

Spectra Energy Corp.  
Form 4  
May 14, 2010

**FORM 4**

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

OMB APPROVAL

OMB Number: 3235-0287  
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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 \*  
**HENDRIX DENNIS R**

(Last) (First) (Middle)

5400 WESTHEIMER COURT

(Street)

HOUSTON, TX 77056-5310

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol  
**Spectra Energy Corp. [SE]**

3. Date of Earliest Transaction (Month/Day/Year)  
**05/12/2010**

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director  10% Owner  
 Officer (give title below)  Other (specify below)

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

**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 Indirect Beneficial Ownership (Instr. 4)
Common Stock	05/12/2010		P	(A) or (D) Code V Amount (D) Price 5,000 (1) A \$ 22.6395	5,000	I	Held by Trustee
Common Stock					166,565	D	
Common Stock					80,000	I	By Grat (2) (3) (4) (5) (6) (7) (8)

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

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SEC 1474  
(9-02)

number.

**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 Beneficially Owned Following Reported Transaction (Instr. 6)
				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
HENDRIX DENNIS R 5400 WESTHEIMER COURT HOUSTON, TX 77056-5310		X		

## Signatures

/s/By Beverly Fite as Attorney-in-Fact for Dennis R. Hendrix  
 \*\*Signature of Reporting Person  
 05/14/2010  
 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) Held in a retirement account by broker.
- (2) 20,000 shares held in GRAT with reporting person's wife as Trustee and 20,000 shares held in GRAT with reporting person as Trustee.
- (3) 30,000 shares held in GRAT with reporting person's wife as Trustee and 30,000 shares held in GRAT with reporting person as Trustee.
- (4) 36,000 shares held in GRAT with reporting person's wife as Trustee and 36,000 shares held in GRAT with reporting person as Trustee.
- (5) 38,000 shares held in GRAT with reporting person's wife as Trustee and 38,000 shares held in GRAT with reporting person as Trustee.
- (6) 40,000 shares held in GRAT with reporting person's wife as Trustee and 40,000 shares held in GRAT with reporting person as Trustee.
- (7) The Reporting Person is Trustee.
- (8) The Reporting Person's wife is Trustee of the Trust.

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.