

Arensdorf John R.  
Form 4  
May 25, 2012

**FORM 4**

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

OMB APPROVAL

OMB Number: 3235-0287  
Expires: January 31, 2015  
Estimated average burden hours per response... 0.5

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 \*  
Arensdorf John R.

(Last) (First) (Middle)  
5400 WESTHEIMER COURT  
(Street)

HOUSTON, TX 77056

(City) (State) (Zip)

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

3. Date of Earliest Transaction  
(Month/Day/Year)  
05/25/2012

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)  
Chief Communications Officer

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) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|---|
|                                 |                                      |  | Code                           | V   | Amount  | (A) or (D)   | Price   |
| Common Stock                    | 05/25/2012                           |  | M                              |   | 250   | A  | \$ 28.9333  |
| Common Stock                    | 05/25/2012                           |  | M                              |   | 2,950   | A  | \$ 28.9333  |
| Common Stock                    |                                      |  |                                |   |   |  | 192   |
|                                 |                                      |  |                                |   |   | I  | By Wife   |

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**

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) |              |                            |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|--------------|----------------------------|
|  |  |                                      |  | Code                           | V (A) (D)   | Date Exercisable   | Expiration Date   | Title        | Amount or Number of Shares |
| Employee Stock Option (Right to Buy)       | \$ 14.37   | 05/25/2012                           |  | M                              | 250   | 01/28/2003   | 01/28/2013  | Common Stock | 250                        |
| Employee Stock Option (Right to Buy)       | \$ 11.86   | 05/25/2012                           |  | M                              | 2,950   | 02/25/2003   | 02/25/2013  | Common Stock | 2,950                      |

## Reporting Owners

| Reporting Owner Name / Address                                  | Relationships |           |                              |       |
|---|---------------|-----------|------------------------------|-------|
|   | Director      | 10% Owner | Officer                      | Other |
| Arensdorf John R.<br>5400 WESTHEIMER COURT<br>HOUSTON, TX 77056 |               |           | Chief Communications Officer |       |

## Signatures

/s/Emily L. Strait as Attorney-in-Fact for John R. Arensdorf

05/25/2012

\_\_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 10,304 held by Trustee, Retirement Savings Plan.

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.