

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 Officer (give title below) <input checked="" type="checkbox"/> Other (specify below) <u>Pres of GPP (GPE subsidiary)</u>		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <u>08/23/2005</u>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> 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⁾	08/23/2005 ⁽¹⁾	(1)	P	V	320	A	(1)	12,390	I	401-k
Common Stock ⁽²⁾	08/23/2005 ⁽²⁾	(2)	P	V	27	A	(2)	291	D	
Common Stock	08/23/2005	08/23/2005	S		291	D	\$30.9624	0	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) ⁽³⁾	\$24.9							02/05/2005	02/05/2012	Common Stock ⁽³⁾	(3)	1,983	D	
Performance Shares ⁽⁴⁾	(4)							(4)	(4)	Common Stock	1,474 ⁽⁴⁾	1,474	D	
Performance Shares ⁽⁵⁾	(5)							(5)	(5)	Common Stock	2,247 ⁽⁵⁾	3,721	D	
Performance Shares ⁽⁶⁾	(6)							(6)	(6)	Common Stock	2,247 ⁽⁶⁾	5,968	D	

Explanation of Responses:

- Shares acquired since last report through August 22, 2005 through automatic payroll deduction/investment and participation in the Company's 401-k Plan.
- Shares acquired at various times and prices from automatic reinvestment of quarterly dividends through participation in the Company's Dividend Reinvestment and Direct Stock Purchase Plan.
- Options were 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 previous-owned shares of Common Stock.
- Award of Performance Shares awarded under the Long-Term Incentive Plan. Payment to which Grantee shall be entitled at the end of 2005 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.
- Award of 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.
- Award of Performance Shares awarded under the Long-Term Incentive Plan. Payment to which Grantee shall be entitled at the end of 2007 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 08/24/2005
** 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.