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):
April 24, 2002

GREAT PLAINS ENERGY INCORPORATED
(Exact name of registrant as specified in its charter)

03-33207
(Commission file number)

MISSOURI	43-1916803
(State of other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1201 Walnut
Kansas City, Missouri 64106
(Address of principal executive offices)

(816) 556-2200
(Registrant's telephone number, including area code)

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

ITEM 7. FINANCIAL STATEMENTS AND EXHIBITS

(c) Exhibit No.

99 Press release issued April 24, 2002.

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/Jeanie Sell Latz
Jeanie Sell Latz
Senior Vice President-Corporate
Services and Secretary

Date: April 25, 2002

Media Contact: Tom Robinson
816-556-2902
Investor Contact: Greg Drown
816-556-2312

FOR IMMEDIATE RELEASE

GREAT PLAINS ENERGY REPORTS FIRST QUARTER RESULTS, REACHES SETTLEMENT OF STORM COSTS, AND ANNOUNCES EXPECTED ISSUANCE OF COMMON EQUITY

KANSAS CITY, MO, April 24, 2002 - Great Plains Energy Incorporated (NYSE: GXP) today reported revenues of $364.6 million for the first quarter ended March 31, 2002, an increase of 30% over the first quarter of 2001. The Company reported a first quarter loss of $3.3 million, or $0.05 per share, compared to 2001 first quarter earnings of $12.5 million, or $0.20 per share. The 2002 first quarter loss includes expenses of $14.8 million, or $0.15 per share, as a result of a January 2002 ice storm. Total costs of the ice storm were $45.4 million consisting of $14.8 million charged to operating expenses and $12.5 million for capital expenditures. The remaining $18.1 million of storm costs will be amortized over a 60-month period. The 2001 first quarter includes earnings of $15.9 million, or $0.26 per share, for a gain on early extinguishment of debt. Adjusting for the impact of the 2002 ice storm and the 2001 gain on early extinguishment of debt, the Company earned $0.10 per share in the first quarter of 2002 versus a loss of $0.06 per share in 2001.

As a result of the costs associated with the January 2002 ice storm and the associated rate settlement, the Company now expects full year 2002 earnings per share in the range of $1.85 to $1.95. This revised guidance includes the impact of an expected equity offering later this year.

HIGHLIGHTS OF THE FIRST QUARTER:

- Kansas City Power & Light restored power to more than 300,000 of its customers affected during the unprecedented storm.
- The Company has agreed to the treatment of storm costs with the Kansas Corporation Commission staff and the Citizens Utility Ratepayers Board that results in a $12 million rate decrease for Kansas customers beginning in 2003 and an accounting authority order has been requested from the Missouri Public Service Commission.
- Great Plains Energy decided to strengthen the balance sheet with an expected common equity offering of $150 million to be completed later in the year.
- Strategic Energy increased revenues by 250% primarily due to expanded business in Texas.

Commenting on the unprecedented ice storm, Chairman Bernie Beaudoin said, "As a result of negotiations on the storm restoration costs, we are pleased to offer our Kansas customers a $12 million annual rate decrease in return for a four year rate moratorium. This is a balanced solution for our shareholders and Kansas customers. Also, today we filed in Missouri to seek a solution for that portion of our business."

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EQUITY FINANCING

After considering various alternatives to enhance the Company's financial strength and flexibility, Great Plains Energy also announced its plans to issue $150 million in additional common equity. Proceeds of the sale will be used to reduce debt at Great Plains Energy and Kansas City Power & Light Company (KCP&L).

Beaudoin commented on the Company's financing plans, "We have chosen to accelerate the increase in our equity ratio through an offering of common shares this year. I am also pleased to report that we remain committed to maintaining our dividend at the current quarterly rate."

KANSAS CITY POWER & LIGHT

Total revenues for the first quarter at KCP&L were $198.9 million, essentially unchanged from $198.8 million in the first quarter of 2001. Retail revenues were off 3.2% for the first quarter of 2002 to $178.3 million from $184.1 million in the first quarter of 2001 due primarily to milder winter weather in 2002. The decline in retail revenues was offset by a 62.5% increase in bulk power revenues to $16.6 million from $10.2 million in 2001.

