

ALLIANT ENERGY CORP
 Form 4
 February 21, 2007

FORM 4

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

OMB APPROVAL

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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 *
 SWAN BARBARA J

(Last) (First) (Middle)
 PO BOX 2568
 (Street)

MADISON, WI 53701

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
 ALLIANT ENERGY CORP [LNT]

3. Date of Earliest Transaction
 (Month/Day/Year)
 02/16/2007

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)
 EXECUTIVE VICE PRESIDENT

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 | | | | | 2,000 | D | |
| COMMON DRIP | | | | | 4,629.652 | D | |
| 401(k) | | | | | 6,014.4318 | D | |
| COMMON (RESTRICTED) | 02/16/2007 | | J ⁽¹⁾ | 73.628 A | \$ 42.4114 | 9,908.513 | D |

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

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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 Underlying (Instr. 3 and 4) | | | |
|--|--|--------------------------------------|--|--------------------------------|---|--|--|---------------------------|---------------------------|--------------|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title |
| DEFERRED COMMON STOCK | \$ 0 | 02/16/2007 | | J ⁽²⁾ | 177.0318 | 08/08/1988 ⁽³⁾ | 08/08/1988 ⁽³⁾ | 08/08/1988 ⁽³⁾ | 08/08/1988 ⁽³⁾ | COMMON STOCK |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|--------------------------|-------|
| | Director | 10% Owner | Officer | Other |
| SWAN BARBARA J PO BOX 2568 MADISON, WI 53701 | | | EXECUTIVE VICE PRESIDENT | |

Signatures

F. J. Buri as
POA for 02/21/2007

**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) The reporting person acquired 73.628 shares under the company's dividend reinvestment plan, pursuant to a dividend reinvestment transaction exempt from Section 16 under Rule 16a-11.
- (2) The reporting person acquired 177.0318 shares under the company's dividend reinvestment plan, pursuant to a dividend reinvestment transaction exempt from Section 16 under Rule 16a-11.
- (3) Units are to be settled upon reporting person's retirement.

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.