



SUPPLEMENTAL INVESTOR INFORMATION

Fourth Quarter 2009

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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 December 31, 2009. The financial data reflect GMO results subsequent to its July 14, 2008, acquisition by Great Plains Energy. Please refer to our Annual Report on Form 10-K for audited financial 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		Year Ended	
	December 31		December 31	
	2009	2008	2009	2008
Operating Revenues	(millions, except per share amounts)			
Electric revenues	\$ 477.6	\$ 443.9	\$ 1,965.0	\$ 1,670.1
Operating Expenses				
Fuel	103.0	88.7	405.5	311.4
Purchased power	42.8	70.6	183.7	208.9
Utility operating and maintenance expenses	155.0	148.0	599.3	499.7
Depreciation and amortization	81.9	68.6	302.2	235.0
General taxes	33.0	31.9	139.8	128.1
Other	4.2	1.4	14.4	12.0
Total	<u>419.9</u>	<u>409.2</u>	<u>1,644.9</u>	<u>1,395.1</u>
Operating income	57.7	34.7	320.1	275.0
Non-operating income	12.1	9.4	49.5	31.9
Non-operating expenses	(4.0)	(5.6)	(6.9)	(10.8)
Interest charges	(47.7)	(35.7)	(180.9)	(111.3)
Income from continuing operations before income tax expense and loss from equity investments	18.1	2.8	181.8	184.8
Income tax (expense) benefit	(3.2)	4.6	(29.5)	(63.8)
Loss from equity investments, net of income taxes	-	(0.2)	(0.4)	(1.3)
Income from continuing operations	14.9	7.2	151.9	119.7
Income (loss) from discontinued operations, net of income taxes	0.8	-	(1.5)	35.0
Net income	15.7	7.2	150.4	154.7
Less: Net income attributable to noncontrolling interest	(0.1)	(0.2)	(0.3)	(0.2)
Net income attributable to Great Plains Energy	15.6	7.0	150.1	154.5
Preferred stock dividend requirements	0.4	0.4	1.6	1.6
Earnings available for common shareholders	<u>\$ 15.2</u>	<u>\$ 6.6</u>	<u>\$ 148.5</u>	<u>\$ 152.9</u>
Average number of basic common shares outstanding	134.8	118.5	129.3	101.1
Average number of diluted common shares outstanding	136.4	118.6	129.8	101.2
Basic earnings (loss) per common share				
Continuing operations	\$ 0.10	\$ 0.06	\$ 1.16	\$ 1.16
Discontinued operations	0.01	-	(0.01)	0.35
Basic earnings per common share	<u>\$ 0.11</u>	<u>\$ 0.06</u>	<u>\$ 1.15</u>	<u>\$ 1.51</u>
Diluted earnings (loss) per common share				
Continuing operations	\$ 0.10	\$ 0.06	\$ 1.15	\$ 1.16
Discontinued operations	0.01	-	(0.01)	0.35
Diluted earnings per common share	<u>\$ 0.11</u>	<u>\$ 0.06</u>	<u>\$ 1.14</u>	<u>\$ 1.51</u>
Cash dividends per common share	<u>\$ 0.2075</u>	<u>\$ 0.415</u>	<u>\$ 0.83</u>	<u>\$ 1.66</u>

The Notes to the Consolidated Financial Statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2009, should be read in conjunction with this financial information.

GREAT PLAINS ENERGY INCORPORATED
Consolidated Balance Sheets
(Unaudited)

	December 31	
	2009	2008
ASSETS	(millions, except share amounts)	
Current Assets		
Cash and cash equivalents	\$ 65.9	\$ 61.1
Funds on deposit	4.4	10.8
Receivables, net	230.5	242.3
Fuel inventories, at average cost	85.0	87.0
Materials and supplies, at average cost	121.3	99.3
Deferred refueling outage costs	19.5	12.4
Refundable income taxes	13.5	26.0
Deferred income taxes	36.8	28.6
Assets held for sale	19.4	16.3
Derivative instruments	1.5	4.8
Prepaid expenses and other assets	14.7	15.2
Total	612.5	603.8
Utility Plant, at Original Cost		
Electric	8,849.0	7,940.8
Less-accumulated depreciation	3,774.5	3,582.5
Net utility plant in service	5,074.5	4,358.3
Construction work in progress	1,508.4	1,659.1
Nuclear fuel, net of amortization of \$106.0 and \$110.8	68.2	63.9
Total	6,651.1	6,081.3
Investments and Other Assets		
Affordable housing limited partnerships	13.2	13.9
Nuclear decommissioning trust fund	112.5	96.9
Regulatory assets	822.2	824.8
Goodwill	169.0	156.0
Derivative instruments	7.9	13.0
Other	94.4	79.6
Total	1,219.2	1,184.2
Total	\$ 8,482.8	\$ 7,869.3

