obligations may Instruction 1(b).

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| Check this box if no longer subject to | STA |
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| Section 16. Form 4 or Form 5 | |
| obligations may continue. See | |

TEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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

| Name and Address of Reporting Person* CHESSER MICHAEL J | | | | 2. Issuer Name and Ticker or Trading Symbol GREAT PLAINS ENERGY INC [GXP] | | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | | | | | | |
|---|--|--|-----------------|--|---|---|--|----------|--------------------------------------|--|---|-------|---|-------------|---|----------------------------|---|--|---|--|--|
| CHESS | ER MIC | HAEL J | | | 101 | L LI | пп | 7 111 10 | <u> </u> | | 1110 | U/A | .] | | X | Direc | tor | | 10% C | Owner | |
| | AT PLAIN | IS ENERGY INC | Middle) | ATED | | 3. Date of Earliest Trans 09/26/2012 | | | | action (Month/Day/Year) | | | | | | Office below | er (give title v) | | Other (specify below) | | |
| 1200 MA | IN STREE | Т | | | 4. If | If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable | | | | | | |
| | S CITY M | | 54105 | | | | | | | | | | | Li | ine) X | | n filed by One n filed by Monon | • | • | | |
| (City) | (5) | ate) (. | Zip) | | | | | | | | | | | | | | | | | | |
| | | Tabl | e I - Nor | -Deriv | ative | Se | curitie | s Ac | quired, | Dis | posed o | f, or | Bene | eficia | ally C | wne | ed | | | | |
| 1. Title of Security (Instr. 3) 2. Transa Date (Month/D | | | | | Execution | | n Date, | Code (| Transaction Disposed Code (Instr. 5) | | ities Acquired (A) d Of (D) (Instr. 3, | | | 4 and Secui | | cially I Following | Form: | nership Direct Indirect str. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | |
| | | | | | | | | | Code | v | Amount | (| A) or D) | Price | . т | ransa | ction(s) 3 and 4) | | | (iiisti. 4) | |
| Common Stock 09 | | | | 09/20 | 9/26/2012 | | | | A | | 616(1 |) | A | \$0 | | 215,515(2) | | | D | | |
| Common Stock | | | | | | | | | | | | | | | | 3,018 ⁽³⁾ | | I | 401(k) | | |
| | 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) | Execution Date, | | 4. Transaction Code (Instr. 8) | | of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | Expiratio (Month/D | Date Exercisable and Expiration Date Month/Day/Year) Date Expiration Date | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) Amoun or Numbe of | | | e of ative ity 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Ov Fo Di or (I) | wnership orm: rect (D) Indirect (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |

Explanation of Responses:

- 1. Director Shares acquired under the Long-Term Incentive Plan.
- 2. Amount includes 6 shares acquired between June 27, 2012, and September 26, 2012, through participation in the Company's Dividend Reinvestment and Direct Stock Purchase Plan.
- 3. Amount includes 29 shares acquired between June 27, 2012, and September 26, 2012, from automatic payroll deduction/investment and participation in the Company's 401(k) Plan.

Executed on behalf of Michael

J. Chesser by Jaileah X. 09/27/2012

Huddleston, attorney-in-fact

** 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.