Great Plains Energy

First Quarter 2012
Earnings Presentation

May 4, 2012

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 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, including but not limited to cyber terrorism; 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.

Great Plains Energy

First Quarter 2012
Earnings Presentation

May 4, 2012

Michael J. Chesser
Chairman and CEO

CEO Discussion

- Key Elements of 1Q12 Results
  - Weather
  - Wolf Creek
- Kansas Rate Case Filing
- Transource Energy, LLC

KCP&L[SM]

energizing *life*

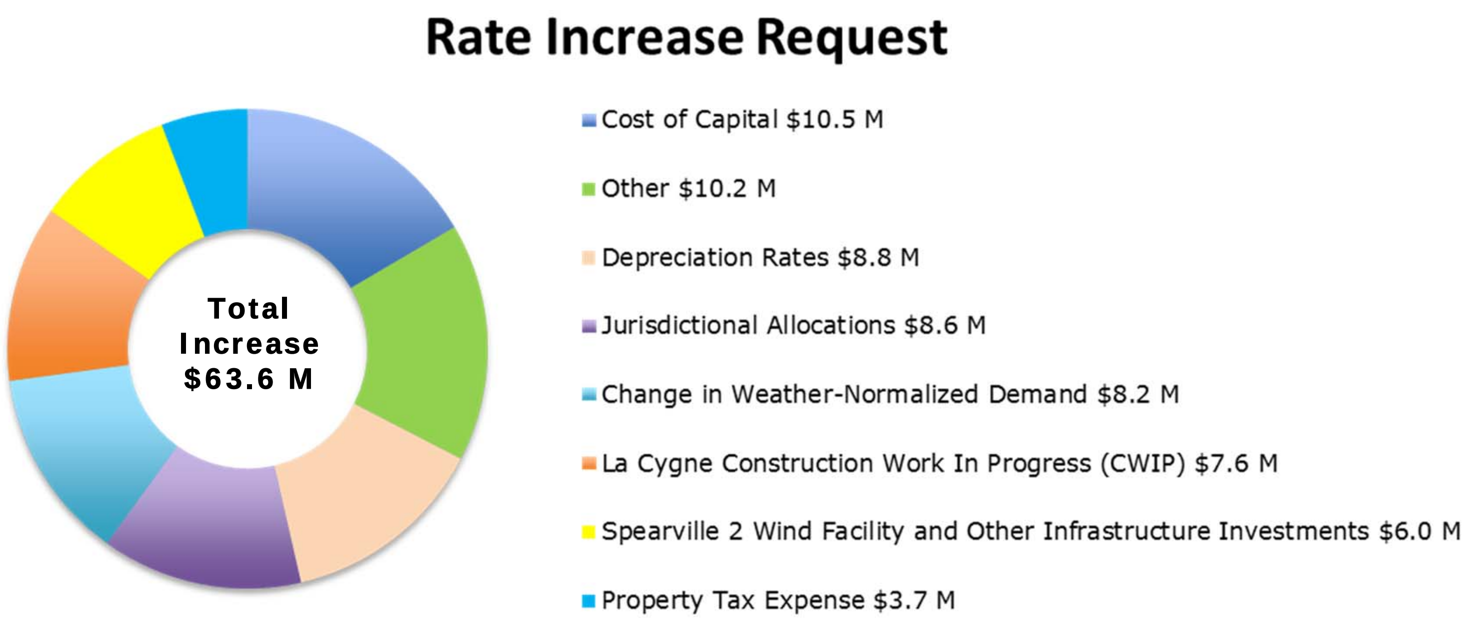
Terry Bassham
President and COO

Operations and Regulatory Update

- Rate Case Filings
- Plant Performance
- Customer Consumption

Kansas Rate Case Summary

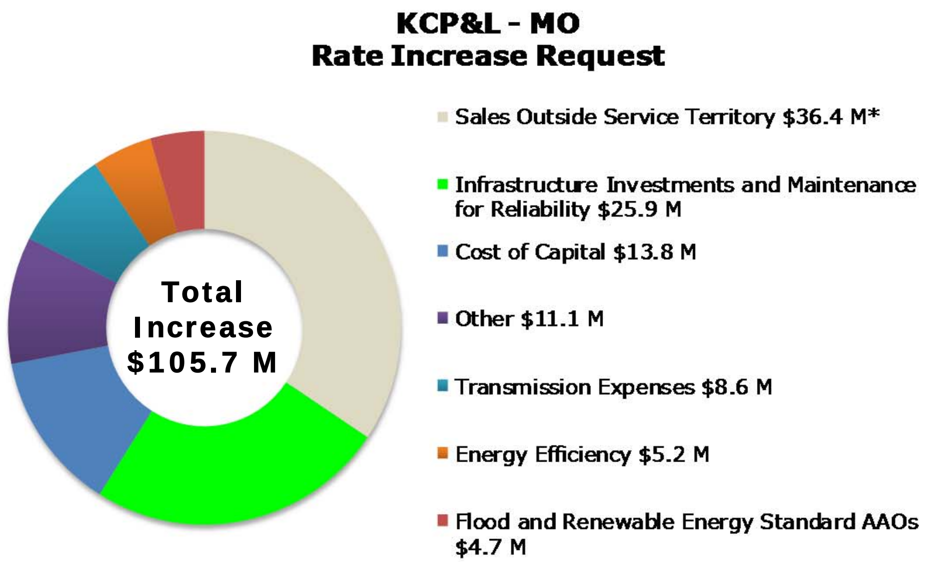