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GREAT PLAINS ENERGY INCORPORATED
Consolidated Balance Sheets
(Unaudited)

	December 31	
	2009	2008
LIABILITIES AND CAPITALIZATION		
(millions, except share amounts)		
Current Liabilities		
Notes payable	\$ 252.0	\$ 204.0
Commercial paper	186.6	380.2
Current maturities of long-term debt	1.3	70.7
Accounts payable	315.0	418.0
Accrued taxes	27.9	27.7
Accrued interest	72.5	72.4
Accrued compensation and benefits	45.1	29.7
Pension and post-retirement liability	4.6	4.7
Derivative instruments	0.3	86.2
Other	53.0	43.8
Total	958.3	1,337.4
Deferred Credits and Other Liabilities		
Deferred income taxes	381.9	387.1
Deferred tax credits	140.5	105.5
Asset retirement obligations	132.6	124.3
Pension and post-retirement liability	440.4	445.6
Regulatory liabilities	237.8	209.4
Derivative instruments	0.5	-
Other	145.1	112.8
Total	1,478.8	1,384.7
Capitalization		
Great Plains Energy common shareholders' equity		
Common stock-250,000,000 shares authorized without par value		
135,636,538 and 119,375,923 shares issued, stated value	2,313.7	2,118.4
Retained earnings	529.2	489.3
Treasury stock-213,423 and 120,677 shares, at cost	(5.5)	(3.6)
Accumulated other comprehensive loss	(44.9)	(53.5)
Total	2,792.5	2,550.6
Noncontrolling interest	1.2	1.0
Total	2,793.7	2,551.6
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	3,213.0	2,556.6
Total	6,045.7	5,147.2
Commitments and Contingencies		
Total	\$ 8,482.8	\$ 7,869.3

The Notes to the Consolidated Financial Statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2009, should be read in conjunction with this financial information.

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

Year Ended December 31	2009	2008
Cash Flows from Operating Activities		(millions)
Net income	\$ 150.4	\$ 154.7
Adjustments to reconcile income to net cash from operating activities:		
Depreciation and amortization	302.2	238.3
Amortization of:		
Nuclear fuel	16.1	14.5
Other	(10.1)	(1.9)
Deferred income taxes, net	(3.6)	44.1
Investment tax credit amortization	(2.2)	(1.8)
Loss from equity investments, net of income taxes	0.4	1.3
Fair value impacts from interest rate hedging	-	9.2
Fair value impacts from energy contracts - Strategic Energy	-	(189.1)
Loss on sale of Strategic Energy	-	116.2
Other operating activities	(117.8)	52.4
Net cash from operating activities	<u>335.4</u>	<u>437.9</u>
Cash Flows from Investing Activities		
Utility capital expenditures	(841.1)	(1,023.7)
Allowance for borrowed funds used during construction	(37.7)	(31.7)
Payment to Black Hills for asset sale working capital adjustment	(7.7)	-
Proceeds from sale of Strategic Energy, net of cash sold	-	218.8
GMO acquisition, net cash received	-	271.9
Purchases of nuclear decommissioning trust investments	(99.0)	(49.1)
Proceeds from nuclear decommissioning trust investments	95.3	45.4
Other investing activities	(7.4)	(10.7)
Net cash from investing activities	<u>(897.6)</u>	<u>(579.1)</u>
Cash Flows from Financing Activities		
Issuance of common stock	219.9	15.3
Issuance of long-term debt	700.7	363.4
Issuance fees	(22.8)	(5.3)
Repayment of long-term debt	(70.7)	(169.9)
Net change in short-term borrowings	(145.6)	118.4
Dividends paid	(110.5)	(172.0)
Credit facility termination fees	-	(12.5)
Other financing activities	(4.0)	(2.2)
Net cash from financing activities	<u>567.0</u>	<u>135.2</u>
Net Change in Cash and Cash Equivalents	4.8	(6.0)
Cash and Cash Equivalents at Beginning of Year (includes \$43.1 million of cash included in assets of discontinued operations in 2008)	61.1	67.1
Cash and Cash Equivalents at End of Period	\$ 65.9	\$ 61.1

The Notes to the Consolidated Financial Statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2009, should be read in conjunction with this financial information.

