



SUPPLEMENTAL INVESTOR INFORMATION

First Quarter 2011

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NOTE:

The financial data and statistics in this document reflect the financial position and operating results of Great Plains Energy, its electric utility segment and Kansas City Power & Light Company (KCP&L) and KCP&L Greater Missouri Operations Company (GMO), its utility subsidiaries, through March 31, 2011. Independent auditors have not audited any of the financial and operating statements. This document has been prepared primarily for security analysts and investors in the hope that it will serve as a convenient and useful reference document. The format of this document may change in the future as we continue to try to meet the needs of security analysts and investors. This document is not intended for use in connection with any sale, offer to sell, or solicitation of any offer to buy securities.

GREAT PLAINS ENERGY INCORPORATED
Consolidated Statements of Income
(Unaudited)

Three Months Ended March 31	2011	2010
Operating Revenues	(millions, except per share amounts)	
Electric revenues	\$ 492.9	\$ 506.9
Operating Expenses		
Fuel	104.9	101.8
Purchased power	54.9	65.5
Transmission of electricity by others	7.5	5.6
Utility operating and maintenance expenses	157.5	151.2
Voluntary separation program	9.7	-
Depreciation and amortization	72.4	82.2
General taxes	42.0	38.1
Other	2.8	0.5
Total	451.7	444.9
Operating income	41.2	62.0
Non-operating income	3.6	16.1
Non-operating expenses	(2.2)	(1.6)
Interest charges	(44.9)	(46.5)
Income before income tax (expense) benefit	(2.3)	30.0
Income tax (expense) benefit	4.6	(9.7)
Net income	2.3	20.3
Less: Net loss attributable to noncontrolling interest	0.1	-
Net income attributable to Great Plains Energy	2.4	20.3
Preferred stock dividend requirements	0.4	0.4
Earnings available for common shareholders	\$ 2.0	\$ 19.9
Average number of basic common shares outstanding	135.4	134.9
Average number of diluted common shares outstanding	138.2	136.6
Basic earnings per common share	\$ 0.02	\$ 0.15
Diluted earnings per common share	\$ 0.01	\$ 0.15
Cash dividends per common share	\$ 0.2075	\$ 0.2075

The Notes to the Consolidated Financial Statements in the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2011, should be read in conjunction with this financial information.

GREAT PLAINS ENERGY INCORPORATED
Consolidated Balance Sheets
(Unaudited)

	March 31	December 31
	2011	2010
(millions, except share amounts)		
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 6.6	\$ 10.8
Funds on deposit	4.3	5.2
Receivables, net	191.9	241.7
Accounts receivable pledged as collateral	95.0	95.0
Fuel inventories, at average cost	92.8	85.1
Materials and supplies, at average cost	135.2	132.8
Deferred refueling outage costs	19.5	9.6
Refundable income taxes	0.2	2.1
Deferred income taxes	11.6	14.3
Derivative instruments	1.5	1.1
Prepaid expenses and other assets	15.2	13.9
Total	573.8	611.6
Utility Plant, at Original Cost		
Electric	10,621.4	10,536.9
Less-accumulated depreciation	4,096.5	4,031.3
Net utility plant in service	6,524.9	6,505.6
Construction work in progress	286.5	307.5
Nuclear fuel, net of amortization of \$136.9 and \$131.1	74.2	79.2
Total	6,885.6	6,892.3
Investments and Other Assets		
Nuclear decommissioning trust fund	135.1	129.2
Regulatory assets	937.4	924.0
Goodwill	169.0	169.0
Derivative instruments	9.5	7.8
Other	92.1	84.3
Total	1,343.1	1,314.3
Total	\$ 8,802.5	\$ 8,818.2

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GREAT PLAINS ENERGY INCORPORATED
Consolidated Balance Sheets
(Unaudited)

