Amendment No.)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to §240.14a-12

KAYNE ANDERSON MLP INVESTMENT COMPANY

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
 - Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
- (1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

- o Fee paid previously with preliminary materials.
- o Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

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**1800 Avenue of the Stars, Second Floor
Los Angeles, CA 90067
1-877-657-3863/MLP-FUND**

May 10, 2007

Dear Fellow Stockholder:

You are cordially invited to attend the third annual meeting of stockholders of Kayne Anderson MLP Investment Company (the Company) on Friday, June 15, 2007 at 8:00 a.m., Pacific Time, at 1800 Avenue of the Stars, Second Floor, Los Angeles, CA 90067.

The sole matter scheduled for consideration at the meeting is the election of two directors of the Company, as more fully discussed in the enclosed proxy statement.

Enclosed with this letter are answers to questions you may have about the proposal, the formal notice of the meeting, the proxy statement, which gives detailed information about the proposal and why the Board of Directors recommends that you vote to approve it, and a proxy for you to sign and return. If you have any questions about the enclosed proxy or need any assistance in voting your shares, please call 1-877-657-3863/MLP-FUND.

Your vote is important. Please complete, sign, and date the enclosed proxy card and return it in the enclosed envelope. This will ensure that your vote is counted, even if you cannot attend the meeting in person.

Sincerely,

Kevin S. McCarthy
CEO and President

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ANSWERS TO SOME IMPORTANT QUESTIONS

Q. WHAT AM I BEING ASKED TO VOTE FOR ON THIS PROXY?

- A. This proxy contains a single proposal to elect two Class III Directors to each serve until the Company's 2010 Annual Meeting of Stockholders and until their successors are duly elected and qualify. The Directors currently serving in Class III are Anne K. Costin and Michael C. Morgan. Ms. Costin's initial term will expire at the Company's 2007 Annual Meeting of Stockholders, and the Company's Board of Directors has nominated Ms. Costin for reelection at the meeting. The holders of the Company's common stock and preferred stock will vote together, as a single class, on the election of Ms. Costin.

On May 4, 2007, a Class III Director, Terrance J. Quinn, resigned as a Director of the Company. The Company's Board of Directors unanimously elected Michael C. Morgan to fill the vacancy for the remainder of Mr. Quinn's initial term expiring at the Company's 2007 Annual Meeting of Stockholders. The Company's Board of Directors has nominated Mr. Morgan for election by stockholders at the meeting. The holders of the Company's preferred stock will vote on the election of Mr. Morgan.

Q. HOW WAS MR. MORGAN SELECTED?

- A. The Company's Board of Directors considered Mr. Morgan's qualifications to be a Director, including his public company experience and his experience in the energy industry. In addition, Mr. Morgan is not an interested person of the Company, as such term is defined in the Investment Company Act of 1940, as amended, and the vacancy on the Company's Board of Directors was for a Director who is not an interested person of the Company. For these reasons, the Company's Board of Directors elected Mr. Morgan to fill the vacancy and has nominated him for election by stockholders at the meeting.

Q. HOW DOES THE BOARD OF DIRECTORS SUGGEST THAT I VOTE?

- A. The Board of Directors of the Company unanimously recommends that you vote FOR the election of each nominee as director on the enclosed proxy card.

Q. HOW CAN I VOTE?

- A. If your shares are held in Street Name by a broker or bank, you will receive information regarding how to instruct your bank or broker to vote your shares. If you are a stockholder of record, you may authorize the persons named as proxies on the enclosed proxy card to cast the votes you are entitled to cast at the meeting by completing, signing, dating and returning the enclosed proxy card. Stockholders of record or their duly authorized proxies also may vote in person if able to attend the meeting. However, even if you plan to attend the meeting, we urge you to return your proxy card. That will ensure that your vote is cast should your plans change.

This information summarizes information that is included in more detail in the Proxy Statement. We urge you to read the Proxy Statement carefully.

If you have questions, call 1-877-657-3863/MLP-FUND.

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**1800 Avenue of the Stars, Second Floor
Los Angeles, CA 90067
1-877-657-3863/MLP-FUND**

NOTICE OF 2007 ANNUAL MEETING OF STOCKHOLDERS

To the Stockholders of Kayne Anderson MLP Investment Company:

NOTICE IS HEREBY GIVEN that the 2007 Annual Meeting of Stockholders of Kayne Anderson MLP Investment Company, a Maryland corporation (the Company), will be held on Friday, June 15, 2007 at 8:00 a.m. Pacific Time at 1800 Avenue of the Stars, Second Floor, Los Angeles, CA 90067, to consider and vote on the following matters as more fully described in the accompanying proxy statement:

1. To elect two Class III Directors of the Company, each such Director to hold office until the 2010 Annual Meeting of Stockholders and until his successor is duly elected and qualifies;
2. To transact any other business that may properly come before the meeting or any adjournment or postponement thereof.

Stockholders of record as of the close of business on April 13, 2007 are entitled to notice of and to vote at the meeting (or any adjournment or postponement of the meeting).

By Order of the Board of Directors of the Company,

David J. Shladovsky
Secretary

May 10, 2007
Los Angeles, California

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**1800 Avenue of the Stars, Second Floor
Los Angeles, CA 90067
1-877-657-3863/MLP-FUND**

PROXY STATEMENT

**2007 ANNUAL MEETING OF STOCKHOLDERS
JUNE 15, 2007**

This proxy statement is being sent to you by the Board of Directors of Kayne Anderson MLP Investment Company, a Maryland corporation (the **Company** or **KYN**). The Board of Directors is asking you to complete, sign, date and return the enclosed proxy card, permitting your votes to be cast at the annual meeting (the **Annual Meeting**) of stockholders called to be held on June 15, 2007 at 8:00 a.m. Pacific Time at 1800 Avenue of the Stars, Second Floor, Los Angeles, California 90067. Stockholders of record at the close of business on April 13, 2007 (the **Record Date**) are entitled to vote at the Annual Meeting. You are entitled to one vote for each share of common stock and one vote for each share of preferred stock you hold on each matter on which holders of such shares are entitled to vote. This proxy statement and enclosed proxy are first being mailed to stockholders on or about May 15, 2007.