Jurisdiction	Case Number	Date Filed	Requested Increase (in Millions)	Requested Increase (Percent)	Rate Base (in Millions)	Requested ROE	Rate-making Equity Ratio	Anticipated Effective Date of New Rates
KCP&L – KS	12-KCPE-764-RTS	4/20/2012	$63.6	12.9%	$1,820.8	10.40%	51.8%	1/1/2013

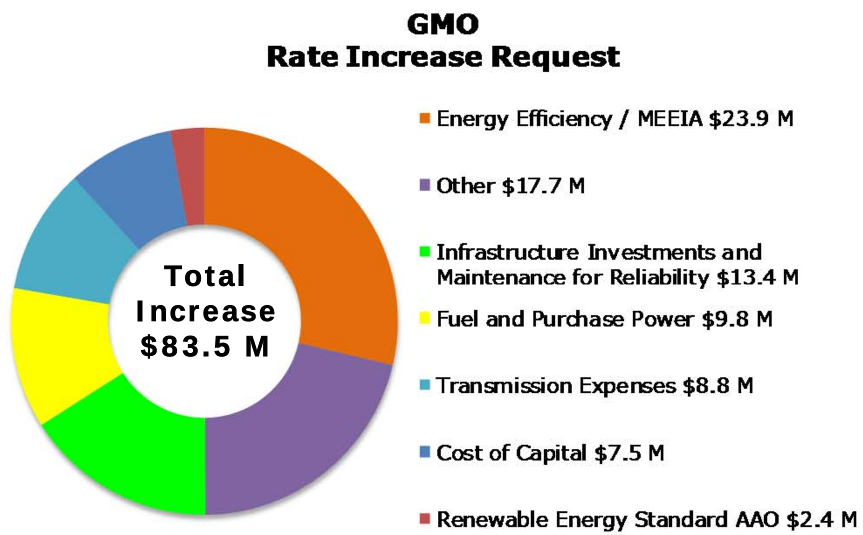


Missouri Rate Case Summary

Jurisdiction	Case Number	Date Filed	Requested Increase (in Millions)	Requested Increase (Percent)	Rate Base (in Millions)	Requested ROE	Rate-making Equity Ratio	Anticipated Effective Date of New Rates
KCP&L – MO	ER-2012-0174	2/27/2012	$105.7	15.1%	$2,129.9	10.40%	52.5%	Late January 2013
GMO – MPS	ER-2012-0175	2/27/2012	$58.3	10.9%	$1,411.9	10.40%	52.5%	Late January 2013
GMO – L&P	ER-2012-0175	2/27/2012	$25.2	14.6%	$479.5	10.40%	52.5%	Late January 2013
Total			$189.2		$4,021.3[1]			

[1] Projected combined rate base is approximately $226 million or 6% higher than at the conclusion of the last rate cases for these jurisdictions

