

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

Current Report

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): February 9, 2010

Commission File Number	Registrant, State of Incorporation, Address and Telephone Number	I.R.S. Employer Identification Number
001-32206	GREAT PLAINS ENERGY INCORPORATED (A Missouri Corporation) 1201 Walnut Street Kansas City, Missouri 64106 (816) 556-2200 NOT APPLICABLE (Former name or former address, if changed since last report)	43-1916803

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.02 **Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers**

Compensation actions

On February 9, 2010, the independent members of the Great Plains Energy Board, upon recommendations of its Compensation and Development Committee, approved time-based restricted stock awards and performance share awards for the performance period ending December 31, 2012 to all officers of Great Plains Energy and its wholly-owned subsidiary, Kansas City Power & Light Company, including the following named executive officers in Great Plains Energy's 2009 proxy statement: Mr. Chesser, Chairman of the Board and Chief Executive Officer, Mr. Downey, President and Chief Operating Officer, Mr. Bassham, Executive Vice President – Finance and Strategic Development and Chief Financial Officer, and Mr. Marshall, Executive Vice President – Utility Operations. These awards will be made pursuant to the Long-Term Incentive Plan ("LTIP") and will be issued on March 2, 2010.

The number of shares of restricted stock to be issued on March 2, 2010 will be calculated by dividing the following dollar amounts by the closing price of Great Plains Energy stock on that date: Mr. Chesser, \$400,000; Mr. Downey, \$191,250; Mr. Bassham, \$107,500; and Mr. Marshall, \$100,000. The restricted stock grants will vest on March 5, 2013, subject to the applicable terms and conditions of the LTIP.

The number of performance shares at target to be issued on March 2, 2010 will be calculated by dividing the following dollar amounts by the closing price of Great Plains Energy stock on that date: Mr. Chesser, \$1,200,000; Mr. Downey, \$573,750; Mr. Bassham, \$322,500; and Mr. Marshall, \$300,000. The three equally weighted performance metrics are: 2012 funds from operations as a percentage of total adjusted debt; total shareholder return compared to the Edison Electric Institute index of electric companies for the 2010-2012 period; and the 2012 equivalent availability factor achieved by Great Plains Energy's nuclear and coal-fired generating units. Fifty percent of the target number of performance shares allocated to each metric is payable at the threshold level of performance, and 200% of the target number of performance shares is payable at the maximum level of performance. Dividends during the performance period on the number of performance shares actually earned will be paid in cash after the end of the performance period.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

GREAT PLAINS ENERGY INCORPORATED

/s/Terry Bassham
Terry Bassham
Executive Vice President- Finance & Strategic Development and Chief Financial
Officer

Date: February 16, 2010