KAYNE ANDERSON MIDSTREAM/ENERGY FUND, INC.

Form N-Q

October 30, 2015

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number 811-22467

Kayne Anderson Midstream/Energy Fund, Inc.

(Exact name of registrant as specified in charter)

811 Main Street, 14th Floor

Houston, Texas 77002

(Address of principal executive offices) (Zip code)

David Shladovsky, Esq.

KA Fund Advisors, LLC

811 Main Street, 14th Floor

Houston, Texas 77002

(Name and address of agent for service)

Registrant s telephone number, including area code: (713) 493-2020

Date of fiscal year end: November 30, 2015

Date of reporting period: August 31, 2015

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Item 1. Schedule of Investments.

KAYNE ANDERSON MIDSTREAM/ENERGY FUND, INC.

SCHEDULE OF INVESTMENTS

AUGUST 31, 2015

$(amounts\ in\ 000\ \ s,\ except\ numbers\ of\ option\ contracts)$

(UNAUDITED)

Description Shares/Units Value Long-Term Investments 154.5% Equity Investments 136.1% United States 131.3% ***********************************
Equity Investments(1) 136.1% United States 131.3% Midstream Company(2) 73.0% Capital Product Partners L.P. (3) 827 \$ 5,853 Capital Product Partners L.P. (2 lass B Unit(3)(4)(5)) 606 5,066 Columbia Pipeline Group, Inc. 501 12,713 Dynagas LNG Partners LP(3) 1,296 18,487 GasLog Partners LP(3) 607 11,665 Golar LNG Partners LP(3) 814 16,083 Höegh LNG Partners LP(3) 238 4,487 Kinder Morgan, Inc. 3,054 98,974 KNOT Offshore Partners LP(3) 843 15,419 ONEOK, Inc. 907 32,647 Plains GP Holdings, L.P.(3)(6) 649 12,720 Plains GP Holdings, L.P.(3)(6)(7) 1,836 35,973
United States 131.3% Midstream Company ⁽²⁾ 73.0% Capital Product Partners L.P. ⁽³⁾ 827 \$5,853 Capital Product Partners L.P. Class B Unit§ ⁽⁴⁾⁽⁵⁾ 606 5,066 Columbia Pipeline Group, Inc. 501 12,713 Dynagas LNG Partners LP ⁽³⁾ 1,296 18,487 GasLog Partners LP ⁽³⁾ 607 11,665 Golar LNG Partners LP ⁽³⁾ 814 16,083 Höegh LNG Partners LP ⁽³⁾ 238 4,487 Kinder Morgan, Inc. 3,054 98,974 KNOT Offshore Partners LP ⁽³⁾ 843 15,419 ONEOK, Inc. 907 32,647 Plains GP Holdings, L.P. ⁽³⁾⁽⁶⁾ 649 12,720 Plains GP Holdings, L.P. ⁽³⁾⁽⁶⁾⁽⁷⁾ 1,836 35,973
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Plains GP Holdings, L.P. (3)(6)(7) 1,836 35,973
SemGroup Corporation 67 3,685
Spectra Energy Corp. 501 14,570
Tallgrass Energy GP, $LP^{(3)(8)}$ 226 6,466
Targa Resources Corp. ⁽⁸⁾ 250 16,502
Teekay Corporation 168 6,165
Teekay Offshore Partners L.P. ⁽³⁾ 602 10,662
VTTI Energy Partners LP ⁽³⁾ 376 8,175
The Williams Companies, Inc. (8)(9) 1,292 62,266
398,578
Midstream MLP ⁽²⁾⁽¹⁰⁾ 51.7%
Antero Midstream Partners LP 61 1,406
Arc Logistics Partners LP 483 7,703
Buckeye Partners, L.P. (8) 156 10,989
Columbia Pipeline Partners LP 68 1,339
Crestwood Midstream Partners LP ⁽¹¹⁾ 892 6,970
DCP Midstream Partners, LP 373 10,514
Enbridge Energy Management, L.L.C. (12)(13) 2,241 63,091
Energy Transfer Equity, L.P. (8)(9) 129 3,607
Energy Transfer Partners, L.P. (8)(14) 704 34,576
EnLink Midstream Partners, LP 511 9,015
Enterprise Products Partners L.P. ⁽¹⁴⁾ 739 20,773
EQT Midstream Partners, LP 21 1,610
Exterran Partners, L.P. 252 5,478

