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 23, 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**<br>(A Missouri Corporation)<br>1200 Main Street<br>Kansas City, Missouri 64105<br>(816) 556-2200<br><br>NOT APPLICABLE<br>(Former name or former address,<br>if changed since last report) | 43-1916803 |
| 000-51873 | **KANSAS CITY POWER & LIGHT COMPANY**<br>(A Missouri Corporation)<br>1200 Main Street<br>Kansas City, Missouri 64105<br>(816) 556-2200<br><br>NOT APPLICABLE<br>(Former name or former address,<br>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))

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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 7.01 Regulation FD Disclosure**

Representatives of Great Plains Energy will participate in meetings with investors on May 24-25, 2011. A copy of the investor handout to be used in such meetings is attached as Exhibit 99.1 hereto. The investor handout contains information regarding KCP&L. Accordingly, information in the investor handout relating to KCP&L is also being furnished on behalf of KCP&L.

The information under this Item 7.01 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 7.01 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 | Investor presentation slides |

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## 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/ Ellen E. Fairchild
Ellen E. Fairchild
Vice President, Corporate Secretary and Chief Compliance Officer

**KANSAS CITY POWER & LIGHT COMPANY**

/s/ Ellen E. Fairchild
Ellen E. Fairchild
Vice President, Corporate Secretary and Chief Compliance Officer

Date: May 23, 2011

**Exhibit Index**

| Exhibit No. | Description |
|---|---|
| 99.1 | Investor presentation slides |

Exhibit 99.1

# Great Plains Energy

## Investor Presentation

## May 2011

# Forward-Looking Statement

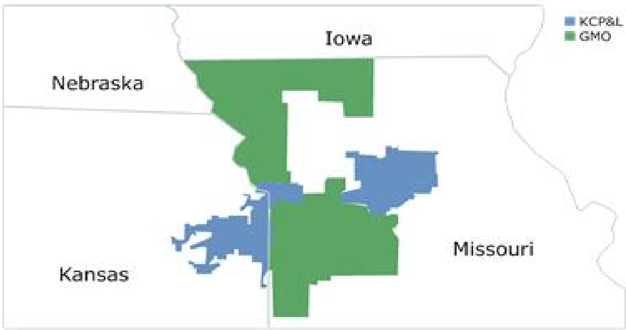
Statements made in this presentation that are not based on historical facts are forward-looking, may involve risks and uncertainties, and are intended to be as of the date when made. Forward-looking statements include, but are not limited to, the outcome of regulatory proceedings, cost estimates of capital 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, weather-related 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 additional 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.

# Company Overview

# Solid Vertically-Integrated Midwest Utility

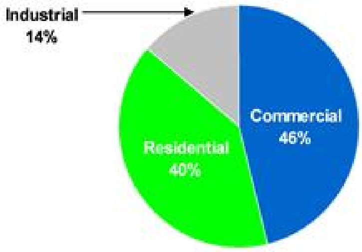
## Service Territories: KCP&L and GMO




## Business Highlights

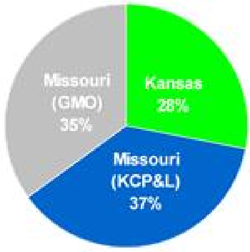
- Solid Midwest electric utility operating under the KCP&L brand
- Transformational events in 2008 to focus business model on fully regulated utility operations
  - Sale of Strategic Energy
  - Acquisition of Aquila (now KCP&L Greater Missouri Operations, or “GMO”)
- Company attributes
  - ~824,600 customers / 3,200 employees
  - ~6,600 MW of primarily low-cost coal baseload generation
  - 5-year projected synergies post-GMO acquisition of ~$760M
  - ~$8.8bn in assets at 2010YE
  - ~$5.6bn in rate base

## 2010 Retail MWh Sold by Customer Type*



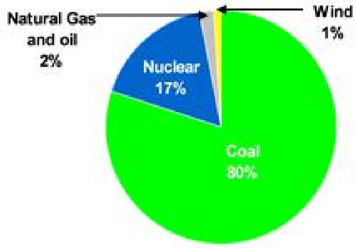

**Total: ~ 23,806 MWhs**

## 2010 Retail MWh Sales by Jurisdiction*




**Total: ~ 23,806 MWhs**

## 2010 MWh Generated by Fuel Type*




**Total: ~ 26,679 MWhs**

* In thousands

# Strong Platform

**100% Regulated Electric Utility Operations Focus**

- Strong Midwest electric utilities focused on regulated operations in Missouri and Kansas
- Diversified customer base includes ~824,600 residential, commercial, and industrial customers
- ~6,600 Megawatts of generation capacity
- Low-cost generation mix: 80% coal, 17% nuclear (Wolf Creek), 2% natural gas/oil and 1% wind in 2010

