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): March 25, 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 NOT APPLICABLE (Former name or former address, if changed since last report)	43-1916803
000-51873	**KANSAS CITY POWER & LIGHT COMPANY** (A Missouri Corporation) 1200 Main Street Kansas City, Missouri 64105 (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))

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 March 28-29, 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

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: March 25, 2011

Exhibit Index

Exhibit No.	Description
99.1	Investor presentation slides

Exhibit 99.1

Great Plains Energy

Investor Presentation

March 28 & 29, 2011

GREAT PLAINS ENERGY

March 28 & 29, 2011 Investor Presentation

Company Representatives

Michael Cline
Vice President - Investor Relations and Treasurer
816-556-2622
michael.cline@kcpl.com

Tony Carreño
Director, Investor Relations
816-654-1763
anthony.carreno@kcpl.com

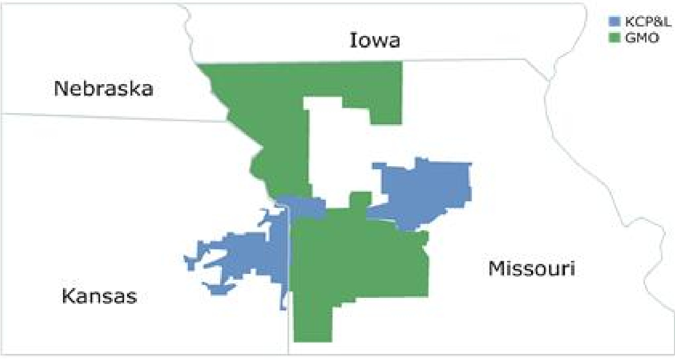
Forward-Looking Statement

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.

Solid Vertically-Integrated Midwest Utility

Service Territories: KCP&L and GMO

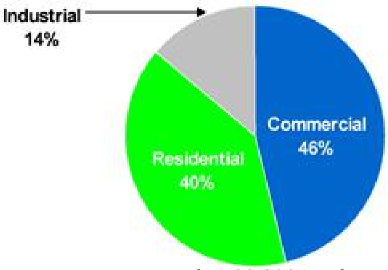


Business Highlights

- 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
  - ~823,200 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 and $5.7bn* in rate base at 2010YE

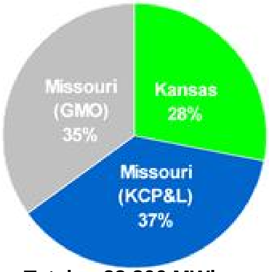
*Includes MO portion of Iatan 2 subject to MPSC decision in rate cases

2010 Retail MWh Sold by Customer Type



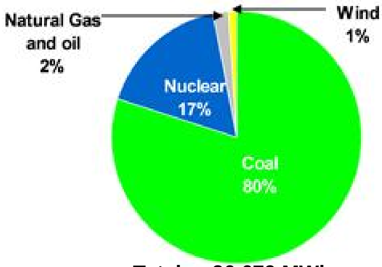
Total: ~ 23,806 MWhs

2010 Retail MWh Sales by Jurisdiction



Total: ~ 23,806 MWhs

2010 MWh Generated by Fuel Type



Total: ~ 26,679 MWhs

Strong Platform

100% Regulated Electric Utility Operations Focus	• Strong Midwest electric utilities focused on regulated operations in Missouri and Kansas • Diversified customer base includes ~823,200 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 and current cases – Kansas - In 2010, the KCC authorized a revenue requirement increase of $22 million and brought Iatan 2 into rate base with minimal disallowance – Missouri - $144 million rate increase request pending for KCP&L -MO and GMO; decisions expected 2Q11
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 • Began construction in 2005	ü Completed in Q3 2006 ü In rate base from 1/1/2007 ü No regulatory disallowance
LaCygne Environmental	• Selective Catalytic Reduction (SCR) unit at LaCygne 1	ü Completed in Q2 2007 ü In rate base from 1/1/2008 ü No regulatory disallowance
Iatan 1 Environmental	• Air Quality Control System at Iatan 1	ü Completed in Q2 2009 ü In rate base starting 3Q 2009 (KS 8/1 & MO 9/1) ü No regulatory disallowance in 2009 MO and KS cases; minimal disallowance in 2010 KS case and capped exposure in 2010 MO cases
Iatan 2	• Construction of Iatan 2 super-critical coal plant (850 MW; 73% GXP ownership share)[1]	ü In-service on 8/26/2010; confirmed by KCC in October; MPSC view to be communicated through pending rate cases ü Included in KS rate base with minimal disallowance Q4 2010; MO rate base treatment to be determined Q2 2011

