Kayne Anderson MLP Investment CO
Form N-30B-2
October 30, 2007

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS: This report contains forward-looking statements as defined under the U.S. federal securities laws. Generally, the words believe, expect, intend, estimate, anticipate, project, will and similar expressions identify forward-looking statements, which gen are not historical in nature. Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to materially differ from the Company s historical experience and its present expectations or projections indicated in any forward-looking statements. These risks include, but are not limited to, changes in economic and political conditions; regulatory and legal changes; MLP industry risk; leverage risk; valuation risk; interest rate risk; tax risk; and other risks discussed in the Company s filings with the SEC. You should not place undue reliance on forward-looking statements, which speak only as of the date they are made. The Company undertakes no obligation to update or revise any forward-looking statements made herein. There is no assurance that the Company s investment objectives will be attained.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

SCHEDULE OF INVESTMENTS
AUGUST 31, 2007
(amounts in 000 s)
(UNAUDITED)

Description	No. of Shares/Units		Value
Long-Term Investments 170.0%			
Equity Investments(a) 170.0%			
Midstream MLP(b) 132.1%			
Atlas Pipeline Partners, L.P.	417	$	19,363
Boardwalk Pipeline Partners, LP	522		17,320
Buckeye Partners, L.P.	369		18,117
Copano Energy, L.L.C.	3,923		152,963
Crosstex Energy, L.P.	2,614		92,546
Crosstex Energy, L.P. Class C Senior Subordinated Units(c)(d)	356		11,948
DCP Midstream Partners, LP	142		6,444
Duncan Energy Partners L.P.	164		3,923
Eagle Rock Energy Partners L.P.	113		2,485
Enbridge Energy Management, L.L.C.(e)	662		34,475
Enbridge Energy Partners, L.P.	1,487		75,802
Energy Transfer Partners, L.P.	4,262		221,818
Enterprise GP Holdings L.P. Unregistered(c)	1,342		50,033
Enterprise Products Partners L.P.(f)	5,463		161,204
Genesis Energy, L.P.	59		1,739
Global Partners LP	1,464		46,755
Hiland Partners, LP	162		8,096
Holly Energy Partners, L.P.	226		10,301
Kinder Morgan Management, LLC(e)	2,897		139,446
Magellan Midstream Partners, L.P.	3,871		166,438
MarkWest Energy Partners, L.P.	2,183		69,590
Martin Midstream Partners L.P.	295		11,319
NuStar L.P.	550		34,249
ONEOK Partners, L.P.	892		57,108
Plains All American Pipeline, L.P.	3,112		179,082
Regency Energy Partners LP	1,949		62,376
Semgroup Energy Partners LP(d)	211		6,335
Spectra Energy Partners LP(d)	280		7,404
Sunoco Logistics Partners L.P.	144		7,719
Targa Resources Partners LP	434		13,029
TC PipeLines, LP	1,260		46,832
TEPPCO Partners, L.P.	677		27,174
Williams Partners L.P.	473		21,079
			1,784,512

Propane MLP 8.6%		
AmeriGas Partners, L.P.	128	4,475
Ferrellgas Partners, L.P.	877	19,860
Inergy, L.P.	2,839	92,479
		116,814

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

SCHEDULE OF INVESTMENTS (CONTINUED)
AUGUST 31, 2007
(amounts in 000 s)
(UNAUDITED)

Description	No. of Shares/Units		Value
Shipping MLP 2.9%			
Capital Product Partners LP	121	$	3,497
K-Sea Transportation Partners L.P.	249		9,690
Teekay LNG Partners L.P.	383		13,383
Teekay Offshore Partners L.P.	265		7,820
U.S. Shipping Partners L.P.	245		4,728
			39,118
Coal MLP 4.7%			
Clearwater Natural Resources, LP Unregistered(c)(g)(h)	3,889		43,945
Natural Resource Partners L.P. Subordinated Units	311		10,275
Penn Virginia Resource Partners, L.P.	319		8,870
			63,090
Upstream MLP(b) 10.6%			
Atlas Energy Resources, LLC	565		18,271
Atlas Energy Resources, LLC Unregistered(c)	398		11,536
Atlas Energy Resources, LLC Class D, Unregistered(c)	910		25,812
BreitBurn Energy Partners L.P.	64		2,145
BreitBurn Energy Partners L.P. Unregistered(c)	1,426		45,515
Constellation Energy Partners LLC	198		8,312
Constellation Energy Partners LLC Unregistered(c)	247		9,802
Constellation Energy Partners LLC Class F, Unregistered(c)	312		12,182
Dorchester Minerals, L.P.	119		2,567
Legacy Reserves LP	290		6,733
			142,875
MLP Affiliates 6.2%			
Atlas Pipeline Holdings, L.P.	79		3,225
Buckeye GP Holdings L.P.	206		6,468
Crosstex Energy, Inc.	156		5,108
Energy Transfer Equity, L.P.	196		7,192
Energy Transfer Equity, L.P. Unregistered(c)	365		13,408
Hiland Holdings GP, LP	153		4,614

