FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| l | OMB APPRO | DVAL | | | | |
|---|------------------------|-----------|--|--|--|--|
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| l | hours per response: | 0.5 | | | | |

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

| 1. Name and Address of Reporting Person* DOWNEY WILLIAM H (Last) (First) (Middle) C/O GREAT PLAINS ENERGY INCORPORATED 1200 MAIN STREET (Street) KANSAS CITY MO 64105 | | | | | | 2. Issuer Name and Ticker or Trading Symbol GREAT PLAINS ENERGY INC [GXP] 3. Date of Earliest Transaction (Month/Day/Year) 05/20/2011 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | (Check X X A X A A A A A A A A A A A A A A A | X Officer (give title Other (specify below) Executive Vice Chairman 6. Individual or Joint/Group Filing (Check Applicable | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------|-------|----------------------------------------------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------|------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|--|
| (City) | | State) | (Zip) | | /ative | Sac | uritio | s Ac | auirea | ı Di | enoced o | of or I | Ronof | cially | Οννη | | | |
| Table I - Non-Deriva 1. Title of Security (Instr. 3) 2. Transactic Date (Month/Day/ | | | | | | on 2A. Deemed Execution Date, | | 3. 4. Securitie | | es Acquired (A) or Of (D) (Instr. 3, 4 ar | | r and 5) | 5. Am Secur Benef Owne Repor Trans | ount of ities icially d Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | |
| Common | Stock | | | | | | | | | \perp | | 3 | ,466 ⁽¹⁾ | I | 401(k) | | | |
| Common | 2011 | 011 | | F | | 17,518 ⁽²⁾ | | \$2 | \$20.95(2) | | 3,673 ⁽³⁾ | 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) | ative Conversion Date Execution Date, ity or Exercise (Month/Day/Year) if any | | | saction e (Instr. 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) Date Expiration Date Expiration Date | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) Amoun or Numbe of Title Shares | | Der Sec (Ins | Price of ivative curity str. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | | | |

Explanation of Responses:

- 1. Amount includes 226 shares acquired between March 1, 2011, and May 20, 2011, from automatic payroll deduction/investment and participation in the Company's 401(k) Plan.
- 2. Relinquished to the Company for withholding taxes incident to the recognition of income taxes on restricted stock grants on May 20, 2011.
- 3. Amount includes 430 shares acquired between March 1, 2011, and May 20, 2011, through participation in the Company's Dividend Reinvestment and Direct Stock Purchase Plan.

Remarks:

<u>William H. Downey</u> <u>05/24/2011</u>

** 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.