You should have received the Company's Annual Report to stockholders for the fiscal year ended November 30, 2006. If you would like another copy of the Annual Report, please write the Company at the address shown at the top of this page or call the Company at 1-877-657-3863/MLP-FUND. The report will be sent to you without charge. The Company's reports can be accessed on its website (www.kaynemp.com) or on the website of the Securities and Exchange Commission (the **SEC) at www.sec.gov.**

KA Fund Advisors, LLC (**KAFA**), a subsidiary of Kayne Anderson Capital Advisors, L.P., (**KACALP** and together with **KAFA**, **Kayne Anderson**), externally manages and advises the Company pursuant to its investment management agreement. **KAFA** is registered as an investment adviser under the Investment Advisers Act of 1940. Kayne Anderson is a leading investor in both public and private energy companies. At February 28, 2007, Kayne Anderson managed approximately \$7.6 billion, including \$6.3 billion in securities of energy companies. Kayne Anderson may be contacted at the addresses listed above.

PROPOSAL ONE

ELECTION OF DIRECTORS

The Board of Directors of the Company (the **Board**) is divided into three classes (Class I, Class II and Class III) of approximately equal size. Currently the Company has five total Directors. The terms of the Directors are staggered. The Directors currently serving in Class III are Anne K. Costin and Michael C. Morgan. Ms. Costin's initial term will expire at the Annual Meeting, and the Board has nominated Ms. Costin for reelection at the Annual Meeting to serve for a term of three years (until the 2010 Annual Meeting of Stockholders) or until her successor has been duly elected and qualifies.

On May 4, 2007, a Class III Director, Terrance J. Quinn, resigned as a Director of the Company. The Board unanimously elected Michael C. Morgan to fill the vacancy for the remainder of Mr. Quinn's initial term expiring at the Annual Meeting. The Board has nominated Mr. Morgan for election by stockholders at the Annual Meeting to serve for a term of three years (until the 2010 Annual Meeting of Stockholders) or until his successor has been duly elected and qualifies.

Pursuant to the terms of the Company's auction rate preferred stock (the Preferred Stock), the holders of Preferred Stock are entitled as a class, to the exclusion of the holders of the Company's common stock, \$.001 par

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value per share (the Common Stock), to elect two Directors of the Company (the Preferred Directors). The Board of Directors has designated Steven C. Good and Michael C. Morgan as the Preferred Directors. The terms of the Company's Preferred Stock further provide that the remaining nominees shall be elected by holders of Common Stock and Preferred Stock voting together as a single class. Of those designated as Preferred Directors, Michael C. Morgan is the sole nominee for Preferred Director whose nomination will be considered and voted on by stockholders at the Annual Meeting. Therefore, the holders of the Company's Preferred Stock, voting as a single class, are being asked to vote for Mr. Morgan as a Class III Director of the Company, and the holders of the Company's Common Stock and Preferred Stock, voting together as a single class, are being asked to vote for Ms. Costin as a Class III Director of the Company.

The Board knows of no reason why any of the nominees listed below will be unable to serve, and each nominee has consented to serve if elected, but if any of the nominees are unable to serve or for good cause will not serve because of an event not now anticipated, the persons named as proxies may vote for other persons designated by the Board. The persons named as proxies on the accompanying proxy card intend to vote at the Annual Meeting (unless otherwise directed) FOR the election of each of Mr. Morgan and Ms. Costin as Class III Directors of the Company.

The following tables set forth each nominee's and each remaining Director's name and birth year; position(s) with the Company and length of time served; principal occupation during the past five years; and other directorships currently held by each nominee and each remaining Director. The address for all nominees, Directors and officers is 1800 Avenue of the Stars, Second Floor, Los Angeles, CA 90067. All of the Company's Directors currently serve on the board of directors of Kayne Anderson Energy Total Return Fund, Inc. (KYE), a closed-end investment company registered under the Investment Company Act of 1940, as amended (the 1940 Act), that is advised by KAFA.

NOMINEES FOR DIRECTOR WHO ARE NOT INTERESTED PERSONS:

Name (Year Born)	Position Held with Registrant	Proposed Term of Office/ Term of Service	Principal Occupations During Past Five Years	Other Directorships Held by Director
Anne K. Costin* (born 1950)	Director	3-year term (until the 2010 Annual Meeting of Stockholders)/ served since July 2004	Ms. Costin is currently an Adjunct Professor in the Finance and Economics Department of Columbia University Graduate School of Business in New York. As of March 1, 2005, Ms. Costin retired after a 28-year career at Citigroup. During the last five years she was Managing Director and Global Deputy Head of the Project & Structured Trade Finance product group within Citigroup's Investment Banking Division.	Kayne Anderson Energy Total Return Fund, Inc.
Michael C. Morgan (born 1968)	Director	3-year term (until the 2010 Annual Meeting of Stockholders)/ served since May	President and Chief Executive Officer Portcullis Partners, LP, a privately owned investment partnership, since 2005. Adjunct Professor in the Practice of	Kayne Anderson Energy Total Return Fund, Inc.; Kinder Morgan, Inc.

2007

Management at the Jones Graduate School of Management at Rice University since 2003. President of Kinder Morgan, Inc., an energy transportation and storage company, and of Kinder Morgan Energy Partners, LP, a publicly traded pipeline limited partnership, from 2001 to 2004.

- * Due to her ownership of securities issued by one of the underwriters in certain of the Company's previous securities offerings, Ms. Costin, in the future, may be treated as an interested person during any subsequent offerings of the Company's securities if the relevant offering is underwritten by the underwriter in which Ms. Costin owns securities.