KCP&L recorded a loss of $0.11 per share for the quarter compared to a loss of $0.04 in the first quarter of 2001. The loss in the current quarter is primarily due to $14.8 million, or $0.15 per share, of expenses recorded as a result of the January 2002 ice storm. Additionally, pension expense increased by $4.0 million lowering earnings per share by $0.04 in the first quarter of 2002 compared to the first quarter of 2001 primarily due to a significant decline in the market value of plan assets at the end of the plan's year which is September 30, 2001.

As previously mentioned, a severe ice storm occurred throughout large portions of the Midwest in late January 2002, including the greater Kansas City metropolitan area. At its peak, the storm caused outages at over 50% of KCP&L's customers. This level of outages is unprecedented in the Company's 120-year history.

Costs related to the January ice storm were approximately $45.4 million of which $12.5 million were capital expenditures and therefore charged to utility plant. The Company expensed $14.8 million, or $0.15 per share, for the Kansas jurisdictional portion of the storm costs and deferred $18.1 million of the storm costs applicable to Missouri. The Company has reached a stipulation and agreement with the Kansas Corporation Commission staff and the Citizens Utility Ratepayers Board that would result in a rate moratorium until 2006 in return for KCP&L's agreement to not seek reimbursement for storm-related costs, and reduce rates by $5 million annually beginning in 2003. Additionally KCP&L agreed to determine depreciation expense of the Wolf Creek nuclear generating station using a 60 year life instead of 40 effective January 2003, which results in a reduction of depreciation expense and revenue by approximately $7 to $8 million annually. Additionally, on April 24, 2002, KCP&L filed a request for an accounting authority order with the Missouri Public Service Commission for deferral and amortization over a five-year period of the Missouri jurisdictional portion of the storm costs. Once the order is received from the Missouri Public Service Commission, the Company will begin amortizing the Missouri storm expense. The impact in 2002 is expected to be $2.1 million, or $.02 per share, and $3.6 million, or $.04 per share, annually for the remainder of the amortization period.

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KLT INC.

KLT Inc., which manages the Company's high-growth competitive businesses, recorded earnings of $0.09 per share in the first quarter of 2002 compared to earnings of $0.27 per share in the same quarter of 2001. The prior year results included a $0.26 per share gain on early extinguishment of debt as a result of restructuring debt at Digital Teleport, Inc. (DTI), a majority-owned, subsidiary of KLT Telecom at March 31, 2001.

Following is a discussion of each of KLT Inc.'s primary operating businesses:

STRATEGIC ENERGY LLC, a Pittsburgh-based energy management company, continues the profitable expansion of its business. Strategic Energy contributed earnings of $0.11 per share in the first quarter of 2002 compared to $0.02 per share in the same quarter of 2001. Business expansion, primarily in Texas, resulted in a 250% increase in revenues to $152.2 million in the first quarter of 2002 compared to the same quarter in 2001. Peak megawatts under management at March 31, 2002 were 2,354 compared with 2,181 at December 31, 2001 and 612 at March 31, 2001.

KLT GAS, located in Houston, specializes in the acquisition and development of natural gas properties, specifically coal bed methane. KLT Gas derives earnings from two sources - gas production from developed properties and gains on the sale of developed properties. In the quarter ending March 31, 2002, KLT Gas broke even compared with earnings of $0.02 per share in the prior year quarter. The company's current development portfolio consists of approximately 200,000 prospective acres in four different basins.

DTI HOLDINGS, INC. and its subsidiary DIGITAL TELEPORT, INC., Inc., a fiber optic business located in St.Louis, filed voluntary petitions for bankruptcy on December 31, 2001. DTI's reorganization under Chapter 11 of the U.S. Bankruptcy Code continues in process. In the three months ended March 31, 2002, there were no asset dispositions and the timing of completion of the bankruptcy process has yet to be determined. During the quarter, the bankruptcy court approved $5 million in debtor-in-possession (DIP) financing to be provided by KLT Telecom. To date, none of the DIP financing has been needed by DTI. As a result of DTI's filing for bankruptcy protection, KLT Telecom has not included in its results the ongoing earnings or loss incurred by DTI during the quarter.

