

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>CHESSER MICHAEL J</u> (Last) (First) (Middle) <u>C/O GREAT PLAINS ENERGY INCORPORATED</u> <u>1200 MAIN STREET</u> (Street) <u>KANSAS CITY MO 64105</u> (City) (State) (Zip)	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) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Chief Executive Officer</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>02/10/2012</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

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	07/27/2011		G	V	200	D	\$0	0	I	Wife
Common Stock	07/27/2011		G	V	200	A	\$0	257,907	D	
Common Stock	02/10/2012		F		21,690 ⁽¹⁾	D	\$20.77	240,495 ⁽²⁾	D	
Common Stock								2,707 ⁽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)	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)
						Date Exercisable	Expiration Date					

Explanation of Responses:

- Relinquished to the Company for withholding taxes incident to vesting of restricted stock on February 10, 2012.
- Amount includes 4,278 shares acquired between March 1, 2011 and February 10, 2012, through participation in the Company's Dividend Reinvestment and Direct Stock Purchase Plan.
- Amount includes 422 shares acquired between March 1, 2011 and February 10, 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. Huddleston, attorney-in-fact 02/14/2012

** 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.