Global Partners LP	266	8,595
Holly Energy Partners, L.P.	33	1,124
Magellan Midstream Partners, L.P. (8)	25	1,764
MarkWest Energy Partners, L.P. (6)(15)	203	11,433
Midcoast Energy Partners, L.P.	138	1,629
MPLX LP ⁽⁸⁾⁽¹⁵⁾	25	1,241
ONEOK Partners, L.P.	786	25,431
PennTex Midstream Partners, LP	23	413
Plains All American Pipeline, L.P. ⁽⁶⁾	405	14,619

KAYNE ANDERSON MIDSTREAM/ENERGY FUND, INC.

SCHEDULE OF INVESTMENTS

AUGUST 31, 2015

(amounts in 000 s, except numbers of option contracts)

(UNAUDITED)

	No. of	
Description	No. 01 Shares/Units	Value
Midstream MLP ⁽²⁾⁽¹⁰⁾ (continued)	Shares/ Chris	v aluc
Rose Rock Midstream, L.P.	65	\$ 2,032
Shell Midstream Partners, L.P.	197	7,811
Summit Midstream Partners, LP	72	1,587
Sunoco Logistics Partners L.P.	111	3,752
Tallgrass Energy Partners, LP	59	2,794
Targa Resources Partners LP	224	6,760
USD Partners LP	119	1,332
Western Gas Partners, LP	115	6,745
Williams Partners L.P. ⁽⁹⁾	153	6,093
Williams Fatures E.I.	133	0,093
		282,226
		202,220
Other Energy Company 4.1%		
Anadarko Petroleum Corporation 7.50% Tangible Equity Units ⁽⁶⁾	140	6,391
Enduro Royalty Trust	76	226
Marathon Petroleum Corporation ⁽⁸⁾	22	1,041
NRG Yield, Inc. Class C	26	419
Phillips 66 ⁽⁸⁾	112	8,824
Seadrill Partners LLC ⁽³⁾	356	4,237
TerraForm Power, Inc.	71	1,600
	, -	1,000
		22,738
		22,736
Other 2.2%		
Macquarie Infrastructure Company LLC	154	12,147
Seaspan Corporation 7.95% Series D Preferred Shares	9	189
Seaspan Corporation 7.93% Series D Freiencu Shares	9	109
		12,336
Other MLP ⁽¹⁰⁾ 0.3%		
Suncoke Energy Partners, L.P.	113	1,487
Total United States (Cost \$633,006)		717,365
Canada 4.8%		
Midstream Company ⁽²⁾ 4.8%		
AltaGas Ltd.	404	11,107
Enbridge Inc.	159	6,576
Gibson Energy Inc.	167	2,468
Inter Pipeline Ltd.	102	2,182

Pembina Pipeline Corporation	139	3,848
		26,181
Other Energy Company 0.0% ARC Resources Ltd. ⁽¹⁴⁾	1	7
Total Canada (Cost \$32,487)		26,188
Total Equity Investments (Cost \$665,493)		743,553

KAYNE ANDERSON MIDSTREAM/ENERGY FUND, INC.

SCHEDULE OF INVESTMENTS

AUGUST 31, 2015

(amounts in 000 s, except numbers of option contracts)

(UNAUDITED)

