Kayne Anderson MLP Investment CO Form N-PX August 22, 2007

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM N-PX

ANNUAL REPORT OF PROXY VOTING RECORD OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number: 811-21593

KAYNE ANDERSON MLP INVESTMENT COMPANY

(Exact name of registrant as specified in charter)

1800 AVENUE OF THE STARS, SECOND FLOOR LOS ANGELES, CALIFORNIA 90067

(Address of principal executive offices)

(Name and address of agent for service)

Registrant's telephone number, including area code: 310-284-6438

Date of fiscal year-end: November 30th

Date of reporting period: July 1, 2006 - June 30, 2007

ISSUER	SYMBOL	CUSIP	MEETING DATE	MATTER:
Energy Transfer Equity, L.P.	ETE	29273V100	8/15/2006	recommend: proposal to approve (a) change in the terms of our class F units to provide that each class F unit is convertible into one of their common units and (b) issuance of add'l common shares
Valero L.P.	VLI	91913W104	9/18/2006	approve: the Valero GP, LLC second

long-term incentive plan, which incorporates the proposed amendments described in the consent solicitation statement.

TEPPCO Partners, LP

TPP 872384102 10/26/2006

PROPOSE:

revise certain provisions of the partnership agreement that relate to distribution and capital contributions, inc. reduction of their general partner's max. percentage interest in their quarterly distribution from 50% to 25%

PROPOSE:

change various voting percentage requirements of the partnership agreement, in most cases from 66.75% of outstanding units to a majority of outstanding units

PROPOSE:

supplement & revise certain provisions of the partnership agreement that relate to conflicts of interest and fiduciary duties

PROPOSE:

make add'l amendments to the partnership agreement to provide for certain registration rights of the general partner, for the maintenance of the separation of the separateness of the partnership from any other person or entity

ISSUE:

units to the general partner as consideration for the IDR reduction amendment based on a predetermined formula

APPROVE:

terms of the EPCO, Inc. 2006 TPP long-term incentive plan

APPROVE:

terms of the EPCO, Inc.

TPP unit purchase plan Crosstex Energy, Inc XTXI 22765Y104 10/26/2006 APPROVE: restated certificate of incorporation to increase the authorized shares of capital stock and to clarify a liquidation provision applicable to common stock APPROVE: amended and restated long-term incentive plan (including the increase in the number of shares available for issuance there under) Plains All American PAA 726503105 11/9/2006 Pipeline, L.P. APPROVE: agreement & plan of merger dated 7/11/06 and the merger contemplated by the merger agreement APPROVE: issuance of Plains common units to the common unit holders of Pacific Pacific Energy PPX 69422R105 11/9/2006 APPROVE: Partners, L.P. adopt the agreement and plan of merger dated as of June 11, 2006 with Plains All American Kinder Morgan, Inc KMP 49455P101 12/19/2006 APPROVE: adopt the agreement and plan of merger among Kinder Morgan, Knight Holding Co. and Knight Acquisition APPROVE: adjourn the special meeting to a later date to solicit additional proxies if there are insufficient votes at the time of the special meeting ONEOK Partners, L.P. OKS 68268N103 3/29/2007 APPROVE: change in the terms of the class B units of Oneok to provide for the conversion of all outstanding class B units into the same # of common units of Oneok

AMEND:

				partnership agreement
				ADJOURN: the special meeting to a later date if necessary
Magellan Midstream Partners L.P.	ММР	559080106	4/25/2007	ELECT: John Desbarres Patrick Eilers Thomas Macejko, Jr.
				AMEND: Magellan's long-term incentive plan
Energy Transfer Equity, L.P.	ETE	29273V100	2/22/2007	APPROVE: change in the terms of Class C units and issuance of additional common units upon conversion
Copano Energy, L.L.C.	CPNO	217202100	5/24/2007	ELECT: James Crump Ernie Daner John Eckel Jr. Scott Griffins Michael Johnson T. William Porter William Thacker
				RATIFY: Deloitte & Touche LLP as auditors
Williams Partners L.P.	WPZ	96950F104	5/21/2007	APPROVE: change in the terms of the class B units to provide that each Class B unit is convertible into one of the common units and the issuance of add'l common units upon such conversion
Crosstex Energy, Inc.	XTXI	22765Y104	5/9/2007	DIRECT: Bryan Lawrence Cecil Martin, Jr. James Crain
Legacy Reserves LP	LGCY	524707304	5/30/2007	ELECT: Cary Brown Kyle McGraw Dale Brown G. Larry Lawrence William Sullivan S. Will Vanloh, Jr. Kyel Vann
MarkWest Hydrocarbon, Inc.	MWP	570762104	6/13/2007	ELECT: Michael Beatty William Kellstrom

				William Wallace
				RATIFY: Deloitte & Touche as the public accountants
Atlas Energy Resources, LLC	ATN	049303100	5/23/2007	ELECT: Edward Cohen Jonathan Cohen Mathew Jones Richard Weber Walter Jones Ellen Warren Bruce Wolf
Omega Navigation Enterprises, Inc.	ONAV	Y6476R105	5/22/2007	ELECT: Robert Flynn Dr. Chiang Hai Ding Shariq Azhar
				RATIFY: Ernst & Young as certified auditors
Arlington Tankers, Ltd.	ATB	G04899103	4/25/2007	ELECT: Michael Drayton
				APPOINT: Moore Stephens P.C. as independent auditors and for the authorization of the board to determine the independent registered public accounting firm fees
Double Hull Tankers, Inc.	DHT	Y21110104	6/20/2007	ELECT: Randee Day
				APPOINT: independent auditors
Nordic American Tanker Shipping Limited	NAT	G65773106	6/20/2007	ELECT: Her Bjorn Hanson Torpor Gladson Sir David Gibbons Andreas Ove Ugland Andrew March Paul Hopkins Richard Vietor APPOINT:
Constellation Energy				Deloitte as auditors
Partners LLC	CEP	21038E101	6/26/2007	APPROVE: change in the terms of Constellation's class E units to provide that each class E be converted into

one of their common units and the issuance of add'l common units

Pursuant to the requirements of 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.

Kayne Anderson MLP Investment Company
(Registrant)

By: /s/ Kevin S. McCarthy

Kevin S. McCarthy

President of Kayne Anderson MLP Investment Company

(Signature & Title)
Date: August 22, 2007