UNITED STATES 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): November 22, 2010

Exact Name of Registrant as Specified in its Charter, State of Incorporation, Address of Principal Executive Offices and Telephone Number

I.R.S. Employer Identification No.

44-0308720

43-1916803

GREAT PLAINS ENERGY INCORPORATED

(A Missouri Corporation) 1200 Main Street Kansas City, Missouri 64105 (816) 556-2200

NOT APPLICABLE (Former name or former address, if changed since last report)

000-51873

Commission

File Number

001-32206

KANSAS CITY POWER & LIGHT COMPANY

(A Missouri Corporation) 1200 Main Street Kansas City, Missouri 64105 (816) 556-2200

NOT APPLICABLE (Former name or former address, if changed since last report)

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))

This combined Current Report on Form 8-K is being furnished by Great Plains Energy Incorporated (Great Plains Energy) and Kansas City Power & Light Company (KCP&L). KCP&L is a wholly-owned subsidiary of Great Plains Energy and represents a significant portion of its assets, liabilities, revenues, expenses and operations. Thus, all information contained in this report relates to, and is furnished by, Great Plains Energy. Information that is specifically identified in this report as relating solely to Great Plains Energy, such as its financial statements and all information relating to Great Plains Energy's other operations, businesses and subsidiaries, including KCP&L Greater Missouri Operations Company (GMO), does not relate to, and is not furnished by, KCP&L. KCP&L makes no representation as to that information. Neither Great Plains Energy nor GMO has any obligation in respect of KCP&L's debt securities and holders of such securities should not consider Great Plains Energy's or GMO's financial resources or results of operations in making a decision with respect to KCP&L's debt securities. Similarly, KCP&L has no obligation in respect of securities of Great Plains Energy or GMO.

Item 8.01 Other Information

Kansas Rate Case Order

As discussed under Management's Discussion and Analysis – Executive Summary – Regulatory Proceedings in the Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2010, KCP&L on December 17, 2009 filed a request with the Kansas Corporation Commission (KCC) to increase its Kansas retail electric annual revenues by \$55.2 million. The request was subsequently adjusted during the rate case proceedings by KCP&L to \$50.9 million as the net result of updates to the case. On November 22, 2010, the KCC issued its order (KCC Order) which authorized an increase in annual revenues of \$21.8 million, reflecting an authorized return on equity of 10.0%, an equity ratio of approximately 49.7% and a Kansas jurisdictional rate base of approximately \$1.781 billion.

The KCC excluded from KCP&L's Kansas jurisdictional rate base approximately \$5.1 million of budgeted construction costs related to Iatan 2 (\$20.4 million on a total project basis). Great Plains Energy had previously recorded a \$4.0 million pre-tax loss in the third quarter related to recommended disallowances of certain Iatan 2 construction costs, which are reflected in the KCC's disallowance. The KCC also excluded from KCP&L's Kansas jurisdictional rate base approximately \$1.0 million of budgeted construction costs related to the Iatan 1 environmental project (\$3.2 million on a total project basis). The KCC set the depreciable life of Iatan 2 to 60 years,

among other matters, and rejected as premature KCP&L's proposal to file an abbreviated rate case within the next twe lve months, to true up the budgeted cost of Iatan 2 (other than the excluded costs) and the Iatan 1 environmental project to actual cost.

The rates established by the KCC Order will take effect on December 1, 2010. Parties to the case may file petitions for reconsideration with the KCC by December 7, 2010, and may also file court appeals. However, the rates authorized by the KCC Order will be effective unless and until modified by the KCC or stayed by a court.

Missouri Rate Case Proceedings

Also as discussed under Management's Discussion and Analysis – Executive Summary – Regulatory Proceedings in the Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2010, KCP&L and GMO on June 4, 2010 filed separate requests with the Missouri Public Service Commission (MPSC) to increase their Missouri retail electric annual revenues by \$92.1 million and \$97.9 million (\$75.8 million for its MPS division, and \$22.1 million for GMO's L&P division), respectively. In November 2010, the MPSC Staff filed its construction audit and prudence review regarding construction expenditures through June 30, 2010 for Iatan 2 and the Iatan 1 environmental project. The MPSC Staff review recommended disallowance of approximately \$130 million and \$70 million of the total c osts incurred to that date for Iatan 2 and the Iatan 1 environmental project, respectively, representing all

audited expenditures above the associated control budget estimates of approximately \$1.685 billion and \$377 million.

