

**INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES**

| OMB APPROVAL                                 |           |
|--|-----------|
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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

|   |  |   |  |
|---|--|---|--|
| 1. Name and Address of Reporting Person*<br><u>Humphrey Heather A</u><br><br>(Last) (First) (Middle)<br><u>C/O GREAT PLAINS ENERGY</u><br><u>INCORPORATED</u><br><u>1200 MAIN STREET</u><br><br>(Street)<br><u>KANSAS</u> <u>MO</u> <u>64105</u><br><u>CITY</u><br><br>(City) (State) (Zip) | 2. Date of Event Requiring Statement (Month/Day/Year)<br><u>10/26/2010</u> | 3. Issuer Name and Ticker or Trading Symbol<br><u>GREAT PLAINS ENERGY INC [ GXP ]</u>   |  |
|   |  | 4. Relationship of Reporting Person(s) to Issuer (Check all applicable)<br>Director _____ 10% Owner _____<br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><u>General Counsel and VP - HR</u> | 5. If Amendment, Date of Original Filed (Month/Day/Year)<br><br>6. Individual or Joint/Group Filing (Check Applicable Line)<br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br><input type="checkbox"/> Form filed by More than One Reporting Person |

**Table I - Non-Derivative Securities Beneficially Owned**

| 1. Title of Security (Instr. 4) | 2. Amount of Securities Beneficially Owned (Instr. 4) | 3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 4. Nature of Indirect Beneficial Ownership (Instr. 5) |
|---------------------------------|---|--|---|
| <u>Common Stock</u>             | <u>2,528</u>  | <u>D</u>   |   |

**Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivative Security (Instr. 4) | 2. Date Exercisable and Expiration Date (Month/Day/Year) |                 | 3. Title and Amount of Securities Underlying Derivative Security (Instr. 4) |                            | 4. Conversion or Exercise Price of Derivative Security | 5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 6. Nature of Indirect Beneficial Ownership (Instr. 5) |
|--|--|-----------------|---|----------------------------|--|--|---|
|  | Date Exercisable   | Expiration Date | Title   | Amount or Number of Shares |  |  |   |
|  |  |                 |   |                            |  |  |   |

Explanation of Responses:

Remarks:

Executed on behalf of Heather A. Humphrey by Jaileah X. Huddleston, attorney-in-fact 11/04/2010

\*\* 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 5 (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 by these presents, that the undersigned hereby constitutes and appoints each of Ellen E. Fairchild, Mark G. English, and Jaileah X. Huddleston, and any individual who hereafter holds the offices of Secretary or Assistant Secretary of Great Plains Energy Incorporated (the "Company"), or any of them signing singly, and with full power of substitution, the undersigned's true and lawful attorney-in-fact to:

- (1) prepare, execute in the undersigned's name and on the undersigned's behalf, and submit to the U.S. Securities and Exchange Commission (the "SEC") a Form ID, including amendments thereto, and any other documents necessary or appropriate to obtain codes and passwords enabling the undersigned to make electronic filings with the SEC of reports required by Section 16(a) of the Securities Exchange Act of 1934 or any rule or regulation of the SEC;
- (2) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of the Company, Forms 3, 4, and 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder;
- (3) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4, or 5, complete and execute any amendment or amendments thereto, and timely file such form with the SEC and any stock exchange or similar authority; and
- (4) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 29th day of October 2010.

/s/ Heather A. Humphrey

Heather A. Humphrey

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STATE OF )  
MISSOURI )  
 ) ss.  
COUNTY OF )  
JACKSON )

On this 29th day of October, in the year 2010, before me, Barbara P. Fillinger, a Notary Public in and for said state, personally appeared Heather A. Humphrey, known to me to be the person who executed the within Power of Attorney, and acknowledged to me that she executed the same for the purposes therein stated.

BARBARA P. FILLINGER  
Notary Public – Notary Seal  
Comm. Number 08412713  
STATE OF MISSOURI  
Jackson County  
My Commission Expires June 6, 2012

/s/ Barbara P. Fillinger  
Notary Public