**Attractive Platform for Long-Term Earnings Growth**

- Growth and stability in earnings driven by sizable regulated investments as part of the Comprehensive Energy Plan ("CEP")
  - Wind, environmental retrofits and Iatan 2 baseload coal plant all in-service
- Organic growth potential through environmental, transmission, renewable energy and on-going reliability-related investment

**Diligent Regulatory Approach**

- Constructive outcomes in 2006, 2007 and 2008 rate cases in Missouri and Kansas
- Recent cases
  - Kansas - In 2010, the KCC authorized a revenue increase of $22 million and brought Iatan 2 into rate base with minimal disallowance
  - Missouri - In 2011, the MPSC authorized revenue increases totaling $94.2 million for KCP&L -MO and GMO and brought Iatan 2 into rate base with minimal disallowance

**Improved Financial Position**

- Cash flow and earnings heavily driven by regulated operations and cost recovery mechanisms
- Ample liquidity currently available under $1.25bn credit facilities
- Sustainable dividend and pay-out, right-sized to fund growth and to preserve liquidity
- Stable Outlook at Moody's and S&P

# Strong Track Record of Execution

## Comprehensive Energy Plan

| | Project description | Comments |
|---|---|---|
| **Wind** | • 100 MW plant in Spearville, KS<br>• Began construction in 2005 | ü Completed in Q3 2006<br>ü In rate base from 1/1/2007<br>ü No regulatory disallowance |
| **LaCygne Environmental** | • Selective Catalytic Reduction (SCR) unit at LaCygne 1 | ü Completed in Q2 2007<br>ü In rate base from 1/1/2008<br>ü No regulatory disallowance |
| **Iatan 1 Environmental** | • Air Quality Control System at Iatan 1 | üCompleted in Q2 2009<br>üIncluded in KCP&L KS, KCP&L MO and GMO rate base with minimal disallowance |
| **Iatan 2** | • Construction of Iatan 2 super-critical coal plant (850 MW; 73% GXP ownership share)[1] | üIn-service on 8/26/2010; Included in KCP&L KS, KCP&L MO and GMO rate base with minimal (1%) disallowance |

**Great Plains Energy effectively executed all elements of its Comprehensive Energy Plan and received constructive regulatory treatment**

[1] Includes post-combustion environmental technologies including an SCR system, wet flue gas desulphurization system and fabric filter to control emissions

# Focused Regulatory Approach

| (in $ millions) Rate Jurisdiction | Initial Request | Amount Approved | Effective Date | Rate Base | Return on Equity | Rate-making Equity Ratio |
|---|---|---|---|---|---|---|
| KCP&L - Missouri | $55.8 | $50.6 | 1/1/2007 | $1,270 | 11.25% | 53.69% |
| KCP&L - Missouri | $45.4 | $35.3 | 1/1/2008 | $1,298 | 10.75% | 57.62% |
| KCP&L - Missouri | $101.5 | $95.0 | 9/1/2009 | $1,496[1] | n/a[4] | 46.63% |
| **KCP&L - Missouri** | **$92.1** | **$34.8** | **5/4/2011** | **$2,036** | **10.00%** | **46.30%** |
| KCP&L - Kansas | $42.3 | $29.0 | 1/1/2007 | $1,000[1] | n/a[2] | n/a |
| KCP&L - Kansas | $47.1 | $28.0 | 1/1/2008 | $1,100[1] | n/a[3] | n/a |
| KCP&L - Kansas | $71.6 | $59.0 | 8/1/2009 | $1,270[1] | n/a[4] | 50.75% |
| **KCP&L - Kansas** | **$55.2** | **$22.0** | **12/1/2010** | **$1,781** | **10.00%** | **49.66%** |
| GMO - MPS | $94.5 | $45.2 | 6/1/2007 | $918 | 10.25% | 48.17% |
| GMO - MPS | $66.0 | $48.0 | 9/1/2009 | $1,188[1] | n/a[5] | 45.95% |
| **GMO - MPS** | **$75.8** | **$30.1** | **6/4/2011** | **$1,336** | **10.00%** | **46.58%** |
| GMO - L&P | $24.4 | $13.6 | 6/1/2007 | $186 | 10.25% | 48.17% |
| GMO - L&P | $17.1 | $15.0 | 9/1/2009 | $286[1] | n/a[5] | 45.95% |
| **GMO - L&P** | **$22.1** | **$29.3** | **6/4/2011** | **$422** | **10.00%** | **46.58%** |