Great Plains Energy has effectively executed all elements of its Comprehensive Energy Plan to date and has 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

Rate Case Outcomes

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 - 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	**$55.1**	**$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 - 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%

[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 /SNCR	Scrubber	Bag House	Precipitator	Mercury Controls	Cooling Tower
Iatan 1	621[(a)]	✓	✓	✓	◇	✓	◇
Iatan 2	618[(a)]	✓	✓	✓	◇	✓	✓
LaCygne 1	368[(a)]	✓	✓ (b)	▲	◇	◇	◇
LaCygne 2	341[(a)]	▲	▲	▲	✓	◇	◇
Hawthorn 5	563	✓	✓	✓	◇	◇	◇
Sibley 1 and 2	102	✓ (c)	◇	◇	✓	◇	◇
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) Share of jointly-owned facility
(b) LaCygne 1 currently has a scrubber installed; however, our 2011 capital expenditure plan includes the installation a new scrubber on the unit
(c) Sibley 1 and 2 both have SNCRs installed; however, both units would require an SCR for compliance with NOx reduction under the NAAQS
ü 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 Regulatory / Operations Update

2010 Highlights

ü Completed Iatan 2 consistent with 2005 schedule 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

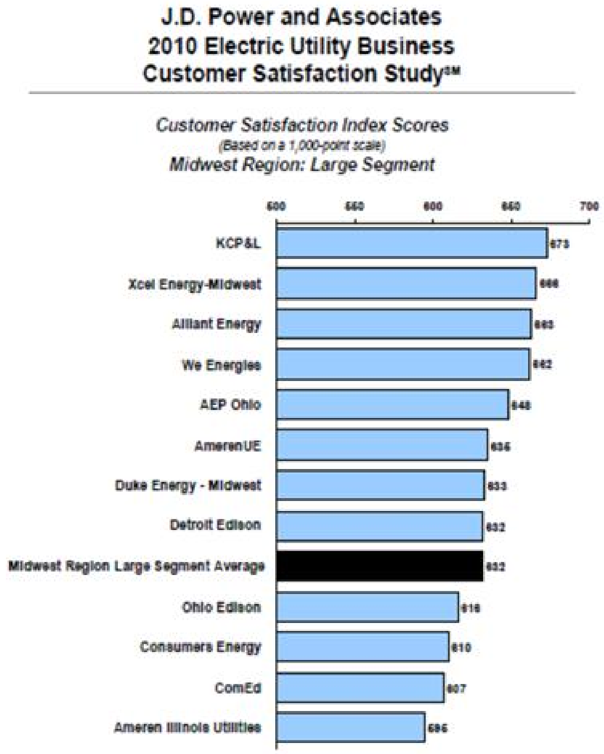
ü Completed 48 MW Spearville 2 wind facility

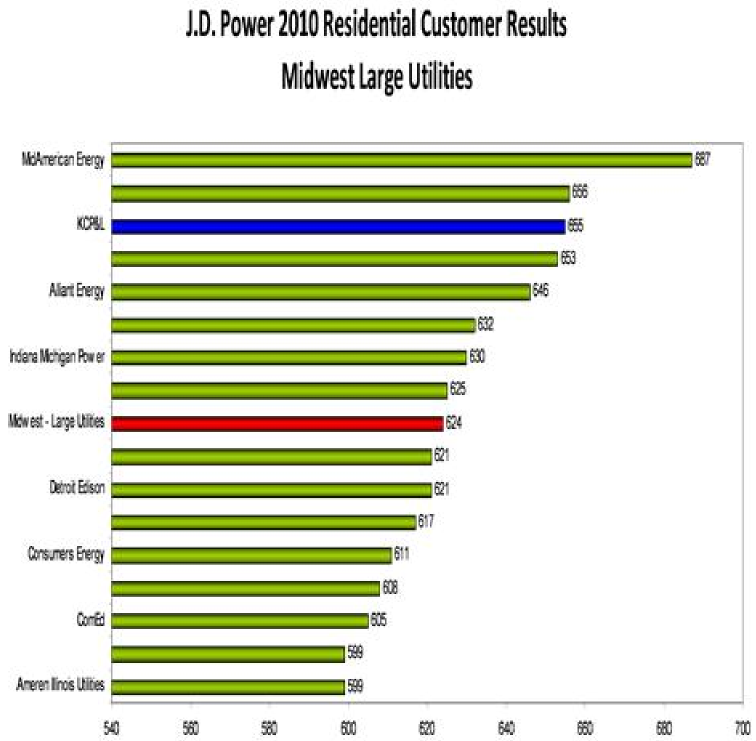
ü Obtained improved outlooks (from “Negative” to “Stable”) at Moody’s and S&P

