

Arensdorf John R.
Form 4
February 23, 2011

FORM 4

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

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

OMB APPROVAL

OMB
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(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)

02/21/2011

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

5. Relationship of Reporting Person(s) to
Issuer

(Check all applicable)

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

Chief Communications Officer

6. Individual or Joint/Group Filing(Check
Applicable Line)
____X____ 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 Ownership (Instr. 4)
Common Stock	02/21/2011		M	4,160 A	\$ 26.25	21,945	D ⁽¹⁾
Common Stock	02/21/2011		F	1,101 D	\$ 26.25	20,844	D ⁽¹⁾
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
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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)
				Code V (A) (D)		Date Exercisable Expiration Date	Title Amount or Number of Shares
Performance Shares Grant Feb 2008	(2)	02/21/2011		M	4,160 (5)	02/26/2011 (4) (3)	Common Stock 4,160

Reporting Owners

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

Signatures

/s/ Emily L. Strait as Attorney-in-Fact for Ms. Ables 02/23/2011

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.
- (2) Converts to Common Stock on a 1-for-1 basis
- (3) Expiration date not applicable.
- (4) Grant Cliff vests 3 years from date of Grant.
- (5) Performance award is greater than original target.

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.