[1] Rate Base amounts are approximate amounts since the cases were black box settlements; [2] Iatan 2 AFUDC calculation was set at 8.5%; [3] Iatan 2 AFUDC calculation was set at 8.3%; [4] Iatan 2 AFUDC calculation was set at 8.25%; [5] Iatan 2 AFUDC calculation was set at 10.2%

# Coal Fleet Emissions Control Equipment

| Coal Unit | MW | SCR | Scrubber | Bag House | Other Particulate Control (f) | Mercury Controls | Cooling Tower |
|---|---|---|---|---|---|---|---|
| Iatan 1 | 621[a] | √ | √ | √ | ◆ | √ | ◆ |
| Iatan 2 | 618[a] | √ | √ | √ | ◆ | √ | √ |
| LaCygne 1 | 368[a] | √ | √ (b) | ▲ | √ (c) | ▲ | ◆ |
| LaCygne 2 | 341[a] | ▲ | ▲ | ▲ | √ (d) | ▲ | ◆ |
| Hawthorn 5 | 563 | √ | √ | √ | ◆ | ◆ | ◆ |
| Sibley 1 and 2 | 102 | ◆ (e) | ◆ | ◆ | √ | ◆ | ◆ |
| Sibley 3 | 364 | √ | ▲ | ▲ | √ | ◆ | ◆ |
| Montrose 1, 2 and 3 | 510 | ◆ | ◆ | ◆ | √ | ◆ | ◆ |
| Lake Road 4 | 99 | ◆ | ◆ | ◆ | √ | ◆ | ◆ |
| Jeffrey Energy Center 1, 2 and 3 | 173[a] | ▲ ◆ | √ | ◆ | √ | ◆ | √ |

**If a scrubber is installed on both LaCygne 2 and Sibley 3, roughly 81 percent of the installed coal capacity would have scrubbers**

(a) KCP&L's share of jointly-owned facility
(b) LaCygne 1 currently has a scrubber installed; however, 2011-2013 capital expenditure plan includes the installation a new scrubber on the unit
(c) Existing scrubber removes particulate matter; a baghouse is expected to be installed
(d) Existing precipitator will be replaced by a baghouse
(e) Sibley 1 and 2 both have SNCRs installed
(f) Particulate control provided by existing baghouse for Iatan 1, Iatan 2 and Hawthorn 5
√ Installed
▲ Installation of this equipment is scheduled to begin during the period covered by the 2011-2013 capital expenditure plan. Jeffrey Energy Center SCR is planned for Unit 1
◆ Not installed