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; confirmed by KCC in October; MPSC view to be communicated through pending rate cases)
- ☑ 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

Missouri Rate Cases Status

(in $ millions) Jurisdiction	Requested Increase	Requested ROE[4]	Rate Base	Rates Effective	Decision
KCP&L - MO	$92.1[1]	11.00%	2,122.8	5/4/2011	Spring 2011
GMO - MPS	$75.8[2]	11.00%	1,468.7	6/4/2011	Spring 2011
GMO - L&P	$22.1[3]	11.00%	422.0	6/4/2011	Spring 2011
Total	$190.0	-	4,013.5	-	-

[1] KCP&L's initial request was subsequently adjusted to $55.8 million, mainly due to lower fuel and purchased power costs and increased deferred income taxes from bonus depreciation

[2] GMO - MPS's initial request was subsequently adjusted to $65.2 million

[3] GMO - L&P's initial request was subsequently adjusted to $23.2 million

[4] The requested ROE was adjusted by KCP&L and GMO to 10.75%

Operations Update

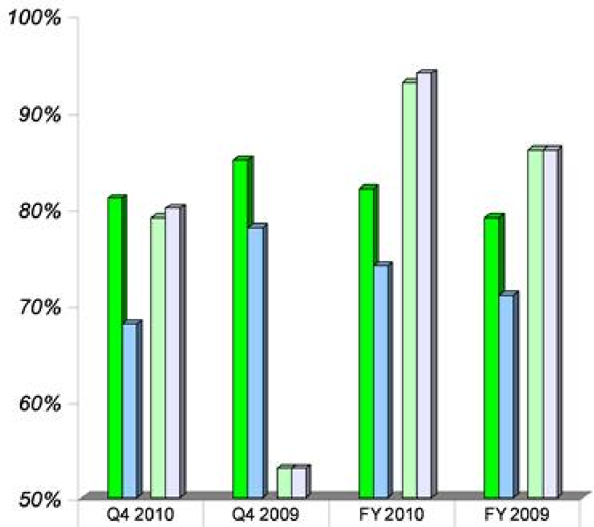
- LaCygne Predetermination Filing in Kansas
- Plant Performance
- Renewable Energy Update
- Customer Consumption - 4Q and Full-year 2010

Kansas Predetermination Filing - LaCygne Environmental Retrofit Project

- Project includes the installation of:
  - LaCygne 1 - Wet scrubber and baghouse
  - LaCygne 2 - Selective Catalytic Reduction system (SCR), wet scrubber, baghouse 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
- Decision expected in August 2011
- New KCC general investigation docket regarding KCP&L and Westar environmental retrofits will run concurrently with KCP&L’s LaCygne predetermination filing

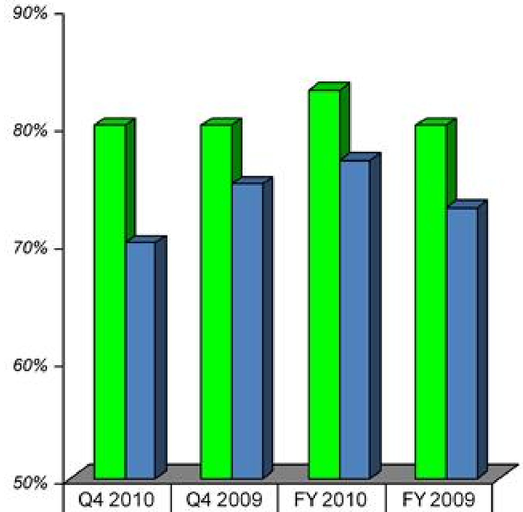
Plant Performance

Coal and Nuclear



	Q4 2010	Q4 2009	FY 2010	FY 2009
Equivalent Availability Coal	81%	85%	82%	79%
Capacity Factor Coal	68%	78%	74%	71%
Equivalent Availability Nuclear	79%	53%	93%	86%
Capacity Factor Nuclear	80%	53%	94%	86%