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Name (Year Born)	Positions Held with Registrant	Term of Office/ Time of Service	Principal Occupations During Past Five Years	Other Directorships Held by Director
Kevin S. McCarthy** (born 1959)	Chairman of the Board of Directors; President and Chief Executive Officer	3-year term as a director (until the 2009 Annual Meeting of Stockholders), elected annually as an officer/ served since July 2004	Senior Managing Director of KACALP since June 2004 and of KAFA since 2006. From November 2000 to May 2004, Global Head of Energy at UBS Securities LLC. President and Chief Executive Officer of KYE and Kayne Anderson Energy Development Company (KED).	Kayne Anderson Energy Total Return Fund, Inc.; Kayne Anderson Energy Development Company; Range Resources Corporation; Clearwater Natural Resources, LLC.

** Mr. McCarthy is an interested person of the Company by virtue of his employment relationship with Kayne Anderson.

REMAINING DIRECTORS WHO ARE NOT INTERESTED PERSONS:

Name (Year Born)	Position Held with Registrant	Term of Office/ Time of Service	Principal Occupations During Past Five Years	Other Directorships Held by Director
Steven C. Good (born 1942)	Director	3-year term (until the 2009 Annual Meeting of Stockholders)/ served since July 2004	Senior partner at Good Swartz Brown & Berns LLP, which offers accounting, tax and business advisory services to middle market private and publicly-traded companies, their owners and their management. Founded Block, Good and Gagerman in 1976, which later evolved in stages into Good Swartz Brown & Berns LLP.	Kayne Anderson Energy Total Return Fund, Inc.; OSI Systems, Inc.; Big Dog Holdings, Inc.; and California Pizza Kitchen, Inc.
Gerald I. Isenberg (born 1940)	Director	3-year term (until the 2008 Annual Meeting of Stockholders)/ served since June 2005	Professor at the University of Southern California School of Cinema-Television since 1995. Member of the board of trustees of Partners for Development, a non-governmental organization	Kayne Anderson Energy Total Return Fund, Inc.; Partners for Development

dedicated to developmental work in third-world countries, since 2004. Board member of Kayne Anderson Rudnick Mutual Funds from 1998 to 2002.

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The preceding table gives information regarding Mr. McCarthy, the President and Chief Executive Officer of the Company. The following table sets forth each other officer's name and birth year; position(s) with the Company and length of time served; principal occupation during the past five years; and other directorships held by each such officer. All of the Company's officers currently serve in identical offices with Kayne Anderson Energy Total Return Fund, Inc., an investment company managed by KAFA.

Name (Year Born)	Position(s) Held with Registrant	Term of Office/ Time of Service	Principal Occupations During Past Five Years	Other Directorships Held by Officer
Terry A. Hart (born 1969)	Chief Financial Officer and Treasurer	Elected annually/served since December 2005	Chief Financial Officer and Treasurer of KYE since December 2005 and of KED since September 2006. Director of Structured Finance, Assistant Treasurer and most recently as Senior Vice President and Controller of Dynegy, Inc. from 2000 to 2005.	None.
David J. Shladovsky (born 1960)	Secretary and Chief Compliance Officer	Elected annually/served since inception	Managing Director and General Counsel of KACALP since 1997 and of KAFA since 2006. Secretary and Chief Compliance Officer of KYE since 2005 and of KED since 2006.	None.
J.C. Frey (born 1968)	Vice President, Assistant Treasurer and Assistant Secretary	Elected annually/served as Assistant Treasurer and Assistant Secretary since inception; served as Vice President since June 2005	Senior Managing Director of KACALP since 2004 and of KAFA since 2006 and Managing Director of KACALP since 2001. Portfolio Manager of KACALP since 2000 and Portfolio Manager, Vice President, Assistant Secretary and Assistant Treasury of KYE since 2005 and of KED since 2006.	None.
James C. Baker (born 1972)	Vice President	Elected annually/served since June 2005	Managing Director of KACALP since December 2004 and of KAFA since 2006. Vice President of KYE since 2005 and of KED since 2006. Director in Planning and	ProPetro Services, Inc.

Analysis at El Paso Corporation
from April 2004 to December
2004. Director at UBS
Securities LLC (energy
investment banking group) from
2002 to 2004 and Associate
Director from 2000 to 2002.

The Directors who are not interested persons, as defined in the 1940 Act, of Kayne Anderson or the Company's underwriters in offerings of the Company's securities from time to time as defined in the 1940 Act are referred to herein as Independent Directors. Unless noted otherwise, references to the Company's Independent Directors include Ms. Costin. None of the Company's Independent Directors (other than Mr. Isenberg) nor any of their immediate family members, has ever been a director, officer or employee of Kayne Anderson or its affiliates.

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From 1998 to 2002, Mr. Isenberg was a board member of the Kayne Anderson Rudnick Mutual Funds, whose investment adviser, Kayne Anderson Rudnick Investment Management, LLC, may formerly have been deemed an affiliate of Kayne Anderson. The Company has no employees and its officers are compensated by Kayne Anderson.

The following table sets forth the dollar range of the Company's equity securities beneficially owned by the Company's Directors and the nominees as of February 28, 2007:

Director or Nominee	Dollar Range(1) of the Company's Equity Securities	Aggregate Dollar Range of Equity Securities in All Registered Investment Companies Overseen or to be Overseen by Director or Nominee in Family of Investment Companies(2) as of February 28, 2007
Independent Directors and Nominees		
Anne K. Costin	\$50,001-\$100,000	Over \$100,000
Steven C. Good	\$50,001-\$100,000	Over \$100,000
Michael C. Morgan(3)	None	None
Gerald I. Isenberg	\$10,001-\$50,000	\$50,001-\$100,000
Interested Director		
Kevin S. McCarthy	Over \$100,000	Over \$100,000

(1) Dollar ranges are as follows: none; \$1-\$10,000; \$10,001-\$50,000; \$50,001-\$100,000; over \$100,000.