Great Plains Energy is the holding company for three wholly owned subsidiaries: Kansas City Power & Light Company, a leading regulated provider of electricity in the Midwest; Great Plains Power Inc., a competitive generator that will sell to the wholesale market; and KLT Inc., an investment company focusing on energy related ventures that are unregulated with high growth potential. Headquartered in Kansas City, Missouri, the Company's web site is www.kcpl.com.

Great Plains Energy Incorporated will broadcast a discussion of these results via the Internet on Thursday, April 25, 2002 at 9:00 AM Eastern/8:00 AM Central. The presentation can be accessed through www.kcpl.com. A replay of the webcast will be available on the web site until close of business on May 3, 2002.

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CERTAIN FORWARD-LOOKING INFORMATION -- Statements made in this presentation 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. 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 provided forward-looking information. These important factors include: future economic conditions in the regional, national and international markets; state, federal and foreign regulation; weather conditions including weather-related damage; cost of fuel; financial market conditions including, but not limited to, changes in interest rates; inflation rates; increased competition including, but not limited to, the deregulation of the electric utility industry and the entry of new competitors; ability to carry out marketing and sales plans; ability to achieve generation planning goals and the occurrence of unplanned generation outages; nuclear operations; ability to enter new markets successfully and capitalize on growth opportunities in nonregulated businesses; adverse changes in applicable laws, regulations or rules governing environmental regulations (including air quality), tax or accounting matters; delays in the anticipated in-service dates of additional generating capacity; performance of projects undertaken by our non-regulated businesses and the success of efforts to invest in and develop new opportunities; non-performance of counterparties; availability and cost of capital; and other risks and uncertainties. This list of factors is not all-inclusive because it is not possible to predict all possible factors.

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GREAT PLAINS ENERGY
Consolidated Statements of Income
(Unaudited)

Three Months Ended March 31	2002	2001
	(thousands)	
Operating Revenues		
Electric sales revenues	$ 350,743	$249,137
Gas sales revenue	460	11,975
Other revenues	13,403	19,078
Total	364,606	280,190
Operating Expenses		
Fuel	34,007	32,714
Purchased power	141,723	68,699
Gas purchased and production expenses	852	12,155
Other	77,204	79,800
Maintenance	34,934	21,309
Depreciation and depletion	37,431	36,631
(Gain) Loss on property	41	(1,308)
General taxes	23,161	22,852
Total	349,353	272,852
Operating income	15,253	7,338
Loss from equity investments	(316)	(536)
Minority interest in subsidiaries	(2,437)	2,785
Non-operating income and expenses	(7,165)	(3,965)
Interest charges	20,798	24,221
Loss before income taxes	(15,463)	(18,599)
Income taxes	(12,566)	(15,627)
Loss before extraordinary item	(2,897)	(2,972)
Early extinguishment of debt, net of income taxes	-	5,872
Net income (loss)	(2,897)	12,900
Preferred stock dividend requirements	412	412
Earnings (Loss) available for common stock	$ (3,309)	$ 12,488
Average number of common shares outstanding	61,884	61,853
Basic and diluted loss per common share before extraordinary item	$ (0.05)	$ 0.06)
Early extinguishment of debt	-	0.26
Basic and diluted earnings (loss) per common share	$ (0.05)	$ 0.20
Cash dividends per common share	$ 0.415	$ 0.415

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Great Plains Energy
Consolidated Earnings Per Share