Great Plains Energy Incorporated
(Unaudited)

Electric Utility Operating Income

	Three Months Ended		Year Ended	
	December 31		December 31	
	2009	2008	2009	2008
	(millions)			
Operating revenues	\$ 477.6	\$ 443.9	\$ 1,965.0	\$ 1,670.1
Fuel	(103.0)	(88.7)	(405.5)	(311.4)
Purchased power	(42.8)	(70.6)	(183.7)	(209.9)
Other operating expenses	(188.4)	(177.1)	(738.9)	(624.2)
Depreciation and amortization	(81.9)	(68.6)	(302.2)	(235.0)
Operating income	<u>\$ 61.5</u>	<u>\$ 38.9</u>	<u>\$ 334.7</u>	<u>\$ 289.6</u>

Electric Utility Revenues

	Three Months Ended			Year Ended		
	December 31		%	December 31		%
	2009	2008	Change	2009	2008	Change*
Retail revenues	(millions)			(millions)		
Residential	\$ 178.4	\$ 156.8	14	\$ 772.6	\$ 605.5	NM
Commercial	183.1	161.7	13	752.5	620.7	NM
Industrial	43.4	39.5	10	171.9	142.2	NM
Other retail revenues	4.9	4.3	13	17.2	13.3	NM
Provision for rate refund (excess Missouri wholesale margin)	-	(2.9)	NM	-	(2.9)	NM
Fuel recovery mechanism under (over) recovery	6.0	19.9	(70)	32.8	30.7	NM
Total retail	<u>415.8</u>	<u>379.3</u>	10	<u>1,747.0</u>	<u>1,409.5</u>	NM
Wholesale revenues	51.5	54.4	(5)	174.6	230.1	NM
Other revenues	10.3	10.2	1	43.4	30.5	NM
Electric utility revenues	<u>\$ 477.6</u>	<u>\$ 443.9</u>	8	<u>\$ 1,965.0</u>	<u>\$ 1,670.1</u>	NM

Electric Utility MWh Sales

	Three Months Ended			Year Ended		
	December 31		%	December 31		%
	2009	2008	Change	2009	2008	Change*
Retail MWh sales	(thousands)			(thousands)		
Residential	2,026	2,027	-	8,647	7,047	NM
Commercial	2,602	2,664	(2)	10,637	9,227	NM
Industrial	795	839	(5)	3,143	2,721	NM
Other retail MWh sales	36	32	7	122	94	NM
Total retail	<u>5,459</u>	<u>5,562</u>	(2)	<u>22,549</u>	<u>19,089</u>	NM
Wholesale MWh sales	1,664	1,398	19	5,626	5,237	NM
Electric utility MWh sales	<u>7,123</u>	<u>6,960</u>	2	<u>28,175</u>	<u>24,326</u>	NM

* NM - not meaningful due to GMO numbers only reflected subsequent to the July 14, 2008 date of acquisition.

Electric Utility Customers at December 31, 2009

Residential	723,900
Commercial	95,100
Industrial	2,300
Other	400
Total retail customers	<u>821,700</u>

Kansas City Power & Light Company
(Unaudited)

KCP&L Operating Income

	Three Months Ended December 31		Year Ended December 31	
	2009	2008	2009	2008
	(millions)			
Operating revenues	\$ 320.4	\$ 286.7	\$ 1,318.2	\$ 1,343.0
Fuel	(68.0)	(60.7)	(251.3)	(253.3)
Purchased power	(12.2)	(18.7)	(70.8)	(119.0)
Other operating expenses	(133.5)	(127.1)	(534.3)	(528.3)
Depreciation and amortization	(63.5)	(51.9)	(229.6)	(204.3)
Operating income	\$ 43.2	\$ 28.3	\$ 232.2	\$ 238.1

KCP&L Revenues

	Three Months Ended December 31		%	Year Ended December 31		%
	2009	2008		2009	2008	
	(millions)		Change	(millions)		Change
Retail revenues	\$ 106.7	\$ 94.2	13	\$ 472.2	\$ 463.0	2
Residential	132.9	117.1	13	542.7	521.1	4
Commercial	27.6	24.8	12	108.8	109.9	(1)
Industrial	3.0	2.8	7	10.9	10.6	2
Other retail revenues	-	(2.9)	NM	-	(2.9)	NM
Provision for rate refund (excess Missouri wholesale margin)	(1.9)	(3.9)	51	(0.7)	1.6	NM
Kansas ECA under (over) recovery	268.3	232.1	16	1,133.9	1,103.3	3
Total retail	48.4	51.3	(6)	166.2	221.5	(25)
Wholesale revenues	3.7	3.3	12	18.1	18.2	(1)
Other revenues	\$ 320.4	\$ 286.7	12	\$ 1,318.2	\$ 1,343.0	(2)
KCP&L revenues						

