

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): December 11, 2006

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
000-51873	KANSAS CITY POWER & LIGHT COMPANY (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)	44-0308720

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))

Great Plains Energy Incorporated (Great Plains Energy) and Kansas City Power & Light Company (KCP&L) (Registrants) are separately filing this combined Current Report on Form 8-K (Report). Information contained herein relating to an individual Registrant is furnished by such registrant on its own behalf. Each Registrant makes representations only as to information relating to itself.

CAUTIONARY STATEMENTS REGARDING CERTAIN FORWARD-LOOKING INFORMATION

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, statements regarding projected delivered volumes and margins, 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, the registrants 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 the regional, national and international markets, including but not limited to regional and national wholesale electricity markets; market perception of the energy industry and Great Plains Energy; 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 KCP&L 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 in availability and cost of capital and the effects on pension plan assets and costs; 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 weather-related damage; cost, availability, quality and deliverability of fuel; ability to achieve generation planning goals and the occurrence and duration of unplanned generation outages; delays in the anticipated in-service dates and cost increases of additional generating capacity; nuclear operations; ability to enter new markets successfully and capitalize on growth opportunities in non-regulated businesses and the effects of competition; application of critical accounting policies, including, but not limited to, those related to derivatives and pension liabilities; workforce risks including compensation and benefits costs; performance of projects undertaken by non-regulated businesses and the success of efforts to invest in and develop new opportunities and other risks and uncertainties.

This list of factors is not all-inclusive because it is not possible to predict all factors. Part II Item 1A. Risk Factors included in Registrants' combined Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, together with the risk factors included in the Registrants' 2005 Form 10-K under Part I Item 1A, should be carefully read for further understanding of potential risks to the Registrants. These reports and other periodic reports filed by the Registrants with the Securities and Exchange Commission (SEC) should also be read for more information regarding risk factors.

KCP&L Comprehensive Energy Plan Cost Estimate

KCP&L announced in 2005 its Comprehensive Energy Plan (CEP), which includes investments in coal-fired and wind generation, environmental retrofits of certain existing coal plants, infrastructure improvements and demand management, distributed generation, customer efficiency and affordability programs. The total estimated capital expenditure relating to the CEP disclosed in the 2005 Annual Report on Form 10-K (2005 10-K) was \$1.266 billion. During 2006, KCP&L entered into certain procurement and engineering agreements for CEP projects, and further refined its cost estimates and schedules as contracting and engineering progressed. Great Plains Energy and KCP&L have previously discussed that developing market conditions indicated an increase in the overall cost estimate for the CEP of about 20% above the 2005 10-K estimate. Since that time, various Iatan No. 2 engineering changes have been reflected in the updated cost estimate of that project.

KCP&L has completed a detailed update of its CEP cost estimate. The following table compares the CEP cost estimate contained in the 2005 10-K with the updated cost estimate:

Project	2005 10-K Estimate ^(a)	Updated Estimate ^(a)			% Increase		
		(millions)					
Iatan No. 2 ^(b)	\$733	\$837	-	\$914	14	-	25
Environmental Retrofit Projects ^(c)	272	423	-	443	56	-	63
Wind Generation ^(d)	166	164				(1)	
Asset Management	42	42				-	
Customer Programs	53	53				-	
Total	\$1,266	\$1,519	-	\$1,616	20	-	28

(a) KCP&L share of costs, exclusive of allowance for funds during construction.

(b) Reflects KCP&L's 54.71% ownership, or approximately 465MW, of an estimated 850MW plant.

(c) These projects are the Iatan No. 1 air quality control project, the LaCygne No. 1 selective catalytic reduction project and the LaCygne No. 1 baghouse and scrubber project.

(d) The Spearville Wind Energy Facility went into service in September 2006.

Construction of Iatan No. 2 is underway and on schedule for completion in 2010. KCP&L has approximately 50% of the total estimated cost of the project under firm contracts. The estimate range for Iatan No. 2 includes \$78 million for items that are customarily excluded in calculating the installed cost per kW of a generating plant. These items are rail cars, substation expansion, interconnection upgrades, off-site improvements, solid waste landfill and operating spare parts. Excluding these items, the currently estimated installed cost for Iatan No. 2 ranges from approximately \$1,700/kW to \$1,875/kW, which KCP&L believes is competitive with other similar projects to be built in the same timeframe.

The Iatan No. 1 air quality control project and the LaCygne No. 1 selective catalytic reduction project are currently underway and are also on schedule. KCP&L has about 70% and 95% of the Iatan No. 1 air quality control project and the LaCygne No. 1 selective catalytic reduction projects, respectively, under firm contracts. In aggregate, for all three retrofit projects, 50% of the estimated costs are under firm contract. Procurement for the LaCygne No. 1 baghouse and scrubber project is currently expected to start in 2007. KCP&L continues to examine the schedule for this project.

The updated cost estimates for Iatan No. 2 and the environmental retrofits and the range for contingencies on those projects reflect, among other factors, the current level of contracting. The upper end of each range reflects a contingency allowance that is consistent with industry practice and market conditions for projects of these types, sizes and degree of completion. Specific CEP project management and other risk mitigation practices result in varying uncertainty and therefore a range of contingency allowance.

The increases in the estimates for Iatan No. 2 and the environmental retrofits are due to increases in the estimated prices of labor, materials and equipment, changes in project scope and increases in the amount of project contingency. Increases in price, changes in scope and increases in project contingency accounted for approximately 25%, 40%, and 35%, respectively, of the increase in the estimated cost of Iatan No. 2 (calculated from the high point of the estimate range). Changes in the estimated price of labor, materials and equipment accounted for approximately 90% of the increase in the estimated cost of the environmental retrofit projects.

The increases in estimated labor and material prices reflect current and expected market conditions for those items. The increases in contingency reflect, among other things, the currently foreseen risks of those future market conditions as well as risks associated with global sourcing of materials. The demand for environmental projects has increased substantially, with many utilities in the United States starting similar projects to address changing environmental regulations. This demand has constrained labor and material resources resulting in a significant escalation in the cost of, and extension of scheduled completion times for, environmental retrofits. In addition, a significant percentage of materials for the Iatan No. 2 and environmental retrofit projects is expected to be supplied by overseas sources, which creates risks beyond those that would be expected if such materials were supplied from domestic sources. These risks include, among others, delays in clearing customs, ocean transportation and potential political instability in sourcing countries. Additionally, as with any major construction program, inadequate availability of qualified craft labor may have an adverse impact on both the estimated cost and completion date of the projects.

Because of the magnitude of the CEP projects and the length of the implementation period, the actual expenditures, scope and timing of any or all of these projects that have not been completed may differ materially from these estimates.

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/Lori A. Wright

Lori A. Wright
Controller

KANSAS CITY POWER & LIGHT COMPANY

/s/Lori A. Wright

Lori A. Wright
Controller

Date: December 11, 2006