Combined Fleet



	Q4 2010	Q4 2009	FY 2010	FY 2009
Equivalent Availability	80%	80%	83%	80%
Capacity Factor	70%	75%	77%	73%

Renewable Energy

- 48 MW of new wind generation operational in 4Q10 at Spearville 2 site
- Addition of Spearville 2 along with purchase of 52 MW of RECs ensures compliance with Kansas RES effective later in 2011
- Will pursue additional wind generation required under Collaboration Agreement by end of 2012, subject to regulatory approval
  - RFPs issued for 100MW; evaluating responses
  - Considering options for the remainder

Customer Consumption

Retail MWh Sales and Customer Growth Rates

	4Q 2010 Compared to 4Q 2009				Full-Year 2010 Compared to Full-Year 2009			
		Weather-Normalized				Weather-Normalized		
	Total Change in MWh Sales	Customers	Use / Customer	Change MWh Sales	Total Change in MWh Sales	Customers	Use / Customer	Change MWh Sales
Residential	(4.9%)	0.1%	(4.9%)	(4.8%)	9.4%	0.2%	(0.1%)	0.1%
Commercial	0.5%	0.6%	(0.7%)	(0.1%)	2.9%	0.3%	(1.0%)	(0.7%)
Industrial	2.4%	(1.2%)	2.9%	1.7%	4.6%	(1.3%)	4.3%	3.0%
	(1.4%)	0.2%*	(1.8%)*	(1.7%)*	5.6%	0.2%*	(0.1%)*	0.1%*

* Weighted average

Statistics by Customer Class Full-Year 2010

	Customers	Revenue (in millions)	Sales (000s of MWhs)	% of MWh Sales
Residential	724,200	$915.8	9,459	40%
Commercial	96,300	838.0	10,950	46%
Industrial	2,300	193.5	3,286	14%

Financial Overview

Great Plains Energy Consolidated Earnings and Earnings Per Share Year Ended December 31

(Unaudited)

	Earnings (in Millions) 2010	2009	Earnings per Share 2010	2009
Electric Utility	$ 235.3	$ 157.8	$ 1.72	$ 1.22
Other	(23.4)	(5.9)	(0.17)	(0.05)
Income from continuing operations	211.9	151.9	1.55	1.17
Strategic Energy discontinued operations	-	(1.5)	-	(0.01)
Net income	211.9	150.4	1.55	1.16
Less: Net income attributable to noncontrolling interest	(0.2)	(0.3)	-	-
Net income attributable to Great Plains Energy	211.7	150.1	1.55	1.16
Preferred dividends	(1.6)	(1.6)	(0.02)	(0.02)
Earnings available for common shareholders	$ 210.1	$ 148.5	$ 1.53	$ 1.14

- Electric Utility's net income increased $77.5 million primarily driven by a $234.7 million increase in gross margin* due to a full year of new retail rates effective in 3Q09 and favorable impacts from weather
- A $17.4 million decrease in Other category results, attributable primarily to a $16 million tax benefit in 2009
- Increased number of shares outstanding primarily from the May 2009 equity offering resulted in dilution of $0.09 per share

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

Great Plains Energy Consolidated Earnings and Earnings Per Share Three Months Ended December 31

(Unaudited)

	Earnings (Loss) (in Millions)		Earnings (Loss) per Share	
	2010	2009	2010	2009
Electric Utility	$ 2.5	$ 23.7	$ 0.02	$ 0.17
Other	(7.3)	(8.8)	(0.06)	(0.06)
Income (loss) from continuing operations	(4.8)	14.9	(0.04)	0.11
Strategic Energy discontinued operations	-	0.8	-	0.01
Net income (loss)	(4.8)	15.7	(0.04)	0.12
Less: Net income attributable to noncontrolling interest	(0.1)	(0.1)	-	-
Net income (loss) attributable to Great Plains Energy	(4.9)	15.6	(0.04)	0.12
Preferred dividends	(0.4)	(0.4)	-	(0.01)
Earnings (loss) available for common shareholders	$ (5.3)	$ 15.2	$ (0.04)	$ 0.11

