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): May 3, 2011

	Commission File Number	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.				
	001-32206	GREAT PLAINS ENERGY INCORPORATED (A Missouri Corporation) 1200 Main Street Kansas City, Missouri 64105 (816) 556-2200	43-1916803				
		NOT APPLICABLE (Former name or former address, if changed since last report)					
	000-51873	KANSAS CITY POWER & LIGHT COMPANY (A Missouri Corporation) 1200 Main Street Kansas City, Missouri 64105 (816) 556-2200	44-0308720				
		NOT APPLICABLE (Former name or former address, if changed since last report)					
Check the	e appropriate box below if	the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant	t 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 com (17 CFR 240.14d-2(b))	amunications pursuant to Rule 14d-2(b) under the Exchange Act					
[]	Pre-commencement com	amunications 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 2.02 Results of Operations and Financial Condition

On May 3, 2011, Great Plains Energy issued a press release announcing its results for the quarter ended March 31, 2011. A copy of the press release is attached as Exhibit 99.1.

The press release contains information regarding KCP&L. Accordingly, information in the press release relating to KCP&L is also being furnished on behalf of KCP&L.

The information under this Item 2.02 and in Exhibit 99.1 hereto is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended or otherwise subject to the liabilities of that section. The information under this Item 2.02 and Exhibit 99.1 hereto shall not be deemed incorporated by reference into any registration statement or other document pursuant to the Securities Act of 1933, as amended, unless otherwise expressly indicated in such registration statement or other document.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit No. Description

99.1 Press release issued by Great Plains Energy Incorporated on May 3, 2011.

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: May 3, 2011

Exhibit Index

Exhibit Description

No.

99.1 Press release issued by Great Plains Energy Incorporated on May 3, 2011.

GREAT PLAINS ENERGY REPORTS FIRST QUARTER 2011 RESULTS

Kansas City, Mo. (May 3, 2011) — Great Plains Energy (NYSE: GXP) today announced first quarter 2011 earnings of \$2.0 million or \$0.01 per share of common stock outstanding, compared with first quarter 2010 earnings of \$19.9 million or \$0.15 per share.

Results in the 2011 quarter included charges related to an organizational realignment and voluntary separation program and impacts from the outcome of Kansas City Power & Light Company's ("KCP&L") Missouri rate case. The first quarter was also impacted by regulatory lag from higher fuel transportation costs and property taxes. The combined effect of these factors accounted for approximately \$0.11 of the decline in earnings per share compared to 2010. The balance of the decrease was mainly due to lower retail energy consumption compared to the first three months of last year, which more than offset new retail rates in Kansas effective in the fourth quarter of 2010.

"Lower demand, especially among our residential customers, was a key factor for us in the quarter," commented Mike Chesser, Chairman and CEO. "We believe this was largely due to lower electric heat usage influenced by near historic low natural gas prices, a move to more energy efficient furnaces and heat pumps, and increased customer efforts to reduce their monthly bills through conservation. In addition, both our residential and commercial customers continue to feel the effects of a regional economy that remains sluggish."

On a weather-normalized basis, total customer consumption in the 2011 first quarter declined 3 percent from the 2010 period. Consumption by residential and commercial customers, which each account for over 40 percent of retail sales volume, declined nearly 6 percent and nearly 2 percent, respectively. Based on actual results for the first quarter, the Company has reduced its projection of the change in 2011 weather-normalized megawatt-hour sales to essentially flat from the previously-disclosed growth rate of 0.7 percent.

Discussing KCP&L's Missouri rate case, Chesser commented, "We were pleased that the Missouri Public Service Commission, like the Kansas Commission last year, recognized Iatan 2 was a well managed project that will be a valuable resource in supplying affordable and reliable electricity to our region for decades to come. Though we were disappointed with the Missouri Commission's rulings in certain other areas of the case, on balance we consider its order to be the latest example

of the overall constructive regulatory treatment we've received in both states throughout the Comprehensive Energy Plan."

Great Plains Energy:

GREAT PLAINS ENERGY INCORPORATED Consolidated Earnings and Earnings Per Share Three Months Ended March 31

(Unaudited)

	Earnings			Earnings per Great Plains Energy Share				
	2	2011 20		010	2011		2010	
		(milli	ons)					
Electric Utility	\$	7.0	\$	24.9	\$	0.05	\$	0.18
Other		(4.7)		(4.6)		(0.04)		(0.03)
Net income		2.3		20.3		0.01		0.15
Less: Net loss attributable to noncontrolling interest		0.1		-		-		-
Net income attributable to Great Plains Energy		2.4		20.3		0.01		0.15
Preferred dividends		(0.4)		(0.4)		-		-
Earnings available for common shareholders	\$	2.0	\$	19.9	\$	0.01	\$	0.15

Consolidated earnings for the first quarter of 2011 compared to 2010 were attributable to lower results in the Electric Utility segment as discussed in the following section.