Description	Interest Rate	Maturity Date	Principal Amount	Value
Debt Instruments 18.4%	Rutt	Dute	Amount	v uruc
United States 17.6%				
Upstream 16.8%				
American Eagle Energy Corporation ⁽¹⁷⁾⁽¹⁸⁾	11.000%	9/1/19	\$ 4,800	\$ 1,080
American Energy-Woodford, LLC	12.000	12/30/20	1,050	504
BlackBrush Oil & Gas, L.P.	(19)	7/30/21	13,300	10,939
California Resources Corporation ⁽²⁰⁾	6.000	11/15/24	7,500	5,580
Canbriam Energy Inc.	9.750	11/15/19	9,640	9,592
Chief Oil & Gas LLC	(21)	8/8/21	9,609	8,552
Comstock Resources, Inc.	10.000	3/15/20	5,000	4,037
Eclipse Resources Corporation	8.875	7/15/23	8,000	7,380
Energy & Exploration Partners, Inc.	(22)	1/22/19	992	769
Goodrich Petroleum Corporation	8.875	3/15/19	6.950	1,425
Halcón Resources Corporation ⁽²³⁾	9.750	7/15/20	10,500	5,323
Jonah Energy LLC	(24)	5/29/21	3,000	2,550
Jones Energy, Inc.	9.250	3/15/23	5,000	4,675
Jupiter Resources Inc.	8.500	10/1/22	10,000	6,300
Magnum Hunter Resources Corporation	9.750	5/15/20	13,900	9,626
Midstates Petroleum Company, Inc.	10.750	10/1/20	3,500	1,032
Midstates Petroleum Company, Inc.	9.250	6/1/21	6,750	1,924
Resolute Energy Corporation	8.500	5/1/20	4.900	1.715
Triangle USA Petroleum Corporation	6.750	7/15/22	800	484
Vantage Energy, LLC	(25)	12/31/18	8,885	8,130
	(23)	12/01/10	0,000	91,617
Midstream Company ⁽²⁾ 0.8%				
ONEOK, Inc.	7.500	9/1/23	4,500	4,500
Total United States (Cost \$136,503)				96,117
Canada 0.8%				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Upstream 0.8%				
Athabasca Oil Corporation (Cost \$5,099)	7.500	11/19/17	(26)	4,217
Total Debt Investments (Cost \$141,602)				100,334
Total Long-Term Investments (Cost \$807,095)				843,887
	Strike Price	Expiration Date	No. of Contracts	Value

Call Option Contracts Written ⁽¹⁷⁾				
Midstream Company				
Tallgrass Energy GP, LP	\$ 30.00	9/18/15	500	\$ (36)
Targa Resources Corp.	80.00	9/18/15	300	(8)
Targa Resources Corp.	85.00	9/18/15	300	(8)
The Williams Companies, Inc.	60.00	9/18/15	1,220	(13)
The Williams Companies, Inc.	62.50	9/18/15	400	(6)
The Williams Companies, Inc.	65.00	9/18/15	350	(4)
				(75)
Midstream MLP				
Buckeye Partners, L.P.	70.00	9/18/15	300	(62)
Energy Transfer Equity, L.P.	32.50	9/18/15	250	(2)

KAYNE ANDERSON MIDSTREAM/ENERGY FUND, INC.

SCHEDULE OF INVESTMENTS

AUGUST 31, 2015

(amounts in 000 s, except numbers of option contracts)

(UNAUDITED)

Description Midstream MLP (continued)	Strike Price	Expiration Date	No. of Contracts	Value
Energy Transfer Equity, L.P.	\$ 33.75	9/18/15	100	\$ (1)
Energy Transfer Partners, L.P.	52.50	9/18/15	200	(7)
Energy Transfer Partners, L.P.	55.00	9/18/15	200	(3)
Magellan Midstream Partners, L.P.	82.50	9/18/15	100	(20)
MPLX LP	55.00	9/18/15	250	(19)
				(114)
Other Energy Company				
Marathon Petroleum Corporation	60.00	9/18/15	170	(1)
Marathon Petroleum Corporation	62.50	9/18/15	50	(1)
Phillips 66	82.50	9/18/15	400	(40)
Phillips 66	85.00	9/18/15	260	(12)
Phillips 66	87.50	9/18/15	350	(9)
Phillips 66	90.00	9/18/15	100	(2)
				(65)
Total Call Option Contracts Written (Premiums Received \$604)				(254)
Debt				(235,000)
Mandatory Redeemable Preferred Stock at Liquidation Value				(105,000)
Other Assets in Excess of Other Liabilities				42,534
Net Assets Applicable to Common Stockholders				\$ 546,167

KAYNE ANDERSON MIDSTREAM/ENERGY FUND, INC.