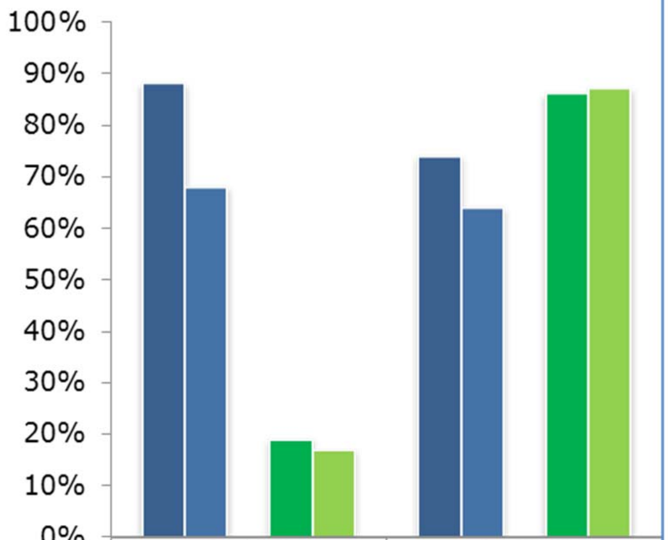




* Reflects revised wholesale margin cap request of $22.7 M

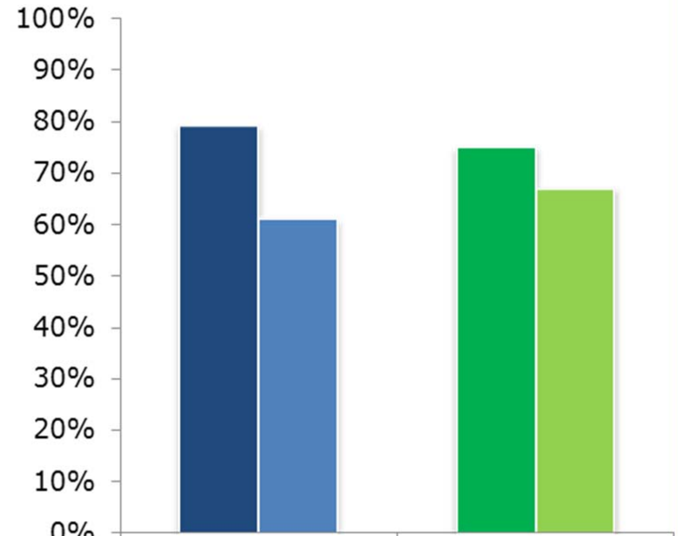
Plant Performance

Coal and Nuclear



	Q1 2012	Q1 2011
Equivalent Availability Coal	88%	74%
Capacity Factor Coal	68%	64%
Equivalent Availability Nuclear	19%	86%
Capacity Factor Nuclear	17%	87%

Combined Fleet



	Q1 2012	Q1 2011
Equivalent Availability	79%	75%
Capacity Factor	61%	67%

Customer Consumption

Retail MWh Sales and Customer Growth Rates
1Q 2012 Compared to 1Q 2011

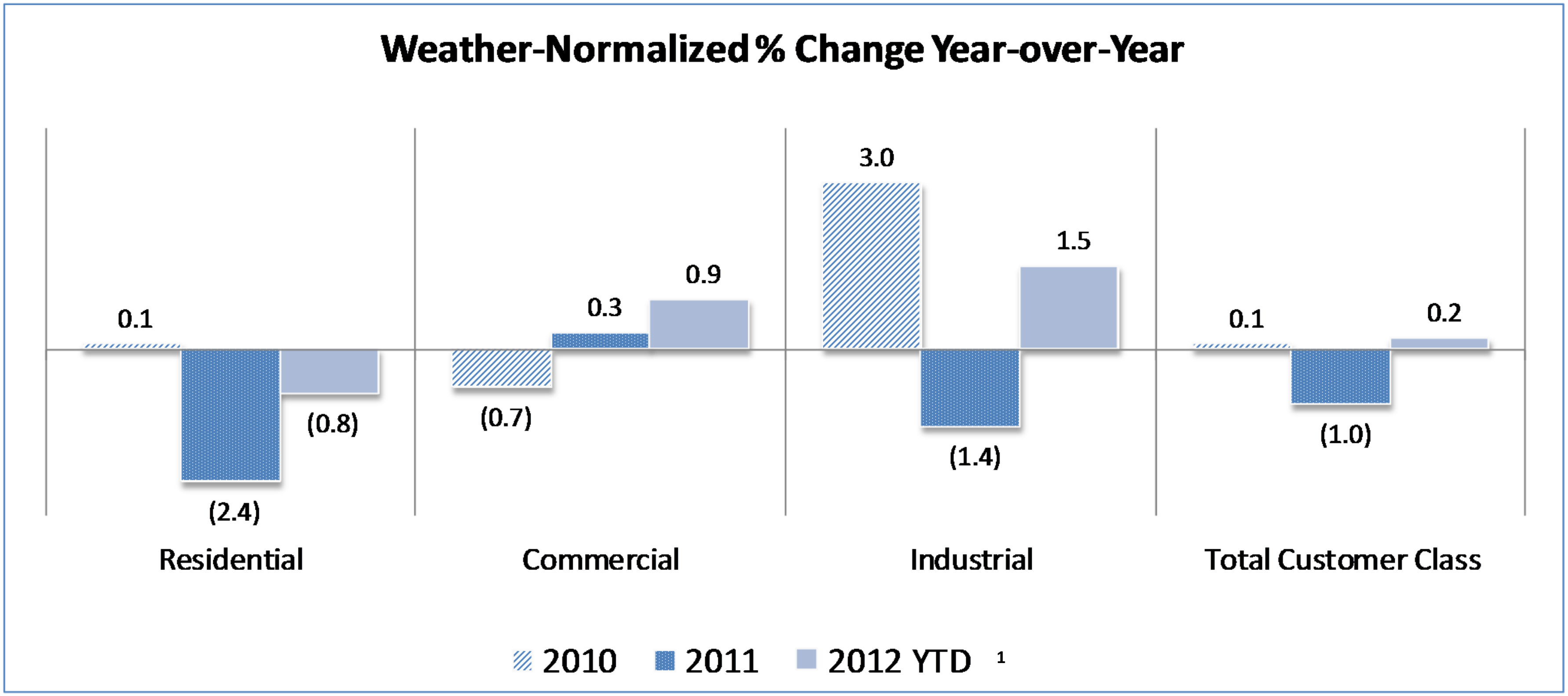
		Weather – Normalized		
	Total Change in MWh Sales	Customers	Use / Customer	Change MWh Sales
Residential	(15.6%)	0.2%	(1.0%)	(0.8%)
Commercial	(4.9%)	0.1%	0.8%	0.9%
Industrial	1.5%	(1.7%)	3.3%	1.5%
	(8.5%)	0.2%[1]	0.0%[1]	0.2%[1]