# 2010 Highlights and 1Q11 Regulatory / Operations Update

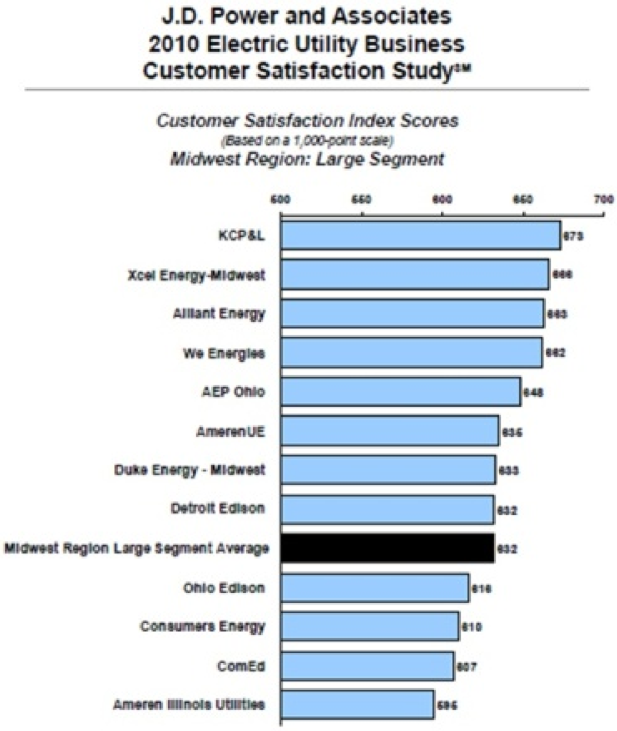
# 2010 Highlights

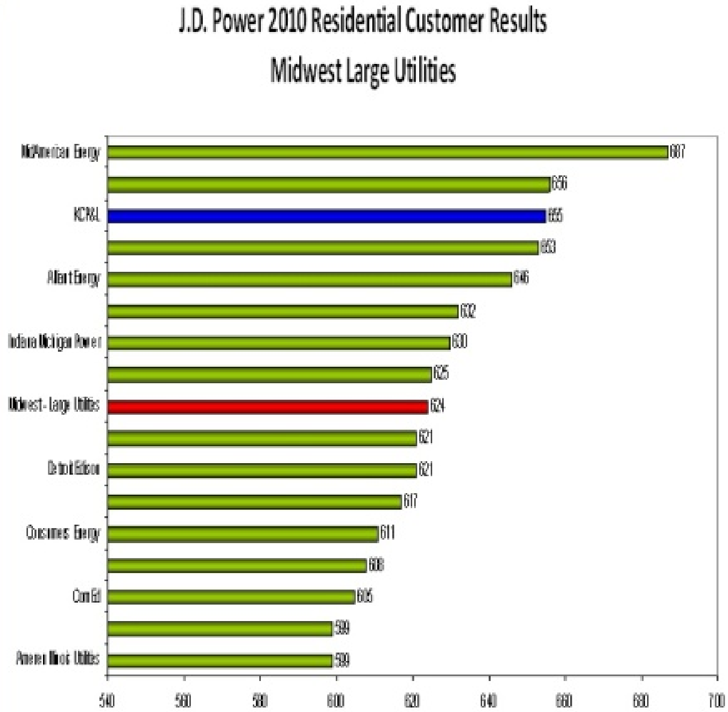
- ü Completed Iatan 2 consistent with 2005 scheduled commitment of "summer 2010"
- ü Achieved top-tier customer satisfaction
- ü Completed KCP&L's Kansas rate case; filed cases for KCP&L and GMO in Missouri
- ü Improved generation fleet performance
- ü Completed 48 MW Spearville 2 wind facility
- ü Obtained improved outlooks (from "Negative" to "Stable") at Moody's and S&P

# 2010 Milestones - Iatan 2

- ☑ Air Flow Draft Tests (completed 2/25/10)
- ☑ First Fire on Oil (completed 3/29/10)
- ☑ Steam Blows (completed 6/03/10)
- ☑ First Fire on Coal (completed 7/20/10)
- ☑ Synchronization (completed 7/20/10)
- ☑ In-Service (declared by Company 8/26/10)
- ☑ Testing and Fine-Tuning (completed 4Q10)

# Customer Satisfaction




Source: 2010 JD Power Residential Study Results (3Q09 to 2Q10)

# KCP&L Kansas Rate Case Results

- Annual Revenue Increase of $22.0 million (vs. Updated Company Request of $50.9 Million)
- 10.00% Authorized ROE (vs. Updated Company Request of 10.75%); Equity Ratio of 49.66%
- Iatan 2 in Service and Added to Rate Base
  - Total project disallowance of $20.4 million of budgeted costs, or about 1% ($5.1 million KCP&L Kansas jurisdictional share)
- Minimal Iatan 1 Environmental Project Disallowance
- Kansas Jurisdictional Rate Base of $1.781 Billion
- Requested Environmental Rider Denied
- New Rates Effective 12/1/10

# KCP&L Missouri Rate Case Results

- Annual Revenue Increase of $34.8 Million or 5.25% (vs. Updated Company Request of $66.5 million) Effective May 4, 2011
- 10.00% Authorized ROE (vs. Updated Company Request of 10.75%); Equity Ratio of 46.3%
- Iatan 2 in Service and Added to Rate Base
  - Total Project Disallowance of $21.1 Million ($6.2 million for KCP&L Missouri Jurisdictional Share) or ~1 Percent of Total Project Cost
- Minimal Iatan 1 Environmental Project Disallowance
- KCP&L Missouri Jurisdictional Rate Base of $2.036 Billion
- Off-System Sales Margin Threshold Set at $45.9 Million Missouri Jurisdictional Share
  - Compares to Updated Company Request of $29.4 million

# GMO Rate Case Results

- Authorized Annual Combined Revenue Increase of $59.4 Million (vs. Updated Company Request of $89.1 Million) Effective June 4, 2011
- Same ROE and Equity Percentage as KCP&L Missouri
- Iatan 2 - Same Total Project Disallowance as in KCP&L Missouri's Case; $3.8 Million for GMO's Share
- Minimal Iatan 1 Environmental Project Disallowance
- MPS Rate Base of $1.336 Billion and L&P Rate Base of $422 Million
- Crossroads Energy Center
  - Approximately $50 Million of Asset Cost Disallowed from Rate Base
  - About $5 Million of Related Transmission Costs Excluded from Cost of Service

# 1Q11 Operations Update

- LaCygne Predetermination Filing in Kansas
- Plant Performance
- Recent EPA Proposals
- Customer Consumption