SCHEDULE OF INVESTMENTS

AUGUST 31, 2015

(amounts in 000 s, except numbers of option contracts)

(UNAUDITED)

(1)	Unless otherwise noted, equity investments are common units/common shares.
(2)	Securities are categorized as Midstream if they (i) derive at least 50% of their revenues or operating income from operating Midstream Assets or (ii) have Midstream Assets that represent the majority of their assets.
(3)	This company is structured like an MLP, but is not treated as a publicly-traded partnership for regulated investment company (RIC) qualification purposes.
(4)	Fair valued security, restricted from public sale.
(5)	Class B Units are convertible on a one-for-one basis into common units of Capital Product Partners L.P. (CPLP) and are senior to the common units in terms of liquidation preference and priority of distributions. The Class B Units pay quarterly cash distributions and are convertible at any time at the option of the holder. The Class B Units paid a distribution of \$0.21775 per unit for the third quarter of fiscal 2015.
(6)	The Fund believes that it is an affiliate of MarkWest Energy Partners, L.P., Plains All American Pipeline, L.P. and Plains GP Holdings, L.P. (Plains GP).
(7)	The Fund holds an interest in Plains AAP, L.P. (PAA GP), which controls the general partner of Plains All American, L.P. The Fund s ownership of PAA GP is exchangeable into shares of Plains GP (which trades on the NYSE under the ticker PAGP) on a one-for-one basis at the Fund s option.
(8)	Security or a portion thereof is segregated as collateral on option contracts written.

purposes, the Fund may directly invest up to 25% of its total assets in equity and debt securities of entities treated as publicly-traded

(10) Unless otherwise noted, securities are treated as a publicly-traded partnership for RIC qualification purposes. To qualify as a RIC for tax

(9) On September 28, 2015, Energy Transfer Equity, L.P. (ETE) announced an agreement to combine with The Williams Companies, Inc. (WMB). WMB is the general partner of Williams Partners L.P. (WPZ). In conjunction with this announcement, WPZ announced the

termination of the merger agreement between WMB and WPZ.

partnerships. The Fund had 24.5% of its total assets invested in publicly-traded partnerships at August 31, 2015. It is the Fund s intention to be treated as a RIC for tax purposes.

(11) On September 30, 2015, Crestwood Equity Partners LP (CEQP) and Crestwood Midstream Partners LP (CMLP) completed their merger. CMLP unitholders received 2.75 units of CEQP for each CMLP unit that they owned. (12) Dividends are paid-in-kind. (13) Security is not treated as a publicly-traded partnership for RIC qualification purposes. (14) In lieu of cash distributions, the Fund has elected to receive distributions in additional units/stock through the issuer s dividend reinvestment program. (15) On July 13, 2015, MPLX LP (MPLX) and MarkWest Energy Partners, L.P. (MWE) announced the signing of a definitive merger agreement whereby MWE would become a wholly owned subsidiary of MPLX. Under the terms of the agreement, common unitholders of MWE will receive 1.09 MPLX common units and a cash payment of \$3.37 for each MWE common unit they own. (16) Security is comprised of a prepaid equity purchase contract and a senior amortizing note. Unless settled earlier, each prepaid equity purchase contract will settle on June 7, 2018 for between 0.7159 and 0.8591 Western Gas Equity Partners, LP (WGP) common units (subject to Anadarko Petroleum Corporation s (APC) right to deliver APC common stock in lieu of WGP common units). The Fund receives a quarterly payment of 7.50% per annum on the \$50 per unit stated amount of the security. (17) Security is non-income producing. (18) On May 8, 2015, American Eagle Corporation (American Eagle) filed voluntary petitions in the United States Bankruptcy Court for the District of Colorado seeking relief under Chapter 11 of the bankruptcy code. On April 2, 2015, American Eagle made a partial interest payment to its noteholders, and the Fund received \$110 as its share of the partial interest payment. As of February 28, 2015, the Fund had \$270 of accrued interest income, and accordingly, the Fund established a \$160 reserve during the second quarter against the portion of the accrued interest income that exceeded the partial interest payment. The Fund is no longer accruing interest income related to its investment in American Eagle. (19) Floating rate second lien secured term loan. Security pays interest at a rate of LIBOR + 650 basis points with a 1.00% LIBOR floor (7.50% as of August 31, 2015). (20) Robert V. Sinnott, the Chief Executive Officer of Kayne Anderson Capital Advisors, L.P., serves as a director of California Resources Corporation (CRC). The Fund does not believe that it is an affiliate of CRC. (21) Floating rate second lien secured term loan. Security pays interest at a rate of LIBOR + 650 basis points with a 1.00% LIBOR floor (7.50%) as of August 31, 2015). (22) Floating rate second lien secured term loan. Security pays interest at a rate of LIBOR + 675 basis points with a 1.00% LIBOR floor (7.75%) as of August 31, 2015).