Common stock outstanding for the quarter averaged 138.2 million shares, about 1 percent higher than the same period in 2010.

Great Plains Energy continued to maintain a strong liquidity position during the quarter. As of March 31, 2011, approximately \$692 million of available capacity remained on the Company's \$1.25 billion of revolving credit facilities.

Electric Utility Segment First Quarter:

The Electric Utility segment, which includes KCP&L and the regulated utility operations of KCP&L Greater Missouri Operations Company ("GMO"), generated net income of \$7.0 million or \$0.05 per share compared to \$24.9 million or \$0.18 per share in 2010.

Key drivers influencing the segment results include the following:

- · An \$8.4 million, or 3 percent, decrease in pre-tax gross margin (a non-GAAP financial measure described in Attachment A). The decline in gross margin was mainly due to a \$5.7 million reduction in retail revenue from reduced customer consumption and a \$4.6 million impact of increased coal transportation costs not recovered in KCP&L Missouri retail rates where there is no fuel recovery mechanism;
- · A \$12.4 million increase in pre-tax other operating expense driven by:

- o A \$6.9 million loss representing KCP&L and GMO's combined share of the impact of disallowed construction costs for the Iatan 1 environmental retrofit and Iatan 2 projects and other costs as a result of the April 2011 Missouri Public Service Commission ("MPSC") order in KCP&L's rate case. The loss reflects GMO's portion of the disallowances, as management determined it is probable that the MPSC will disallow these costs as well in GMO's pending rate case; and o A \$4.0 million increase in general taxes principally related to property taxes at Iatan 2;
- · A \$9.7 million pre-tax expense for an organizational realignment process and voluntary separation program;
- · A \$9.8 million pre-tax reduction in depreciation and amortization expense. Although the first quarter 2011 depreciation expense reflects the inclusion of the Kansas jurisdictional share of Iatan 2 being placed into service, that impact was more than offset by:
 - o The exclusion in the 2011 quarter of \$8.3 million of regulatory amortization to maintain credit metrics for KCP&L in Kansas reflected in 2010's first quarter. The regulatory amortization mechanism was in effect during the CEP, but expired for KCP&L in Kansas upon the December 2010 effective date of new retail rates in Kansas (regulatory amortization continued to be in effect for KCP&L in Missouri through the May 4, 2011 effective date for new retail rates); and o Lower depreciation rates for KCP&L set by the Kansas Corporation Commission in KCP&L's 2010 rate case;
- · A \$9.8 million decrease in non-operating income and expense primarily due to a decline in the equity component of Allowance for Funds Used During Construction resulting from lower construction work in progress; and
- · A decrease in income tax expense of \$10.7 million due to lower pre-tax income.

Overall retail megawatt-hour ("MWh") sales declined approximately 2 percent in the quarter compared to the 2010 period as the favorable effects of new retail rates in Kansas and weather were more than offset by lower customer consumption.

- · Compared to 2010's first quarter, weather accounted for an estimated increase of 1 percent in MWh sales and about \$4 million in retail revenue.
 - o Compared to normal, the positive impact from weather in the 2011 quarter was approximately \$13 million;
- · On a weather-normalized basis, MWh sales fell an estimated 3.2 percent, as declines of 5.8 percent and 1.7 percent in the residential and commercial categories, respectively, outweighed a slight gain of 0.1 percent in the industrial sector.

Generation fleet availability in the quarter was lower compared to 2010 primarily as a result of the LaCygne 1 maintenance outage, which began in the fourth quarter 2010 and concluded in March 2011. Plant availability was also impacted by the refueling outage at the Wolf Creek nuclear unit, which began late in the first quarter 2011 and is expected to be completed in the middle of the second quarter 2011.

	Three Months Ended March 31		
	2011	2010	
Equivalent Availability - Coal Plants	74%	78%	
Capacity Factor - Coal Plants	64%	71%	
Equivalent Availability - Nuclear	86%	92%	
Capacity Factor - Nuclear	87%	93%	
Equivalent Availability - Coal and Nuclear	75%	80%	
Capacity Factor - Coal and Nuclear	67%	74%	

Other Category First Quarter:

Results for the Other category primarily include unallocated corporate charges, GMO non-regulated operations, non-controlling interest and preferred dividends. For the 2011 first quarter, the Other category reflected a loss of \$5.0 million or \$0.04 per share compared to a loss of \$5.0 million or \$0.03 per share in 2010.

