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, 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) (the Registrants) are separately furnishing 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.

Item 2.02 Results of Operations and Financial Condition

On May 3, 2006, Great Plains Energy issued a press release announcing first quarter 2006 earnings information. A copy of the press release is attached to this report on Form 8-K as Exhibit 99.

The press release contains information regarding Great Plains Energy's reportable segments, including the KCP&L reportable segment. Accordingly, this report is also being furnished on behalf of KCP&L.

The information, including the exhibit attached hereto, in this report is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section. The information in this report shall not be incorporated by reference into any registration statement or other document pursuant to the Securities Act of 1933, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits

(c) Exhibit No.

99	Press release issued by Great Plains Energy Incorporated on May 3, 2006.

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

KANSAS CITY POWER & LIGHT COMPANY

/s/Terry Bassham

Terry Bassham
Chief Financial Officer

Date: May 4, 2006

Exhibit 99

Media Contact:	Tom Robinson 816-556-2902
Investor Contact:	Todd Allen 816-556-2083

GREAT PLAINS ENERGY ANNOUNCES FIRST QUARTER FINANCIAL RESULTS
Core Earnings Stronger Than Last Year

Kansas City, MO, May 3, 2006 - Great Plains Energy Incorporated (NYSE:GXP) today announced core earnings, which exclude net mark-to-market gains and losses on energy contracts and a workforce realignment at Kansas City Power & Light (KCP&L), were $24.4 million or $0.33 per share in the first quarter of 2006, compared to $16.9 million or $0.23 per share in the first quarter of 2005. Reported earnings, which include $21.1 million of net mark-to-market losses on energy contracts at Strategic Energy and a $5.8 million impact of the workforce realignment, were a loss of $2.5 million or $0.03 per share, compared to first quarter 2005 earnings of $19.8 million or $0.27 per share. Reported earnings are reconciled to core earnings in attachment B.

Higher core earnings in the first quarter of 2006 compared to the same quarter last year were driven primarily by KCP&L's results, as higher wholesale prices, lower purchased power expense and the absence of 2005 ice storm costs more than offset the effects of higher fuel prices and lower wholesale volumes. Strategic Energy core earnings in the first quarter of 2006 were slightly higher than last year, with higher gross margins more than offsetting lower delivered volumes.

"In the first quarter, we continued to have strong financial performance while executing on our Strategic Intent," said Chairman Michael Chesser. "We broke ground on our wind turbine project, took initial steps on environmental upgrades on our coal fleet, continued securing the long lead time items for our new coal plant and filed our first rate cases in nearly 20 years. We also made progress on our plan for workforce realignment at KCP&L designed to help improve our skill sets to deliver on our Strategic Intent. Strategic Energy also demonstrated continuing improvement, growing backlog 23% through increased sales and longer contract durations during the quarter."

Kansas City Power & Light

KCP&L core earnings, which exclude a $5.8 million impact of severance and related costs associated with the workforce realignment, were $17.8 million or $0.24 per share, compared to $10.8 million or $0.15 per share last year. Reported earnings were $12.0 million or $0.16 per share, compared to first quarter 2005 earnings of $10.8 million or $0.15 per share.

Revenues for the first quarter of 2006 were $240 million compared to $233 million for the first quarter of 2005. Retail revenues were essentially flat at $189 million. Wholesale revenues were $48 million, up from $39 million in the first quarter of 2005 due to higher prices. Average wholesale electricity prices for the first quarter of 2006 were up 45% over the same period last year.

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Fuel costs in the first quarter of 2006, which were up 14% compared to last year due to higher commodity and transportation prices, were largely offset by a 55% decrease in purchased power expense. The absence of ice storm costs experienced in the first quarter of 2005 also benefited KCP&L earnings compared to last year.

During the first quarter, KCP&L began securing long lead-time items for its Comprehensive Energy Plan. Although contracting is not complete, developing market conditions have resulted in potential increases in the estimated overall cost for the Plan in the range of 10%-20%. The primary drivers are increases in material and labor costs and some scope additions. The Company anticipates completing its definitive estimates by August and is confident that project costs will be competitive with other similar projects.

Strategic Energy

Strategic Energy core earnings, which exclude net mark-to-market gains and losses on energy contracts, were $10.2 million or $0.13 per share, compared to $9.9 million or $0.13 per share in the same period last year. Reported earnings were a loss of $10.9 million or $0.15 per share, compared to earnings of $12.8 million or $0.17 per share in the first quarter of 2005.