(2) As of February 28, 2007, the Directors and nominees also oversee Kayne Anderson Energy Total Return Fund, Inc., an investment company managed by KAFA.

(3) As of February 28, 2007, Mr. Morgan had not yet been elected a Director of the Company. Mr. Morgan intends to purchase equity securities in the Company prior to the Annual Meeting.

As of February 28, 2007, the Independent Directors (other than Mr. Isenberg as noted in the table below, but with respect to Mr. Morgan, as of May 4, 2007) and their respective immediate family members did not own beneficially or of record any class of securities of Kayne Anderson or any person directly or indirectly controlling, controlled by, or under common control with Kayne Anderson. As of that same date, the Independent Directors (other than Ms. Costin) did not own beneficially or of record any class of securities of the underwriters of the offering of the Company's Series E Notes or any person directly or indirectly controlling, controlled by, or under common control with such underwriters. As of February 28, 2007, Ms. Costin owned securities issued by one of such underwriters in the offering of the Company's Series E Notes and may continue to own securities in such issuer at the time of any future offering of the Company's securities in which such company could be considered for participation as an underwriter. Accordingly, Ms. Costin was treated as an interested person of the Company as defined in the 1940 Act during and until the completion of the offering of the Company's Series E Notes, which closed on or about December 14, 2005, and, in the future, may be treated as an interested person during subsequent offerings of the Company's securities if the relevant offering is underwritten by the company in which Ms. Costin owns securities.

The table below sets forth information about securities owned by the Directors and nominees and their respective immediate family members, as of February 28, 2007, in entities directly or indirectly controlling, controlled by, or under common control with, the Company's investment adviser or underwriters.

Director	Name of Owners and Relationships to Director	Company	Title of Class	Value of Securities	Percent of Class
Gerald I. Isenberg	Self	Kayne Anderson Capital Income Partners (QP), L.P.(1)	Partnership units	\$ 1,371,192	0.2%

(1) KACALP may be deemed to control this fund by virtue of its role as the fund's general partner.

As of April 30, 2007, certain officers of Kayne Anderson, including all of the Company's officers, own, in the aggregate, approximately \$8 million of the Company's Common Stock.

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Committees of the Board of Directors

The Company's Board of Directors currently has three standing committees:

Audit Committee. Messrs. Good, Morgan, and Isenberg serve on the Audit Committee. The Audit Committee operates under a written charter (the Audit Committee Charter) adopted and approved by the Board of Directors and was established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended. The Audit Committee Charter conforms to the applicable listing standards of the New York Stock Exchange. The Audit Committee Charter is available on the Company's website (www.kaynemlp.com). The Audit Committee approves and recommends to the Board of Directors the election, retention or termination of independent auditors; approves services to be rendered by the auditors; monitors the auditors' performance; reviews the results of the Company's audit; determines whether to recommend to the Board of Directors that the Company's audited financial statements be included in the Company's Annual Report; and responds to other matters as outlined in the Audit Committee Charter. Each audit committee member is independent under the applicable New York Stock Exchange listing standard.

Valuation Committee. Ms. Costin and Messrs. McCarthy and Isenberg serve on the Valuation Committee. The Valuation Committee is responsible for the oversight of the Company's pricing procedures and the valuation of its securities in accordance with such procedures. The Valuation Committee operates under a written charter adopted and approved by the Board, a copy of which is available on the Company's website (www.kaynemlp.com).

Nominating Committee. Ms. Costin and Messrs. Good and Isenberg are members of the Nominating Committee, none of whom are interested persons of the Company as defined in the 1940 Act (other than as previously noted for Ms. Costin). The Nominating Committee is responsible for appointing and nominating Independent Directors to the Company's Board of Directors. Each Nominating Committee member is independent under the applicable New York Stock Exchange listing standard. The committee operates under a written charter adopted and approved by the Board, a copy of which is available on the Company's website (www.kaynemlp.com). The Nominating Committee has not established specific, minimum qualifications that must be met by an individual for the Committee to recommend that individual for nomination as a Director. The Nominating Committee expects to seek referrals for candidates to consider for nomination from a variety of sources, including current Directors, management of the Company, the investment adviser of the Company and counsel to the Company, and may also engage a search firm to identify or evaluate or assist in identifying or evaluating candidates. As set forth in the Nominating Committee Charter, in evaluating candidates for a position on the Board, the Committee considers a variety of factors, including, as appropriate:

the candidate's knowledge in matters relating to the investment company industry;

any experience possessed by the candidate as a director or senior officer of public companies;

the candidate's educational background;

the candidate's reputation for high ethical standards and personal and professional integrity;

any specific financial, technical or other expertise possessed by the candidate, and the extent to which such expertise would complement the Board's existing mix of skills and qualifications;

the candidate's perceived ability to contribute to the ongoing functions of the Board, including the candidate's ability and commitment to attend meetings regularly and work collaboratively with other members of the Board;

the candidate's ability to qualify as an independent director for purposes of the 1940 Act, the candidate's independence from Company service providers and the existence of any other relationships that might give rise to conflict of interest or the appearance of a conflict of interest; and

such other factors as the Nominating Committee determines to be relevant in light of the existing composition of the Board of Directors and any anticipated vacancies or other transitions (*e.g.*, whether or not a candidate is an audit committee financial expert under the federal securities laws).

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Prior to making a final recommendation to the Board, the Nominating Committee may conduct personal interviews with the candidates it concludes are the most qualified. The Nominating Committee (then comprised of Ms. Costin and Messrs. Good, Quinn, and Isenberg) met with Mr. Morgan before recommending to the Board that he be nominated to stand for election as a Director.