Regulatory Update

On April 12, 2011, the MPSC authorized an annual rate increase for KCP&L of \$34.8 million (5.25 percent) effective May 4, 2011. The authorized increase included an annual offset to the Company's revenue requirement of approximately \$45.9 million related to the Missouri jurisdictional share of KCP&L's annual non-firm wholesale electric sales margin ("margin offset"). This compared to the Company's adjusted request for a \$66.5 million rate increase, reflecting a margin offset of \$29.4 million. The primary driver of the difference between the authorized rate increase and the Company's request was a lower allowed return on equity (10.00 percent compared to the Company's request of 10.75 percent). With respect to Iatan 2, the Commission excluded approximately \$6 million, or only about 1 percent, of Iatan 2 costs from KCP&L's Missouri rate base.

GMO filed a rate request with the MPSC on June 4, 2010 to increase its Missouri retail electric annual revenue by \$75.8 million for its MPS division, and \$22.1 million for its L&P division. GMO subsequently adjusted its requests during the rate case proceedings to \$65.9 million and \$23.2 million, respectively, as the net result of updates to the cases. An order in this case is expected in May 2011, with rates to take effect on June 4, 2011. It is probable that the MPSC will exclude GMO's share of the construction costs that the MPSC excluded from KCP&L's rates in its recently-concluded rate case. Also, GMO's rate request for its MPS division includes a rate base amount for its Crossroads Energy Center ("Crossroads") that is different than what the MPSC staff has recommended. In the event of a disallowance of Crossroads costs, Great Plains Energy will

determine if an impairment loss will need to be recognized on its income statement with a corresponding write-down of utility plant on its balance sheet for the excess of the carrying value of Crossroads over its fair value. It is possible that the MPSC will authorize a lower rate increase than what GMO has requested. Management cannot predict or provide any assurances regarding the outcome of the GMO proceedings.

The Company has posted its 2011 First Quarter Form 10-Q, as well as supplemental financial information related to the first quarter on its website, www.greatplainsenergy.com.

Earnings Webcast Information:

An earnings conference call and webcast is scheduled for 9:00 a.m. EDT Friday, May 6, 2011, to review the Company's first quarter 2011 financial results and business outlook.

A live audio webcast of the conference call, presentation slides, supplemental financial information, and the earnings press release will be available on the investor relations page of Great Plains Energy's website at www.greatplainsenergy.com. The webcast will be accessible only in a "listen-only" mode.

The conference call may be accessed by dialing 877-791-9323 (U.S./Canada) or 706-758-1332 (international) five to ten minutes prior to the scheduled start time. The confirmation code is 58088223.

A replay and transcript of the call will be available later in the day by accessing the investor relations section of the Company's website. A telephonic replay of the conference call will also be available through May 12, 2011 by dialing 800-642-1687 (U.S./Canada) or 706-645-9291 (international). The confirmation code is 58088223.

About The Companies:

Headquartered in Kansas City, Mo., Great Plains Energy Incorporated (NYSE: GXP) is the holding company of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company, two of the leading regulated providers of electricity in the Midwest. Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company use KCP&L as a brand name. More information about the companies is available on the Internet at: www.greatplainsenergy.com or www.kcpl.com.

Forward-Looking Statements:

Statements made in this release 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 capital projects 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 assets 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; ability to carry out marketing and sales plans; weather conditions including, but not limited to, weatherrelated damage and their effects on sales, prices and costs; cost, availability, quality and deliverability of fuel; the inherent uncertainties in estimating the effects of weather, economic conditions and other factors on customer consumption and financial results; 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 generation, transmission, distribution or other projects; the inherent risks associated with the ownership and operation of a nuclear facility including, but not limited to, environmental, health, safety, regulatory and financial risks; workforce risks, including, but not limited to, increased costs of retirement, health care and other benefits; 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.

Great Plains Energy Contacts:

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Attachment A

Gross margin is a financial measure that is not calculated in accordance with generally accepted accounting principles (GAAP). Gross margin, as used by Great Plains Energy, is defined as operating revenues less fuel, purchased power and transmission of electricity by others. The Company's expense for fuel, purchased power and transmission of electricity by others, offset by wholesale sales margin, is subject to recovery through cost adjustment mechanisms, except for KCP&L's Missouri retail operations. As a result, operating revenues increase or decrease in relation to a significant portion of these expenses. Management believes that gross margin provides a more meaningful basis for evaluating the Electric Utility segment's operations across periods than operating revenues because gross margin excludes the revenue effect of fluctuations in these expenses. Gross margin is used internally to measure performance against budget and in reports for management and the Board of Directors. The Company's definition of gross margin may differ from similar terms used by other companies. A reconciliation to GAAP operating revenues is provided in the table below

Great Plains Energy Incorporated Reconciliation of Gross Margin to Operating Revenues (Unaudited)

Three Months Ended March 31		2011	2010		
		(millions)			
Operating revenues	\$	492.9	\$	506.9	
Fuel		(104.9)		(101.8)	
Purchased power		(54.9)		(65.5)	
Transmission of electricity by others		(7.5)		(5.6)	
Gross margin	\$	325.6	\$	334.0	