# Kansas Predetermination Filing Update

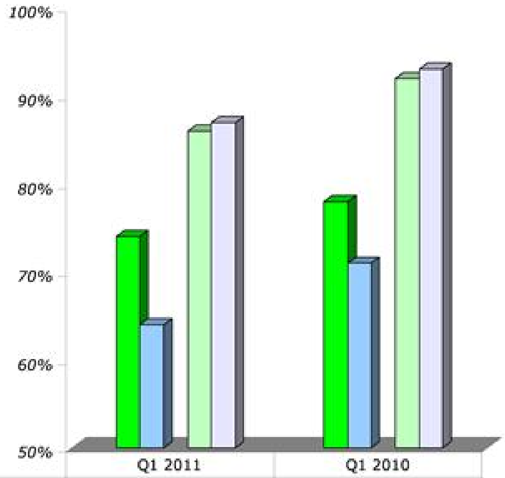
| Coal Unit | MW | SCR | Scrubber | Bag House | Other Particulate Control | Mercury Controls | Cooling Tower |
|---|---|---|---|---|---|---|---|
| LaCygne 1 | 368[a] | ✓ | ✓(b) | ▲ | ✓(c) | ▲ | ◇ |
| LaCygne 2 | 341[a] | ▲ | ▲ | ▲ | ✓(d) | ▲ | ◇ |

(a) KCP&L's share of jointly-owned facility
(b) LaCygne 1 currently has a scrubber installed; however, 2011-13 capital expenditure plan includes the installation of a new scrubber on the unit
(c) Existing scrubber removes particulate matter; a baghouse is expected to be installed
(d) Existing precipitator will be replaced by a baghouse
ü Installed
▲ Installation of this equipment is scheduled to begin during the period covered by the 2011-2013 capital expenditure plan
◇ Not installed

- Project includes the installation of:
  - LaCygne 1 - Wet scrubber, baghouse, activated carbon injection
  - LaCygne 2 - Selective Catalytic Reduction system (SCR), wet scrubber, baghouse, activated carbon injection and low NOx burners
- Predetermination filing is for total project cost of $1.23 billion; KCP&L's total share is $615 million and Kansas jurisdictional share is $281 million
- Filing includes request for a LaCygne project-specific rider
- Predetermination case proceeding in parallel with KCC general investigation docket concerning environmental retrofits
- Decision in predetermination filing expected in August 2011

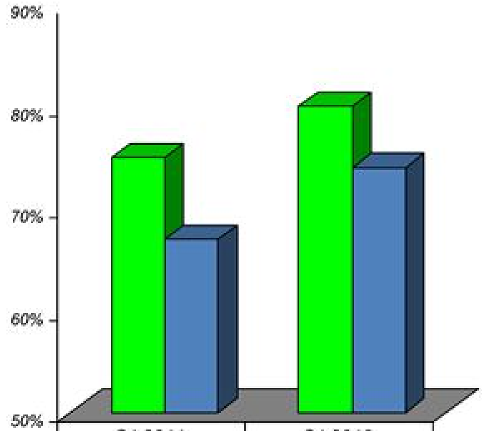
# Plant Performance

## Coal and Nuclear




| | Q1 2011 | Q1 2010 |
|---|---|---|
| Equivalent Availability Coal | 74% | 78% |
| Capacity Factor Coal | 64% | 71% |
| | | |
| Equivalent Availability Nuclear | 86% | 92% |
| Capacity Factor Nuclear | 87% | 93% |

## Combined Fleet




| | Q1 2011 | Q1 2010 |
|---|---|---|
| Equivalent Availability | 75% | 80% |
| Capacity Factor | 67% | 74% |

# Recent EPA Ruling and Proposals

**Industrial Boiler Maximum Achievable Control Technology (MACT) Rule**

- EPA final rule issued in February 2011; effective date delayed pending appeal / reconsideration
- Applies to most of GMO's Lake Road boilers and auxiliary boilers at other generating facilities
- Expected cost of compliance for this rule and the currently effective CAIR and BART is approximately $1 billion

**Utility Boiler MACT Rule**

- EPA proposed rule issued in March 2011; plans to issue final rule by November 2011
- Proposed rule will impact all KCP&L and GMO coal plants
- If final rule is as proposed:
    - Potential retrofit of about 1,250 MW of baseload coal generation. Expected cost of compliance to be within the approximate $1 billion estimate referenced above
    - Potential retirement of older units totaling about 535 MW
- Final rule is expected to change from the current form

**Section 316(B) Rule - Water Intake Structures**

- EPA proposed rule issued in March 2011; plans to issue final rule by July 2012
- Proposed rule applicable to most KCP&L and GMO coal units
- If cooling towers are ultimately required, projected compliance costs would likely be significant; however, this is not likely
- Current form of proposed rule by itself would not be expected to lead to retirements
- Final rule is likely to change from the current form