- (23) On August 27, 2015, the Fund entered in to an agreement with Halcón Resources Corporation (Halcón) to exchange \$10,500 principal amount of Halcón s outstanding 9.75% unsecured notes due 2020 for \$6,825 principal amount of new 13.00% third lien senior secured notes due 2022 (the New Notes). The Halcón notes held at August 31, 2015 were valued on an as-exchanged basis with the New Notes. The exchange was completed on September 10, 2015. The New Notes are restricted from sale pursuant to Rule 144A of the Securities Act of 1933, as amended.
- (24) Floating rate second lien secured term loan. Security pays interest at a rate of LIBOR + 650 basis points with a 1.00% LIBOR floor (7.50% as of August 31, 2015).
- (25) Floating rate second lien secured term loan. Security pays interest at a rate of LIBOR + 750 basis points with a 1.00% LIBOR floor (8.50% as of August 31, 2015).
- (26) Principal amount is 6,850 Canadian dollars.

From time to time, certain of the Fund s investments may be restricted as to resale. For instance, private investments that are not registered under the Securities Act of 1933, as amended (the Securities Act), cannot be offered for public sale in a non-exempt transaction without first being registered. In other cases, certain of the Fund s investments have restrictions such as lock-up agreements that preclude the Fund from offering these securities for public sale.

At August 31, 2015, the Fund held the following restricted investments:

Investment	Acquisition Date	Type of Restriction	l Prir	mber of Units, acipal (\$) a 000s)	Cost Basis (GAAP)	Fair Value	Fair Value Per Unit	Percent of Net Assets	Percent of Total Assets
Level 2 Investments									
Equity Investments									
Plains GP Holdings, L.P. ⁽¹⁾									
Partnership Interests	(2)	(3)		1,836	\$ 5,679	\$ 35,973	\$ 19.59	6.6%	4.0%
Senior Notes and Secured Term Loans ⁽⁴⁾									
American Eagle Energy Corporation	8/13/14	(5)	\$	4,800	4,759	1,080	n/a	0.2	0.1
American Energy-Woodford, LLC	9/11/14	(6)		1,050	1,389	504	n/a	0.1	0.1
Athabasca Oil Corporation	(2)	(5)		(7)	5,099	4,217	n/a	0.8	0.5
BlackBrush Oil & Gas, L.P.	(2)	(6)		13,300	13,178	10,939	n/a	2.0	1.2
Canbriam Energy Inc.	(2)	(6)		9,640	9,713	9,592	n/a	1.8	1.1
Chief Oil & Gas LLC	(2)	(6)		9,609	9,224	8,552	n/a	1.6	0.9
Comstock Resources, Inc.	(2)	(5)		5,000	5,004	4,037	n/a	0.7	0.4
Eclipse Resources Corporation	(2)	(5)		8,000	7,813	7,380	n/a	1.3	0.8
Energy & Exploration Partners, Inc.	12/22/14	(6)		992	748	769	n/a	0.1	0.1
Jonah Energy LLC	5/8/14	(6)		3,000	2,963	2,550	n/a	0.5	0.3
Jones Energy, Inc.	4/29/15	(5)		5,000	5,359	4,675	n/a	0.9	0.5
Jupiter Resources Inc.	9/11/14	(6)		10,000	9,615	6,300	n/a	1.1	0.7
Triangle USA Petroleum Corporation	7/15/14	(5)		800	800	484	n/a	0.1	0.1
Vantage Energy, LLC	(2)	(6)		8,885	8,839	8,130	n/a	1.5	0.9
Total					\$ 90,182	\$ 105,182		19.3%	11.7%
Level 3 Investments ⁽⁸⁾									
Capital Product Partners L.P.									
Class B Units	(2)	(5)		606	\$ 4,227	\$ 5,066	\$ 8.36	0.9%	0.6%
Total of all restricted investments					\$ 94,409	\$ 110,248		20.2%	12.3%