[1]Weighted average

Statistics by Customer Class First Quarter 2012

	Customers	Revenue (in millions)	Sales (000s of MWhs)	% of Retail MWh Sales
Residential	726,900	$ 190.1	2,056	39%
Commercial	96,300	188.8	2,463	47%
Industrial	2,200	42.8	757	14%

Retail MWh Sales



[1] As of March 31

Financial Overview

James C. Shay
SVP, Finance & Strategic Development and CFO

2012 First Quarter EPS Reconciliation Versus 2011

	2011 EPS	2012 EPS	Change in EPS
1Q	$ 0.01	($0.07)	($0.08)

Contributors to Change in 2012 EPS Compared to 2011

	Weather	Wolf Creek	Interest Expense	New Retail Rates	2011 Special Factors	Total
1Q 2012	$ (0.11)	$ (0.07)	$ (0.10)	$ 0.13	$ 0.07	$ (0.08)

Great Plains Energy Consolidated Earnings and Earnings Per Share – Three Months Ended March 31
(Unaudited)

	Earnings (in Millions)		Earnings per Share	
	2012	2011	2012	2011
Electric Utility	$ 4.5	$ 7.0	$ 0.03	$ 0.05
Other	(13.8)	(4.7)	(0.10)	(0.04)
Net income (loss)	(9.3)	2.3	(0.07)	0.01
Less: Net loss attributable to noncontrolling interest	0.2	0.1	-	-
Net income (loss) attributable to Great Plains Energy	(9.1)	2.4	(0.07)	0.01
Preferred dividends	(0.4)	(0.4)	-	-
Earnings (loss) available for common shareholders	$ (9.5)	$ 2.0	$ (0.07)	$ 0.01

March 31, 2012 Debt Profile and Liquidity

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	$ 366.0	0.67%	$110.8	0.92%	$ 30.0	2.00%	$ 506.8	0.80%
Long-term debt [3]	1,902.3	6.02%	633.0	10.97%	993.4	4.65%	3,528.7	6.51%
Total	$2,268.3	5.16%	$743.8	9.45%	$1,023.4	4.57%	$4,035.5	6.44%