# Customer Consumption

## Retail MWh Sales and Customer Growth Rates

1Q 2011 Compared to 1Q 2010

| | | Weather-Normalized | | |
|---|---|---|---|---|
| | Total Change in MWh Sales | Customers | Use / Customers | Change MWh Sales |
| **Residential** | (4.0%) | (0.1%) | (5.7%) | (5.8%) |
| **Commercial** | (1.3%) | 0.3% | (2.0%) | (1.7%) |
| **Industrial** | (0.0%) | (0.9%) | 1.1% | 0.1% |
| | (2.2%) | 0.0%* | (3.1%)* | (3.2%)* |

* Weighted average

## Statistics by Customer Class First Quarter 2011

| | Customers | Revenue (in millions) | Sales (000s of MWhs) | % of MWh Sales |
|---|---|---|---|---|
| **Residential** | 725,500 | $201.5 | 2,437 | 42% |
| **Commercial** | 96,400 | 182.3 | 2,589 | 45% |
| **Industrial** | 2,300 | 38.5 | 746 | 13% |

# Financial Overview

# Great Plains Energy Consolidated Earnings and Earnings Per Share - Three Months Ended March 31

(Unaudited)

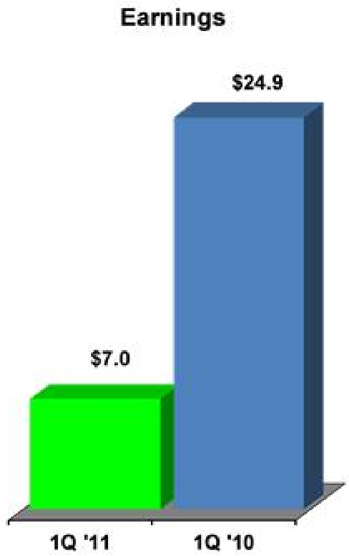
| | Earnings (in Millions) | | Earnings per Share | |
|---|---|---|---|---|
| | 2011 | 2010 | 2011 | 2010 |
| **Electric Utility** | $ 7.0 | $ 24.9 | $ 0.05 | $ 0.18 |
| **Other** | (4.7) | (4.6) | (0.04) | (0.03) |
| **Net income** | 2.3 | 20.3 | 0.01 | 0.15 |
| **Less: Net loss attributable to noncontrolling 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 |

- Electric Utility's net income decreased $17.9 million including an $8.4 million decrease in gross margin*
- Common stock outstanding for the quarter averaged 138.2 million shares, about 1 percent higher than the same period in 2010

*Gross margin is defined and reconciled to GAAP operating revenues at the end of the presentation

# Electric Utility First Quarter Results

(in millions)





* Gross margin is defined and reconciled to GAAP operating revenues at the end of the presentation

## Key Earnings Drivers

- Decreased depreciation and amortization of $9.8 million primarily driven by a reduction of KCP&L's regulatory amortization in Kansas;
- Decreased income tax expense of $10.7 million resulting from lower pre-tax income;
- Decreased gross margin* of $8.4 million due to a $5.7 million reduction in retail revenue from reduced customer consumption and $4.6 million of increased coal transportation costs not recovered in KCP&L Missouri retail rates where there is no fuel recovery mechanism;
- Increased other operating expenses of $12.4 million primarily driven by $6.9 million loss attributed to Iatan 1 and 2 construction costs plus other costs resulting from the Missouri rate case orders and a $4.0 million increase in general taxes principally related to property taxes at Iatan 2;
- A $9.7 million expense for the voluntary separation program; and
- Decreased non-operating income and expenses of $9.8 million primarily due to lower AFUDC equity

# Debt Profile as of March 31, 2011

## Great Plains Energy Debt

| ($ in millions) | KCP&L | | GMO [1] | | GPE | | Consolidated | |
|---|---|---|---|---|---|---|---|---|
| | Amount | Rate [2] | Amount | Rate [2] | Amount | Rate [2] | Amount | Rate [2] |
| **Short-term debt** | **$ 383.8** | **0.61%** | **$ 205.0** | **3.06%** | **$ 14.0** | **3.06%** | **$ 602.8** | **1.50%** |
| **Long-term debt [3]** | **1,780.1** | **6.13%** | **863.9** | **10.20%** | **637.0** | **7.57%** | **3,281.0** | **7.45%** |
| **Total** | **$2,163.9** | **5.15%** | **$1,068.9** | **8.78%** | **$ 651.0** | **7.47%** | **$3,883.8** | **6.51%** |