If there is no vacancy on the Board, the Board of Directors will not actively seek recommendations from other parties, including stockholders. When a vacancy on the Board of Directors occurs and nominations are sought to fill such vacancy, the Nominating Committee may seek nominations from those sources it deems appropriate in its discretion, including the Company's stockholders.

To submit a recommendation for nomination as a candidate for a position on the Board, stockholders shall mail such recommendation to the Secretary of the Company, at the Company's address, 1800 Avenue of the Stars, Second Floor, Los Angeles, California 90067. Such recommendation shall include the following information: (a) evidence of stock ownership of the person or entity recommending the candidate (if submitted by one of the Company's stockholders), (b) a full description of the proposed candidate's background, including his or her education, experience, current employment, and date of birth, (c) names and addresses of at least three professional references for the candidate, (d) information as to whether the candidate is an interested person in relation to us, as such term is defined in the 1940 Act, and such other information that may be considered to impair the candidate's independence and (e) any other information that may be helpful to the Nominating Committee in evaluating the candidate. Any such recommendation must contain sufficient background information concerning the candidate to enable the Nominating Committee to make a proper judgment as to the candidate's qualifications. If a recommendation is received with satisfactorily completed information regarding a candidate during a time when a vacancy exists on the Board of Directors or during such other time as the Nominating Committee is accepting recommendations, the recommendation will be forwarded to the Chair of the Nominating Committee and will be evaluated in the same manner as other candidates for nomination. Recommendations received at any other time will be kept on file until such time as the Nominating Committee is accepting recommendations, at which point they may be considered for nomination.

Board of Director and Committee Meetings Held

The following table shows the number of meetings held for the Company during the fiscal year ended November 30, 2006:

Board of Directors	7
Audit Committee	4
Valuation Committee	10
Nominating Committee	1

All of the Directors then serving attended at least 75% of the meetings of the Board of Directors and applicable committees held during the fiscal year.

Audit and Related Fees

Audit Fees. The aggregate fees billed by PricewaterhouseCoopers LLP during the Company's fiscal years ended November 30, 2006 and November 30, 2005 to the Company for professional services rendered with respect to the audit of the Company's financial statements were \$221,000 and \$197,000, respectively.

Audit-Related Fees. The Company was not billed by PricewaterhouseCoopers LLP for any fees for assurance and related services reasonably related to the performance of the audits of the Company's annual financial statements for the fiscal years ended November 30, 2006 and November 30, 2005.

Tax Fees. For professional services for tax compliance, tax advice and tax planning for its last fiscal year ended November 30, 2006 and its fiscal year ended November 30, 2005, the Company was billed by PricewaterhouseCoopers LLP for fees in the approximate amount of \$170,000 and \$149,000, respectively.

All Other Fees. The Company was not billed by PricewaterhouseCoopers LLP for any fees for services other than those described above during its fiscal years ended November 30, 2006 and November 30, 2005.

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Aggregate Non-Audit Fees. The Company was not billed by PricewaterhouseCoopers LLP for any amounts for any non-audit services during the Company's last two fiscal years. In addition, neither Kayne Anderson nor any entity controlling, controlled by, or under common control with Kayne Anderson that provides ongoing services to the Company, was billed by PricewaterhouseCoopers LLP for any non-audit services during the Company's last two fiscal years.

Audit Committee Pre-Approval Policies and Procedures

Before the auditor is (i) engaged by the Company to render audit, audit related or permissible non-audit services to the Company or (ii) with respect to non-audit services to be provided by the auditor to KAFA or any entity in the investment Company complex, if the nature of the services provided relate directly to the operations or financial reporting of the Company, either: (a) the Audit Committee shall pre-approve such engagement; or (b) such engagement shall be entered into pursuant to pre-approval policies and procedures established by the Audit Committee. Any such policies and procedures must be detailed as to the particular service and not involve any delegation of the Audit Committee's responsibilities to KAFA. The Audit Committee may delegate to one or more of its members the authority to grant pre-approvals. The pre-approval policies and procedures shall include the requirement that the decisions of any member to whom authority is delegated under this provision shall be presented to the full Audit Committee at its next scheduled meeting. Under certain limited circumstances, pre-approvals are not required if certain *de minimis* thresholds are not exceeded, as such thresholds are set forth by the Audit Committee and in accordance with applicable SEC rules and regulations.

For engagements with PricewaterhouseCoopers LLP, the Audit Committee approved in advance all audit services and non-audit services that PricewaterhouseCoopers LLP provided to the Company and to KAFA (with respect to the operations and financial reporting of the Company). None of the services rendered by PricewaterhouseCoopers LLP to the Company or KAFA were pre-approved by the Audit Committee pursuant to the pre-approval exception under Rule 2.01(c)(7)(i)(C) or Rule 2.01(c)(7)(ii) of Regulation S-X. The Audit Committee has considered whether the provision of non-audit services rendered by PricewaterhouseCoopers LLP to KAFA and any entity controlling, controlled by, or under common control with KAFA that were not required to be pre-approved by the Audit Committee is compatible with maintaining PricewaterhouseCoopers LLP's independence.

Appointment of Independent Auditors

The Board of Directors has appointed PricewaterhouseCoopers LLP, independent registered public accounting firm, as independent auditors to audit the books and records of the Company for its current fiscal year. A representative of PricewaterhouseCoopers LLP will be present at the Annual Meeting to make a statement, if such representative so desires, and to respond to stockholders' questions. PricewaterhouseCoopers LLP has informed the Company that it has no direct or indirect material financial interest in the Company or KAFA.

Director and Officer Compensation.

The Company does not compensate any of the Directors or officers who are employed by Kayne Anderson. Each of the Company's Independent Directors receives a \$25,000 annual retainer for serving as a Director. In addition, the Company's Independent Directors receive fees for each meeting attended, as follows: \$2,500 per Board meeting; \$1,500 per Audit Committee meeting; and \$500 for other committee meetings. Committee meeting fees are not paid unless the meeting is held on a day when there is not a Board meeting and the meeting is more than 15 minutes in length. The Directors are reimbursed for expenses incurred as a result of attendance at meetings of the Board of Directors and its committees.

