

Martin Susan H.
Form 4
May 14, 2012

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

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(Print or Type Responses)

1. Name and Address of Reporting Person *
Martin Susan H.

2. Issuer Name **and** Ticker or Trading
Symbol
WISCONSIN ENERGY CORP
[WEC]

5. Relationship of Reporting Person(s) to
Issuer

(Check all applicable)

(Last) (First) (Middle)
231 WEST MICHIGAN STREET
(Street)

3. Date of Earliest Transaction
(Month/Day/Year)
05/10/2012

____ Director ____ 10% Owner
____X____ Officer (give title ____ Other (specify
below) below)
Executive VP & General Counsel

MILWAUKEE, WI 53203

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

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

(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)
Common Stock	05/10/2012		M	3,348 A	\$ 5,357.8479 19.75 (2)	D	
Common Stock	05/10/2012		S	3,348 (1) D	\$ 2,009.8479 37 (2)	D	
Common Stock					3,020.913 (3)	I	ERSP

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

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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)	8.
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Stock Option (right to buy)	\$ 19.75	05/10/2012		M	3,348	01/03/2009	01/03/2016	Common Stock	3,348

Reporting Owners

Reporting Owner Name / Address

Relationships

Director 10% Owner Officer Other

Martin Susan H.
231 WEST MICHIGAN STREET
MILWAUKEE, WI 53203

Executive VP & General Counsel

Signatures

/s/ Joshua M. Erickson, as
Attorney-in-Fact

05/14/2012

__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) This transaction was effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on February 9, 2012.
- (2) Includes shares acquired pursuant to a dividend reinvestment feature of Wisconsin Energy Corporation's Stock Plus Investment Plan in transactions exempt from Section 16 pursuant to Rule 16a-11.
Includes shares acquired under Wisconsin Energy Corporation's Employee Retirement Savings Plan (ERSP) in transactions exempt from Section 16(b) pursuant to Rule 16b-3(c) and exempt from reporting pursuant to Rule 16a-3(f)(1)(i)(B). The number of shares in the ERSP attributable to any one participant varies with the price of the Common Stock. The information in this report is based on a plan statement dated as of April 30, 2012.
- (3)

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.