	March 31 2011	December 31 2010
LIABILITIES AND CAPITALIZATION		
(millions, except share amounts)		
Current Liabilities		
Notes payable	\$ 219.0	\$ 9.5
Collateralized note payable	95.0	95.0
Commercial paper	288.8	263.5
Current maturities of long-term debt	473.6	485.7
Accounts payable	173.4	276.3
Accrued taxes	52.7	26.6
Accrued interest	72.2	75.4
Accrued compensation and benefits	36.5	46.8
Pension and post-retirement liability	4.1	4.1
Derivative instruments	20.3	20.8
Other	42.5	35.6
Total	1,478.1	1,339.3
Deferred Credits and Other Liabilities		
Deferred income taxes	510.4	518.3
Deferred tax credits	133.3	133.4
Asset retirement obligations	146.4	143.3
Pension and post-retirement liability	424.5	427.5
Regulatory liabilities	267.3	258.2
Other	130.9	129.4
Total	1,612.8	1,610.1
Capitalization		
Great Plains Energy common shareholders' equity		
Common stock-250,000,000 shares authorized without par value		
136,192,220 and 136,113,954 shares issued, stated value	2,324.0	2,324.4
Retained earnings	599.6	626.5
Treasury stock-254,440 and 400,889 shares, at cost	(5.5)	(8.9)
Accumulated other comprehensive loss	(54.0)	(56.1)
Total	2,864.1	2,885.9
Noncontrolling interest	1.1	1.2
Cumulative preferred stock \$100 par value		
3.80% - 100,000 shares issued	10.0	10.0
4.50% - 100,000 shares issued	10.0	10.0
4.20% - 70,000 shares issued	7.0	7.0
4.35% - 120,000 shares issued	12.0	12.0
Total	39.0	39.0
Long-term debt	2,807.4	2,942.7
Total	5,711.6	5,868.8
Commitments and Contingencies		
Total	\$ 8,802.5	\$ 8,818.2

The Notes to the Consolidated Financial Statements in the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2011, should be read in conjunction with this financial information.

GREAT PLAINS ENERGY INCORPORATED
Consolidated Statements of Cash Flows
(Unaudited)

Three Months Ended March 31	2011	2010
Cash Flows from Operating Activities	(millions)	
Net income	\$ 2.3	\$ 20.3
Adjustments to reconcile income to net cash from operating activities:		
Depreciation and amortization	72.4	82.2
Amortization of:		
Nuclear fuel	5.8	6.1
Other	(0.3)	(1.9)
Deferred income taxes, net	(7.4)	4.7
Investment tax credit amortization	(0.1)	(0.5)
Other operating activities	(35.7)	(119.7)
Net cash from operating activities	<u>37.0</u>	<u>(8.8)</u>
Cash Flows from Investing Activities		
Utility capital expenditures	(99.9)	(176.9)
Allowance for borrowed funds used during construction	(1.3)	(9.7)
Purchases of nuclear decommissioning trust investments	(3.8)	(65.8)
Proceeds from nuclear decommissioning trust investments	2.9	64.9
Other investing activities	(6.1)	(2.6)
Net cash from investing activities	<u>(108.2)</u>	<u>(190.1)</u>
Cash Flows from Financing Activities		
Issuance of common stock	1.5	1.6
Repayment of long-term debt	(138.4)	(1.1)
Net change in short-term borrowings	234.8	74.9
Net change in collateralized short-term borrowings	-	95.0
Dividends paid	(28.6)	(28.5)
Other financing activities	(2.3)	(2.6)
Net cash from financing activities	<u>67.0</u>	<u>139.3</u>
Net Change in Cash and Cash Equivalents	<u>(4.2)</u>	<u>(59.6)</u>
Cash and Cash Equivalents at Beginning of Year	<u>10.8</u>	<u>65.9</u>
Cash and Cash Equivalents at End of Period	<u>\$ 6.6</u>	<u>\$ 6.3</u>

The Notes to the Consolidated Financial Statements in the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2011, should be read in conjunction with this financial information.

Great Plains Energy Incorporated
Electric Utility Segment
(Unaudited)

Electric Utility Results

Three Months Ended March 31	2011	2010
	(millions)	
Operating revenues	\$ 492.9	\$ 506.9
Fuel	(104.9)	(101.8)
Purchased power	(54.9)	(65.5)
Transmission of electricity by others	(7.5)	(5.6)
Gross margin ^(a)	325.6	334.0
Other operating expenses	(201.4)	(189.0)
Voluntary separation program	(9.7)	-
Depreciation and amortization	(72.4)	(82.2)
Operating income	42.1	62.8
Non-operating income and expenses	0.1	9.9
Interest charges	(34.3)	(36.2)
Income tax (expense) benefit	(0.9)	(11.6)
Net income	\$ 7.0	\$ 24.9