The MPSC Staff also filed testimony in KCP&L's and GMO's rate cases in November 2010. Staff's testimony recommended a return on equity range of 8.5% to 9.5% and revenue increase/(decrease) ranges of approximately \$(0.2) million to \$14 million for KCP&L, approximately \$0.9 million to \$10.1 million for GMO's MPS division, and approximately \$28.8 million to \$32.6 million for GMO's L&P division. The revenue recommendations reflect Staff's proposed construction cost disallowances and its positions on allocations of costs between GMO's divisions and other various issues. Several other parties also filed testimony on certain discrete issues.

Evidentiary hearings in these cases are scheduled to begin in January 2011 for KCP&L and February 2011 for GMO. Any rate changes for KCP&L and GMO are expected to take effect in May 2011 for KCP&L and June 2011 for GMO. It is possible that the MPSC will authorize a lower rate increase than what KCP&L or GMO has requested, or no increase or a rate reduction. Management cannot predict or provide any assurances regarding the outcome of these proceedings.

Forward-looking statements

Statements made in this report that are not based on historical facts are forward-looking, may involve risks and uncertainties, and are intended to be as of the date when made. Forward-looking statements include, but are not limited to, the outcome of regulatory proceedings, cost estimates of the Comprehensive Energy Plan and other matters affecting future operations. In connection with the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, Great Plains Energy and KCP&L are providing a number of important factors that could cause actual results to differ materially from the provided forward-looking information. These important factors include: future economic conditions in regional, national and international markets and their effects on sales, prices and costs, including but not limited to possible further deterioration in economic conditions and the timing and extent of any economic recovery; prices and availability of electricity in regional and national wholesale markets; market perception of the energy industry, Great Plains Energy and KCP&L; changes in business strategy, operations or development plans; effects of current or proposed state and federal legislative and regulatory actions or developments, including, but not limited to, deregulation, re-regulation and restructuring of the electric utility industry; decisions of regulators regarding rates the companies can charge for electricity; adverse changes in applicable laws, regulations, rules, principles or practices governing tax, accounting and environmental matters including, but not limited to, air and water quality; financial market conditions and performance including, but not limited to, changes in interest rates and credit spreads and in availability and cost of capital and the effects on nuclear decommissioning trust and pension plan ass ets and costs; impairments of long-lived assets or goodwill; credit ratings; inflation rates; effectiveness of risk management policies and procedures and the ability of counterparties to satisfy their contractual commitments; impact of terrorist acts; increased competition including, but not limited to, retail choice in the electric utility industry and the entry of new competitors; ability to carry out marketing and sales plans; weather conditions including, but not limited to, weather-related damage and their effects on sales, prices and costs; cost, availability, quality and deliverability of fuel; ability to achieve generation goals and the occurrence and duration of planned and unplanned generation outages; delays in the anticipated in-service dates and cost increases of additional generating capacity and environmental projects; nuclear operations; workforce risks, including, but not limited to, increased costs of retirement, health care and other benefits; the timing and amount of resulting synergy sa vings from the GMO acquisition; and other risks and uncertainties.

This list of factors is not all-inclusive because it is not possible to predict all factors. Other risk factors are detailed from time to time in Great Plains Energy's and KCP&L's quarterly reports on Form 10-Q and annual report on Form 10-K filed with the Securities and Exchange Commission. Each forward-looking

statement speaks only as of the date of the particular statement. Great Plains Energy and KCP&L undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrants have duly caused this report to be signed on their behalf by the undersigned hereunto duly authorized.

GREAT PLAINS ENERGY INCORPORATED

/s/ Michael W. Cline Michael W. Cline Vice President-Investor Relations and Treasurer

KANSAS CITY POWER & LIGHT COMPANY

/s/ Michael W. Cline Michael W. Cline Vice President-Investor Relations and Treasurer

Date: November 23, 2010