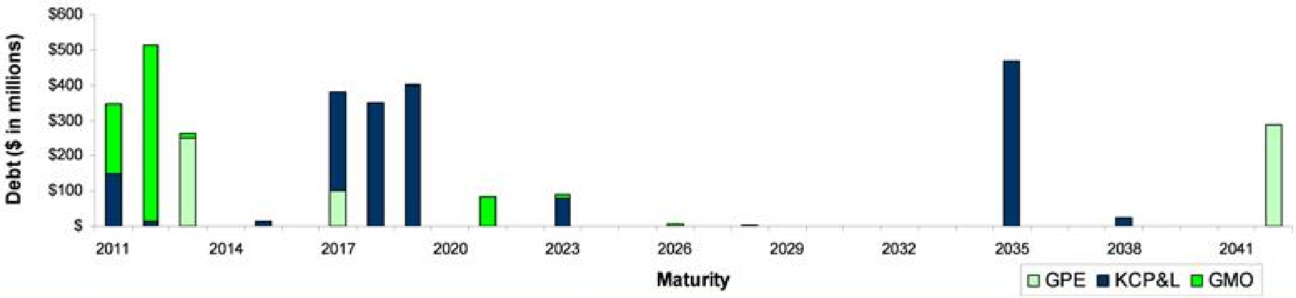
Secured debt = $861.5 (22%), Unsecured debt = $3,022.3 (78%)

[1] GPE guarantees substantially all of GMO's debt

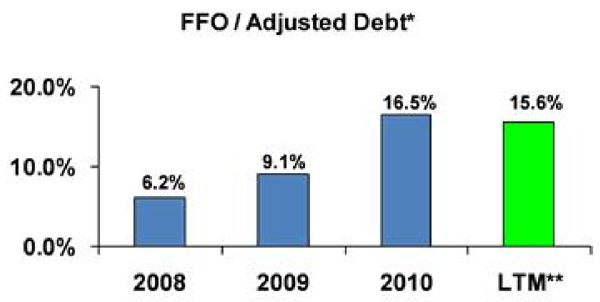
[2] Weighted Average Rates - excludes premium / discounts and fair market value adjustments; includes full Equity Units coupon (12%) for GPE

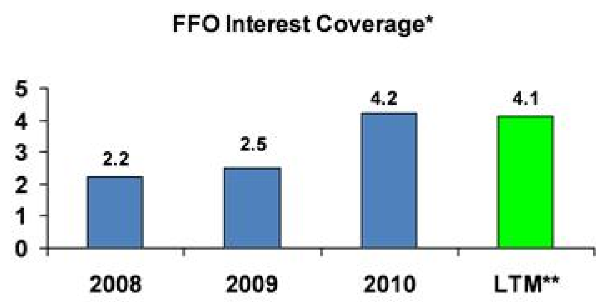
[3] Includes current maturities of long-term debt