Electric Utility Gross Margin

Three Months Ended March 31	Revenues and Costs		%	MWhs Sold		%
	2011	2010	Change	2011	2010	Change
Retail revenues	(millions)			(thousands)		
Residential	\$ 201.5	\$ 204.7	(2)	2,437	2,539	(4)
Commercial	182.3	182.3	-	2,589	2,624	(1)
Industrial	38.5	40.4	(5)	746	745	-
Other retail revenues	4.5	4.2	9	31	25	14
Provision for rate refund (excess Missouri wholesale margin)	(0.1)	-	NA	NA	NA	NA
Fuel recovery mechanism under (over) recovery	12.8	13.6	(6)	NA	NA	NA
Total retail	439.5	445.2	(1)	5,803	5,933	(2)
Wholesale revenues	41.3	49.7	(17)	1,257	1,323	(5)
Other revenues	12.1	12.0	1	NA	NA	NA
Operating revenues	492.9	506.9	(3)	7,060	7,256	(3)
Fuel	(104.9)	(101.8)	3			
Purchased power	(54.9)	(65.5)	(16)			
Transmission of electricity by others	(7.5)	(5.6)	36			
Gross margin ^(a)	\$ 325.6	\$ 334.0	(3)			

^(a) 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 to management and the Board of Directors. The Company's definition of gross margin may differ from similar terms used by other companies.

Electric Utility Generation

Three Months Ended March 31	2011	2010	%
			Change
Net MWhs Generated by Fuel Type	(thousands)		
Coal	5,202	4,834	8
Nuclear	1,024	1,100	(7)
Natural gas and oil	7	10	(34)
Wind	131	88	49
Total Generation	6,364	6,032	6

Electric Utility Customers at March 31, 2011

Residential	725,500
Commercial	96,400
Industrial	2,300
Other	400
Total retail customers	824,600

Electric Utility Statistics

Three Months Ended March 31	2011	2010
Average non-firm wholesale price per MWh	\$ 29.88	\$ 34.90
Average purchased power price per MWh	\$ 28.22	\$ 37.15
Purchased power MWhs	1,137,549	1,645,704
Heating degree days	2,947	2,928
Equivalent availability - coal plants	74 %	78 %
Capacity factor - coal plants	64 %	71 %
Equivalent availability - nuclear	86 %	92 %
Capacity factor - nuclear	87 %	93 %
Equivalent availability - coal and nuclear	75 %	80 %
Capacity factor - coal and nuclear	67 %	74 %

Kansas City Power & Light Company
(Unaudited)

KCP&L Results

Three Months Ended March 31	2011	2010
	(millions)	
Operating revenues	\$ 330.8	\$ 335.6
Fuel	(68.2)	(61.5)
Purchased power	(21.4)	(27.3)
Transmission of electricity by others	(4.3)	(2.9)
Gross margin ^(a)	236.9	243.9
Other operating expenses	(150.2)	(139.9)
Voluntary separation program	(6.8)	-
Depreciation and amortization	(53.4)	(63.5)
Operating income	26.5	40.5
Non-operating income and expenses	(0.5)	8.0
Interest charges	(23.1)	(21.7)
Income tax (expense) benefit	1.1	(7.6)
Net income	\$ 4.0	\$ 19.2

KCP&L Gross Margin

Three Months Ended March 31	Revenues and Costs		%	MWhs Sold		%
	2011	2010		Change	2011	
Retail revenues	(millions)			(thousands)		
Residential	\$ 120.7	\$ 122.3	(1)	1,402	1,461	(4)
Commercial	134.4	134.3	-	1,834	1,859	(1)
Industrial	24.1	26.3	(8)	441	448	(1)
Other retail revenues	3.1	3.0	1	23	23	1
Provision for rate refund (excess Missouri wholesale margin)	(0.1)	-	NA	NA	NA	NA
Kansas ECA under (over) recovery	4.6	1.0	NM	NA	NA	NA
Total retail	286.8	286.9	-	3,700	3,791	(2)
Wholesale revenues	38.9	43.8	(11)	1,190	1,178	1
Other revenues	5.1	4.9	3	NA	NA	NA
Operating revenues	330.8	335.6	(1)	4,890	4,969	(2)
Fuel	(68.2)	(61.5)	11			
Purchased power	(21.4)	(27.3)	(21)			
Transmission of electricity by others	(4.3)	(2.9)	49			
Gross margin ^(a)	\$ 236.9	\$ 243.9	(3)			

^(a) 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. KCP&L'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 KCP&L'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 to management and the Board of Directors. The Company's definition of gross margin may differ from similar terms used by other companies.