- Decline in 2010 quarter vs. 2009 period includes two key items:
  - Electric Utility - $8 million / $0.06 per share from the impact of disallowed costs on Iatan 1 and Iatan 2
  - Other - $7 million / $0.05 per share from write-down of affordable housing investments

Electric Utility Full-Year Results

(in millions)

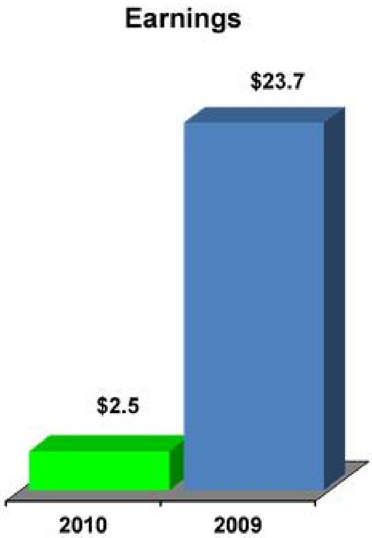
* Gross margin is defined and reconciled to GAAP operating revenues in the Appendix

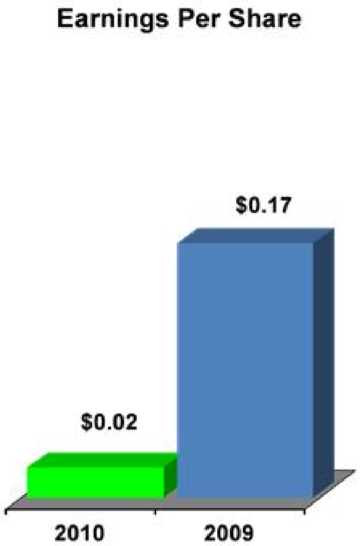
Key Earnings Drivers

- Increased gross margin* of $234.7 million due to approximately $150 million from the full-year impact of new retail rates which took effect in 2009, and about $105 million due to favorable weather;
- Increased other operating expense of $61.4 million primarily driven by $18 million increase in plant operating and maintenance expenses, recognition of a $16.8 million loss attributed to Iatan 1 environmental and Iatan 2 construction costs, $15 million in general taxes and approximately $5 million due to other accounting effects of the KCC November rate order;
- Increased depreciation and amortization of $29.4 million including additional regulatory amortization from 2009 rate cases, a full year of depreciation on Iatan 1 and the commencement of depreciation on Iatan 2 for the KS jurisdiction;
- Decreased non-operating income and expense of $14.6 million principally due to lower AFUDC equity; and
- Increased income tax expense of $59.7 million resulting from higher pretax income

Electric Utility Fourth Quarter Results

(in millions)





* Gross margin is defined and reconciled to GAAP operating revenues in the Appendix

Key Earnings Drivers

- ↑ Decreased income tax expense of approximately $10 million resulting from lower pre-tax income;
- ↓ Decreased gross margin* of $5 million primarily due to a 1.7 percent decline in weather-normalized demand;
- ↓ Increased other operating expenses of $20.7 million primarily driven by $13 million loss attributed to Iatan 1 and 2 construction costs and approximately $5 million due to other accounting effects of the KCC November order; and
- ↓ Decreased non-operating income and expenses of $6.5 million principally due to lower AFUDC equity