	Three Months Ended March 2002	2001
Kansas City Power & Light Company (KCP&L)		
Operations	(0.11)	(0.04)
Home Service Solutions Inc.	(0.02)	(0.03)
Total KCP&L	(0.13)	(0.07)
KLT Inc.		
Strategic Energy, LLC	$ 0.11	$ 0.02
DTI Holdings, Inc. and subsidiary Digital Teleport, Inc. (DTI)		
Operations 2/8/01 to 12/31/01	-	(0.07)
Gain on early extinguishment of debt and equity losses prior to majority ownership	-	0.26
KLT Gas	-	0.02
KLT Investments	-	0.05
Other	(0.02)	(0.01)
Total KLT Inc.	0.09	0.27
Great Plains Energy Incorporated and Great Plains Power Incorporated	(0.01)	-
Consolidated Earnings per Share	$ (0.05)	$ 0.20

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GREAT PLAINS ENERGY INCORPORATED
Summary Income Statement by Segment
Three months ended March 31, 2002

Three months ended March 31, 2002	Con-soli-dated GPE	KCPL	KLT Inc. DTI	SEL	Gas	Other	HSS	Other
Operating revenues	364.6	198.9	-	152.2	0.2	-	13.3	-
Fuel expense	(34.0)	(34.0)	-	-	-	-	-	-
Purchased power expense	(141.7)	(10.9)	-	(130.8)	-	-	-	-
Other	(136.2)	(110.8)	-	(7.0)	(2.5)	(2.0)	(13.0)	(0.9)
Depreciation and depletion	(37.4)	(35.8)	-	(0.2)	(0.3)	-	(1.1)	-
Gain (loss) on property	-	-	-	-	(0.1)	-	0.1	-
Operating income (loss)	15.3	7.4	-	14.2	(2.7)	(2.0)	(0.7)	(0.9)
Loss from equity investments	(0.3)	-	-	-	-	(0.3)	-	-
Non-operating income (expenses)	(9.7)	(1.9)	-	(2.4)	0.3	(5.6)	0.1	(0.2)
Interest charges	(20.8)	(19.0)	-	(0.1)	-	(1.2)	(0.4)	(0.1)
Income taxes	12.6	6.6	-	(4.8)	2.3	8.1	(0.1)	0.5
Net income (loss)	(2.9)	(6.9)	-	6.9	(0.1)	(1.0)	(1.1)	(0.7)
Earnings (loss) per GPE common share	(0.05)	(0.11)	-	0.11	-	(0.02)	(0.02)	(0.01)

Favorable/ (Unfavorable) variance from three months ended March 31, 2001	Con-soli-dated GPE	KCPL	KLT Inc. DTI	SEL	Gas	Other	HSS	Other
Operating revenues	84.4	0.1	(2.3)	91.3	(1.3)	-	(3.4)	-

Fuel expense	(1.3)	(1.3)	-	-	-	-	-	-
Purchased power expense	(73.0)	13.3	-	(86.3)	-	-	-	-
Other	(0.1)	(17.8)	3.8	7.3	0.2	(0.5)	7.8	(0.9)
Depreciation and depletion	(0.8)	(3.1)	2.6	(0.2)	0.3	0.1	(0.5)	-
Gain (loss) on property	(1.3)	-	-	-	(1.4)	-	0.1	-
Operating income (loss)	7.9	(8.8)	4.1	12.1	(2.2)	(0.4)	4.0	(0.9)
Income (loss) from equity investments	0.2	-	-	-	(0.1)	0.2	0.1	-
Non-operating income (expenses)	(8.4)	1.3	(0.9)	(2.1)	0.3	(4.6)	(2.2)	(0.2)
Interest charges	3.4	0.4	4.0	-	-	(0.9)	-	(0.1)
Income taxes	(3.0)	2.3	(2.8)	(4.1)	0.5	1.7	(1.1)	0.5
Early extinguishment of debt	(15.9)	-	(15.9)	-	-	-	-	-
Net income (loss)	(15.8)	(4.8)	(11.5)	5.9	(1.5)	(4.0)	0.8	(0.7)
Earnings (loss) per GPE common share	(0.25)	(0.07)	(0.19)	0.09	(0.02)	(0.06)	0.01	(0.01)

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