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The following table sets forth the compensation paid by the Company during its fiscal year ended November 30, 2006 to the Independent Directors and the Director nominees. The Company has no retirement or pension plans.

Name of Director or Nominee	Aggregate Accrued Compensation from the Company	Total Compensation from the Fund Complex(1)
Independent Directors and Nominees		
Anne K. Costin	\$ 37,500	\$ 88,000
Steven C. Good	\$ 49,000	\$ 95,500
Gerald I. Isenberg	\$ 48,000	\$ 96,500
Michael C. Morgan(2)	None	None
Interested Director		
Kevin S. McCarthy	None	None

(1) As of November 30, 2006, the Directors and the nominees also oversee Kayne Anderson Energy Total Return Fund, Inc., an investment company managed by KAFA.

(2) As of November 30, 2006, Mr. Morgan had not yet been elected a Director of the Company.

Required Vote.

The election of Mr. Morgan, a Class III Director, requires the affirmative vote of the holders of a majority of shares of Preferred Stock outstanding as of the Record Date. The election of Ms. Costin, a Class III Director, requires the affirmative vote of the holders of a majority of shares of Common Stock and Preferred Stock outstanding as of the Record Date, voting together as a single class. For the purposes of determining whether the majority of the votes entitled to be cast by the common and preferred stockholders voting together as a single class has elected a nominee, each common share and each preferred share is entitled to one vote. For purposes of the vote on the election of each of Mr. Morgan and Ms. Costin as a Class III Director, abstentions, if any, will have the same effect as votes against the election of each nominee, although they will be considered present for purposes of determining the presence of a quorum at the Annual Meeting. Because brokers are permitted by applicable regulations to vote shares as to which instructions have not been received from the beneficial owners or the persons entitled to vote in uncontested elections of Directors, it is anticipated that there will be no broker non-votes in connection with Proposal 1. However, broker non-votes, if any, will have the same effect as a vote against the nominee, although they would be present for purposes of determining a quorum.

BOARD RECOMMENDATION

THE BOARD OF DIRECTORS OF THE COMPANY, INCLUDING ALL OF THE INDEPENDENT DIRECTORS, UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR EACH OF THE NOMINEES TO THE BOARD.

OTHER MATTERS

The Board of Directors of the Company knows of no other matters that are intended to be brought before the meeting. If other matters are properly presented at the Annual Meeting, the proxies named in the enclosed form of proxy will vote on those matters in their sole discretion.

MORE INFORMATION ABOUT THE MEETING

Stockholders. At the Record Date, the Company had the following numbers of shares of stock issued and outstanding:

Shares of Common Stock

38,265,172

Shares of Preferred Stock

3,000

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To the knowledge of the Company's management, as of February 28, 2007: there were no other entities holding beneficially more than 5% of the Company's outstanding Common Stock; none of the Company's Directors owned 1% or more of its outstanding Common Stock; and the Company's officers and Directors owned, as a group, less than 1% of its outstanding Common Stock.

How Proxies Will Be Voted. All proxies solicited by the Board of Directors that are properly executed and received at or prior to the Annual Meeting, and that are not revoked, will be voted at the Annual Meeting. Votes will be cast in accordance with the instructions marked on the enclosed proxy card. If no instructions are specified, the persons named as proxies will cast such votes FOR the proposal. We know of no other matters to be presented at the Annual Meeting. However, if another proposal is properly presented at the Annual Meeting, the votes entitled to be cast by the persons named as proxies on the enclosed proxy card will cast such votes in their sole discretion.

How To Vote. If your shares are held in Street Name by a broker or bank, you will receive information regarding how to instruct your bank or broker to cast your votes. If you are a stockholder of record, you may authorize the persons named as proxies to cast the votes you are entitled to cast at the meeting by completing, signing, dating and returning the enclosed proxy card. Stockholders of record or their duly authorized proxies may vote in person if able to attend the Annual Meeting.

Expenses and Solicitation of Proxies. The expenses of preparing, printing and mailing the enclosed proxy card, the accompanying notice and this proxy statement, tabulation expenses and all other costs, in connection with the solicitation of proxies will be borne by the Company. The Company may also reimburse banks, brokers and others for their reasonable expenses in forwarding proxy solicitation material to the beneficial owners of shares of the Company. In order to obtain the necessary quorum at the meeting, additional solicitation may be made by mail, telephone, telegraph, facsimile or personal interview by representatives of the Company, Kayne Anderson, the Company's transfer agent, or by brokers or their representatives. Any costs associated with such additional solicitation are not anticipated to be significant. The Company will not pay any representatives of the Company or Kayne Anderson any additional compensation for their efforts to supplement proxy solicitation.

Revoking a Proxy. At any time before it has been voted, you may revoke your proxy by: (1) sending a letter revoking your proxy to the Secretary of the Company at the Company's offices located at 1800 Avenue of the Stars, Second Floor, Los Angeles, CA 90067; (2) properly executing and sending a later-dated proxy; or (3) attending the Annual Meeting, requesting return of any previously delivered proxy, and voting in person.