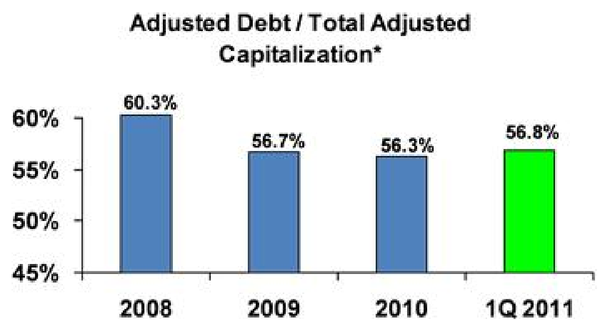
## Long-term Debt Maturities



# Credit Profile for Great Plains Energy



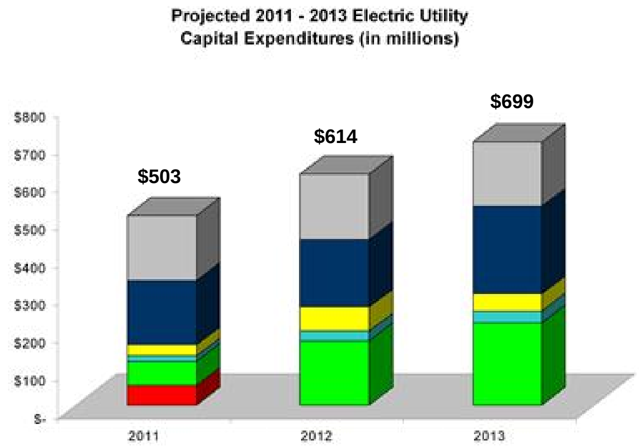




**Current Credit Ratings**

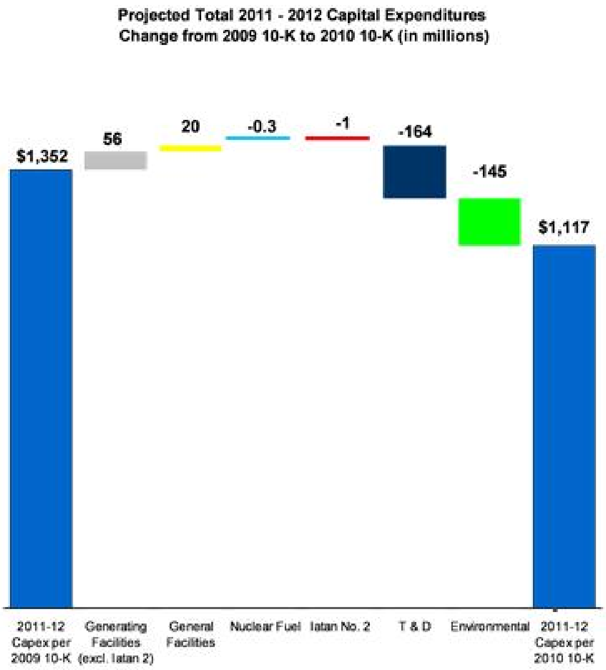
| | Moody's | Standard & Poor's |
|---|---|---|
| Great Plains Energy | | |
| Outlook | **Stable** | **Stable** |
| Corporate Credit Rating | - | BBB |
| Preferred Stock | Ba2 | BB+ |
| Senior Unsecured Debt | Baa3 | BBB- |
| KCP&L | | |
| Outlook | **Stable** | **Stable** |
| Senior Secured Debt | A3 | BBB+ |
| Senior Unsecured Debt | Baa2 | BBB |
| Commercial Paper | P-2 | A-2 |
| GMO | | |
| Outlook | **Stable** | **Stable** |
| Senior Unsecured Debt | Baa3 | BBB |

* All ratios calculated using Standard and Poor's methodology
** Last twelve months as of March 31, 2011

# Capital Expenditures Forecast




| | 2011 | 2012 | 2013 |
|---|---|---|---|
| Generating Facilities (excl. Iatan 2) | 172.2 | 174.6 | 171.8 |
| Transmission & Distribution | 171.0 | 178.9 | 232.2 |
| General Facilities | 29.2 | 63.2 | 44.6 |
| Nuclear Fuel | 14.8 | 26.2 | 31.5 |
| Environmental | 63.0 | 171.0 | 219.1 |
| Iatan No. 2 | 53.1 | - | - |



# Considerations for 2011

## Rate Case Implications

- Full-year impact from new KS rates
- Missouri new rates effective early May 2011 (KCP&L) / early June 2011 (GMO)
- Regulatory lag January - April from new rail contract for KCP&L in Missouri (no FAC)
- Iatan 2 depreciation effective with new rates will be lower due to lower depreciable plant from additional amortization granted during the CEP to maintain credit metrics

## Construction Accounting - Missouri

- Missouri jurisdictional share of Iatan 2 carried as a regulatory asset until effective date of new rates in MO
  - Carrying cost reduces interest expense
  - Iatan-related O&M and property taxes deferred as regulatory asset until effective date of new rates
  - Depreciation expense deferred as regulatory asset until effective date of new rates
  - Iatan 2 system energy value recorded to regulatory asset as an offset to costs listed above

# Considerations for 2011 (continued)

## Interest Expense

- Interest expense impacted by carrying cost offset, new long-term debt issued in 2010 and May 2011 and additional debt anticipated in 2011

## Weather-Normalized MWh Sales

- Expectation is flat compared to 2010 weather-normalized level

## O&M

- Projected to be consistent with levels requested in rate cases

## Generation Fleet

- Projected EAF for combined fleet - 83%
- LaCygne outage for most of 1Q
- Wolf Creek refueling and expanded maintenance outage began in late 1Q and expected to end late May

## Taxes

- Expect no cash taxes in 2011 as a result of bonus depreciation / NOL utilization
- Anticipate effective tax rate of approximately 34% based on normal conditions

# Considerations for 2011 (continued)

**Other**

- Expenses Associated with Voluntary Separation Program
  - $0.04 EPS impact in 1Q
  - $0.02 EPS impact to be recognized In 2Q

- Missouri Rate Case-Related Expenses
  - $0.03 EPS impact in 1Q
  - Currently assessing impacts of GMO order

# Looking Ahead / Conclusion

# Looking Ahead

- Regional economy poised to improve; impact of customer energy consumption still difficult to assess
- New rates in effect for 7 months for GMO and 8 months for KCP&L Missouri in 2011
- Internal project underway to identify regulatory and operating strategies to reduce regulatory lag going forward
- Decisive management actions implemented in 2011 to manage costs within levels reflected in rates, enhance organizational effectiveness and contribute to solid credit metrics
- Impact of new EPA rules

# Great Plains Energy

## Investor Presentation

## May 2011

# Appendix
# Gross Margin Reconciliation

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

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

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 above.