Magellan Midstream Holdings, L.P.	1,221	34,572
MarkWest Hydrocarbon, Inc.(f)	186	9,355
		83,942
Other MLP 4.1%		
Calumet Specialty Products Partners, L.P.	644	31,317
Exterran Partners LP	353	12,119
Exterran Partners LP Unregistered(c)	378	12,696
		56,132
Other 0.8%		
Arlington Tankers Ltd.	70	1,736
Double Hull Tankers, Inc.	182	2,805
Nordic American Tanker Shipping Limited	82	3,027
Omega Navigation Enterprises, Inc.	185	3,655
		11,223
Total Long-Term Investments (Cost $1,577,144)		2,297,706

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

SCHEDULE OF INVESTMENTS (CONCLUDED)
AUGUST 31, 2007
(amounts in 000 s, except option contracts written)
(UNAUDITED)

	Interest Rate	Maturity Date	Value
Short-Term Investment 0.9%			
Repurchase Agreement 0.9%			
Bear, Stearns & Co. Inc. (Agreement dated 8/31/07 to be repurchased at $11,760), collateralized by $12,096 in U.S. Treasury Notes (Cost $11,753)	5.150%	9/04/07	$ 11,753
Total Investments 170.9% (Cost $1,588,897)			2,309,459

	No. of Contracts	
Liabilities		
Option Contracts Written(h)		
Midstream MLP		
Enterprise Products Partners L.P., call option expiring 10/20/07 @ $30.00 (Premiums received $178)	1,840	(202)
Auction Rate Senior Notes		(505,000)
Deferred Taxes		(261,825)
Revolving Credit Line		(119,000)
Other Liabilities		(10,890)
Unrealized Depreciation on Interest Rate Swap Contracts		(1,710)
Total Liabilities		(898,627)
Unrealized Appreciation on Interest Rate Swap Contracts		2,246
Income Tax Receivable		2,459
Other Assets		10,726
Total Liabilities in Excess of Other Assets		(883,196)
Preferred Stock at Redemption Value		(75,000)
Net Assets Applicable to Common Stockholders		$ 1,351,263

(a) Unless otherwise noted, equity investments are common units/common shares.

(b) Includes Limited Liability Companies.

(c) Fair valued and restricted security (See Notes 2 and 6).

(d) Security is currently not paying cash distributions but is expected to pay cash distributions or convert to securities which pay cash distributions within the next 12 months.

(e) Distributions are paid in-kind.

(f) Security or a portion thereof is segregated as collateral on option contracts written or interest rate swap contracts.

(g) Clearwater Natural Resources, LP is a privately-held MLP that the Company believes is a controlled affiliate.

(h) Security is non-income producing.

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

STATEMENT OF ASSETS AND LIABILITIES
AUGUST 31, 2007
(amounts in 000 s, except share and per share amounts)
(UNAUDITED)

ASSETS	
Investments at fair value, non-controlled (Cost $1,506,889)	$ 2,253,761
Investments at fair value, controlled (Cost $70,255)	43,945
Repurchase agreement (Cost $11,753)	11,753
Total investments (Cost $1,588,897)	2,309,459
Deposits with brokers	622
Receivable for securities sold	3,848
Interest, dividends and distributions receivable	280
Income tax receivable	2,459
Deferred debt issuance costs and other, net	5,976
Unrealized appreciation on interest rate swap contracts	2,246
Total Assets	2,324,890
LIABILITIES	
Revolving credit line	119,000
Investment management fee payable	7,936
Option contracts written, at fair value (Premiums received $178)	202
Accrued directors fees and expenses	52
Accrued expenses and other liabilities	2,902
Deferred tax liability	261,825
Unrealized depreciation on interest rate swap contracts	1,710
Total Liabilities before Senior Notes	393,627
Auction Rate Senior Notes:	
Series A, due April 3, 2045	85,000
Series B, due April 5, 2045	85,000
Series C, due March 31, 2045	90,000
Series E, due December 21, 2045	60,000
Series F, due July 9, 2047	185,000
Total Senior Notes	505,000
Total Liabilities	898,627
PREFERRED STOCK	
$25,000 liquidation value per share applicable to 3,000 outstanding shares (10,000 shares authorized)	75,000

NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS	$	1,351,263
NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS CONSIST OF		
Common stock, $0.001 par value (43,028,545 shares issued and outstanding, 199,990,000 shares authorized)	$	43
Paid-in capital		908,968
Accumulated net investment loss, net of income taxes less dividends		(58,175)
Accumulated realized gains on investments and interest rate swap contracts, net of income taxes		45,913
Net unrealized gains on investments, options and interest rate swap contracts, net of income taxes		454,514
NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS	$	1,351,263
NET ASSET VALUE PER COMMON SHARE		$31.40

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

STATEMENT OF OPERATIONS
FOR THE NINE MONTHS ENDED AUGUST 31, 2007
(amounts in 000 s)
(UNAUDITED)

INVESTMENT INCOME	
Income	
Dividends and distributions	$ 79,813
Return of capital	(70,838)
Net dividends and distributions	8,975
Interest and other fees	105
Total Investment Income	9,080
Expenses	
Investment management fees	21,952
Administration fees	721
Professional fees	623
Reports to stockholders	233
Custodian fees	173
Directors fees	137
Insurance	128
Other expenses	406
Total Expenses Before Interest Expense, Auction Agent Fees and Taxes	24,373
Interest expense	18,952
Auction agent fees	859
Total Expenses Before Taxes	44,184
Net Investment Loss Before Taxes	(35,104)
Deferred tax benefit	11,665
Net Investment Loss	(23,439)
REALIZED AND UNREALIZED GAINS/(LOSSES)	
Net Realized Gains/(Losses)	
Investments	24,675
Payments on interest rate swap contracts	1,839
Deferred tax expense	(8,810)
Net Realized Gains	17,704
Net Change in Unrealized Gains/(Losses)	
Investments	211,805

Options		(24)
Interest rate swap contracts		(1,787)
Deferred tax expense		(69,780)
Net Change in Unrealized Gains		140,214
Net Realized and Unrealized Gains		157,918
NET INCREASE IN NET ASSETS RESULTING FROM OPERATIONS		134,479
DIVIDENDS TO PREFERRED STOCKHOLDERS		(3,013)
NET INCREASE IN NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS RESULTING FROM OPERATIONS	$	131,466

See accompanying notes to financial statements.

KAYNE ANDERSON MLP INVESTMENT COMPANY

STATEMENT OF CHANGES IN NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS
(amounts in 000 s, except share amounts)

	For the Nine Months Ended August 31, 2007 (Unaudited)	For the Fiscal Year Ended November 30, 2006
OPERATIONS		
Net investment loss	$ (23,439)	$ (23,356)
Net realized gains	17,704	14,152
Net change in unrealized gains	140,214	226,725
Net Increase in Net Assets Resulting from Operations	134,479	217,521
DISTRIBUTIONS TO PREFERRED STOCKHOLDERS		
Distributions return of capital	(3,013)(1)	(3,732)(2)
DISTRIBUTIONS TO COMMON STOCKHOLDERS		
Distributions return of capital	(57,257)(1)	(65,492)(2)
CAPITAL STOCK TRANSACTIONS		
Proceeds from common stock public offerings of 4,420,916 shares of common stock	160,647	
Underwriting discounts and offering expenses associated with the issuance of common stock	(4,569)	
Issuance of 542,793 and 889,285 shares of common stock from reinvestment of distributions, respectively	17,584	23,005
Net Increase in Net Assets Applicable to Common Stockholders from Capital Stock Transactions	173,662	23,005
Total Increase in Net Assets Applicable to Common Stockholders	247,871	171,302
NET ASSETS		
Beginning of period	1,103,392	932,090
End of period	$ 1,351,263	$ 1,103,392

(1) The information presented in each of these items is a current estimate of the characterization of a portion of the total dividends paid to preferred stockholders and common stockholders for the nine months ended August 31,

2007 as either a dividend (ordinary income) or a distribution (return of capital). This estimate is based on the Company s operating results during the period. The actual characterization of the preferred stock dividend and the common stock dividend made during the year will not be determined until after the end of the calendar year when the Company can determine earnings and profits and, therefore, it may differ from the preliminary estimates.