Quorum and Adjournment. The presence, in person or by proxy, of holders of shares entitled to cast a majority of the votes entitled to be cast (without regard to class) constitutes a quorum. Because only the holders of Preferred Stock are entitled to elect Mr. Morgan as a director, the presence, in person or by proxy, of holders of shares of Preferred Stock entitled to cast a majority of votes in the election of Mr. Morgan, shall be necessary to constitute a quorum for voting on the election of Mr. Morgan. If a quorum is not present in person or by proxy at the Annual Meeting, the chairman of the Annual Meeting may adjourn the meeting to a date not more than 120 days after the original Record Date without notice other than announcement at the Annual Meeting. Failure of a quorum to be present at the Annual Meeting either generally or with respect to the election of Mr. Morgan will necessitate adjournment and will subject the Company to additional expense.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 30(h) of Investment Company Act of 1940 and Section 16(a) of the Securities Exchange Act of 1934 require the Company's directors and officers, investment adviser, affiliated persons of the investment adviser and persons who own more than 10% of a registered class of the Company's equity securities to file forms reporting their affiliation with the Company and reports of ownership and changes in ownership of the Company's shares with the SEC and the New

York Stock Exchange. Those persons and entities are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms they file. Based on a review of those forms furnished to the Company, the Company believes that its Directors and officers, KAFA and affiliated persons of KAFA have complied with all applicable Section 16(a) filing requirements during the last fiscal year. To the knowledge of management of the Company, no person owns beneficially more than 10% of a class of the Company's equity securities.

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AUDIT COMMITTEE REPORT

The Audit Committee of the Board of Directors (the Board) of Kayne Anderson MLP Investment Company (the Company) is responsible for assisting the Board in monitoring (1) the accounting and reporting policies and procedures of the Company, (2) the quality and integrity of the Company's financial statements, (3) the Company's compliance with regulatory requirements, and (4) the independence and performance of the Company's independent and internal auditors. Among other responsibilities, the Audit Committee reviews, in its oversight capacity, the Company's annual financial statements with both management and the independent auditors and the Audit Committee meets periodically with the independent and internal auditors to consider their evaluation of the Company's financial and internal controls. The Audit Committee also selects, retains, evaluates and may replace the Company's independent auditors and determines their compensation, subject to ratification of the Board, if required. The Audit Committee is currently composed of three Directors. The Audit Committee operates under a written charter (the Audit Committee Charter) adopted and approved by the Board, a copy of which is available on the Company's website (www.kaynemlp.com). Each committee member is independent as defined by New York Stock Exchange listing standards.

The Audit Committee, in discharging its duties, has met with and held discussions with management and the Company's independent and internal auditors. The Audit Committee has reviewed and discussed the Company's audited financial statements with management. Management has represented to the independent auditors that the Company's financial statements were prepared in accordance with generally accepted accounting principles. The Audit Committee has also discussed with the independent auditors the matters required to be discussed by Statement on Auditing Standards No. 61 (Communications with Audit Committees). The Company's independent auditors provided to the Audit Committee the written disclosures and the letter required by Independence Standards Board Standard No. 1 (Independence Discussions with Audit Committees), and the Audit Committee discussed with representatives of the independent auditors their firm's independence. As provided in the Audit Committee Charter, it is not the Audit Committee's responsibility to determine, and the considerations and discussions referenced above do not ensure, that the Company's financial statements are complete and accurate and presented in accordance with generally accepted accounting principles.

Based on the Audit Committee's review and discussions with management and the independent auditors, the representations of management and the report of the independent auditors to the Audit Committee, the committee has recommended that the Board include the audited financial statements in the Company's Annual Report.

Steven C. Good
Gerald I. Isenberg
Terrance J. Quinn

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INVESTMENT ADVISER

KAFA is the Company's investment adviser. Its principal office is located at 717 Texas Avenue, Suite 3100, Houston, Texas 77002.

ADMINISTRATOR

Bear Stearns Funds Management Inc. (Administrator) provides certain administrative services to us, including but not limited to preparing and maintaining books, records, and tax and financial reports, and monitoring compliance with regulatory requirements. The Administrator is located at 383 Madison Avenue, 23rd Floor, New York, New York 10179.

STOCKHOLDER COMMUNICATIONS

Stockholders may send communications to the Board of Directors. Communications should be addressed to the Secretary of the Company at its principal offices at 1800 Avenue of the Stars, Second Floor, Los Angeles, CA 90067. The Secretary will forward any communications received directly to the Board of Directors. The Company does not have a policy with regard to Board attendance at annual meetings. The Annual Meeting is the Company's third annual meeting.

STOCKHOLDER PROPOSALS

The Company's current Bylaws provide that in order for a stockholder to nominate a candidate for election as a Director at an annual meeting of stockholders or propose business for consideration at such meeting, written notice containing the information required by the current Bylaws must be delivered to the Secretary of the Company at 1800 Avenue of the Stars, Second Floor, Los Angeles, California, 90076, not later than 5:00 p.m. (Pacific Time) on the 120th day, and not earlier than the 150th day, prior to the one-year anniversary of the mailing of the notice for the preceding year's annual meeting. Accordingly, a stockholder nomination or proposal intended to be considered at the 2008 Annual Meeting must be received by the Secretary of the Company on or after December 10, 2007, and prior to 5:00 p.m. (Pacific Time) on January 8, 2008. However, under the rules of the SEC, if a stockholder wishes to submit a proposal for possible inclusion in the Company's 2008 proxy statement pursuant to Rule 14a-8 of the Securities Exchange Act of 1934, the Company must receive it on or before January 8, 2008. All nominations and proposals must be in writing.

By Order of the Board of Directors

David J. Shladovsky
Secretary

May 10, 2007

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PROXY

PROXY

**KAYNE ANDERSON MLP INVESTMENT COMPANY
PROXY SOLICITED BY THE BOARD OF DIRECTORS FOR
THE 2007 ANNUAL MEETING OF STOCKHOLDERS JUNE 15, 2007**

The undersigned holder of shares of Common Stock of Kayne Anderson MLP Investment Company, a Maryland corporation (the Company), hereby appoints David J. Shladovsky and J.C. Frey, or either of them, as proxies for the undersigned, with full power of substitution in each of them, to attend the 2007 Annual Meeting of Stockholders of the Company (the Annual Meeting) to be held at 1800 Avenue of the Stars, Second Floor, Los Angeles, CA, on June 15, 2007, at 8:00 a.m., Pacific Time, and any adjournment or postponement thereof, to cast on behalf of the undersigned all votes that the undersigned is entitled to cast at such Annual Meeting and otherwise to represent the undersigned at the Annual Meeting with all powers possessed by the undersigned if personally present at the Annual Meeting. The undersigned hereby acknowledges receipt of the Notice of the Annual Meeting and the accompanying Proxy Statement, the terms of each of which are incorporated by reference, and revokes any proxy heretofore given with respect to such Annual Meeting.

