

KAYNE RICHARD A  
Form 4  
November 30, 2010

**FORM 4** UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
KAYNE RICHARD A

2. Issuer Name and Ticker or Trading Symbol  
KAYNE ANDERSON  
MIDSTREAM/ENERGY FUND,  
INC. [KMF]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

\_\_\_\_ Director  
\_\_\_\_ Officer (give title below)  Other (specify below)  
See Exhibit 99.1

(Last) (First) (Middle)

1800 AVENUE OF THE STARS,  
SECOND FLOOR

(Street)

3. Date of Earliest Transaction  
(Month/Day/Year)  
11/30/2010

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 Form filed by One Reporting Person  
 Form filed by More than One Reporting Person

LOS ANGELES, CA 90067

(City) (State) (Zip)

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)
			Code	V	Amount	(D)	Price
Common Stock par value \$0.001	11/30/2010		P		40,000	A	\$ 25
					44,000	(1)	D

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

**Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.**

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(9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Owned Beneficially (Instr. 5)
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares

## Reporting Owners

### Reporting Owner Name / Address

### Relationships

Director      10% Owner      Officer      Other

KAYNE RICHARD A  
1800 AVENUE OF THE STARS, SECOND FLOOR  
LOS ANGELES, CA 90067

See  
Exhibit  
99.1

## Signatures

/s/ David J. Shladovsky by Power of Attorney      11/30/2010

\_\_Signature of Reporting Person

Date

## Explanation of Responses:

- \* If the form is filed by more than one reporting person, see Instruction 4(b)(v).
  - \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Includes 4,000 shares that Mr. Kayne owns indirectly through his interest in KA Fund Advisors LLC

### Remarks:

Exhibit 99.1 Relationship of Reporting Person to Issuer

### EXHIBIT 99.1: RELATIONSHIP OF REPORTING PERSON TO ISSUER

Mr. Kayne is an affiliate of KA Fund Advisors LLC, the Investment Advisor of the Issuer.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.