(2) The information presented in each of these items is a characterization of a portion of the total dividends paid to preferred stockholders and common stockholders for the fiscal year ended November 30, 2006 as either a dividend (ordinary income) or a distribution (return of capital). This characterization is based on the Company s earnings and profits.

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

STATEMENT OF CASH FLOWS
FOR THE NINE MONTHS ENDED AUGUST 31, 2007
(amounts in 000 s)
(UNAUDITED)

CASH FLOWS FROM OPERATING ACTIVITIES		
Net increase in net assets resulting from operations	$	134,479
Adjustments to reconcile net increase in net assets resulting from operations to net cash used in operating activities:		
Purchase of investments		(542,482)
Proceeds from sale of investments		121,917
Purchase of short-term investments, net		(10,804)
Realized gains		(26,514)
Return of capital distributions		70,838
Unrealized gains on investments, options and interest rate swap contracts		(209,994)
Increase in deferred tax liability		66,925
Increase in deposits with brokers		(504)
Increase in receivable for securities sold		(172)
Decrease in interest, dividend and distributions receivables		326
Increase in income tax receivable		(350)
Increase in deferred debt issuance costs and other		(2,011)
Decrease in investment management fee payable		(2,359)
Increase in option contracts written		178
Decrease in payable for securities purchased		(1,489)
Increase in accrued expenses and other liabilities		1,624
Net Cash Used in Operating Activities		(400,392)
CASH FLOWS FROM FINANCING ACTIVITIES		
Issuance of auction rate senior notes		185,000
Issuance of shares of common stock		156,078
Proceeds from revolving credit line		102,000
Cash distributions paid to preferred stockholders		(3,013)
Cash distributions paid to common stockholders		(39,673)
Net Cash Provided by Financing Activities		400,392
NET CHANGE IN CASH		
CASH BEGINNING OF PERIOD		
CASH END OF PERIOD	$	

Supplemental disclosure of cash flow information:

Noncash financing activities not included herein consist of reinvestment of distributions of $17,584 pursuant to the Company s dividend reinvestment plan.

During the nine months ended August 31, 2007, federal and state taxes paid were $350 and interest paid was $14,424.

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

FINANCIAL HIGHLIGHTS
(amounts in 000 s, except per share amounts)

	For the Nine Months Ended August 31, 2007 (Unaudited)	For the Fiscal Year Ended November 30, 2006	For the Fiscal Year Ended November 30, 2005	For the Period September 28, 2004[(1)] through November 30, 2004
Per Share of Common Stock				
Net asset value, beginning of period	$ 28.99	$ 25.07	$ 23.91	$ 23.70[(2)]
Income from Operations[(3)]				
Net investment income/(loss)	(0.58)	(0.62)	(0.17)	0.02
Net realized and unrealized gain on investments, securities sold short, options and interest rate swap contracts	4.23	6.39	2.80	0.19
Total income from investment operations	3.65	5.77	2.63	0.21
Dividends/Distributions Preferred Stockholders[(3)]				
Dividends	[(4)]	[(5)]	(0.05)[(5)]	
Distributions	(0.07)[(4)]	(0.10)[(5)]	[(5)]	
Total dividends/distributions Preferred Stockholders	(0.07)	(0.10)	(0.05)	
Dividends/Distributions Common Stockholders				
Dividends	[(4)]	[(5)]	(0.13)[(5)]	
Distributions	(1.44)[(4)]	(1.75)[(5)]	(1.37)[(5)]	
Total dividends/distributions Common Stockholders	(1.44)	(1.75)	(1.50)	
Capital Stock Transactions[(3)]				
Underwriting discounts and offering costs on the issuance of preferred stock			(0.03)	