- (1) The Fund values its investment in Plains AAP, L.P. (PAA GP) on an as exchanged basis based on the public market value of Plains GP Holdings, L.P. (Plains GP).
- (2) Security was acquired at various dates during the nine months ended August 31, 2015 and/or in prior fiscal years.
- (3) The Fund s investment in PAA GP is exchangeable into shares of Plains GP on a one-for-one basis at the Fund s option. Upon exchange, the shares of Plains GP will be free of any restriction.

(4)	These securities have a fair market value determined by the mean of the bid and ask prices provided by an agent or a syndicate bank, a principal market maker, an independent pricing service or an independent broker. These securities have limited trading volume and are not listed on a national exchange.
(5)	Unregistered or restricted security of a publicly-traded company.
(6)	Unregistered security of a private company.
(7)	Principal amount is 6,850 Canadian dollars.
(8)	Securities are valued using inputs reflecting the Fund s own assumptions.

At August 31, 2015, the cost basis of investments for federal income tax purposes was \$808,235. At August 31, 2015, gross unrealized appreciation and depreciation of investments for federal income tax purposes were as follows:

Gross unrealized appreciation Gross unrealized depreciation	\$ 158,704 (123,051)
Net unrealized appreciation	\$ 35,653

The identified cost basis of federal tax purposes is estimated based on information available from the Fund s portfolio companies. In some cases, this information is very limited. Accordingly, the actual cost basis may prove higher or lower than the estimated cost basis included above.

As required by the Fair Value Measurement and Disclosures of the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC 820), the Fund has performed an analysis of all assets and liabilities measured at fair value to determine the significance and character of all inputs to their fair value determination.

The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into the following three broad categories.

Level 1 Valuations based on quoted unadjusted prices for identical instruments in active markets traded on a national exchange to which the Fund has access at the date of measurement.

Level 2 Valuations based on quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets. Level 2 inputs are those in markets for which there are few transactions, the prices are not current, little public information exists or instances where prices vary substantially over time or among brokered market makers.

Level 3 Model derived valuations in which one or more significant inputs or significant value drivers are unobservable. Unobservable inputs are those inputs that reflect the Fund s own assumptions that market participants would use to price the asset or liability based on the best available information.

The following table presents the Fund s assets and liabilities measured at fair value on a recurring basis at August 31, 2015, and the Fund presents these assets and liabilities by security type and description on its Schedule of Investments. Note that the valuation levels below are not necessarily an indication of the risk or liquidity associated with the underlying investment.

	Total	Quoted Prices in Active Markets (Level 1)		Active Prices with Other Markets Observable Inputs		Unobservable Inputs (Level 3)	
Assets at Fair Value							
Equity investments	\$ 743,553	\$	702,514	\$	35,973(1)	\$	5,066
Debt investments	100,334				100,334		
Total assets at fair value	\$ 843,887	\$	702,514	\$	136,307	\$	5,066
Liabilities at Fair Value							
Call option contracts written	\$ 254	\$		\$	254	\$	

(1) The Fund s investment in PAA GP is exchangeable into shares of Plains GP Holdings, L.P. (Plains GP) on a one-for-one basis at the Fund s option. Plains GP trades on the NYSE under the ticker PAGP . The Fund values its investment in PAA GP on an as exchanged basis based on the public market value of Plains GP and categorizes its investment as a Level 2 security for fair value reporting purposes.

For the nine months ended August 31, 2015, there were no transfers between Level 1 and Level 2.

The following table presents the Fund s assets measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the nine months ended August 31, 2015.

		Equity
	Inv	estments
Balance November 30, 2014	\$	52,527
Purchases		11,667
Issuances		161
Transfers out to Level 1 and 2		(58,997)
Realized gains (losses)		
Unrealized gains (losses), net		(292)
Balance August 31, 2015	\$	5,066

The \$292 of net unrealized losses relate to investments that were still held at August 31, 2015.