KCP&L MWh Sales

	Three Months Ended December 31		%	Year Ended December 31		%
	2009	2008		2009	2008	
	(thousands)		Change	(thousands)		Change
Retail MWh sales	1,202	1,218	(1)	5,203	5,413	(4)
Residential	1,819	1,877	(3)	7,506	7,704	(3)
Commercial	466	492	(5)	1,884	2,061	(9)
Industrial	24	23	(1)	88	80	9
Other retail MWh sales	3,511	3,610	(3)	14,681	15,258	(4)
Total retail	1,565	1,317	19	5,381	5,030	7
Wholesale MWh sales	5,076	4,927	3	20,062	20,288	(1)
KCP&L electric MWh sales						

KCP&L Customers at December 31, 2009

Residential	449,700
Commercial	56,900
Industrial	2,100
Other	100
Total retail customers	508,800

KCP&L Statistics

	Three Months Ended December 31		Year Ended December 31	
	2009	2008	2009	2008
Average non-firm wholesale price per MWh	\$ 28.64	\$ 42.13	\$ 28.92	\$ 46.34
Cooling degree days	-	21	1,090	1,196
Heating degree days	2,012	2,077	5,069	5,590
Equivalent availability - coal plants	91 %	70 %	79 %	78 %
Capacity factor - coal plants	85 %	66 %	73 %	74 %
Equivalent availability - nuclear	53 %	100 %	86 %	83 %
Capacity factor - nuclear	53 %	100 %	86 %	83 %

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

GMO Utility Operating Income

	Three Months Ended December 31		Year Ended December 31	
	2009	2008	2009	2008
	(millions)			
Operating revenues	\$ 157.2	\$ 157.2	\$ 646.8	\$ 327.1
Fuel	(35.0)	(28.0)	(154.2)	(58.1)
Purchased power	(30.6)	(51.9)	(112.9)	(90.9)
Other operating expenses	(54.9)	(50.0)	(204.6)	(95.9)
Depreciation and amortization	(18.4)	(16.7)	(72.6)	(30.7)
Operating income	<u>\$ 18.3</u>	<u>\$ 10.6</u>	<u>\$ 102.5</u>	<u>\$ 51.5</u>

GMO Utility Revenues

	Three Months Ended December 31		%	Year Ended December 31		%
	2009	2008		Change	2009	
	(millions)			(millions)		
Retail revenues	\$ 71.7	\$ 62.6	15	\$ 300.4	\$ 142.5	NM
Residential	50.2	44.6	13	209.8	99.6	NM
Commercial	15.8	14.7	7	63.1	32.3	NM
Industrial	1.9	1.5	24	6.3	2.7	NM
Other retail revenues	7.9	23.8	(67)	33.5	29.1	NM
Fuel recovery mechanism under (over) recovery	<u>147.5</u>	<u>147.2</u>	-	<u>613.1</u>	<u>306.2</u>	NM
Total retail	3.1	3.1	1	8.4	8.6	NM
Wholesale revenues	6.6	6.9	(4)	25.3	12.3	NM
Other revenues	<u>\$ 157.2</u>	<u>\$ 157.2</u>	-	<u>\$ 646.8</u>	<u>\$ 327.1</u>	NM
Total revenues						

GMO Utility MWh Sales

	Three Months Ended December 31		%	Year Ended December 31		%
	2009	2008		Change	2009	
	(thousands)			(thousands)		
Retail MWh sales	824	809	2	3,444	1,634	NM
Residential	783	787	(1)	3,131	1,523	NM
Commercial	329	347	(5)	1,259	660	NM
Industrial	12	9	23	34	14	NM
Other retail MWh sales	<u>1,948</u>	<u>1,952</u>	-	<u>7,868</u>	<u>3,831</u>	NM
Total retail	99	81	22	245	207	NM
Wholesale MWh sales	2,047	2,033	1	8,113	4,038	NM
Electric MWh sales						

* NM - not meaningful due to GMO numbers only reflected subsequent to the July 14, 2008 date of acquisition.

GMO Utility Customers at December 31, 2009

Residential	274,200
Commercial	38,200
Industrial	200
Other	300
Total retail customers	<u>312,900</u>

GMO Utility Statistics

	Three Months Ended December 31		Year Ended December 31	
	2009	2008	2009	2008
Cooling degree days	-	21	1,090	1,196
Heating degree days	2,012	2,077	5,069	5,590
Equivalent availability - coal plants	70 %	48 %	79 %	N/A
Capacity factor - coal plants	61 %	41 %	67 %	N/A