Total backlog at Strategic Energy grew 23% in the first quarter as new sales volume more than doubled to 7.3 million MWhs in the first quarter of 2006 compared to 3.0 million MWhs in the same period in 2005. The company's improved marketing approach, a favorable sales environment in several states, lower energy prices and changing customer perceptions about the longer-term price of electricity, led to increased sales and longer duration for new contracts. Average contract lengths increased to 18 months in the first quarter of 2006, compared to 10 months in the same quarter last year. Delivered volume during the quarter combined with 2006 backlog totaled 13.8 million MWhs at the end of the first quarter, compared to 2006 backlog of 10.4 million MWhs at the end of 2005.

Retail gross margin per MWh in the first quarter of 2006 was ($2.12). However, excluding net mark-to-market losses on energy contracts, retail gross margin per MWh was strong at $7.67. This compares to an average retail gross margin per MWh, excluding net mark-to-market gains on energy contracts, of $6.08 last year. Retail gross margin per MWh in the first quarter reflects the positive impacts of portfolio optimization, a gain from the early termination of a power contract, and a favorable product mix during the quarter. Retail gross margin on new sales during the first quarter of 2006 was $3.24, which is exclusive of potential portfolio optimization benefits. Strategic Energy's delivered volume decreased to 3.7 million MWhs during the first quarter from 4.6 million MWhs last year, which is in-line with lower overall delivered volume guidance for the year.

KLT Investments and "Other"

First quarter 2006 earnings and core earnings from KLT Investments were $0.7 million or $0.01 per share, compared to $3.0 million or $0.04 per share in the first quarter of 2005. The lower earnings in the first quarter of 2006 are due to the timing of reductions of affordable housing investments and a decline in available tax credits from the investments.

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In the first quarter of 2006 the “other” category loss was $4.3 million compared to a loss of $6.8 million in the same period last year. The loss per share was $0.05 in the first quarter of 2006 versus $0.09 in the first quarter of 2005.

Non-GAAP Financial Measure

Great Plains Energy provides in its earnings releases descriptions of “core earnings” in addition to earnings calculated in accordance with GAAP. Great Plains Energy also provides its earnings guidance in terms of core earnings. Core earnings is a non-GAAP financial measure that differs from GAAP earnings because it excludes the effects of discontinued operations, certain unusual items and mark-to-market gains and losses on energy contracts. Core earnings for historical periods are reconciled to GAAP earnings in Attachment B.

The Company believes core earnings provide to investors a meaningful indicator of its results that is comparable among periods because it excludes the effects of discontinued operations, certain unusual items and mark-to-market gains and losses on energy contracts. These items are excluded from core earnings because they may not be indicative of Great Plains Energy’s prospective earnings potential. Investors should note that this non-GAAP measure involves judgments by management, including whether an item is classified as an unusual item. Core earnings is used internally to measure performance against budget and in reports for management and the Board of Directors. Great Plains Energy’s definition of core earnings may differ from similar terms used by other companies.

Great Plains Energy Incorporated (NYSE:GXP) headquartered in Kansas City, MO, is the holding company for Kansas City Power & Light Company, a leading regulated provider of electricity in the Midwest, and Strategic Energy L.L.C., a competitive electricity supplier. The Company's web site is www.greatplainsenergy.com.

CERTAIN FORWARD-LOOKING INFORMATION -- 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, 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 Company is 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. Other risk factors are detailed from time to time in the Company’s most recent quarterly report on Form 10-Q or annual report on Form 10-K filed with the Securities and Exchange Commission. This list of factors is not all-inclusive because it is not possible to predict all factors.

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Attachment A

GREAT PLAINS ENERGY
Consolidated Statements of Income
(Unaudited)

Three Months Ended March 31		2006		2005
Operating Revenues		(thousands, except per share amounts)		
Electric revenues - KCP&L	$	**240,390**	$	233,215
Electric revenues - Strategic Energy		**318,012**		311,316
Other revenues		**783**		583
Total		**559,185**		545,114
Operating Expenses				
Fuel		**47,400**		41,490
Purchased power - KCP&L		**5,117**		11,490
Purchased power - Strategic Energy		**325,758**		277,866
Skill set realignment costs		**9,393**		-
Other		**76,235**		79,895
Maintenance		**22,590**		29,358
Depreciation and amortization		**38,946**		37,862
General taxes		**27,644**		25,856
(Gain) loss on property		**99**		(519)
Total		**553,182**		503,298
Operating income		**6,003**		41,816
Non-operating income		**2,985**		1,924
Non-operating expenses		**(2,141)**		(1,315)
Interest charges		**(17,323)**		(17,487)
Income (loss) before income taxes, minority interest in subsidiaries and loss from equity investments		**(10,476)**		24,938
Income taxes		**8,630**		(5,291)
Minority interest in subsidiaries		**-**		888
Loss from equity investments, net of income taxes		**(290)**		(345)
Net income (loss)		**(2,136)**		20,190
Preferred stock dividend requirements		**411**		411
Earnings (loss) available for common shareholders	**$**	**(2,547)**	$	19,779
Average number of common shares outstanding		**74,659**		74,436
Basic and diluted earnings (loss) per common share	**$**	**(0.03)**	$	0.27
Cash dividends per common share	**$**	**0.415**	$	0.415