The votes entitled to be cast by the undersigned will be cast as instructed below. If this Proxy is executed but no instruction is given, the votes entitled to be cast by the undersigned will be cast for the nominee for director. Additionally, the votes entitled to be cast by the undersigned will be cast in the discretion of the Proxy holder on any other matter that may properly come before the Annual Meeting or any adjournment or postponement thereof.

YOUR VOTE IS IMPORTANT. PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY PROMPTLY USING THE ENCLOSED POSTMARKED ENVELOPE.

**6 PLEASE DETACH AT PERFORATION BEFORE MAILING 6
KAYNE ANDERSON MLP INVESTMENT COMPANY
ANNUAL MEETING PROXY CARD**

**AUTHORIZED SIGNATURES
THIS SECTION MUST BE COMPLETED**

Please sign exactly as your name appears. If the shares are held jointly, each holder should sign. When signing as an attorney, executor, administrator, trustee, guardian, officer of a corporation or other entity or in another representative capacity, please give the full title under signature(s).

Signature

Date

Signature(s)(if held jointly):

Date

(continued from reverse side)

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**KAYNE ANDERSON MLP INVESTMENT COMPANY
ANNUAL MEETING PROXY CARD**

**THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED IN THE MANNER DIRECTED
BELOW**

AND, IF NO CHOICE IS INDICATED, WILL BE VOTED FOR THE NOMINEE.

1. THE ELECTION OF A CLASS III DIRECTOR FOR A TERM OF THREE YEARS AND UNTIL HER SUCCESSOR IS ELECTED AND QUALIFIES.
 - o FOR THE NOMINEE LISTED BELOW
 - o WITHHOLD FROM THE NOMINEE LISTED BELOW
2. TO VOTE AND OTHERWISE REPRESENT THE UNDERSIGNED ON ANY OTHER MATTER THAT MAY PROPERLY COME BEFORE THE MEETING OR ANY ADJOURNMENT OR POSTPONEMENT THEREOF IN THE DISCRETION OF THE PROXY HOLDER.

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PROXY

PROXY

**KAYNE ANDERSON MLP INVESTMENT COMPANY
PROXY SOLICITED BY THE BOARD OF DIRECTORS FOR
THE 2007 ANNUAL MEETING OF STOCKHOLDERS JUNE 15, 2007**

The undersigned holder of shares of Auction Rate Preferred Stock of Kayne Anderson MLP Investment Company, a Maryland corporation (the Company), hereby appoints David J. Shladovsky and J.C. Frey, or either of them, as proxies for the undersigned, with full power of substitution in each of them, to attend the 2007 Annual Meeting of Stockholders of the Company (the Annual Meeting) to be held at 1800 Avenue of the Stars, Second Floor, Los Angeles, CA, on June 15, 2007, at 8:00 a.m., Pacific Time, and any adjournment or postponement thereof, to cast on behalf of the undersigned all votes that the undersigned is entitled to cast at such Annual Meeting and otherwise to represent the undersigned at the Annual Meeting with all powers possessed by the undersigned if personally present at the Annual Meeting. The undersigned hereby acknowledges receipt of the Notice of the Annual Meeting and the accompanying Proxy Statement, the terms of each of which are incorporated by reference, and revokes any proxy heretofore given with respect to such Annual Meeting.

The votes entitled to be cast by the undersigned will be cast as instructed below. If this Proxy is executed but no instruction is given, the votes entitled to be cast by the undersigned will be cast for each of the nominees for director. Additionally, the votes entitled to be cast by the undersigned will be cast in the discretion of the Proxy holder on any other matter that may properly come before the Annual Meeting or any adjournment or postponement thereof.

YOUR VOTE IS IMPORTANT. PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY PROMPTLY USING THE ENCLOSED POSTMARKED ENVELOPE.

**6 PLEASE DETACH AT PERFORATION BEFORE MAILING 6
KAYNE ANDERSON MLP INVESTMENT COMPANY
ANNUAL MEETING PROXY CARD**

**AUTHORIZED SIGNATURES
THIS SECTION MUST BE COMPLETED**

Please sign exactly as your name appears. If the shares are held jointly, each holder should sign. When signing as an attorney, executor, administrator, trustee, guardian, officer of a corporation or other entity or in another representative capacity, please give the full title under signature(s).

Signature

Date

Signature(s)(if held jointly):

Date

(continued from reverse side)

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**KAYNE ANDERSON MLP INVESTMENT COMPANY
ANNUAL MEETING PROXY CARD**

**THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED IN THE MANNER DIRECTED
BELOW**

AND, IF NO CHOICE IS INDICATED, WILL BE VOTED FOR EACH NOMINEE.

1. THE ELECTION OF CLASS III DIRECTORS FOR A TERM OF THREE YEARS AND UNTIL THEIR SUCCESSORS ARE ELECTED AND QUALIFY.

- o FOR ALL NOMINEES LISTED BELOW
 - o WITHHOLD FROM ALL NOMINEES LISTED BELOW
- NOMINEES: (A) ANNE K. COSTIN AND (B) MICHAEL C. MORGAN

o

FOR ALL NOMINEES EXCEPT AS NOTED ABOVE

2. TO VOTE AND OTHERWISE REPRESENT THE UNDERSIGNED ON ANY OTHER MATTER THAT MAY PROPERLY COME BEFORE THE MEETING OR ANY ADJOURNMENT OR POSTPONEMENT THEREOF IN THE DISCRETION OF THE PROXY HOLDER.