

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 | |
|--|-----------|
| OMB Number: | 3235-0287 |
| Estimated average burden hours per response: | 0.5 |

| | | | | | | | | |
|---|---------|----------|---|--|--|---|--|--|
| 1. Name and Address of Reporting Person* <u>DESTEFANO JOHN J</u> | | | 2. Issuer Name and Ticker or Trading Symbol <u>GREAT PLAINS ENERGY INC [GXP]</u> | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title below) Other (specify below) <u>Pres of GPP (GPE Subsidiary)</u> | | |
| (Last) | (First) | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) <u>08/23/2004</u> | | | 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | |
| <u>1201 WALNUT</u> | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | |
| (Street) <u>KANSAS CITY MO 64106</u> | | | | | | | | |
| (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 Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|---------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Stock ⁽¹⁾ | 08/23/2004 ⁽¹⁾ | (1) | P | V | 363 ⁽¹⁾ | A | (1) | 13,343 ⁽¹⁾ | I | 401-k |
| Common Stock | 08/23/2004 | 08/24/2004 | S | | 1,596 | D | \$29.26 | 11,747 ⁽¹⁾ | I | 401-k |
| Common Stock ⁽²⁾ | 08/23/2004 ⁽²⁾ | (2) | P | V | 56 ⁽²⁾ | A | (2) | 2,217 ⁽²⁾⁽³⁾ | D | |
| Common Stock | 08/24/2004 | 08/24/2004 | M | | 6,000 | A | \$25.55 | 8,217 ⁽³⁾ | D | |
| Common Stock | 08/24/2004 | 08/24/2004 | S | | 2,000 | D | \$29.3 | 6,217 ⁽³⁾ | D | |
| Common Stock | 08/24/2004 | 08/24/2004 | S | | 1,600 | D | \$29.29 | 4,617 ⁽³⁾ | D | |
| Common Stock | 08/24/2004 | 08/24/2004 | S | | 400 | D | \$29.28 | 4,217 ⁽³⁾ | D | |
| Common Stock | 08/24/2004 | 08/24/2004 | S | | 1,300 | D | \$29.35 | 2,917 ⁽³⁾ | D | |
| Common Stock | 08/24/2004 | 08/24/2004 | S | | 700 | D | \$29.34 | 2,217 ⁽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) | 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 | | | | | | Title |
| Stock Options (Right to Buy) ⁽⁴⁾ | \$25.55 | 08/24/2004 | 08/24/2004 | M ⁽⁴⁾ | | | 6,000 | 02/06/2004 | 02/06/2011 | Common Stock ⁽⁴⁾ | 6,000 ⁽⁴⁾ | \$25.55 | 7,983 ⁽⁴⁾ | D | |
| Performance Shares ⁽⁵⁾ | (5) | | | | | | | (5) | (5) | Common Stock ⁽⁵⁾ | (5) | | 1,474 ⁽⁵⁾ | D | |

Explanation of Responses:

- Shares acquired during the period January-August 2004 through automatic payroll deduction/investment and participation in the Company's 401-k Plan.
- Shares acquired during the period January-August 2004 through automatic reinvestment of quarterly dividends through participation in the Company's Dividend Reinvestment and Direct Stock Purchase Plan.
- Amount includes/reflects 2,000 shares of restricted stock.
- 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 were granted. Options may be exercised with cash or previously-owned shares of Common Stock.
- Performance Shares awarded under the Long-Term Incentive Plan. Payment to which Grantee shall be entitled at the end of 2006 will be based on the performance of the Company and paid in Common Stock in an amount ranging from zero (0) to 200 percent (200%) of the performance shares awarded.

Remarks:

/s/John J. DeStefano 08/25/2004

** 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.