Debt Profile as of December 31, 2010

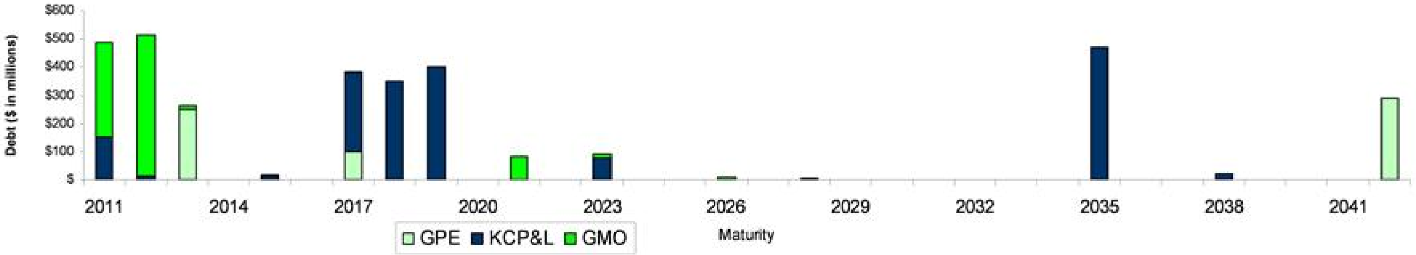
($ in millions)

	KCP&L		GMO (1)		GPE		Consolidated	
	Amount	Rate (2)	Amount	Rate (2)	Amount	Rate (2)	Amount	Rate (2)
Short-term debt	$ 358.5	0.64%	$ 0.0	N/A	$ 9.5	3.06%	$ 368.0	0.70%
Long-term debt (3)	1,780.0	6.13%	1,011.4	9.88%	637.0	7.57%	3,428.4	7.47%
Total	$ 2,138.5	5.21%	$ 1,011.4	9.88%	$ 646.5	7.50%	$ 3,796.4	6.80%

Secured debt = $862.7 (23%), Unsecured debt = $2,933.7 (77%)

(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

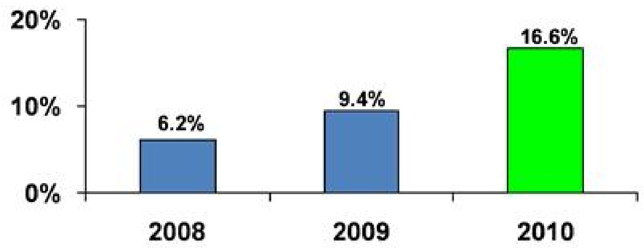
Long-term Debt Maturities



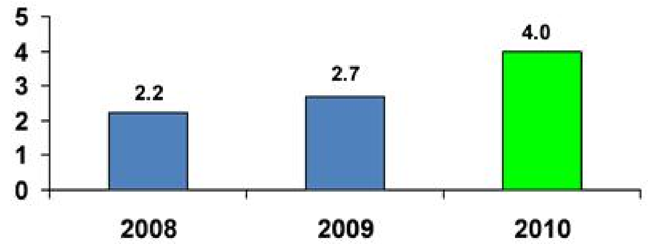
Credit Profile for Great Plains Energy

*All ratios calculated using Standard and Poor's methodology

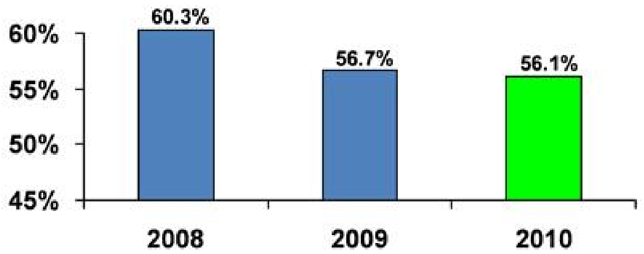
FFO / Adjusted Debt



FFO Interest Coverage



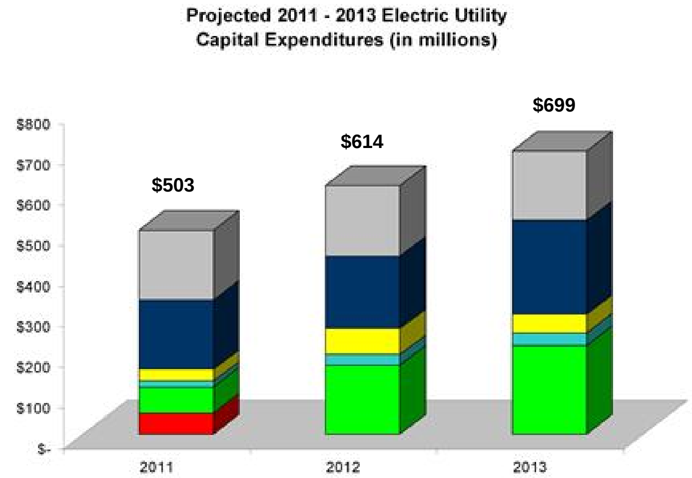
Adjusted Debt / Total Adjusted Capitalization