Anti-dilutive effect due to issuance of common stock, net of underwriting discounts and offering costs	0.26		0.11	
Anti-dilutive effect due to shares issued in reinvestment of dividends	0.01			
Total capital stock transactions	0.27		0.08	
Net asset value, end of period	$ 31.40	$ 28.99	$ 25.07	$ 23.91
Market value per share of common stock, end of period	$ 32.66	$ 31.39	$ 24.33	$ 24.90
Total investment return based on common stock market value(6)	8.74%	37.93%	3.66%	(0.40)%
Supplemental Data and Ratios(7)				
Net assets applicable to common stockholders, end of period	$ 1,351,263	$ 1,103,392	$ 932,090	$ 792,836
Ratio of expenses to average net assets, including current and deferred income tax expense	11.45%(8)	18.85%(8)	8.73%(8)	4.73%(8)
Ratio of expenses to average net assets, excluding current and deferred income taxes	4.55%(8)	5.10%(8)	2.32%(8)	1.20%(8)
Ratio of expenses, excluding taxes and interest expenses, to average net assets	2.51%	3.42%	1.52%	%
Ratio of net investment income/(loss) to average net assets	(2.41)%	(2.37)%	(0.68)%	0.50%
Net increase in net assets to common stockholders resulting from operations to average net assets	10.17%(9)	21.66%	10.09%	0.93%(9)
Portfolio turnover rate	5.84%(10)	9.95%(10)	25.59%(10)	11.78%(10)
Auction Rate Senior Notes outstanding, end of period	$ 505,000	$ 320,000	$ 260,000	
Revolving credit facility	$ 119,000	$ 17,000		
Auction Rate Preferred Stock, end of period	$ 75,000	$ 75,000	$ 75,000	
Asset coverage of Auction Rate Senior Notes	382.43%(11)	468.25%(11)	487.34%(11)	
Asset coverage of Auction Rate Preferred Stock	293.31%(12)	367.81%(12)	378.24%(12)	
Average amount of borrowings outstanding per share of common stock during the period	$ 11.28(3)	$ 8.53(3)	$ 5.57(3)	

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

FINANCIAL HIGHLIGHTS (CONCLUDED)
(amounts in 000 s, except share and per share amounts)

(1) Commencement of operations.

(2) Initial public offering price of $25.00 per share less underwriting discounts of $1.25 per share and offering costs of $0.05 per share.

(3) Based on average shares of common stock outstanding of 40,470,105, 37,638,314, 34,077,731 and 33,165,900, for the nine months ended August 31, 2007, the fiscal year ended November 30, 2006, the fiscal year ended November 30, 2005 and the period September 28, 2004 through November 30, 2004, respectively.

(4) The information presented in each of these items is a current estimate of the characterization of a portion of the total dividends paid to preferred stockholders and common stockholders for the nine months ended August 31, 2007 as either a dividend (ordinary income) or a distribution (return of capital). This characterization is based on the Company s operating results during the period. The actual characterization of the preferred stock dividend and the common stock dividend made during the current year will not be determined until after the end of the calendar year when the Company can determine earnings and profits and, therefore, it may differ from the preliminary estimates.

(5) The information presented in each of these items is a characterization of a portion of the total dividends paid to preferred stockholders and common stockholders for the fiscal years ended November 30, 2006 and November 30, 2005 as either a dividend (ordinary income) or a distribution (return of capital). This characterization is based on the Company s earnings and profits.

(6) Not annualized for the nine months ended August 31, 2007 and the period September 28, 2004 through November 30, 2004. Total investment return is calculated assuming a purchase of common stock at the market price on the first day and a sale at the current market price on the last day of the period reported. The calculation also assumes reinvestment of dividends, if any, at actual prices pursuant to the Company s dividend reinvestment plan.

(7) Unless otherwise noted, ratios are annualized for periods of less than one full year.

(8) For the nine months ended August 31, 2007, the Company s deferred tax benefit was $11,665 and deferred tax expense was $78,590. For the fiscal year ended November 30, 2006, the Company s current tax benefit was $65 and deferred tax expense was $135,738. For the fiscal year ended November 30, 2005, its current tax expense was $3,669 and deferred tax expense was $52,179. For the period September 28, 2004 through November 30, 2004, its current income tax expense was $763 and deferred tax expense was $3,755.

(9) Not annualized.

(10) Amount not annualized for the nine months ended August 31, 2007 and the period September 28, 2004 through November 30, 2004. For the nine months ended August 31, 2007, and fiscal years ended November 30, 2006 and November 30, 2005, and the period September 28, 2004 through November 30, 2004, calculated based on the sales of $121,917, $144,884, $263,296 and $16,880, respectively of long-term investments divided by the

average long-term investment balance of $2,088,208, $1,456,695, $1,029,035 and $143,328, respectively.