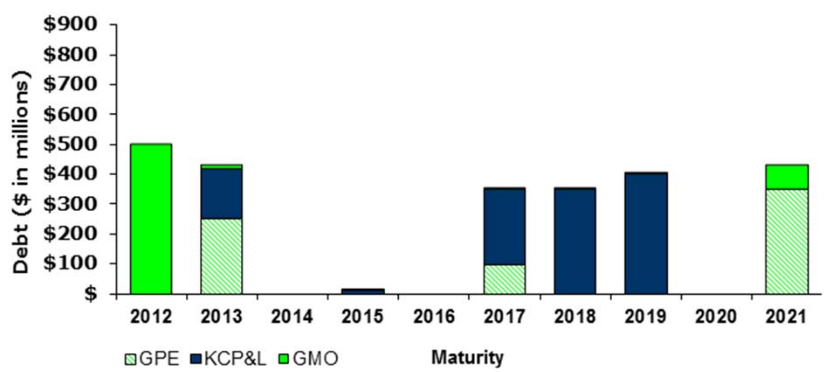
Secured debt = $750 (19%), Unsecured debt = $3,285 (81%)

(1) GPE guarantees substantially all of GMO's debt

(2) Weighted Average Rates – excludes premium / discounts and fair market value adjustments

(3) Includes current maturities of long-term debt

Long-Term Debt Maturities (4)(5)



(4) Includes long-term debt maturities through December 31, 2021

(5) 2013 reflects mode maturity for $167.6 million of KCP&L tax-exempt bonds subject to remarketing prior to final maturity date

Liquidity

($ in millions)	KCP&L	GMO	GPE	Total
Aggregate Bank Commitments [6]	$710.0	$450.0	$200.0	$1,360.0
Outstanding Facility Draws	0.0	0.0	30.0	30.0
Outstanding Letters of Credit	20.2	13.2	4.8	38.2
A/R Securitization Facility Draws	110.0	0.0	0.0	110.0
Available Capacity Under Facilities	**579.8**	**436.8**	**165.2**	**1,181.8**
Outstanding Commercial Paper	256.0	110.8	-	366.8
Available Capacity Less Outstanding Commercial Paper	**$323.8**	**$326.0**	**$165.2**	**$815.0**

(6) Includes KCP&L $110M accounts receivable securitization facility

2012 EPS Guidance Range and 2013 Target

- Affirming 2012 guidance of $1.20 - $1.40
  - Assumes normal weather for the remainder of the year
  - Assumes full-year weather-normalized demand growth of 50 basis points
- Affirming 2013 target of 50 basis points of lag in regulated operations
  - Outcomes of 2012 rate cases and timing of effective dates of new rates will be key drivers

Great Plains Energy

2005	2006	2007	2008	2009	2010	2011	2012
Begin **LaCygne 1** environmental retrofit  Start **Spearville,** Kan., 100-MW wind project	**Complete rate cases** *Missouri: $50.6M increase;* *Kansas: $29M increase* Receive **2006 Edison Electric Institute's** (EEI) Advocacy Excellence Award  Complete **Spearville wind project** on time and on budget Commence **Iatan 1 and 2** projects	**Complete rate cases** *Missouri: $35.3M increase;* *Kansas: $28M increase* Sign **Collaboration Agreement** with the Sierra Club and Concerned Citizens of Platte County Receive **EEI Edison Award** – EEI's highest honor for distinguished leadership, innovation and contribution to the advancement of the electric industry Complete **LaCygne SCR** project on time and on budget	Sell non-regulated subsidiary **Strategic Energy** Acquire **Aquila,** adding over 300,000 Missouri utility customers and 2,000 MW of generation assets Receive **2008 ReliabilityOne™ Plains Region** Reliability Excellence Award for delivering reliable electric service to customers 	**Complete rate cases** *Missouri: $159M increase;* *Kansas: $59M increase* Receive **2009 ReliabilityOne™ Plains Region** Reliability Excellence Award Earn **Tier 1** customer satisfaction ranking among large Midwest utilities in **J.D. Power** survey Complete **Iatan 1** environmental project and unit overhaul 	**Complete rate case** *Kansas: $22M increase* Receive **2010 ReliabilityOne™ Plains Region** Reliability Excellence Award Earn **Tier 1** customer satisfaction ranking among large Midwest utilities in **J.D. Power** survey Bring **Iatan 2** online and into service Complete **Spearville 2** 48-MW wind project	**Complete rate cases** *Missouri: $100.3M increase* Conclude **Comprehensive Energy Plan** Create **streamlined organization** essential to future success through organizational realignment and Voluntary Separation Program Earn **Tier 1** customer satisfaction ranking among large Midwest utilities in **J.D. Power** survey for third year in a row Receive **2011 ReliabilityOne™ Plain Region** Reliability Excellence Award Commence **LaCygne 1 and 2 projects**	Great Plains Energy and American Electric Power form **Transource Energy, LLC** Receive EEI **Emergency Assistance Award** for outstanding efforts in restoring power