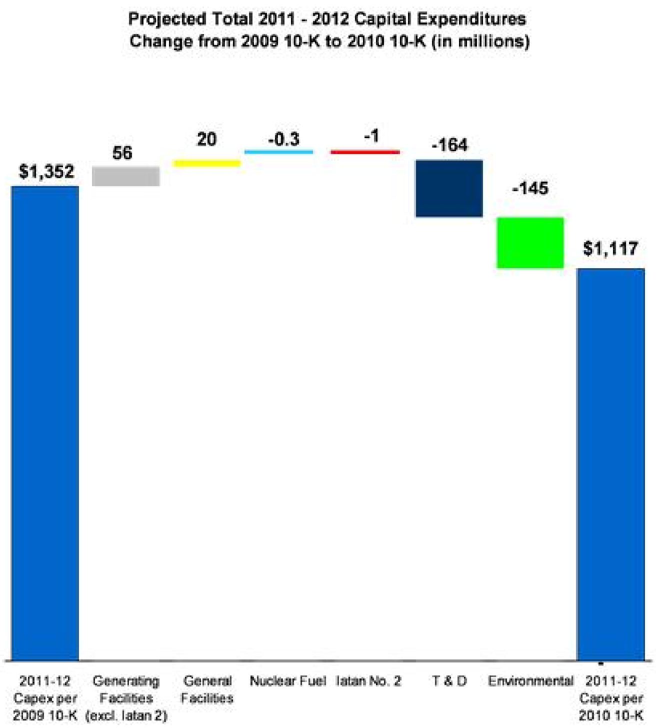
Current Credit Ratings

	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

Capital Expenditures Forecast



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 True-up and Effective Date Implications

- Full-year impact from new KS rates
- True-up date in MO rate cases at end of 2010; new rates expected to be 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

Interest Expense

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

Considerations for 2011 (continued)

Weather-Normalized MWh Sales

- Expectation is for growth of 0.7 percent 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 expected to conclude mid-March
- Wolf Creek refueling and expanded maintenance outage beginning in late 1Q

Taxes

- No cash taxes in 2011 as a result of bonus depreciation / NOL utilization
- Effective tax rate of approximately 34% based on normal conditions

Looking Ahead / Conclusion

Looking Ahead

- Regional economy poised to improve; impact on customer energy consumption still difficult to assess
- Rate cases pending in Missouri; new rates in effect for 7 months for GMO and 8 months for KCP&L 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

Conclusion

Accomplishments in 2009 through 2011 YTD reflect and support our strong commitment to credit quality:

- Reduced risk profile with completion of construction phase of CEP - Iatan 1 (2009) and Iatan 2 (2010);
- Achieved constructive 2009 settlements in Missouri and Kansas and excellent Iatan 1 and 2 prudency outcome in Kansas in 2010;
- Improved generation fleet operations significantly in 2009-10;
- Reduced dividend by 50% in 2009;
- In the face of challenging market conditions, raised $450 million of equity and hybrid capital in 2009 to support credit profile;
- Developed a prudent, disciplined 2011-13 capital expenditure view that satisfies mandatory requirements while targeting improved credit metrics even in an environment in which equity financing remains challenging; and
- Implemented in 2011 strong management actions to support sufficiently robust credit metrics in the midst of a still-challenging regional economy

Entire organization has had…and will maintain…an intense focus on credit.

Great Plains Energy

Investor Presentation

March 28 & 29, 2011

Appendix
Gross Margin Reconciliation

Great Plains Energy Incorporated Reconciliation of Gross Margin to Operating Revenues

(Unaudited)

(millions)	Three Months Ended December 31		Year Ended December 31	
	2010	2009	2010	2009
Operating revenues	$ 467.8	$ 477.6	$ 2,255.5	$ 1,965.0
Fuel	(97.5)	(103.0)	(430.7)	(405.5)
Purchase power	(42.4)	(42.8)	(213.8)	(183.7)
Transmission of electricity by others	(6.5)	(5.7)	(27.4)	(26.9)
Gross margin	$ 321.4	$ 326.1	$ 1,583.6	$ 1,348.9

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.