(11) Represents the value of total assets less all liabilities and indebtedness not represented by Auction Rate Senior Notes (senior securities as defined in the 1940 Act) divided by the aggregate amount of Auction Rate Senior Notes. In this ratio, the revolving credit facility is not considered a senior security. The revolving credit facility is treated as a senior security for purposes of this ratio only in circumstances when the Company is issuing additional Auction Rate Senior Notes.

(12) Represents the value of total assets less all liabilities and indebtedness not represented by Auction Rate Senior Notes, Auction Rate Preferred Stock and amounts borrowed under the revolving credit facility divided by the aggregate amount of Auction Rate Senior Notes, Auction Rate Preferred Stock and amounts borrowed under the revolving credit facility.

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

NOTES TO FINANCIAL STATEMENTS

AUGUST 31, 2007
(amounts in 000 s, except option contracts written, share and per share amounts)
(UNAUDITED)

1. Organization

Kayne Anderson MLP Investment Company (the Company) was organized as a Maryland corporation on June 4, 2004, and is a non-diversified closed-end management investment company registered under the Investment Company Act of 1940, as amended (the 1940 Act). The Company s investment objective is to obtain a high after-tax total return by investing at least 85% of its net assets plus any borrowings (total assets) in energy-related master limited partnerships and their affiliates (collectively, MLPs), and in other companies that, as their principal business, operate assets used in the gathering, transporting, processing, storing, refining, distributing, mining or marketing of natural gas, natural gas liquids (including propane), crude oil, refined petroleum products or coal (collectively with MLPs, Midstream Energy Companies). The Company commenced operations on September 28, 2004. The Company s shares of common stock are listed on the New York Stock Exchange, Inc. (NYSE) under the symbol KYN .

2. Significant Accounting Policies

A. *Use of Estimates* The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the period. Actual results could differ materially from those estimates.

B. *Calculation of Net Asset Value* The Fund determines its net asset value as of the close of regular session trading on the NYSE (normally 4:00 p.m. Eastern time) no less frequently than the last business day of each month, and makes its net asset value available for publication monthly. Net asset value is computed by dividing the value of the Company s assets (including accrued interest and dividends), less all of its liabilities (including accrued expenses, dividends payable, current and deferred and other accrued income taxes, and any borrowings) and the liquidation value of any outstanding preferred stock, by the total number of common shares outstanding.

C. *Investment Valuation* Readily marketable portfolio securities listed on any exchange other than the NASDAQ Stock Market, Inc. (NASDAQ) are valued, except as indicated below, at the last sale price on the business day as of which such value is being determined. If there has been no sale on such day, the securities are valued at the mean of the most recent bid and asked prices on such day, except for short sales and call options contracts written, for which the last quoted asked price is used. Securities admitted to trade on the NASDAQ are valued at the NASDAQ official closing price. Portfolio securities traded on more than one securities exchange are valued at the last sale price on the business day as of which such value is being determined at the close of the exchange representing the principal market for such securities.

Equity securities traded in the over-the-counter market, but excluding securities admitted to trading on the NASDAQ, are valued at the closing bid prices. Fixed income securities with a remaining maturity of 60 days or more are valued by the Company using a pricing service. Fixed income securities maturing within 60 days will be valued on an amortized cost basis.

The Company holds securities that are privately issued or otherwise restricted as to resale. For these securities, as well as any other portfolio security held by the Company for which reliable market quotations are not readily available, valuations are determined in a manner that most fairly reflects fair value of the security on the valuation

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KAYNE ANDERSON MLP INVESTMENT COMPANY

NOTES TO FINANCIAL STATEMENTS (UNAUDITED) (CONTINUED)

date. Unless otherwise determined by the Board of Directors, the following valuation process is used for such securities:

> ***Investment Team Valuation.*** The applicable investments are initially valued by KA Fund Advisors, LLC (Kayne Anderson or the Adviser) investment professionals responsible for the portfolio investments;
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> ***Investment Team Valuation Documentation.*** Preliminary valuation conclusions are documented and discussed with senior management of Kayne Anderson. Such valuations generally are submitted to the Valuation Committee (a committee of the Company s Board of Directors) or the Board of Directors on a monthly basis, and stand for intervening periods of time.
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> ***Valuation Committee.*** The Valuation Committee meets on or about the end of each month to consider new valuations presented by Kayne Anderson, if any, which were made in accordance with the Valuation Procedures in such month. Between meetings of the Valuation Committee, a senior officer of Kayne Anderson is authorized to make valuation determinations. The Valuation Committee s valuations stand for intervening periods of time unless the Valuation Committee meets again at the request of Kayne Anderson, the Board of Directors, or the Valuation Committee itself. All valuation determinations of the Valuation Committee are subject to ratification by the Board at its next regular meeting.
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> ***Valuation Firm.*** No less than quarterly, a third-party valuation firm engaged by the Board of Directors reviews the valuation methodologies and calculations employed for these securities.
>
> ***Board of Directors Determination.*** The Board of Directors meets quarterly to consider the valuations provided by Kayne Anderson and the Valuation Committee, if applicable, and ratify valuations for the applicable securities. The Board of Directors considers the report provided by the third-party valuation firm in reviewing and determining in good faith the fair value of the applicable portfolio securities.

Unless otherwise determined by the Board of Directors, securities that are convertible into or otherwise will become publicly traded (*e.g.,* through subsequent registration or expiration of a restriction on trading) are valued through the process described above, using a valuation based on the market value of the publicly traded security less a discount. The discount is initially equal in amount to the discount negotiated at the time the purchase price is agreed to. To the extent that such securities are convertible or otherwise become publicly traded within a time frame that may be reasonably determined, Kayne Anderson may determine an amortization schedule for the discount in accordance with a methodology approved by the Valuation Committee.

At August 31, 2007, the Company held 17.5% of its net assets applicable to common stockholders (10.2% of total assets) in securities valued at fair value as determined pursuant to procedures adopted by the Board of Directors, with fair value of $236,877. Although these securities may be resold in privately negotiated transactions (subject to certain lock-up restrictions), these values may differ from the values that would have been used had a ready market for these securities existed, and the differences could be material.

Any option transaction that the Company enters into may, depending on the applicable market environment have no value or a positive/negative value. Exchange traded options and futures contracts are valued at the closing price in the market where such contracts are principally traded.

In September 2006, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 157, Fair Value Measurements. This standard establishes a single authoritative definition of fair value, sets out a framework for measuring fair value and requires additional disclosures about fair value measurements. SFAS No. 157 applies to fair value measurements already required or permitted by existing standards. SFAS No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. The changes to current generally accepted accounting principles from the application of this Statement relate to the definition of fair value, the methods used to measure fair value, and the expanded disclosures about fair value measurements. As of August 31, 2007, the Company does not believe the adoption of SFAS No. 157 will impact the financial statement amounts, however, additional disclosures may be

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required about the inputs used to develop the measurements and the effect of certain of the measurements on changes in net assets for the period.

D. *Repurchase Agreements* The Company has agreed to purchase securities from financial institutions subject to the seller s agreement to repurchase them at an agreed-upon time and price (repurchase agreements). The financial institutions with whom the Company enters into repurchase agreements are banks and broker/ dealers which Kayne Anderson considers creditworthy. The seller under a repurchase agreement is required to maintain the value of the securities as collateral, subject to the agreement, at not less than the repurchase price plus accrued interest. Kayne Anderson monitors daily the mark-to-market of the value of the collateral, and, if necessary, requires the seller to maintain additional securities, so that the value of the collateral is not less than the repurchase price. Default by or bankruptcy of the seller would, however, expose the Company to possible loss because of adverse market action or delays in connection with the disposition of the underlying securities.

E. *Short Sales* A short sale is a transaction in which the Company sells securities it does not own (but has borrowed) in anticipation of or to hedge against a decline in the market price of the securities. To complete a short sale, the Company may arrange through a broker to borrow the securities to be delivered to the buyer. The proceeds received by the Company for the short sale are retained by the broker until the Company replaces the borrowed securities. In borrowing the securities to be delivered to the buyer, the Company becomes obligated to replace the securities borrowed at their market price at the time of replacement, whatever the price may be.

All short sales are fully collateralized. The Company maintains assets consisting of cash or liquid securities equal in amount to the liability created by the short sale. These assets are adjusted daily to reflect changes in the value of the securities sold short. The Company is liable for any dividends or distributions paid on securities sold short.

The Company may also sell short against the box (*i.e.,* the Company enters into a short sale as described above while holding an offsetting long position in the security which it sold short). If the Company enters into a short sale against the box, the Company segregates an equivalent amount of securities owned as collateral while the short sale is outstanding. At August 31, 2007, the Company had no open short sales.