Great Plains Energy

First Quarter 2012
Earnings Presentation

May 4, 2012

Appendix

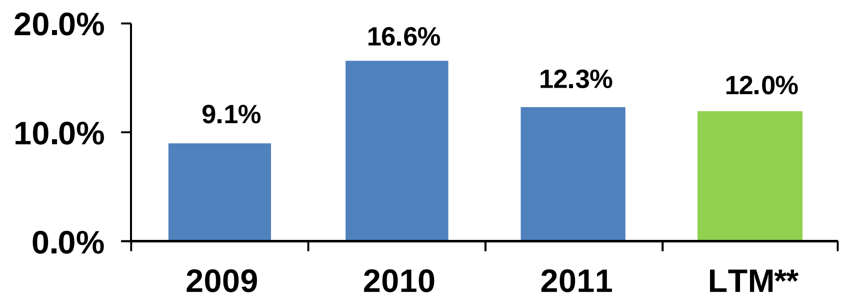
Great Plains Energy Reconciliation of Gross Margin to Operating Revenues
(Unaudited)

	Three Months Ended March 31 (millions)	
	2012	2011
Operating revenues	$ 479.7	$ 492.9
Fuel	(119.3)	(104.9)
Purchased power	(24.7)	(54.9)
Transmission of electricity by others	(7.3)	(7.5)
Gross margin	**$ 328.4**	**$ 325.6**

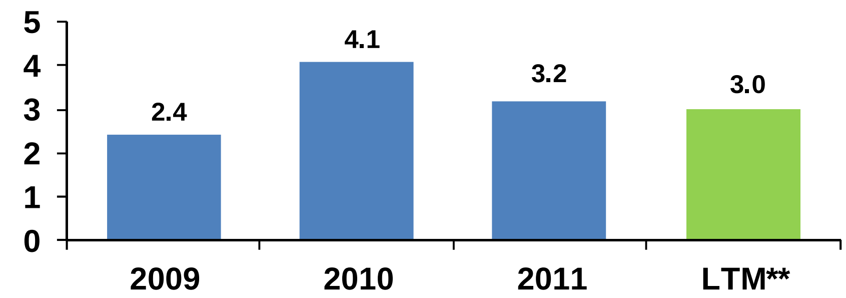
Gross margin is a financial measure that is not calculated in accordance with generally accepted accounting principles (GAAP). Gross margin, as used by Great Plains Energy, is defined as operating revenues less fuel, purchased power and transmission of electricity by others. The Company's expense for 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.

Credit Profile for Great Plains Energy

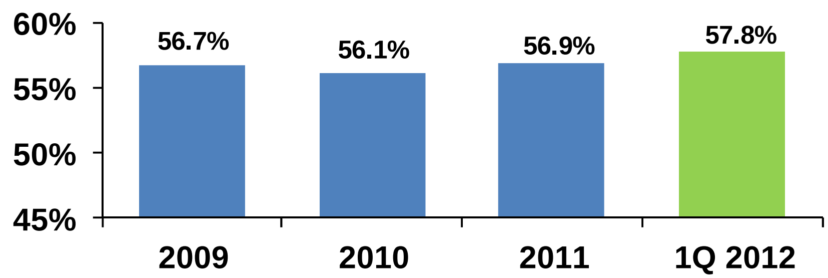
FFO / Adjusted Debt*



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
Commercial Paper	P-3	A-2

* All ratios calculated using Standard and Poor's methodology. Ratios are non-GAAP measures that are defined and reconciled to GAAP in Appendix
** Last twelve months (LTM) as of March 31, 2012

Credit Metric Reconciliation to GAAP

Funds from operations (FFO) to adjusted debt is a financial measure that is not calculated in accordance with generally accepted accounting principles (GAAP). FFO to adjusted debt, as used by Great Plains Energy, is defined in accordance with Standard & Poor's methodology used for calculating FFO to debt. The numerator of the ratio is defined as net cash from operating activities (GAAP) plus non-GAAP adjustments related to operating leases, hybrid securities, post-retirement benefit obligations, capitalized interest, power purchase agreements, asset retirement obligations, changes in working capital and decommissioning fund contributions. The denominator of the ratio is defined as the sum of debt balances (GAAP) plus non-GAAP adjustments related to some of the same items adjusted for in the numerator and other adjustments related to securitized receivables and accrued interest. Management believes that FFO to adjusted debt provides a meaningful way to better understand the Company's credit profile. FFO to adjusted debt is used internally to help evaluate the possibility of a change in the Company's credit rating.