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Attachment B

GREAT PLAINS ENERGY
Consolidated Earnings and Earnings Per Share
Three Months Ended March 31
(Unaudited)

	Earnings (Loss)		Earnings (Loss) per Great Plains Energy Share	
	2006	**2005**	**2006**	**2005**
	(millions)			
KCP&L	$ 12.0	$ 10.8	$ 0.16	$ 0.15
Strategic Energy	(10.9)	12.8	(0.15)	0.17
KLT Investments	0.7	3.0	0.01	0.04
Other	(3.9)	(6.4)	(0.05)	(0.09)
Net income (loss)	(2.1)	20.2	(0.03)	0.27
Preferred dividends	(0.4)	(0.4)	-	-
Earnings (loss) available for common shareholders	$ (2.5)	$ 19.8	$ (0.03)	$ 0.27
Reconciliation of GAAP to Non-GAAP				
Earnings (loss) available for common shareholders	$ (2.5)	$ 19.8	$ (0.03)	$ 0.27
Reconciling items				
KCP&L - skill set realignment costs	5.8	-	0.08	-
Strategic Energy - mark-to-market impacts from energy contracts	21.1	(2.9)	0.28	(0.04)
Core earnings	$ 24.4	$ 16.9	$ 0.33	$ 0.23
Core earnings				
KCP&L	$ 17.8	$ 10.8	$ 0.24	$ 0.15
Strategic Energy	10.2	9.9	0.13	0.13
KLT Investments	0.7	3.0	0.01	0.04
Other	(4.3)	(6.8)	(0.05)	(0.09)
Core earnings	$ 24.4	$ 16.9	$ 0.33	$ 0.23

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Attachment C

GREAT PLAINS ENERGY
Summary Income Statement by Segment
Three Months Ended March 31, 2006
(Unaudited)

	Consolidated GPE	KCP&L	Strategic Energy	Other
		(millions)		
Operating revenues	$ 559.2	$ 240.4	$ 318.8	$ -
Fuel	(47.4)	(47.4)	-	-
Purchased power	(330.9)	(5.1)	(325.8)	-
Skill set realignment costs	(9.4)	(9.3)	-	(0.1)
Other operating expense	(126.5)	(111.4)	(12.5)	(2.6)
Depreciation and amortization	(38.9)	(37.0)	(1.9)	-
Gain (loss) on property	(0.1)	(0.1)	-	-
Operating income (loss)	6.0	30.1	(21.4)	(2.7)
Non-operating income (expenses)	0.8	0.7	0.9	(0.8)
Interest charges	(17.3)	(14.9)	(0.3)	(2.1)
Income taxes	8.7	(3.9)	9.9	2.7
Loss from equity investments	(0.3)	-	-	(0.3)
Net income (loss)	$ (2.1)	$ 12.0	$ (10.9)	$ (3.2)
Earnings (loss) per GPE common share	$ (0.03)	$ 0.16	$ (0.15)	$ (0.04)

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Attachment D

GREAT PLAINS ENERGY
Consolidated Balance Sheets
(Unaudited)

