

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>NELSON WILLIAM C</u> (Last) (First) (Middle) <u>4801 MAIN STREET, SUITE 500</u> (Street) <u>KANSAS CITY MO 64112</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 Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <u>01/22/2007</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

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	01/22/2007		P		1,587 ⁽¹⁾	A	\$31.49	7,443 ⁽²⁾	D	
Common Stock								62	I	Wife

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:

- Shares acquired with optional cash payment through participation in the Company's Dividend Reinvestment and Direct Stock Purchase Plan.
- Amount includes 151 shares acquired between June 23, 2006 and January 22, 2007 through participation in the Company's Dividend Reinvestment and Direct Stock Purchase Plan.

Remarks:

Executed on behalf of William C. Nelson, by Mark G. English, 01/24/2007 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.

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, William C. Nelson, does hereby constitute and appoint Barbara B. Curry or Mark G. English, his/her true and lawful attorney and agent, with full power and authority to execute in the name and on behalf of the undersigned individual a Report on Form 3, Form 4 or Form 5, and all amendments thereto; hereby granting unto such attorney and agent full power of substitution and revocation in the premises; and hereby ratifying and confirming all that such attorney and agent may do or cause to be done by virtue of these presents.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 24th day of January, 2007.

By: /s/ William C. Nelson

William C. Nelson

STATE OF MISSOURI

)
) ss

COUNTY OF JACKSON

)

On this 24th day of January, 2007, before me the undersigned, a Notary Public, personally appeared William C. Nelson, to be known to be the person described in and who executed the foregoing instrument, and who, being by me first duly sworn, acknowledged that he executed the same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

By: /s/ Renee Ray

Notary Public
Jackson County, Missouri

My Commission Expires:

August 30, 2010