Funds from Operations (FFO) / Adjusted Debt

	2009	2010	2011	LTM*
Funds from operations				
Net cash from operating activities	$ 335.4	$ 552.1	$ 443.0	$ 460.1
Adjustments to reconcile net cash from operating activities to FFO:				
Operating leases	7.5	8.7	11.1	10.3
Intermediate hybrids reported as debt	14.4	28.8	28.8	28.8
Intermediate hybrids reported as equity	(0.8)	(0.8)	(0.8)	(0.8)
Post-retirement benefit obligations	8.3	24.4	65.3	67.2
Capitalized interest	(37.7)	(28.5)	(5.8)	(6.0)
Power purchase agreements	12.0	8.3	1.6	1.1
Asset retirement obligations	(6.0)	(7.0)	(6.6)	(6.6)
Reclassification of working-capital changes	37.9	95.1	(0.8)	(18.0)
US decommissioning fund contributions	(3.7)	(3.7)	(3.4)	(3.3)
Other adjustments	1.5	-	-	-
Total adjustments	33.4	125.3	89.4	72.7
Funds from operations	$ 368.8	$ 677.4	$ 532.4	$ 532.8
Adjusted Debt				
Notes payable	$ 252.0	$ 9.5	$ 22.0	$ 30.0
Collateralized note payable		95.0	95.0	110.0
Commercial paper	186.6	263.5	267.0	366.8
Current maturities of long-term debt	1.3	485.7	801.4	507.1
Long-term Debt	3,213.0	2,942.7	2,742.3	3,021.6
Total debt	3,652.9	3,796.4	3,927.7	4,035.5
Adjustments to reconcile total debt to adjusted debt:				
Trade receivables sold or securitized	95.0			
Operating leases	139.7	142.5	127.2	122.8
Intermediate hybrids reported as debt	(287.5)	(287.5)	(287.5)	(287.5)
Intermediate hybrids reported as equity	19.5	19.5	19.5	19.5
Post-retirement benefit obligations	289.3	280.5	303.1	303.1
Accrued interest not included in reported debt	72.5	75.4	76.9	78.0
Power purchase agreements	50.2	19.6	105.8	121.8
Asset retirement obligations	34.2	41.1	40.4	40.4
Total adjustments	412.9	291.1	385.4	398.1
Adjusted Debt	$ 4,065.8	$ 4,087.5	$ 4,313.1	$ 4,433.6
FFO / Adjusted Debt	9.1%	16.6%	12.3%	12.0%

* Last twelve months as of March 31, 2012

Credit Metric Reconciliation to GAAP

Funds from operations (FFO) interest coverage ratio is a financial measure that is not calculated in accordance with generally accepted accounting principles (GAAP). FFO interest coverage, as used by Great Plains Energy, is defined in accordance with Standard & Poor's methodology used for calculating FFO interest coverage. The numerator of the ratio is defined as net cash from operating activities (GAAP) plus non-GAAP adjustments related to operating leases, hybrid securities, post-retirement benefit obligations, capitalized interest, power purchase agreements, asset retirement obligations, changes in working capital and decommissioning fund contributions plus adjusted interest expense (non-GAAP). The denominator of the ratio, adjusted interest expense, is defined as interest charges (GAAP) plus non-GAAP adjustments related to some of the same items adjusted for in the numerator and other adjustments needed to match Standard & Poor's calculation. Management believes that FFO interest coverage provides a meaningful way to better understand the Company's credit profile. FFO interest coverage is used internally to help evaluate the possibility of a change in the Company's credit rating.