F. *Option Writing* When the Company writes an option, an amount equal to the premium received by the Company is recorded as a liability and is subsequently adjusted to the current fair value of the option written. Premiums received from writing options that expire unexercised are treated by the Company on the expiration date as realized gains from investments. The difference between the premium and the amount paid on effecting a closing purchase transaction, including brokerage commissions, is also treated as a realized gain, or if the premium is less than the amount paid for the closing purchase transaction, as a realized loss. If a call option is exercised, the premium is added to the proceeds from the sale of the underlying security in determining whether the Company has realized a gain or loss. If a put option is exercised, the premium reduces the cost basis of the securities purchased by the Company. The Company, as the writer of an option, bears the market risk of an unfavorable change in the price of the security underlying the written option. See Note 7 Option Contracts Written for more detail.

G. Security Transactions and Investment Income Security transactions are accounted for on the date the securities are purchased or sold (trade date). Realized gains and losses are reported on an identified cost basis. Dividend and distribution income is recorded on the ex-dividend date. Distributions received from the Company s investments in MLPs generally are comprised of income and return of capital. For the nine months ended August 31, 2007, the

Company estimated that 90% of the MLP distributions received would be treated as a return of capital. The Company recorded as return of capital the amount of $70,838 of dividends and distributions received from MLPs. The return of capital of $70,838, resulted in an equivalent reduction in the cost basis of the associated MLP investments. Net Realized Gains and Net Change in Unrealized Gains in the accompanying Statement of Operations were increased by $2,223 and $68,615, respectively, attributable to the recording of such dividends and distributions as reductions in the cost basis of investments. The Company records investment income and return of capital based on estimates made at the time such distributions are received. Such estimates are based on historical information

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available from each MLP and other industry sources. These estimates may subsequently be revised based on information received from MLPs after their tax reporting periods are concluded. Interest income is recognized on the accrual basis, including amortization of premiums and accretion of discounts.

H. *Dividends and Distributions to Stockholders* Dividends to common stockholders are recorded on the ex-dividend date. The character of dividends made during the year may differ from their ultimate characterization for federal income tax purposes. Distributions to stockholders of the Company s Auction Rate Preferred Stock, Series D are accrued on a daily basis and are determined as described in Note 11 Preferrred Stock. The Company s dividends will be comprised of return of capital and/or ordinary income, which is based on the earnings and profits of the Company. The Company is unable to make final determinations as to the character of the dividend until after the end of the calendar year. The Company informed its common stockholders in January 2007 of the character of dividends paid during fiscal year 2006. Prospectively, the Company will inform its common stockholders of the character of dividends during that fiscal year in January following such fiscal year.

I. *Partnership Accounting Policy* The Company records its pro-rata share of the income/(loss) and capital gains/(losses), to the extent of dividends it has received, allocated from the underlying partnerships and adjusts the cost of the underlying partnerships accordingly. These amounts are included in the Company s Statement of Operations.

J. *Federal and State Income Taxation* The Company, as a corporation, is obligated to pay federal and state income tax on its taxable income. The Company invests its assets primarily in MLPs, which generally are treated as partnerships for federal income tax purposes. As a limited partner in the MLPs, the Company includes its allocable share of the MLP s taxable income in computing its own taxable income. Deferred income taxes reflect (i) taxes on unrealized gains/(losses), which are attributable to the temporary difference between fair market value and book basis, (ii) the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and (iii) the net tax benefit of accumulated net operating losses. To the extent the Company has a net deferred tax asset, a valuation allowance is recognized if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred income tax asset will not be realized. Future realization of deferred tax assets ultimately depends on the existence of sufficient taxable income of the appropriate character in either the carryback or carryforward period under the tax law.

The Company may rely to some extent on information provided by the MLPs, which may not necessarily be timely, to estimate taxable income allocable to the MLP units held in the portfolio and to estimate the associated deferred tax liability. Such estimates are made in good faith and reviewed in accordance with the valuation process approved by the Board of Directors. From time to time the Company modifies its estimates or assumptions regarding the deferred tax liability as new information become available.

In June 2006, the Financial Accounting Standards Board (FASB) issued FASB Interpretation 48 (FIN 48), Accounting for Uncertainty in Income Taxes. This standard defines the threshold for recognizing the benefits of tax-return positions in the financial statements as more-likely-than-not to be sustained by the taxing authority and requires measurement of a t