FORM 4

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

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

n, D.C. 20549	OMB APPROVAL

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*  Humphrey Heather A						2. Issuer Name and Ticker or Trading Symbol GREAT PLAINS ENERGY INC [ GXP ]									Check all a			Person(s) to Issuer  10% Owner  Other (specify	
(Last) (First) (Middle) C/O GREAT PLAINS ENERGY INCORPORATED 1200 MAIN STREET						3. Date of Earliest Transaction (Month/Day/Year) 03/01/2011									^ be				
(Street) KANSAS	CITY M	Ο 6	54105 Zip)		4. If	4. If Amendment, Date of Original Filed (Month/Day/Year)									Individual or Joint/Group Filing (Check Applicable ne)  X Form filed by One Reporting Person Form filed by More than One Reporting Person				
	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3)  2. Transa Date (Month/D					Execution Date,		Code (	Transaction Disposed Code (Instr. 5)					nd Seci Ben Owr	mount of urities eficially led Following	Forr (D)	ownership m: Direct or Indirect Instr. 4)	7. Nature of Indirect Beneficial Ownership		
									Code	v	Amount		(A) or (D)	Price	Tran	Reported Transaction(s) (Instr. 3 and 4)			(Instr. 4)
Common Stock 03/01						03/01/2011					6,672	(1)	A	\$0	(1)	9,227(2)		D	
	Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																		
Derivative C Security C (Instr. 3) F	ative rity or Exercise Price of Derivative Security Security Security Execution Date (Month/Day/Year) Execution Date, if any (Month/Day/Year) 8		Code ( 8)	Transaction of Code (Instr. B) Si		ative rities ired sed . 3, 4	6. Date Expiration (Month/D	n Date		7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)		ount nber	8. Price of Derivative Security (Instr. 5)		y	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)		

## **Explanation of Responses:**

- 1. Award of restricted stock pursuant to the Company's Long-Term Incentive Plan.
- 2. Amount includes 27 shares acquired between October 26, 2010 and March 1, 2011, through participation in the Company's Dividend Reinvestment and Direct Stock Purchase Plan.

## Remarks:

Executed on behalf of Heather
A. Humphrey by Mark G. 03/03/2011
English, 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.