Funds from Operations (FFO) Interest Coverage

	2009	2010	2011	LTM*
Funds from operations				
Net cash from operating activities	$ 335.4	$ 552.1	$ 443.0	$ 460.1
Adjustments to reconcile net cash from operating activities to FFO:				
Operating leases	7.5	8.7	11.1	10.3
Intermediate hybrids reported as debt	14.4	28.8	28.8	28.8
Intermediate hybrids reported as equity	(0.8)	(0.8)	(0.8)	(0.8)
Post-retirement benefit obligations	8.3	24.4	65.3	67.2
Capitalized interest	(37.7)	(28.5)	(5.8)	(6.0)
Power purchase agreements	12.0	8.3	1.6	1.1
Asset retirement obligations	(6.0)	(7.0)	(6.6)	(6.6)
Reclassification of working-capital changes	37.9	95.1	(0.8)	(18.0)
US decommissioning fund contributions	(3.7)	(3.7)	(3.4)	(3.3)
Other adjustments	1.5			
Total adjustments	33.4	125.3	89.4	72.7
Funds from operations	$ 368.8	$ 677.4	$ 532.4	$ 532.8
Interest expense				
Interest charges	$ 180.9	$ 184.8	$ 218.4	$ 240.4
Adjustments to reconcile interest charges to adjusted interest expense:				
Trade receivables sold or securitized	4.8			
Operating leases	9.4	8.1	7.7	8.5
Intermediate hybrids reported as debt	(14.4)	(28.8)	(28.8)	(28.8)
Intermediate hybrids reported as equity	0.8	0.8	0.8	0.8
Post-retirement benefit obligations	21.6	19.4	17.6	17.6
Capitalized interest	37.7	28.5	5.8	6.0
Power purchase agreements	3.2	2.9	6.1	7.8
Asset retirement obligations	8.1	8.7	9.3	9.3
Other adjustments	2.4	(2.4)		
Total adjustments	73.6	37.2	18.5	21.2
Adjusted interest expense	$ 254.5	$ 222.0	$ 236.9	$ 261.6
FFO interest coverage (x)	2.4	4.1	3.2	3.0

* Last twelve months as of March 31, 2012

Credit Metric Reconciliation to GAAP

Adjusted debt to total adjusted capitalization is a financial measure that is not calculated in accordance with generally accepted accounting principles (GAAP). Adjusted debt to total adjusted capitalization, as used by Great Plains Energy, is defined in accordance with Standard & Poor's methodology used for calculating the ratio of debt to debt and equity. The numerator of the ratio, adjusted debt, is defined as the sum of debt balances (GAAP) plus non-GAAP adjustments related to securitized receivables, operating leases, hybrid securities, post-retirement benefit obligations, accrued interest, power purchase agreements and asset retirement obligations. The denominator of the ratio, total adjusted capitalization, is defined as the sum of equity balances (GAAP) plus non-GAAP adjustments related to hybrid securities plus the non-GAAP adjusted debt as defined for the numerator. Management believes that adjusted debt to total adjusted capitalization provides a meaningful way to better understand the Company's credit profile. Adjusted debt to total adjusted capitalization is used internally to help evaluate the possibility of a change in the Company's credit rating.

Adjusted Debt / Total Adjusted Capitalization

	2009	2010	2011	LTM*
Adjusted Debt				
Notes payable	$ 252.0	$ 9.5	$ 22.0	$ 30.0
Collateralized note payable		95.0	95.0	110.0
Commercial paper	186.6	263.5	267.0	366.8
Current maturities of long-term debt	1.3	485.7	801.4	507.1
Long-term Debt	3,213.0	2,942.7	2,742.3	3,021.6
Total debt	3,652.9	3,796.4	3,927.7	4,035.5
Adjustments to reconcile total debt to adjusted debt:				
Trade receivables sold or securitized	95.0			
Operating leases	139.7	142.5	127.2	122.8
Intermediate hybrids reported as debt	(287.5)	(287.5)	(287.5)	(287.5)
Intermediate hybrids reported as equity	19.5	19.5	19.5	19.5
Post-retirement benefit obligations	289.3	280.5	303.1	303.1
Accrued interest not included in reported debt	72.5	75.4	76.9	78.0
Power purchase agreements	50.2	19.6	105.8	121.8
Asset retirement obligations	34.2	41.1	40.4	40.4
Total adjustments	412.9	291.1	385.4	398.1
Adjusted Debt	$ 4,065.8	$ 4,087.5	$ 4,313.1	$ 4,433.6
Total common shareholders' equity	$ 2,792.5	$ 2,885.9	$ 2,959.9	$ 2,925.7
Noncontrolling interest	1.2	1.2	1.0	0.2
Total cumulative preferred stock	39.0	39.0	39.0	39.0
Total equity	2,832.7	2,926.1	2,999.9	2,964.9
Adjustments to reconcile total equity to adjusted equity:				
Intermediate hybrids reported as debt	287.5	287.5	287.5	287.5
Intermediate hybrids reported as equity	(19.5)	(19.5)	(19.5)	(19.5)
Total adjustments	268.0	268.0	268.0	268.0
Adjusted Equity	$ 3,100.7	$ 3,194.1	$ 3,267.9	$ 3,232.9
Total Adjusted Capitalization	$ 7,166.5	$ 7,281.6	$ 7,581.0	$ 7,666.5
Adjusted Debt / Total Adjusted Capitalization	56.7%	56.1%	56.9%	57.8%

* Last twelve months as of March 31, 2012