KCP&L Generation

Three Months Ended March 31	2011	2010	%
			Change
Net MWhs Generated by Fuel Type	(thousands)		
Coal	3,728	3,476	7
Nuclear	1,024	1,100	(7)
Natural gas and oil	4	10	(66)
Wind	131	88	49
Total Generation	4,887	4,674	5

KCP&L Customers at March 31, 2011

Residential	451,400
Commercial	58,200
Industrial	2,100
Other	100
Total retail customers	511,800

KCP&L Statistics

Three Months Ended March 31	2011	2010
Average non-firm wholesale price per MWh	\$ 29.72	\$ 34.31
Average purchased power price per MWh	\$ 36.30	\$ 45.94
Purchased power - MWh	253,430	546,042
Heating degree days	2,947	2,928
Equivalent availability - coal plants	71 %	75 %
Capacity factor - coal plants	63 %	71 %
Equivalent availability - nuclear	86 %	92 %
Capacity factor - nuclear	87 %	93 %

KCP&L Greater Missouri Operations Company (GMO)
Utility Operations
(Unaudited)

GMO Utility Results

Three Months Ended March 31	2011	2010
	(millions)	
Operating revenues	\$ 162.1	\$ 171.3
Fuel	(36.7)	(40.3)
Purchased power	(33.5)	(38.2)
Transmission of electricity by others	(3.2)	(2.7)
Gross margin ^(a)	88.7	90.1
Other operating expenses	(51.2)	(49.1)
Voluntary separation program	(2.9)	-
Depreciation and amortization	(19.0)	(18.7)
Operating income	15.6	22.3
Non-operating income and expenses	0.6	1.9
Interest charges	(11.2)	(14.5)
Income tax (expense) benefit	(2.0)	(4.0)
Net income (loss)	\$ 3.0	\$ 5.7

GMO Utility Gross Margin

Three Months Ended March 31	Revenues and Costs		%	MWhs Sold		%
	2011	2010		Change	2011	
Retail revenues	(millions)			(thousands)		
Residential	\$ 80.8	\$ 82.4	(2)	1,035	1,078	(4)
Commercial	47.9	48.0	-	755	765	(1)
Industrial	14.4	14.1	2	305	297	3
Other retail revenues	1.4	1.2	28	8	2	85
Fuel recovery mechanism under (over) recovery	8.2	12.6	(36)	NA	NA	NA
Total retail	152.7	158.3	(4)	2,103	2,142	(2)
Wholesale revenues	2.4	5.9	(60)	67	145	(53)
Other revenues	7.0	7.1	(1)	NA	NA	NA
Operating revenues	162.1	171.3	(5)	2,170	2,287	(5)
Fuel	(36.7)	(40.3)	(9)			
Purchased power	(33.5)	(38.2)	(12)			
Transmission of electricity by others	(3.2)	(2.7)	21			
Gross margin ^(a)	\$ 88.7	\$ 90.1	(1)			

^(a) 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. GMO'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. 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 GMO'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 to management and the Board of Directors. The Company's definition of gross margin may differ from similar terms used by other companies.

GMO Generation

Three Months Ended March 31	2011	2010	%
			Change
Net MWhs Generated by Fuel Type	(thousands)		
Coal	1,474	1,358	8
Natural gas and oil	3	-	NM
Total Generation	1,477	1,358	9

GMO Utility Customers at March 31, 2011

Residential	274,100
Commercial	38,200
Industrial	200
Other	300
Total retail customers	312,800

GMO Utility Statistics

Three Months Ended March 31	2011	2010
Average non-firm wholesale price per MWh	\$ 32.98	\$ 39.82
Average purchased power price per MWh	\$ 25.88	\$ 32.79
Purchased power - MWh	884,119	1,099,662
Heating degree days	2,947	2,928
Equivalent availability - coal plants	82 %	86 %
Capacity factor - coal plants	67 %	72 %