The purchases of \$11,667 relate to the Fund s investment in Arc Logistics Partners LP (ARCX) and Shell Midstream Partners, L.P. (SHLX) that were both made in May 2015. The issuance of \$161 relates to additional units received from ARCX.

The \$58,997 of transfers out relates to the Fund s investments in ARCX, SHLX, and Plains AAP, L.P. (PAA GP).

ARCX and SHLX became marketable during the third quarter of fiscal 2015 when the respective companies filed effective shelf registrations. PAA GP became marketable during the first quarter of fiscal 2015 when its 15-month lock-up expired.

As required by the Derivatives and Hedging Topic of the FASB Accounting Standards Codification (ASC 815), the following are the derivative instruments and hedging activities of the Fund.

The following table sets forth the fair value of the Fund s derivative instruments:

Derivatives Not Accounted for as		Fair Value as of
Hedging Instruments	Statement of Assets and Liabilities Location	August 31, 2015
Call options written	Call option contracts written	\$(254)

The following table sets forth the effect of the Fund s derivative instruments on the Fund s operations:

		For the Nine Months Ended	
		August 31, 2015	
		Net Realized	Change in
		Gains/(Losses) on	Unrealized
		Derivatives	Gains/(Losses) on
		Recognized	Derivatives
Derivatives Not Accounted for as	Location of Gains/(Losses) on	in	Recognized in
Hedging Instruments	Derivatives Recognized in Income	Income	Income
Call options written	Options	\$ 4,058	\$ (73)

The Fund s investments are concentrated in the energy sector. The focus of the Fund s portfolio within the energy sector may present more risks than if the Fund s portfolio were broadly diversified across numerous sectors of the economy. A downturn in the energy sector would have a larger impact on the Fund than on an investment company that does not focus on the energy sector. The performance of securities in the energy sector may lag the performance of other industries or the broader market as a whole. Additionally, to the extent that the Fund invests a relatively high percentage of its assets in the securities of a limited number of issuers, the Fund may be more susceptible than a more widely diversified investment company to any single economic, political or regulatory occurrence. At August 31, 2015, the Fund had the following investment concentrations:

	Percent of
	Long-Term
Category	Investments
Securities of energy companies	98.5%
Equity securities	88.1%
Debt securities	11.9%
Securities of MLPs ⁽¹⁾	33.6%
Largest single issuer	11.7%
Restricted securities	13.1%

(1) Securities of MLPs consist of entities that are structured as limited partnerships and limited liability companies that are publicly traded and are treated as partnerships for federal income tax purposes, and their affiliates.

Securities valuation policies and other investment related disclosures are hereby incorporated by reference to the Fund s semi-annual report previously filed with the Securities and Exchange Commission on form N-CSR on July 30, 2015 with a file number 811-22467.

Other information regarding the Fund is available in the Fund s most recent annual report. This information is also available on the Fund s website at www.kaynefunds.com; or on the website of the Securities and Exchange Commission at www.sec.gov.

Item 2. Controls and Procedures.

- (a) As of a date within 90 days of the filing date of this report, the principal executive officer and the principal financial officer concluded that the registrant s disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the 1940 Act)) were effective based on their evaluation of the disclosure controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13a-15(b) or 15d-15(b) under the Securities and Exchange Act of 1934, as amended.
- (b) There were no changes in the registrant s internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the registrant s last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant s internal control over financial reporting.

Item 3. Exhibits.

The certifications for the principal executive officer and the principal financial officer of the registrant as required by Rule 30a-2(a) under the 1940 Act are filed as exhibits to this report.

SIGNATURES

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

KAYNE ANDERSON MIDSTREAM/ENERGY FUND, INC

/s/ Kevin S. McCarthy
Name: Kevin S. McCarthy

itle: Chairman of the Board of Directors,

President and Chief Executive Officer

Date: October 29, 2015

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

KAYNE ANDERSON MIDSTREAM/ENERGY FUND, INC.

/s/ Kevin S. McCarthy
Name: Kevin S. McCarthy

Title: Chairman of the Board of Directors,

President and Chief Executive Officer

Date: October 29, 2015

/s/ Terry A. Hart Name: Terry A. Hart

Title: Chief Financial Officer and Treasurer

Date: October 29, 2015