

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL | |
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|---|---|---|
| 1. Name and Address of Reporting Person* <u>DOWNEY WILLIAM H</u> (Last) (First) (Middle) 1201 WALNUT (Street) KANSAS CITY MO 64106 (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>GREAT PLAINS ENERGY [GXP]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title below) Other (specify below) X President & COO |
| | 3. Date of Earliest Transaction (Month/Day/Year) 02/07/2006 | |
| 4. If Amendment, Date of Original Filed (Month/Day/Year) | | |

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 ⁽¹⁾ | | | | | | | | 1,009 ⁽¹⁾ | I | 401-k |
| Common Stock ⁽²⁾ | 02/07/2006 | 02/07/2006 | M | | 3,051 | A | (2) | 43,659 ⁽⁴⁾ | D | |
| Common Stock ⁽³⁾ | 02/07/2006 | 02/07/2006 | A | | 4,587 | A | \$0 | 48,246 ⁽⁵⁾ | D | |

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 Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|--|--|---|--|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | | | | | |
| Stock Options (Right to Buy) ⁽⁶⁾ | (6) | | | | | | | (6) | (6) | Common Stock | (6) | 45,249 ⁽⁶⁾ | D | |
| Performance Shares ⁽²⁾ | (2) | 02/07/2006 | 02/07/2006 | M | | 3,051 | | (2) | (2) | Common Stock | 3,051 | (2) | 0 | D |

Explanation of Responses:

- Amount includes 256 shares acquired from February 1, 2005 through January 31, 2006 through automatic payroll deduction/investment and participation in the Company's 401-k Plan.
- The reporting person was granted 3,903 performance shares. The amount payable ranged from 0 to 200% based on performance of the Company. Reporting person was granted 3,051 shares of common stock based on Company performance.
- Award of restricted stock pursuant to the Company's Long-Term Incentive Plan.
- Amount includes 1,438 shares acquired from February 1, 2005 through January 31, 2006 through participation in the Company's Dividend Reinvestment and Direct Stock Purchase Plan.
- Amount includes/reflects 24,487 restricted shares.
- Stock options granted in tandem with stock appreciation rights exercisable automatically in the event of a change in control as defined by the Long-Term Incentive Plan under which they are granted. Options may be exercised with cash or previously-owned shares of Common Stock.

Remarks:

/s/William H. Downey 02/09/2006
 ** Signature of Reporting Person Date

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

* 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).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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 Number.