Fiedorek Robert Mark

Form 4

February 24, 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

(Print or Type Responses)

| 1. Name and Address of Reporting Person [*]
 Fiedorek Robert Mark

 (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 _____ Other (specify below)   below)
      Group VP SE Transmission/Stor

 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 Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	02/21/2011		M		8,800	A	$26.25	46,921	D [(4)]	
Common Stock	02/21/2011		F		2,328	D	$26.25	44,593	D [(4)]	
Common Stock								4,000	I	By Son

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

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)	
									Date Exercisable	Expiration Date	Title	Amount or Number of Shares
				Code	V	(A)	(D)					
Performance Shares Grant Feb 2008	(1)	02/21/2011		M		8,800			02/26/2011(3)	(2)	Common Stock	8,800

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Fiedorek Robert Mark 5400 WESTHEIMER COURT HOUSTON, TX 77056			Group VP SE Transmission/Stor	

Signatures

/s/ Allison McHenry as Attorney-in-Fact for R. Mark Fiedorek	02/24/2011
**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)   Converts to Common Stock on a 1-to-1 basis.

(2)   Expiration date not applicable

(3)   Grant cliff vests 3 years from date of grant.

(4)   Includes 24,009 held by Trustee in the 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.