	March 31 2006	December 31 2005
ASSETS	(thousands)	
Current Assets		
Cash and cash equivalents	**$ 87,553**	$ 103,068
Restricted cash	**-**	1,900
Receivables, net	**241,792**	259,043
Fuel inventories, at average cost	**21,186**	17,073
Materials and supplies, at average cost	**57,556**	57,017
Deferred income taxes	**19,783**	-
Assets of discontinued operations	**-**	627
Derivative instruments	**15,753**	39,189
Other	**13,248**	13,001
Total	**456,871**	490,918
Nonutility Property and Investments		
Affordable housing limited partnerships	**26,302**	28,214
Nuclear decommissioning trust fund	**95,063**	91,802
Other	**16,961**	17,291
Total	**138,326**	137,307
Utility Plant, at Original Cost		
Electric	**4,999,326**	4,959,539
Less-accumulated depreciation	**2,354,984**	2,322,813
Net utility plant in service	**2,644,342**	2,636,726
Construction work in progress	**123,881**	100,952
Nuclear fuel, net of amortization of $119,130 and $115,240	**34,849**	27,966
Total	**2,803,072**	2,765,644
Deferred Charges and Other Assets		
Regulatory assets	**188,383**	179,922
Prepaid pension costs	**87,763**	98,295
Goodwill	**88,139**	87,624
Derivative instruments	**8,628**	21,812
Other	**47,668**	52,204
Total	**420,581**	439,857
Total	**$ 3,818,850**	$ 3,833,726

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Attachment D continued

GREAT PLAINS ENERGY
Consolidated Balance Sheets
(Unaudited)

	March 31 2006	December 31 2005
LIABILITIES AND CAPITALIZATION	(thousands)	
Current Liabilities		
Notes payable	$ -	$ 6,000
Commercial paper	**73,800**	31,900
Current maturities of long-term debt	**390,275**	1,675
Accounts payable	**205,435**	231,496
Accrued taxes	**41,593**	37,140
Accrued interest	**13,102**	13,329
Accrued payroll and vacations	**31,054**	36,024
Accrued refueling outage costs	**12,148**	8,974
Deferred income taxes	-	1,351
Supplier collateral	-	1,900
Liabilities of discontinued operations	-	64
Derivative instruments	**31,623**	7,411
Other	**24,821**	25,658
Total	**823,851**	402,922
Deferred Credits and Other Liabilities		
Deferred income taxes	**610,073**	621,359
Deferred investment tax credits	**28,937**	29,698
Asset retirement obligations	**148,294**	145,907
Pension liability	**87,919**	87,355
Regulatory liabilities	**71,284**	69,641
Derivative instruments	**18,652**	7,750
Other	**64,141**	65,787
Total	**1,029,300**	1,027,497
Capitalization		
Common shareholders' equity		
Common stock-150,000,000 shares authorized without par value 74,931,157 and 74,783,824 shares issued, stated value	**747,903**	744,457
Retained earnings	**454,308**	488,001
Treasury stock-44,836 and 43,376 shares, at cost	**(1,346)**	(1,304)
Accumulated other comprehensive loss	**(25,925)**	(7,727)
Total	**1,174,940**	1,223,427
Cumulative preferred stock $100 par value		
3.80% - 100,000 shares issued	**10,000**	10,000
4.50% - 100,000 shares issued	**10,000**	10,000
4.20% - 70,000 shares issued	**7,000**	7,000
4.35% - 120,000 shares issued	**12,000**	12,000
Total	**39,000**	39,000
Long-term debt	**751,759**	1,140,880
Total	**1,965,699**	2,403,307
Commitments and Contingencies		
Total	**$ 3,818,850**	$ 3,833,726

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Attachment E

GREAT PLAINS ENERGY
Statistical Summary

Three Months Ended March 31	2006	2005
KCP&L		
Retail revenues (millions)	$ 189.2	$ 189.5
Wholesale revenues (millions)	$ 47.5	$ 39.1
Average non-firm wholesale price per MWh	$ 50.45	$ 34.88
Wholesale MWh sales (thousands)	1,104	1,210
Equivalent availability - coal plants	80 %	78 %
Capacity factor - coal plants	70 %	75 %
Strategic Energy		
Average retail gross margin per MWh	$ (2.12)	$ 7.16
Change in fair value related to non-hedging energy contracts and from cash flow hedge ineffectiveness	9.79	(1.08)
Average retail gross margin per MWh without fair value impacts [(a)]	$ 7.67	$ 6.08
MWhs delivered (thousands)	3,662	4,625
MWhs delivered plus current year backlog (thousands)	13,794	16,634
Average duration - new and resigned contracts (months)	18	10
MWh sales (thousands)	7,302	2,969
Retention rate	50 %	72 %
Retention rate including month to month customers	62 %	79 %

[(a)] This is a non-GAAP financial measure that differs from GAAP because it excludes the impact of unrealized fair value gains or losses. Management believes this measure is more reflective of average retail gross margins on MWhs delivered due to the non-cash nature and volatility of changes in fair value related to non-hedging energy contracts and from cash flow hedge ineffectiveness.

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